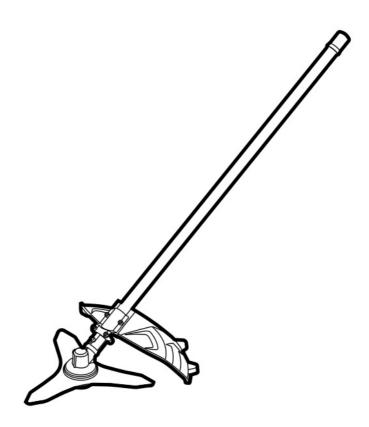


# **EGO BCA1220 Cordless Multi Tool System User Manual**

Home » EGO » EGO BCA1220 Cordless Multi Tool System User Manual

EGO BCA1220 Cordless Multi Tool System User Manual







EXCLUSIVELY FOR USE WITH EGO POWER HEAD PH1400/PH1400-FC/PH1420/PH1420-FC

OPERATOR'S MANUAL

# BRUSH CUTTER ATTACHMENT

**MODEL NUMBER BCA1220/BCA1220-FC** 

⚠ 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!**



**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 chemicals: 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.

#### **Contents**

- **1 SAFETY SYMBOLS**
- **2 SAFETY INSTRUCTIONS**
- **3 INTRODUCTION**
- **4 SPECIFICATIONS**
- **5 PACKING LIST**
- **6 RECOMMENDED**
- **ACCESSORIES**
- **7 DESCRIPTION**
- **8 ASSEMBLY**
- 9 OPERATION
- 10 MAINTENANCE
- 11 TROUBLESHOOTING
- 12 EGO LIMITED WARRANTY
- 13 Documents / Resources
  - 13.1 References
- **14 Related Posts**

#### **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 following 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 shield 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. Always use eye protection which is marked to comply with ANSI Z87.1.

# **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.

A	Safety Alert	Indicates a potential personal injury hazard.
	Read & Understand 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 sound barriers (ear plugs or ear mufflers) to protect your hearing.
	Wear Head Protection	Wear an approved safety hard hat to protect your head.
	Wear Hand Protection	Protect your hands with gloves when handling brush cutter and its blade. Heavy-duty, nonslip gloves improve your grip and protect your hands.
	Wear Slip-resistant Footwear	Wear non-slip safety footwear when using this equipment.
	Beware of Blade Thrust	Warn the operator of the danger of blade thrust.
	Disconnect Battery Before Maintenance	Alerts user to disconnect battery before maintenance.

	Beware of Thrown Objects	Thrown objects can ricochet and result in personal injury or property damage.
15 m(50 ft)	The distance between the machine and bystanders shall be at least 15 m (50 ft)	Ensure that other people and pets remain at least 50 ft (15 m) away from the brush cutter when it is in use.
RECYCLAR BROWN BRO	Recycle Symbol	This product uses lithium-ion (Li-ion) batteries. Local state, or federal laws may prohibit disposal of batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.
IPX4	Ingress Protection Degree	Protection from splashing water.
mm	Millimeter	Length or size
cm	Centimeter	Length or size
in.	Inch	Length or size
Ft.	Feet	Length or size
kg	Kilogram	Weight
lb.	Pound	Weight
°F	Fahrenheit	Temperature
°C	degree Celsius	Temperature

# **GENERAL MACHINE SAFETY WARNINGS**

WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this machine. 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.

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, gases 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 any way. Do not use any adapter 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 operate the machine in rain or wet conditions. Water entering the machine may increase the risk of electric shock or malfunction that could result in personal injury.
- 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 (GFCI) protected supply. Use of a 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 a 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 the power source and/or the 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 moving 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 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 devices can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of machines allow you to become complacent and ignore machine safety principles. A careless action can cause severe injury within a fraction of a second.

- Do not force the machine. Use the correct power 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 remove the battery pack, if detachable, from the
  machine before making any adjustments, changing accessories, or storing machines. 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 machines and accessories.
- **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 power machine, accessories, 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.

#### **BATTERY MACHINE USE AND CARE**

- Recharge only with the charger specified in the PH1400/PH1400-FC/PH1420/PH1420-FC manual. 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 265°F (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.

