

greenworks **pro**

EN	CULTIVATOR	OPERATOR MANUAL
FR	MOTOCULTEUR	MANUEL D'OPÉRATEUR
ES	CULTIVADOR	MANUAL DEL OPERADOR



CUB401

www.greenworkstools.com

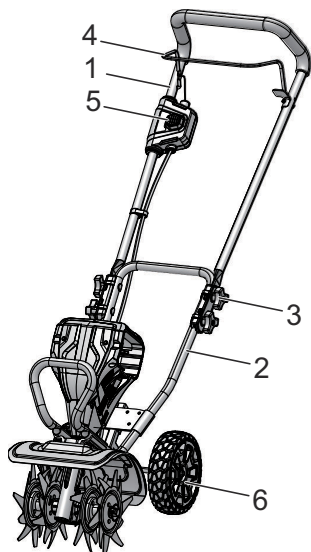
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1 DESCRIPTION

1.1 INTENDED USE

The battery-powered cultivator is intended for loosening of soil in an open garden area. This product is not intended for commercial use. Do not use for any commercial task.

1.2 OVERVIEW



- | | |
|----------------|----------------------|
| 1 Upper handle | 4 Bail switch |
| 2 Lower handle | 5 Safety lock button |
| 3 Wing nut | 6 Wheel assembly |

2 GENERAL POWER TOOL SAFETY WARNINGS

▲ WARNING

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

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your battery-operated (cordless) power tool.

2.1 IMPORTANT SAFETY INSTRUCTIONS

- Use Right Appliance – Do not use appliance for any job except that for which it is intended.
- Read the operator’s manual carefully. Be thoroughly familiar with the controls and the proper use of the

equipment. Know how to stop the unit and disengage the controls quickly.

- Do not operate the machine in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. The machine creates sparks which may ignite the dust or fumes.
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Avoid Dangerous Environment — Don’t expose to rain or use machine in damp or wet locations. Water entering the machine will increase the risk of electric shock.
- 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 a face mask if operation is dusty.
- Dress Properly – Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of rubber gloves and substantial footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
- Do not force the machine — 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.
- Do not operate the machine while under the influence of alcohol or drugs.
- Do not overreach — Keep firm footing and balance at all times. Overreaching can result in loss of balance.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the appliance. Carrying the appliance with your finger on the switch or energizing appliance that have the switch on invites accidents.
- Avoid Unintentional Starting – Don’t carry cordless machine with finger on switch. Be sure the switch is off when inserting the battery.
- Never pick up or carry the machine while the tines are turning or the motor is running.
- Keep the machine in good working condition. Check all nuts, bolts, and screws at frequent intervals for proper tightness to be sure the equipment is in safe working condition.
- Keep the machine free of grass, leaves or grease to reduce the chance of a fire hazard.
- Do not use the machine if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing

appliance. Such preventive safety measures reduce the risk of starting the appliance accidentally.

- Before cleaning, repairing, or inspecting, remove the battery and make certain all moving parts have stopped.
- Never spray water directly into the motor compartment of the machine.
- Use only identical replacement parts when servicing the machine. Use of unauthorized parts may create a risk of serious injury to the user, or damage to the product.

