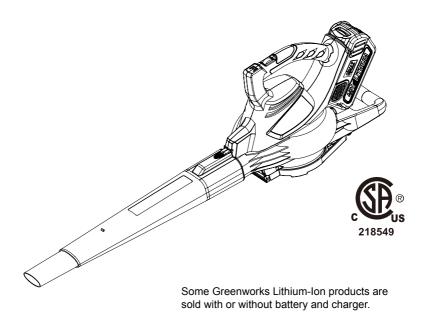


# 40V BRUSHLESS BLOWER / VAC 24322



## Owner's Manual

**TOLL-FREE HELPLINE: 1-888-90WORKS** (888.909.6757)

www.GreenWorksTools.com



## CONTENTS

Contents	2
Product specifications	2
General safety rules	3-5
Symbols	6-7
Know your blower	8
Assembly instruction	9-11
Operation	12-16
Maintenance	17-18
Environmentally safe battery disposal	19
Troubleshooting	20
Warranty	21
Exploded View	22
Parts List	23
Notes	24

## PRODUCT SPECIFICATIONS

#### **40V BRUSHLESS BLOWER**

Type	Cordless, battery-operated
	40 V
Air volume	340 CFM
Air speed (Max)	185 MPH
Mulch ratio	10:1
Collection bag capacity	1.2 Bushel
Weight	9.92 lbs

<sup>\*</sup> For use with 40V 4Ah (146 Wh) battery only.







## GENERAL SAFETY RULES

### 🛕 W A R N I N G

Read and understand all instructions before using this product. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

- 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.
- Do not allow children or untrained individuals to use this unit.
- Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- · Store indoors.
- Do not handle plug or tool with wet hands.
- Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction.
- Always wear safety glasses with side shields that comply with ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Following this rule will reduce the risk of eye injury. Use face mask if operation is dusty.
- Secure long hair above shoulder level to prevent entanglement in moving parts.
- Use extra care when cleaning on stairs.
- · Keep hair, loose clothing, fingers and all body parts away from openings and moving parts.
- Do not operate in poor lighting
- Wear heavy long pants, boots, and gloves. Avoid loose garments and jewelry that could get caught in moving parts of the machine or its motor.
- Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- · Do not operate the equipment while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces.
- Keep firm footing and balance. Do not overreach. Overreaching can result in loss of balance.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Keep all bystanders, children, and pets at least 50 ft. away.
- Do not operate this unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- Do not operate in poor lighting

## **GENERAL SAFETY RULES**

- Keep all parts of your body away from any moving parts and all hot surfaces of the unit.
- Do not put any object into openings. Do not use with any opening blocked; keep openings free
  of dust, lint, hair, and anything that may reduce air flow.
- Check the work area before each use. Remove all objects such as rocks, broken glass, nails, wire, or string which can be thrown or become entangled in the machine.
- Use only identical manufacturer's replacement parts and accessories. Use of any other parts may create a hazard or cause product damage.
- Do not charge battery tool in rain, or damp or wet location. Following this rule will reduce the risk of electric shock.
- · For household use only.
- Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in
  operating condition. Be aware of possible hazards when not using your battery tool or when
  changing accessories. Following this rule will reduce the risk of electric shock, fire, or serious
  personal injury.
- Remove or disconnect battery before servicing, cleaning or removing material from the gardening appliance.
- Use only Greenworks batteries (Model #29472.)
- Store idle appliances When not in use, blower should be stored indoors in a dry, locked place out of the reach of children.
- Do not dispose of the batteries in a fire. The cell may explode. Check with local codes for possible special disposal instructions.
- Do not open or mutilate the batteries. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Do not place battery tools or their batteries near fire or heat. This will reduce the risk of explosion and possibly injury.
- Batteries can explode in the presence of a source of ignition, such as a pilot light. To reduce
  the risk of serious personal injury, never use any cordless product in the presence of open
  flame. An exploded battery can propel debris and chemicals. If exposed, flush with water
  immediately.
- Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.
   Do not open or mutilate the batteries. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- For best results, your battery tool should be charged in a location where the temperature is more than 50°F but less than 100°F. To reduce the risk of serious personal injury, do not store outside or in vehicles.
- Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.