#### **BRUSH CUTTER SAFETY WARNINGS**

- Do not use the machine in bad weather conditions, especially when there is a risk of lightning. This decreases the risk of being struck by lightning.
- Thoroughly inspect the area for wildlife where the machine is to be used.
   Wildlife may be injured by the machine during operation.
- Thoroughly inspect the area where the machine is to be used and remove all stones, sticks, wires, bones, and other foreign objects. Thrown objects can cause personal injury.
- Before using the machine, always visually inspect to see that the cutter or blade and the cutter or blade assembly are not damaged. Damaged parts increase the risk of injury.
- Follow instructions for changing accessories. Improperly tightened blade securing nuts or bolts may either damage the blade or result in it becoming detached.
- The rated rotational speed of the blade must be at least equal to the maximum rotational speed marked on the machine. Blades running faster than their rated rotational speed can break and fly apart.
- Wear eye, ear, head and hand protection. Adequate protective equipment will reduce personal injury by flying debris or accidental contact with the cutting line or blade.
- While operating the machine, always wear non-slip and protective footwear. Do not operate the machine
  when barefoot or wearing open sandals. This reduces the chance of injury to the feet from contact with a
  moving cutter, line or blade.
- While operating the machine, always wear long trousers. Exposed skin increases the likelihood of injury from thrown objects.
- Keep bystanders away while operating the machine. Thrown debris can result in serious personal injury.
- Always use two hands when operating the machine. Holding the machine with both hands will avoid loss of control.
- Hold the machine by the insulated gripping surfaces only, because the cutting line or blade may
  contact hidden wiring. Cutting line or blades contacting a "live" wire may make exposed metal parts of the
  machine "live" and could give the operator an electric shock.
- Always keep proper footing and operate the machine only when standing on the ground. Slippery or unstable surfaces may cause a loss of balance or control of the machine.
- Do not operate the machine on excessively steep slopes. This reduces the risk of loss of control, slipping and falling which may result in personal injury.
- When working on slopes, always be sure of your footing, always work across the face of slopes, never
  up or down and exercise extreme caution when changing direction. This reduces the risk of loss of
  control, slipping and falling which may result in personal injury.
- Keep all parts of the body away from the cutter, line or blade when the machine is operating. Before you start the machine, make sure the cutter, line or blade is not contacting anything. A moment of inattention while operating the machine may result in injury to yourself or others.
- **Do not operate the machine above waist height.** This helps prevent unintended cutter or blade contact and enables better control of the machine in unexpected situations.

- When cutting brush or saplings that are under tension, be alert for spring back. When the tension in the wood fibers is released, the brush or sapling may strike the operator and/or throw the machine out of control.
- Use extreme caution when cutting brush and saplings. The slender material may catch the blade and be whipped toward you or pull you off balance.
- Maintain control of the machine and do not touch cutters, lines or blades and other hazardous moving parts while they are still in motion. This reduces the risk of injury from moving parts.
- Carry the machine with the machine switched off and away from your body. Proper handling of the machine will reduce the likelihood of accidental contact with a moving cutter, line or blade.
- When transporting or storing the machine, always fit the cover on metal blades. Proper handling of the machine will reduce the likelihood of accidental contact with the blade.
- Only use replacement cutters, lines, cutting heads and blades specified by the manufacturer. Incorrect replacement parts may increase the risk of breakage and injury.
- When clearing jammed material or servicing the machine, make sure the switch is off and the battery pack is removed. Unexpected starting of the machine while clearing jammed material or servicing may result in serious personal injury.

#### **BLADE THRUST CAUSES AND RELATED WARNINGS**

Blade thrust is a sudden sideways, forward or backward motion of the machine, which may occur when the blade jams or catches on an object such as a sapling or a tree stump. It can be violent enough to cause the machine and/or operator to be propelled in any direction, and possibly lose control of the machine.

Blade thrust and its related hazards can be avoided by taking proper precautions as given below.

- Maintain a firm grip with both hands on the machine and position your arms to resist blade thrust.
   Position your body to the left side of the machine. Blade thrust can increase the risk of injury due to the machine moving unexpectedly. Blade thrust can be controlled by the operator if proper precautions are taken.
- If the blade binds, or when interrupting a cut for any reason, switch the machine off and hold the
  machine motionless in the material until the blade comes to a complete stop. While the blade is
  binding, never attempt to remove the machine from the material or pull the machine backward while
  the blade is in motion, otherwise blade thrust may occur. Investigate and take corrective actions to
  eliminate the cause of blade binding.
- **Do not use blunt or damaged blades.** Blunt or damaged blades increase the risk of jamming or catching on an object, resulting in blade thrust.
- Always maintain good visibility of the material being cut. Blade thrust is more likely to occur in areas where it is difficult to see the material being cut.
- If you are approached by another person while operating the machine, switch the machine off. There is an increased risk of injury to other persons being struck by the moving blade in the event of blade thrust.