2.2 SPECIFIC SAFETY RULES

- Cleaning, user-maintenance (such as lubrication adjustment, and the like), operations recommended by the manufacturer, and a warning to the user that any other servicing should be performed by an authorized service representative.
- Do not use near underground electric cables, telephone, lines, pipes, or hoses. If in doubt, contact your utility or telephone company to locate underground services.
- If the machine strikes a foreign object, stop the motor, remove the battery pack, thoroughly inspect the machine for any damage, and repair the damage before restarting and operating the machine.
- Maintain Appliance With Care – Keep cutting edge sharp and clean for best performance and to reduce the risk of injury.
- Do not overload the machine capacity by cultivating too deep in a single pass or at too fast a rate.
- Stay alert. Watch what you are doing. Use common sense. Do not operate the machine when you are tired, ill, or upset.
- Don't use in rain.
- Be aware that the equipment may unexpectedly bounce upward or jump forward if the tines should strike buried obstacles such as large stones, roots, or stumps.
- Wear hearing protection.
- Ensure that people and pets are at least 50' (15 m) away from the machine while in use.
- Ensure that work area is free of slippery spots or excessive quantities of stone.
- Start the machine carefully according to instructions from a normal operating position and with feet well away from the tines. It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- Keep hands away from blades.
- Remove the battery pack from the machine before unclogging the tines and when making any repairs, adjustments, or inspections.
- Never operate the equipment on a slope.
- Use extreme caution when pulling the machine towards you.
- When not in use, the machine should be stored indoors in dry, and high or locked-up place – out of reach of children.
- 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.








- Keep Children Away — All visitors and bystanders should be kept at a distance of at least 50 feet from work area.
- Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- Don't grasp the exposed cutting blades or cutting edges when picking up or holding the machine.
- Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion. The temperature of 130°C can be replaced by the temperature of 265°F.
- Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specific in the instructions. Charging improperly or at temperatures outside of the specific range may damage the battery and increase the risk of fire.
- Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
- Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care.
- Check damaged parts. Before further use of this cultivator, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this manual.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this cultivator. If you loan someone this unit, loan them these instructions also.
- For use only with Greenworks BAB726 or other BAB series batteries.
- For use only with Greenworks 2901402 or other CAB series charger.
- Do not dispose of batteries in fire, the cells may explode, check with local codes for possible special disposal instructions.
- Do not open, damage or otherwise tamper with the battery. Released electrolyte is corrosive and may cause damage to the eyes or skin, it may be toxic if swallowed.
- 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.


The recommended ambient temperature range:

Item	Temperature
Cultivator storage temperature range	14°F (-10°C) - 104°F (40°C)
Cultivator operation temperature range	32°F (0°C) - 104°F (40°C)
Battery charging temperature range	39°F (4°C) - 104°F (40°C)
Charger operation temperature range	39°F (4°C) - 104°F (40°C)
Battery storage temperature range	1 year: 32°F (0°C) - 73°F (23°C)
	3 months: 32°F (0°C) - 113°F (45°C)
	1 months: 32°F (0°C) - 140°F (60°C)
Battery discharging temperature range	6.8°F (-14°C) - 113°F (45°C)

2.3 SYMBOLS ON THE PRODUCT




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	Explanation
V	Voltage
A	Current
Hz	Frequency (cycles per second)
	Do not expose the product to rain or moist conditions.
	Type or a characteristic of current
	Keep feet and hands away from rotating tines.
	Thrown objects can ricochet and result in personal injury or property damage. Wear protective clothing and boots.
	Precautions that involve your safety.
	Read and understand all instructions before operating the product, and follow all warnings and safety instructions.
	Wear eye and ear protection.

Symbol	Explanation
	Keep all bystanders at least 15m away.

2.4 RISK LEVELS

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

SYMBOL	SIGNAL	MEANING
	DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	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.

2.5 ENVIRONMENTALLY SAFE BATTERY DISPOSAL



The toxic and corrosive materials below are in the batteries used in this machine: **Lithium-Ion, a toxic material.**

▲ WARNING

Discard all toxic materials in a specified manner to prevent contamination of the environment. Before discarding damaged or worn out Li-ion battery, 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 center, certified for lithium-ion disposal.

▲ WARNING

If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use. Discard it and replace with a new battery pack. **DO NOT TRY TO REPAIR IT!** To prevent injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the terminals of the battery with heavy-duty adhesive tape.
- **DO NOT** try to remove or destroy any of the battery pack components.
- **DO NOT** try 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** put these batteries in your regular household trash.
- **DO NOT** incinerate.
- **DO NOT** put them where they will become part of any waste landfill or municipal solid waste stream.
- Take them to a certified recycling or disposal center.

2.6 PROPOSITION 65**▲ WARNING**

This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm. 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;
- 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.