## **GENERAL SAFETY RULES**

- Do not point the blower nozzle in the direction of people or pets.
- Never run the unit without the proper equipment attached. Always ensure the sweeper tubes are installed.
- When not in use, blower should be stored indoors in a dry, locked up place—out of the reach of children.
- Maintain tool with care. Keep fan area clean for best and safest performance. Follow instructions for proper maintenance. Do not attempt to clear clogs from tool without first removing the battery.
- To reduce the risk of electrical shock, do not expose to rain, do not use on wet surfaces. Store indoors.
- Save these instructions. Refer to them frequently and use them to instruct others who may
  use this power tool. If you loan someone this power tool, loan them these instructions also.

#### **CHILD SAFETY**

Tragic accidents can occur if the operator is not aware of the presence of children.

- · Keep children out of the working area and under the watchful care of a responsible adult.
- Do not allow children under the age of 14 to operate this blower. Children who are 14
  years of age and older must read and understand the operating instructions and safety
  rules in this manual and must be trained and supervised by a parent.
- Stay alert, and turn the blower off if a child or any other person enters the working area.
- Use extreme care when approaching blind corners, doorways, shrubs, trees, or other objects that may obscure your view of a child who may run into the path of the blower.

## ▲ WARNING (PROPOSITION 65)

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known 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 of exposure to these chemicals 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 dust masks that are specially designed to filter out microscopic particles.

## **SYMBOLS**

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
А	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
min	Minutes	Time
>	Alternating Current	Type of current
	Direct Current	Type or a characteristic of current
8	No Load Speed	Rational speed, at no load
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations
	Read The Operator's Manual	To reduce the risk of injury user must read and understand operator's manual before using this product.
	Eye and Hearing Protection	Wear eye and hearing protection that is marked to comply withANSI Z87.1 when operating this equipment.
A	Safety Alert	Precautions that involve your safety.
	Long Hair	Failure to keep long hair away from the air inlet could result in personal injury.
	Loose Clothing	Failure to keep loose clothing from being drawn into air intake could result in personal injury.
	Keep Bystanders Away	Keep all bystanders at least 50 ft. away.
<b>S</b>	Blower Tubes	Do not operate without tubes in place.

## **SYMBOLS**

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
A	DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
A	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
A	CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

### **SERVICE**

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.



To avoid serious personal injury, do not attempt to use this product until you have read this Owner's Manual thoroughly and understand it completely. If you do not understand the warnings and instructions in this Owner's Manual, do not use this product. Call the Toll-free Helpline (1-888-909-6757) for assistance. The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before operating a power tool, always wear safety goggles, safety glasses with side shields, or 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 that is marked to comply with ANSI Z87.1.

## SAVE THESE INSTRUCTIONS

## **KNOW YOUR BLOWER**

The safe use of this product requires an understanding of the information on the tool and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules. (See Fig. 1)

#### HIGH VELOCITY CONCENTRATOR NOZZLE

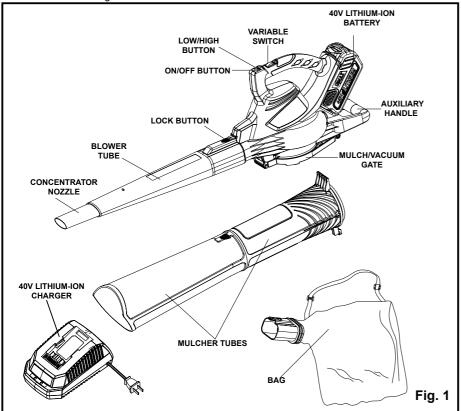
The high velocity nozzle is great for wet sticky leaves. It allows you to scrape wet leaves or debris while operating the blower.