NOTE: SEE YOUR POWER HEAD OPERATOR'S MANUAL FOR ADDITIONAL SPECIFIC SAFETY RULES.

**SAVE THESE INSTRUCTIONS!** 

Congratulations on your selection of the BRUSH CUTTER ATTACHMENT. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact EGO customer service center 1-855-EGO-5656.

This manual contains important information on the safe assembly, operation and maintenance of your product. Read it carefully before using the product. Keep this manual handy so you can refer to it at any time.

SERIAL NUMBER	DATE OF PURCHASE
YOU SHOULD RECORD BOTH SERIAL NUMBER PLACE FOR FUTURE REFERENCE.	AND DATE OF PURCHASE AND KEEP IN A SAFE

# **SPECIFICATIONS**

Cutting Unit	3-tooth metal blade
Cutting Width	12 in. (30 cm)
Maximum Speed	6000 rpm
Weight (w/ blade sheath)	3.88 lb.(1.76 kg)
Recommended Operating Temperature	32 °F – 104 °F (0 °C-40 °C)
Recommended Storage Temperature	-4 °F – 158 °F (-20 °C-70 °C)

# **PACKING LIST**

PART NAME	QUANTITY
Brush Cutter Attachment	1
Blade and Blade Sheath Set	1
Guard	1
Barrier Bar	1
New Quick-release Lever (For use with barrier bar only)	1
4 mm Hex Key	1
Multi-function Wrench	1
Operator's Manual	1

# **RECOMMENDED ACCESSORIES**

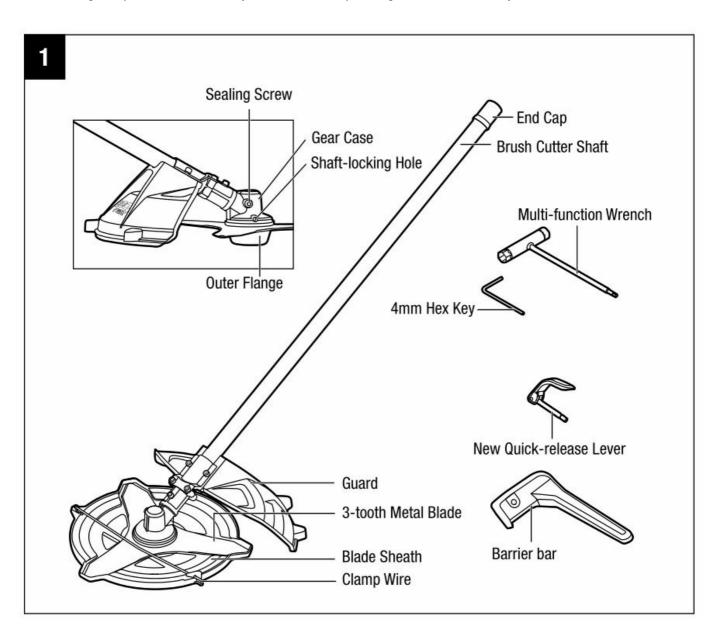
PART NAME	MODEL NUMBER	
Brush Cutter Blade	ABB1203	

# **DESCRIPTION**

# **KNOW YOUR BRUSH CUTTER ATTACHMENT (Fig. 1)**

The safe use of this product requires an understanding of the information on the machine and in this operator's manual, as well as knowledge of the project you are attempting.

Before using this product, familiarize yourself with all operating features and safety rules.



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

#### **END CAP**

keeps the inside the attachment shaft clean whenever it is not connected to the power head.

#### **GUARD**

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

#### **BARRIER BAR**

Helps to protect operator from injury during use of the brush cutter attachment.

#### **BLADE SHEATH**

The blade sheath keeps the operator from coming in contact with the sharp blade when the machine is not in use. It also helps keep the brush cutter blade from being nicked or damaged when the machine is being transported or stored.

#### **3-TOOTH METAL BLADE**

Cutting accessory for brush cutting.

#### **CLAMP WIRE**

Secures the blade sheath on the blade.

#### **SEALING SCREW**

For convenient gear lubrication in the gear case.

# **MULTI-FUCTION WRENCH**

Required for blade replacement.

#### **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 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 installing or removing the blade or the guard or doing any maintenance on the blade. Be careful of the blade and protect your hands from being injured by the blade.

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

#### **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.

**WARNING**: Do not use this product if any parts on the Packing List are already assembled to your product when you unpack it. Parts on this list are not assembled to the product by the manufacturer and require customer installation. Use of a product that may have been improperly assembled could result in serious personal injury.