2.7 SAVE THESE INSTRUCTIONS**3 INSTALLATION**

- Replace the battery pack or the charger immediately if the battery pack or charger cord is damaged.
- Ensure that the unit is switched off before installing or removing the battery pack.

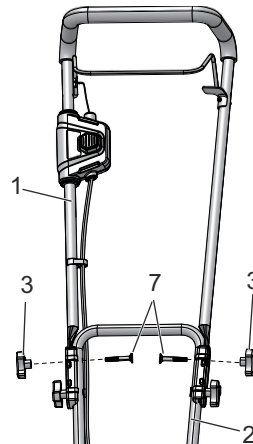
3.1 UNPACK THE MACHINE**▲ WARNING**

Make sure that you correctly assemble the machine before use.

▲ WARNING

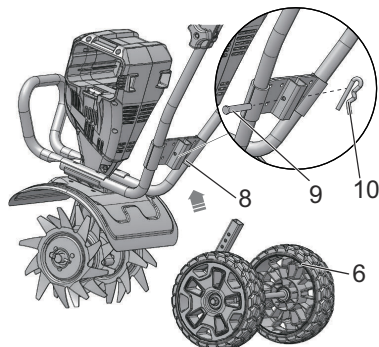
- If the parts are damaged, do not use the machine.
- If you do not have all the parts, do not operate the machine.
- If the parts are damaged or missing, speak to the service center.

1. Open the package.
2. Read the documentation in the box.
3. Remove all the unassembled parts from the box.
4. Remove the machine from the box.
5. Discard the box and package in compliance with local regulations.

3.1.1 INSTALL THE HANDLE

1. Align the holes on the upper handle (1) with holes on the lower handle (2).
2. Insert the bolts (7) through the handles.
3. Use the wing nuts (3) to tighten them.

3.1.2 INSTALL THE WHEEL



1. Insert the wheel assembly (6) into the support rod (8).
2. Align the wheel assembly hole to desired position.
3. Slide bolt (9) through hole and attach the small hitch pin(10) to bolt.

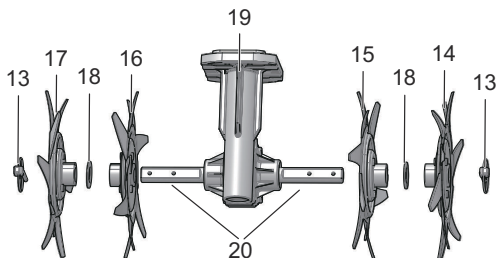
i NOTE

The wheel position of the machine is adjustable. You can control the depth of operation through adjusting the wheel position.

i NOTE

Wheels can be removed for greater tilling depth.

3.1.3 INSTALL THE TINES



The cultivator has four tines —two inner tines stamped B and C and two outer tines stamped A and D. For correct operation of the unit, the tines must be installed in the correct orientation.

1. Put the machine on a flat and smooth surface.
2. Place tine C (16) on the tine shaft (20) to the left of the gear box. The stamped side of the tine should face away from the gear box (19).
3. Place tine B (15) on the tine shaft to the right of the gear box. The stamped side of the tine should face away from the gear box.

4. Place a felt washer (18) on each side of the tine shaft, and slide to rest against the inner tines.
5. Place the outer tine D (17) on the left side of the tine shaft. The stamped side should face in toward tine C (16).
6. Place the outer tine A (14) on the right side of the tine shaft. The stamped side should face in toward tine B (15).
7. To secure the tines to the tine shaft, insert the ring pins (13) into the holes located on either side of the tine shaft.

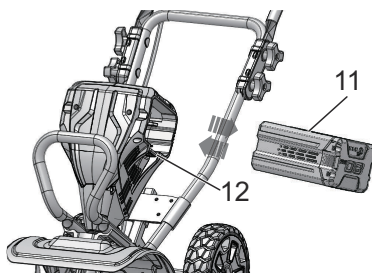
i NOTE

The unit will not operate properly if the tines are installed incorrectly. If you notice a problem with the cultivating operation of the unit, check for proper tine positioning.