#### **TOOLLESS ATTACHMENTS**

The blower tube with high velocity nozzle, vacuum bag, and vacuum tubes can be easily installed on the product without any additional tools.

#### **TWO-SPEED**

The two-speed switch is designed for Low speed which provides longer battery life as well as providing Turbo Speed which is used for high power clean-up as well as mulch/vac function. NOTE: When mulching leaves the Blower/Vac must be in TURBO-MULCH mode.



8

## ASSEMBLY INSTRUCTION

#### UNPACKING

· This product requires assembly.

#### 🕰 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.

- · Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please call 1-888- 909-6757 for assistance.

#### **PACKING LIST**

 Blower/Vac (31108810) Blower Tube (34105810) Concentrator Nozzle (34103810)

Mulcher Tubes

- Upper Tube (34106142A) - Lower Tube (34107142) Baq (31101810) 40V Battery (29472) 40V Charger (29482)

· Operator's Manual



#### A WARNING

If any parts are damaged or missing do not operate this product until the parts are replaced. Failure to heed this warning could result in serious personal injury



#### A 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.

9

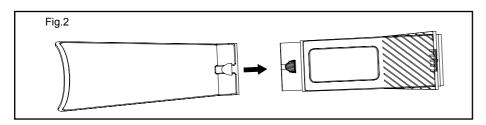
## ASSEMBLE AS A MULCHER (See Fig. 2)

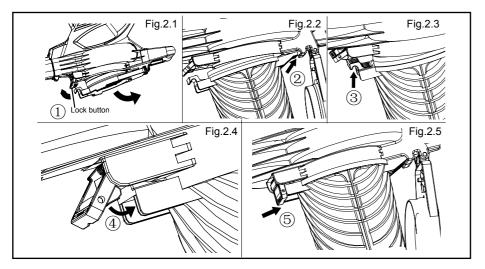
- 1. Slide the front and rear mulcher tubes together until the lock button engages. (See fig 2)
- 2. Pull the lock button forward to disengage the gate. Hold the gate open. (See fig 2.1)
- 3. Insert the "wedged" end clip of the mulcher tube into the rear clip. (See fig 2.2). Push the "hooked" end clip of the mulcher tube into the front clip. (See fig 2.3). Press the lock button back to engage the mulcher tube. (See fig 2.4)
- 4. To remove mulcher tubes, follow the steps (3) (2) (1).
- 5. Insert the bag adaptor into the blower outlet. Lock the bag adaptor with the lock button. To remove the bag, simply press lock button and remove bag. (see Fig.4).

NOTE: It may be necessary to remove the blower tube or mulcher tubes to clear a blocked tube or impeller.

## **WARNING**

To prevent serious personal injury, make sure the switch is in the OFF position, it is unplugged, and the impellers have stopped before attaching or removing tubes.

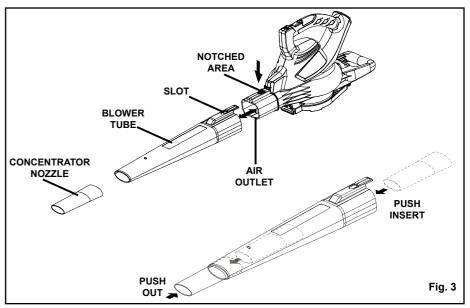




## ASSEMBLY INSTRUCTION

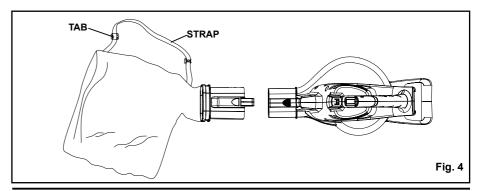
### ASSEMBLE AS A BLOWER ((See Fig. 3))

- 1. Slide blower tube forward until the notched areas on the blower housing click into the slots on the tube.
- 2. Insert the concentrator nozzle into the regular nozzle to lock. (Concentrator nozzle is used to-increase air flow in tight areas: flower beds. under decks, etc.).