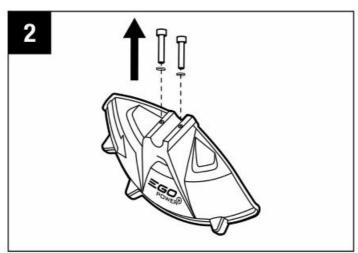
- Inspect the machine carefully to make sure that no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the machine.
- If any parts are damaged or missing, please return the product to the place of purchase.

**NOTICE**: The correct assembly sequence of the brush cutter attachment is mounting the guard first, and then the blade, and finally attaching it to the power head.

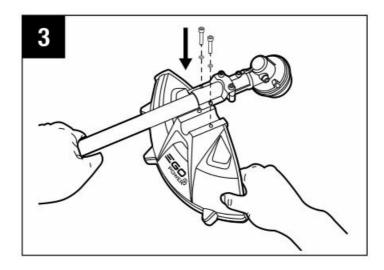
**WARNING**: Never operate the machine without the guard and the front handle with barrier bar firmly in place. Failure to comply could result in possible serious personal injury.

#### MOUNTING THE GUARD

1. Loosen the two screws in the guard with the supplied hex key, and remove the screws and spring washers from the guard (Fig. 2).



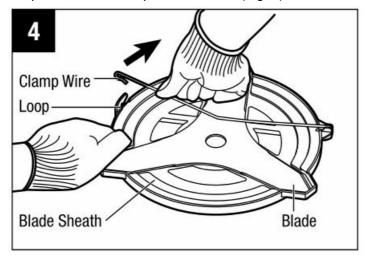
2. Align the guard mounting holes with assembly holes and then secure the guard onto the shaft base with the two screws and two spring washers (Fig. 3).



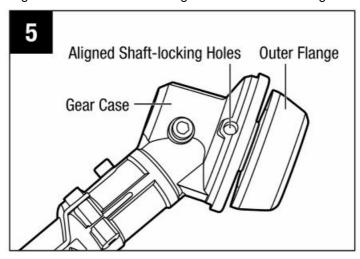
**WARNING**: Make sure the guard is mounted according to Fig. 2 & 3. Incorrect mounting of the guard will cause great danger!

# **MOUNTING THE BLADE**

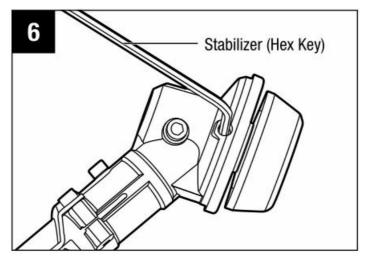
1. The blade is shipped with a sheath. Before mounting the blade onto the brush cutter, the sheath should be removed by undoing the clamp wire from the loop on the sheath (Fig. 4).



2. Rotate the outer flange to align the slot in the inner flange with the shaft-locking hole in the gear case (Fig. 5).



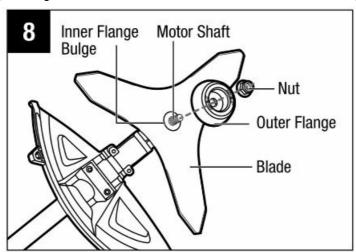
3. Insert the included hex key into the aligned holes to act as a stabilizer (Fig. 6).



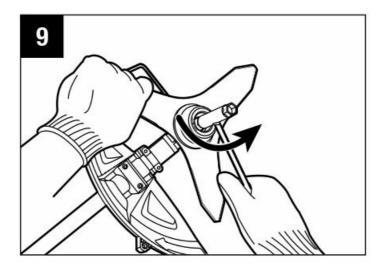
4. Position the gear case against a solid surface for support. Use one hand to grasp the brush cutter shaft and the other hand to loosen the nut in the direction of the arrow marked on the outer flange, using the included multifunction wrench. Remove the nut and the outer flange and save them for reassembly (Fig. 7).



5. Mount the blade onto the motor shaft, ensuring that the surface of the blade is flush with the surface of the inner flange bulge (Fig. 8). Pre-tighten the nut in COUNTERCLOCKWISE direction by hand.



- 6. Rotate the outer flange to align the slot in the inner flange with the shaft-locking hole in the gear case and insert the included hex key into the aligned holes to act as a stabilizer as shown in previous steps 2 and 3.
- 7. Position the gear case against a solid surface for support. With one hand grasping the blade and using the other hand to grasp the multi-function wrench, tighten the nut opposite to the direction of the arrow marked on the outer flange (Fig. 9).

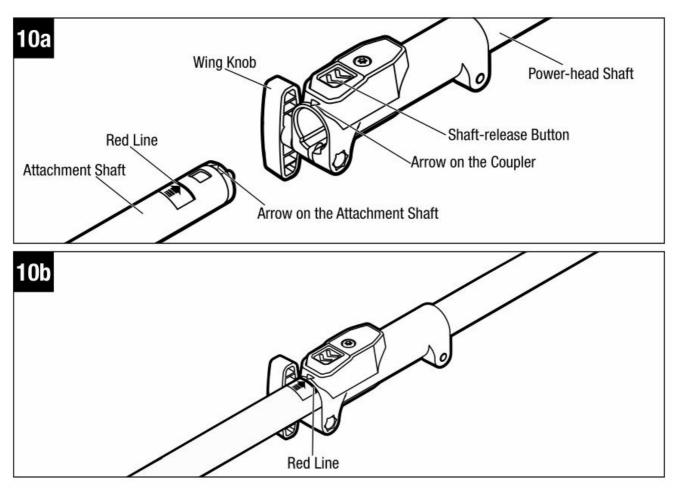


# CONNECTING THE BRUSH CUTTER ATTACHMENT TO THE POWER HEAD

This brush cutter attachment is designed only to be used with EGO Power Head PH1400/PH1400-FC/PH1420/PH1420-FC.

**WARNING**: Never install, remove, 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. The brush cutter 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 on the power-head coupler.
- 3. Remove the end cap from the attachment. Align the arrow on the attachment shaft with the arrow on the coupler (Fig. 10a) and push the attachment shaft into the coupler until you hear a clear "click" sound. The coupler should be positioned all the way to the RED LINE labeled on the shaft for the attachment shaft to be properly mounted into place (Fig. 10b)



- 4. Pull the shaft of the attachment to verify whether 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 that the wing knob 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 knob.
- 3. Press the shaft-release button and, with the button depressed, pull or twist the attachment shaft out of the coupler.

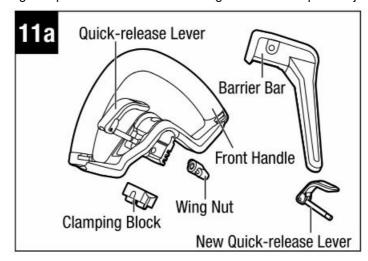
#### MODIFICATIONS TO THE QUICK-ADJUST FRONT HANDLE

The quick-adjust front handle included with EGO PH1420 power head needs to be modified for safe use of the power head with this brush cutter attachment.

WARNING: Always use the NEW quick-release lever specifically designed for the barrier bar. The original quick-release lever will not secure the barrier bar properly which may result in serious personal injury.

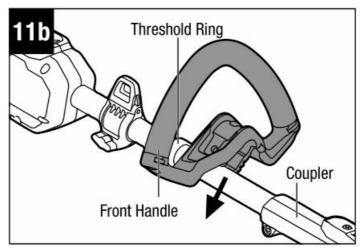
1. Stop the motor and remove the battery pack, if installed.

2. Loosen and remove the original quick-release lever and wing nut from the quick-adjust front handle (Fig. 11a).

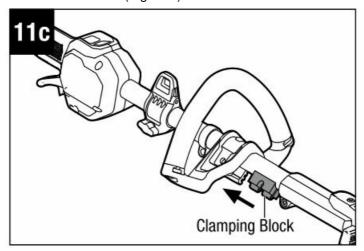


NOTE: You can skip steps 3 and 4 if the front handle is already mounted on the power head shaft.

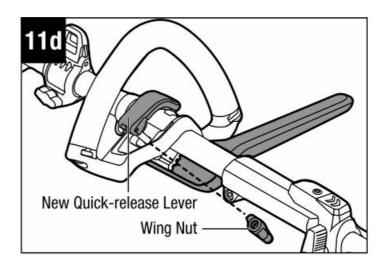
3. Push the front handle onto the shaft within the mounting zone between the threshold ring and the coupler on the power head shaft (Fig. 11b).



4. Insert the clamping block into the handle slot (Fig. 11c).



5. Align the groove on the barrier bar with the corresponding one on the front handle; hold the bar onto the front handle; mount the NEW quick release lever and tighten the wing nut. Make sure that the front handle is positioned upwards and points toward the top of the rear handle (Fig. 11d).



#### **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 with side shields marked to comply with ANSI Z87.1, along with hearing protection. Failure to do so could result in objects being thrown into your eyes and other possible serious injuries.