### **INSTALLING BAG WITH SHOULDER HARNESS** (See Fig.4)

While standing in the operating position adjust the length to fit the operator's size. Pull the tab to lengthen, pull the strap to shorten.



#### **BATTERY**

**IMPORTANT!** The battery pack is not charged when it is purchased. Before using the blower for the first time, place the battery pack in the battery charger and charge. Make sure to read all safety precautions, and follow the instructions in the Battery Charger section.

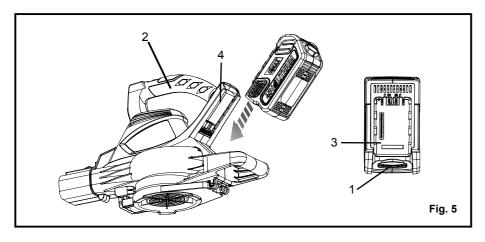
#### To install (See Figure 5.)

- 1. Align the tongue (3) of the battery pack with the cavity (4) in the blower housing.
- 2. Grasp the blower (2) firmly.
- 3. Push the battery pack into the handle until the latch locks into place.
- 4. Do not use force when inserting the battery pack. It should slide into position and "click".

#### To remove (See Figure 5.)

- 1. Press the latch button (1) on the battery pack down and hold.
- 2. Grasp the blower (2) firmly, and pull the battery pack out of the handle.

*NOTE*: The battery pack fits into the handle snugly in order to prevent accidental dislodging. It may require a strong pull to remove it.



## **A** WARNING

Follow these instructions in order to avoid injury and to reduce the risk of electric shock or fire:

- Replace the battery pack or the charger immediately if the battery case or charger cord is damaged.
- Verify that the switch is in the OFF position before inserting or removing the battery pack.
- Verify that the battery pack is removed and the switch is in the OFF position before inspecting, adjusting, or performing maintenance on any part of the blower.
- Read, understand, and follow the instructions contained in the section entitled Charging Procedure.

## **OPERATION**

# STARTING/STOPPING THE BLOWER/MULCHER (See Fig.6)

- 1. Press the On/Off ( ) Switch and you will hear beeping sounds, and the blower will turn on in low speed.
- 2. Roll the variable speed dial forward to increase speed from 70MPH to 130MPH
- 3. Press the low/high switch( ) to increase the speed options from 75MPH to 185MPH
- 4. To Turn off, press the on/off switch

IMPORTANT: TURBO-MULCH by pressing the "LOW/HIGH button, with the variable speed dial set to high speed (5).

## HOLDING THE BLOWER/ MULCHER(See Fig.7)

Before operating the unit, stand in the operating position. Check for the following:

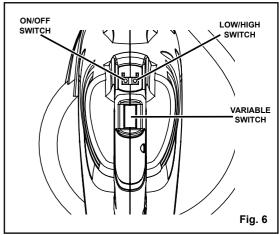
 Operator is wearing proper clothing, such as boots, safety glasses or goggles, ear/hearing protection, gloves, long pants and a long sleeve shirt.

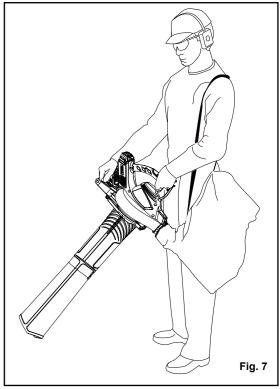
## **A** WARNING

To avoid serious personal injury, wear goggles or safety glasses at all times when operating this unit. Wear a face mask or dust mask in dusty locations.

## **A** WARNING

To prevent serious personal injury or damage to the unit, make sure the blower tube or the mulcher tubes and the bag are in place before operating the unit.





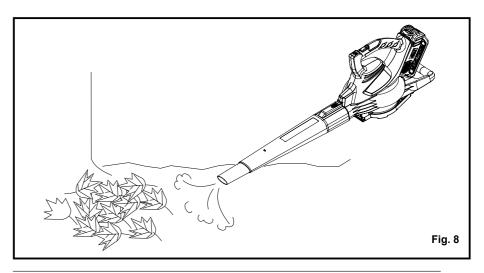
## **OPERATION**

STATUS	LED	SOLVE METHOD
hall fault protection	Green light off red light on; flash 7 times; each time keep 1hz interval: 3s; keep 60s buzzer alarm	Off the trigger and restart it
low-voltage protection	Green light off red light on; flash 5 times; each time keep 1hz interval: 3s; keep 60s buzzer alarm	Off the trigger and restart it or Charging the battery
Over load protection	Green light off red light on; flash 4 times; each time keep 1hz interval: 3s; keep 60s buzzer alarm	Off the trigger and restart it
Battery jam protection	Green/Red light off Unit stop running	Resetting the blower vac by removing the battery for 5 seconds
Abnormal battery temp.	Led off	When the temp. of the bat- tery low down, the blower can run well

## **OPERATION**

## **OPERATING TIPS** (See Fig.8)

- The bag is installed and zipped closed (when used as a mulcher).
- Be sure the bag is zipped closed before operating the unit.
- · Assure the unit is not directed at anybody or any loose debris before starting the unit.
- Verify that the unit is in good working condition. Make sure the tubes and guards are in place and secure.
- · Always hold the unit with both hands when operating.
- Keep a firm grip on both the front and rear handle or grips.
- To reduce the risk of hearing loss associated with sound level(s), hearing protection is required.
- Use the shoulder strap when using unit as a mulcher.
- To reduce noise levels, limit the number of pieces of equipment used at any one time.
- To reduce noise levels, operate power blowers at the lowest possible speed to do the job.
- Use rakes and brooms to loosen debris before blowing.
- In dusty conditions, slightly dampen surfaces.
- Conserve water by using power blowers instead of hoses for many lawn and garden applications, including areas such as gutters, screens, patios, grills, porches, and gardens.
- Watch out for children, pets, open windows or freshly washed cars, and blow debris safely away.
- Clean up after using blowers and other equipment. Dispose of debris appropriately.



NOTE: Please ensure that the Mulch/Vacuum Gate is completely closed and locked.

## **OPERATION**

#### **AIR VENTS**

Never cover air vents. Keep them free from obstructions and debris. They must always remain clear for proper motor cooling.

## **WARNING**

To avoid serious personal injury, do not wear loose fitting clothing or articles such as scarves, strings, chains, ties, etc., that could get drawn into the air vents. To make sure long hair does not get drawn into the air vents, tie back long hair.

#### **OPERATING AS A BLOWER**

Hold the blower firmly. Sweep from side to side with the nozzle several inches above the ground or floor. Slowly advance the unit, keeping the accumulated pile of debris in front of you. Most dry blowing operations are better suited to low speeds, rather than high. High speed blowing is a better way to move heavier items like large debris or gravel.

#### **OPERATING AS A MULCHER**

Hold the vac firmly, tilting the mulcher tubes (2-4 in. or 5-10 cm), and use a sweeping action to collect light debris. The debris will flow into the bag. Items such as small leaves and twigs will be mulched as they pass through the fan housing. For longer bag life and increased performance, empty the bag often.

#### **CLEARING A BLOCKED TUBE / IMPELLER**

## **A** WARNING

To avoid serious personal injury, always wear gloves to protect yourself from the impeller blades or other sharp objects.