# **APPLICATIONS**

You may use this product for the purpose listed below:

• Cutting malted grass, weeds, wild growth and scrub, thinning young stands with a maximum stem diameter of 3/4 in (2cm).

**NOTICE**: The machine is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse.

# HOLDING THE BRUSH CUTTER WITH POWER HEAD PH1400/PH1400-FC/PH1420/PH1420-FC (Fig. 12)



clothing or jewelry. Wear eye and ear/hearing protection. Wear heavy, long pants, boots and gloves. Do not wear short pants or sandals or go barefoot.

Hold the brush cutter with one hand on the rear handle and the other hand on the front handle. Keep a firm grip with both hands while in operation. The brush cutter should be held at a comfortable position with the rear handle at about hip height. Maintain your grip and balance on both feet. Position yourself so that you will not be drawn off balance by the kickback reaction of the cutting blade.

#### **USING THE BRUSH CUTTER WITH POWER HEAD**

To cut wild growth and scrub, lower the rotating blade down onto the ground to achieve a chopping effect. Use the brush cutter like a scythe (sweep it to the right and left) at ground level. Do not use the cutting attachment above waist height.

**WARNING**: The higher the cutting attachment is off the ground, the greater the risk of injury from cuttings being thrown sideways.

**WARNING**: When cutting young stands or other woody materials up to 3/4 in (2 cm) in diameter, use the left side of the blade to avoid blade thrust situations. Do not attempt to cut woody material with a larger diameter, since the blade may catch or jerk the brush cutter forward. This may cause damage to the blade or the brush cutter or loss of control of the brush cutter, resulting personal injury.

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

- Avoid contact with hard or solid foreign objects such as stones, rocks or pieces of metal.
- Never cut wood or shrubs with a stem diameter of more than 3/4 in (2 cm).
- Inspect the blade at a regular short interval for signs of damage. Do not continue working with a damaged blade.
- Re-sharpen the blade regularly (when it has dulled noticeably) and have it balanced if necessary (performed by a qualified service technician).

# **BLADE THRUST**

Exercise extreme caution when using this unit. Blade thrust is the reaction that may occur when the spinning blade contacts anything it cannot cut. This contact may cause the blade to stop for an instant and suddenly "thrust" the unit away from the object that was hit. This reaction can be violent enough to cause the operator to lose control of the unit. Blade thrust can occur without warning if the blade snags, stalls, or binds. This is more likely to occur in areas where it is difficult to see the material being cut. For cutting ease and safety, approach the weeds being cut with the brush cutter from the right to the left. In the event an unexpected object or woody stock is encountered, this practice could minimize the blade thrust reaction.

# Before each use check for damaged/worn parts

Check the blade, guard, barrier bar and front handle and replace any parts that are cracked, warped, bent, or damaged in any away. The edge of the blade can dull over time. It is recommended that you turn over the blade to extend the life of the blade and periodically sharpen it (performed by a qualified service technician) or replace it with a new blade when necessary.

**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 brush cutter after each use

See the MAINTENANCE section for cleaning instructions.

**WARNING**: Ensure the blade has come to a complete stop before cleaning or servicing the brush cutter. Failure to comply could result in possible serious personal injury.

# Check for blockage of the 3-tooth blade

To prevent blockage, keep the blade clean. Remove grass clippings, leaves, dirt and any other accumulated debris before and after each use.

When blockage happens, stop the brush cutter and remove the battery. Then remove any grass that may have wrapped itself around the motor shaft or the blade.

#### TO START/STOP THE MACHINE

See "STARTING/STOPPING THE POWER HEAD" section in the power head PH1400/PH1400-FC/PH1420/PH1420-FC operator's manual.

# Tips for best brush-cutting

- Always hold brush cutter on your right side with both hands when operating. Use a firm grip on both handles.
- Maintain your grip and balance on both feet. Position yourself so that you will not be drawn off balance by the kickback reaction of the cutting blade.
- Inspect and clear the area of any hidden objects such as glass, rocks, concrete, fencing, wire, wood, metal, etc., which can be thrown or entangled in the blade.
- Never use blades near sidewalks, fencing, posts, buildings or other immovable objects.
- Never use a blade after hitting a hard object without first inspecting it for damage.
   Do not use if any damage is detected.
- Inspect machine for damage upon striking a hard object or if there appears to be excessive vibration.
- Use the unit for cutting from the right to the left in a broad sweeping action from side to side.
- Use only the EGOTM blade. Using any other brand blade with this brush cutter could result in serious personal injury

# **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 machines 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 before servicing, cleaning, changing add-on attachments or when the product is not in use.