- 1. Press the on/off ( **(b)** ) button and wait for the unit to come to a complete stop.
- 2. Remove the battery pack.
- 3. Remove the blower tube or mulcher tubes and the bag.
- 4. Carefully remove material blocking the tube or impeller. Inspect the blades to ensure no damage has occurred. Rotate the impeller blades by hand to ensure the blockage is completely cleared.
- 5. Reinstall the blower tube or mulcher tubes and the bag.
- 6. Insert the battery pack into the unit.

## **MAINTENANCE**

#### **CLEANING THE UNIT**

## A

#### **A** WARNING

In order to avoid personal injury and the risk of fire and electric shock, remove the battery pack before adjusting, inspecting, or cleaning the blower.

#### Cleaning

Remove the battery pack.

- 1. Brush or blow dust and debris out of the air vents using compressed air or a vacuum. Keep the air vents free of obstructions, sawdust, and wood chips. Do not spray, wash, or immerse the air vents in water.
- 2. Wipe off the housing and the plastic components using a moist, soft cloth. Do not use strong solvents or detergents on the plastic housing or plastic components. Certain household cleaners may cause damage, and may cause a shock hazard.

#### **Battery Pack**

- Store the battery pack at half charge. 2 lights remaining on the battery is ideal for storage conditions.
- Once the charging light turns green, remove the battery from the charger and disconnect the charger from the outlet.
- Do not store the battery pack on the tool.
- After charging, the battery pack may be stored in the charger, as long as the charger is not plugged in.

#### **Charger Maintenance**

- Keep the charger clean and clear of debris. Do not allow foreign material to get into the recessed cavity or onto the contacts. Wipe the charger clean with a dry cloth. Do not use solvents or water, and do not place the charger in wet conditions.
- · Unplug the charger when there is no battery pack in it.
- Fully charge the batteries before placing them in storage.
- Store the charger at normal room temperature. Do not store it in excessive heat. Do not use the charger in direct sunlight. Recharge at room temperature between 45°F and 104°F (7°C and 40°C). If the battery pack is hot, allow it to cool down before recharging.

## MAINTENANCE

#### **CLEANING THE BAG**

- 1. Empty the bag after each use to avoid deterioration and obstructing air flow, which will reduce the performance of the mulcher.
- 2. Wearing eye protection and a dust mask, clean the bag as needed. Turn the bag inside out after initial emptying and vigorously shake out dust and debris.

18

- 3. Wash the bag once a year, or more often if needed:
  - Remove the bag.
  - Turn bag inside out.
  - Hang it up.
  - Hose it down thoroughly.
  - Leave it hanging to dry.
  - f Turn bag right-side out and reinstall.

#### **STORAGE**

- Store the unit locked up to prevent unauthorized use or damage.
- Store the unit in a dry, well-ventilated area.
- Store the unit out of the reach of children

## ENVIRONMENTALLY SAFE BATTERY DISPOSAL



The following toxic and corrosive materials are in the batteries used in this blower battery pack: Lithium-lon, a toxic material.

#### 🛕 WARNING

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

### **A** WARNING

If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use. Dispose of it and replace with a new battery pack. DO NOT ATTEMPT TO REPAIR IT!

To avoid injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the battery's terminals with heavy-duty adhesive tape.
- DO NOT attempt to remove or destroy any of the battery pack components.
- DO NOT attempt to open the battery pack.
- If a leak develops, the released electrolytes are corrosive and toxic. DO NOT get the solution in the eyes or on skin, and do not swallow it.
- DO NOT place these batteries in your regular household trash.
- DO NOT incinerate.
- DO NOT place them where they will become part of any waste landfill or municipal solid waste stream.

19

Take them to a certified recycling or disposal centre.