#### **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 a clean cloth to remove dirt, dust, oil, grease, etc.



**WARNING**: When cleaning the machine, DO NOT immerse in water or other liquids.

# **CLEANING THE UNIT**

- Remove the battery.
- After each use, clean the debris, clogged soils or grass on the blade and guard with a soft brush.
- Wipe the machine 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.

When the blade becomes dull or both edges of the blade are dull, please have it sharpened by a qualified service technician or replace it with a new one if necessary

# **REPLACING THE BLADE**

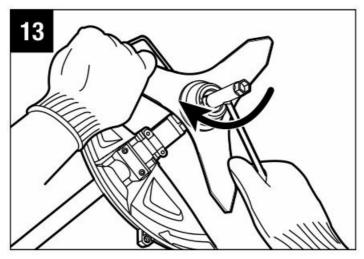
**WARNING**: A worn, cracked, or damaged blade can break and pieces of the damaged blade can become dangerous projectiles. Thrown objects can cause serious injury. Inspect the blade regularly and do not operate the brush cutter with a worn or damaged blade.



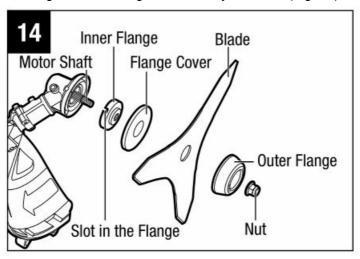
WARNING: Use proper eye protection while removing, sharpening, and installing the blade.

#### To remove the blade

- 1. Remove the battery pack.
- 2. Rotate the outer flange to align the slot in the inner flange with the shaft-locking hole in the gear case and insert the included hex key into the aligned holes to act as a stabilizer described in steps 2 and 3 in "MOUNTING THE BLADE" section.
- 3. Position the gear case against a solid surface for support. Use one hand to grasp the blade and the other hand to loosen the nut in the direction of the arrow marked on the outer flange, using the included multi-function wrench. Remove the nut and the outer flange and save them for reassembly (Fig. 13).



4. Check and replace the inner flange and the flange cover if they are worn (Fig. 14).



5. Install the new blade onto the motor shaft in the order shown in Fig. 14. For instructions, follow steps 5-7 in "MOUNTING THE BLADE" section.

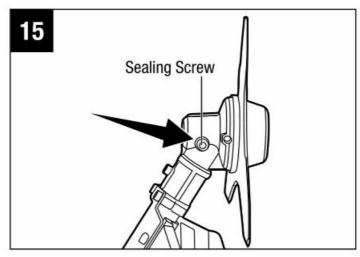
# TRANSMISSION GEARS LUBRICATION

The transmission gears in the gear case need to be lubricated periodically with gear grease. Check the gear case grease level about every 50 hours of operation by removing the sealing screw on the side of the case.

If no grease can be seen on the flanks of the gear, follow the steps below to fill with gear grease up to 3/4 capacity.

Do not completely fill the transmission gears.

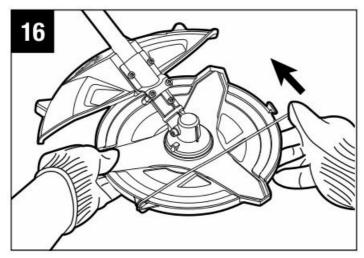
1. Hold the brush cutter attachment so that the sealing screw is facing upwards (Fig. 15).



- 2. Use the hex tip of the multi-function wrench to loosen and remove the sealing screw.
- 3. Use a grease syringe (not included) to inject some grease into the screw hole.
- 4. Tighten the sealing screw after injection.

# STORING THE UNIT

- 1. Remove the battery pack from the power head.
- 2. Wear heavy gloves to clean the machine thoroughly.
- 3. Mount the blade sheath onto the blade for safe storage (Fig. 16).



- 4. Remove the brush cutter attachment from the power head and place the end cap onto the attachment shaft terminal.
- 5. Store the unit 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.

# **TROUBLESHOOTING**

PROBLEM	CAUSE	SOLUTION
Brush cutter fails to start.	The battery pack is not attached to the power head.	Attach the battery pack to the power head.
	No electrical contact between the power head and the battery pack.	Remove battery, check contacts and reinstall the battery pack until it snaps into place.
	The battery pack charge is depleted.	Charge the battery pack with EGO chargers listed in this manual.
	The lock-off lever and trigger are not depressed simultaneously.	■ Follow the section "STARTING/ STOPPING THE POWER HEAD" in the manual for PH1400/PH1400-FC/PH1420/ PH1420-FC.
Brush cutter stops while cutting.	■ The motor is overloaded.	The motor will recover when the load is removed. For continuous working, decrease the load on the power head.
	The battery pack or the power head is too hot.	Allow the battery pack or the power head to cool until the temperature drops below 153 °F (67 °C).
	The battery pack is disconnected from the machine.	■ Re-install the battery pack.
	The battery pack charge is depleted.	Charge the battery pack with EGO chargers listed in this manual.

# **EGO LIMITED WARRANTY**

# **WARRANTY POLICY TERMS AND DURATION**

Chervon North America, Inc. ("Chervon North America") provides the following Limited Warranty for EGO products to the original purchaser of EGO products.

The detailed warranty period for each EGO product can be found online at <a href="http://egopowerplus.com/warranty-policy.">http://egopowerplus.com/warranty-policy.</a>

Please contact EGO Customer Service Toll-Free at 1-855-EGO-5656 any time you have questions or warranty claims or would like a hard copy of the warranty.

# LIMITED SERVICE WARRANTY

EGO products are warranted against defects in material or workmanship from the date of original retail purchase for the applicable warranty period. For any properly and timely submitted warranty claim, if Chervon North America determines a product to be defective during the warranty period, the product will receive free repair or

replacement as determined by Chervon North America.

#### **HOW TO OBTAIN SERVICE**

For warranty service, within the applicable warranty period, please contact EGO customer service toll-free at **1-855-EGO-5656.** When requesting warranty service, you must present the original dated sales receipt. An authorized service center will be selected to evaluate and repair the product if defective according to the stated warranty terms. When bringing your product to the authorized service center, there may be a small deposit that will be required when dropping off your tool. This deposit is refundable when the repair service is deemed to be covered under warranty.

#### **ADDITIONAL LIMITATIONS & EXCLUSIONS**

This limited warranty applies only to the original purchaser from an authorized EGO retailer and is not transferable. EGO products shall not be considered defective, and this warranty will not apply, where the claimed defect is attributable to any cause other than the above-defined defects. This warranty shall be void if the product has been used for rental purposes. This warranty shall not apply to damage caused by accident, abuse, misuse, alteration, modification, unauthorized repair, liquid contact, fire, earthquake or other external cause; operating the product outside EGO's instructions, specifications or guidelines; or failure to properly service of maintain the product. This warranty also does not apply to cosmetic damage, including but not limited to scratches or dents; defects caused by normal wear and tear or otherwise due to the normal aging of the product.

THIS EXPRESS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR USE, WHICH ARE DISCLAIMED. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, that cannot be disclaimed under state law are limited to the applicable warranty period defined at the beginning of this article. The sole and exclusive remedy in connection with the purchase, installation, use, and/or performance of the EGO products is repair or replacement of the product as determined by Chervon North America. Chervon North America's maximum liability shall not in any case exceed the purchase price paid for the product. CHERVON NORTH AMERICA SHALL NOT BE LIABLE TO THE USER OR TO ANYONE ELSE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL, EXEMPLARY, INDIRECT, OR PUNITIVE DAMAGES ARISING FROM USE OF THE PRODUCTS, INCLUDING BUT NOT LIMITED TO PERSONAL INJURY, DEATH, PROPERTY DAMAGE, LOST PROFITS, OR OTHER ECONOMIC INJURY. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, the exclusion or limitation of incidental or consequential damages, or the limitations on time to bring certain actions, so such limitations contained herein do not apply to individual consumers in those states.

This warranty is subject to and shall be interpreted according to Michigan law without regard to principles of conflicts of laws. No legal action shall be brought against Chervon North America unless filed within one (1) year after the basis for such legal action becomes known, or with the exercise of reasonable diligence should have become known. Any action not timely filed shall be deemed waived.

For customer service contact us toll-free at: **1-855-EGO-5656** or **EGOPOWERPLUS.COM**.

EGO Customer Service 769 Seward Ave. NW, Suite 102 Grand Rapids, Michigan 49504

# **Documents / Resources**



EGO BCA1220 Cordless Multi Tool System [pdf] User Manual BCA1220 Cordless Multi Tool System, BCA1220, Cordless Multi Tool System, Multi Tool System, Tool System

# References

- The #1 Rated Brand in Cordless Outdoor Power Equipment | EGO
- Warranty Policy | EGO POWER+

Manuals+,