## **TROUBLESHOOTING**

PROBLEM	POSSIBLE CAUSE	SOLUTION
Unit will not blow	1. Bag full	1. Empty the bag.
or mulcher.	2. Blocked tube	2. Clear the blockage.
	3. Blocked impeller	3. Clear the blockage
	4. Dirty bag	4. Clean the bag.
	5. Torn bag	5. Replace the bag.
	6. Bag unzipped	6. Zip up the bag.
	7. Battery is not secure.	7. To secure the battery pack, make sure the latches on the top of the battery pack snap into place.
	8. Battery is not charged.	Charge the battery pack according to the instructions included with your model.
Unit will not start.	Battery is not secure.	To secure the battery pack, make sure the latches on the top of the battery pack snap into place.
Unit will not start.	<ol> <li>Battery is not secure.</li> <li>Battery is not charged.</li> </ol>	the latches on the top of the battery pack snap into place.  2. Charge the battery pack according to
Unit will not start.	·	the latches on the top of the battery pack snap into place.
Unit will not start.	<ol> <li>Battery is not charged.</li> <li>Power/speed switch is in</li> </ol>	the latches on the top of the battery pack snap into place.  2. Charge the battery pack according to the instructions included with your model.
Unit will not start.	<ol> <li>Battery is not charged.</li> <li>Power/speed switch is in the OFF position.</li> </ol>	the latches on the top of the battery pack snap into place.  2. Charge the battery pack according to the instructions included with your model.  3. Press the on/off switch.

## LIMITED FOUR-YEAR WARRANTY







GREENWORKS™ hereby warranties this product, to the original purchaser with **proof of purchase**, for a period of four (4) years against defects in materials, parts or workmanship. GREENWORKS™, at its own discretion will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial/commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.

Battery and charger carries a two (2) year warranty against defects in workmanship and materials. Batteries must be charged in accordance with the operator's manuals directions and regulations in order to be valid.

#### ITEMS NOT COVERED BY WARRANTY:

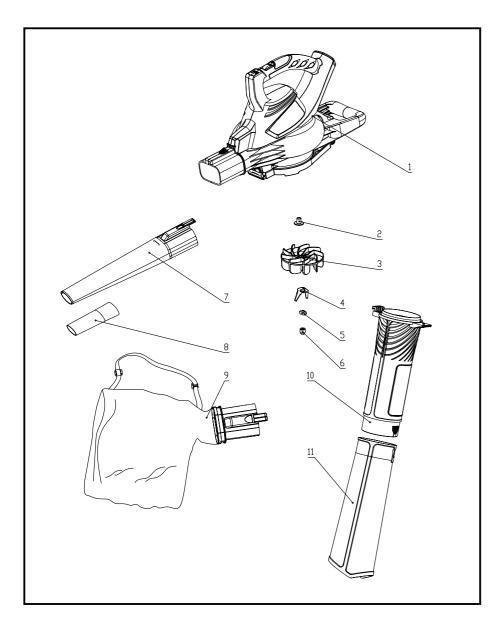
- 1. Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration; or
- The unit, if it has not been operated and/or maintained in accordance with the owner's manual; or
- 3. Normal wear, except as noted below;
- 4. Routine maintenance items such as lubricants, blade sharpening;
- 5. Normal deterioration of the exterior finish due to use or exposure.

#### **GREENWORKS HELPLINE (1 888 90WORKS):**

Warranty service is available by calling our toll-free helpline, 9am to 5pm EST. at 1-888-909-6757 (1-888-90WORKS).

#### TRANSPORTATION CHARGES:

Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser's responsibility to pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by GREENWORKS.



22

# PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	31108810	blower/Vac	1
2	33202810	shaft sleeve	1
3	34103204	Vac mulching impelle	1
4	33203142	Vac cutter blade	1
5	34119144	pad	1
6	34118144-1	turn cap	1
7	34105810	blower tube (brushless)	1
8	34103810	concentrator nozzle	1
9	31101810	bag assy.	1
10	34106142A	upper Vac-tube	1
11	34107142	lower Vac-tube	1

23

NOTES				
-				



**TOLL-FREE HELPLINE: 1-888-90WORKS** (888.909.6757)

Rev: 00 (07-25-13)