▲ WARNING

The tines and the machine may damage even if you move the machine with the motor switched off. To prevent the tines from touching the ground while moving please tilt the machine.

3.1.4 INSTALL THE BATTERY PACK



▲ WARNING

- If the battery pack or charger is damaged, replace the battery pack or the charger.
- Stop the machine and wait until the engine stops before you install or remove the battery pack.
- Read, know, and follow the instructions in the battery and charger manual.

1. Align the lift ribs on the battery pack (11) with the grooves in the battery compartment.
2. Push the battery pack into the battery compartment until the battery pack locks into place.
3. When you hear a click, the battery pack is installed.

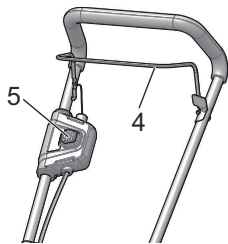
3.1.5 REMOVE THE BATTERY PACK

1. Push and hold the battery release button (12).
2. Remove the battery pack from the machine.

4 APPLICATIONS

- Breaking up garden soil to prepare seed bed for planting.
- Shallow cultivating to remove weeds.

4.1 START THE MACHINE



1. Press the safety lock button (5).
2. Pull the bail switch (4) toward the handle while you hold the safety lock button.
3. Release the safety lock button.

▲ WARNING

Hold the machine with two hands during operation.

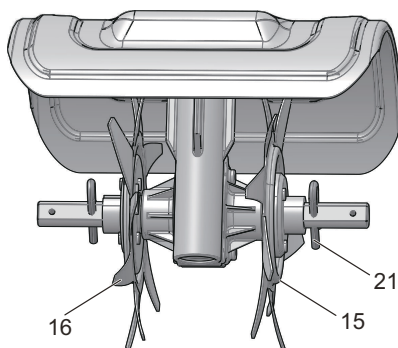
i NOTE

Stand behind the machine with the tines on the ground and the work area clean and free of obstructions.

4.2 STOP THE MACHINE

1. Release the bail switch to stop the machine.

4.3 NARROW CULTIVATING WIDTH



The two outer tine blades can be removed from the unit to allow a more narrow cultivating width.

1. Remove the ring pins from the holes on the ends of the tine shaft.
2. Remove the outside tines and felts from the tine shaft.
3. Place the large hitch pins (21) in the holes.

4.4 OPERATION TIPS

The cultivator can be used to break up garden soil and prepare a seedbed for planting. Plan ahead to leave enough room between the seed rows to allow for machine cultivating after the plants have grown.

1. Several passes over the same path may be required to reach the desired depth. Do not try to dig too deeply in the first pass.
2. If the machine jumps or bucks, allow the unit to move forward at a slightly faster rate or install wheel assembly.
3. If the cultivator stays and digs in at one spot, try rocking it from side to side in order to start it moving forward again.
4. If the soil is very hard, water a few days before cultivating. Avoid working the soil when soggy or wet. Wait a day or two after heavy rain for the ground to dry.
5. Shallow cultivating less than 5cm. deep can be used to disrupt weeds and aerate soil, without injuring nearby plant roots. It should be done often so that weeds do not grow large and cause tangling in the tines of the unit.

5 MAINTENANCE

▲ CAUTION

Do not let brake fluids, gasoline, petroleum-based materials touch the plastic parts. Chemicals can cause damage to the plastic, and make the plastic unserviceable.

▲ CAUTION

Do not use strong solvents or detergents on the plastic housing or components.

▲ WARNING

Remove the battery pack from the machine before maintenance.

5.1 CLEAN THE MACHINE

▲ WARNING

Keep the machine and the motor free of leaves, branches or excessive oil to prevent fire risks.

- Use a moist cloth with a mild detergent to clean the machine.
- Clean all moisture with a soft dry cloth.
- Use a small brush to clean the air vents.

6 STORE THE MACHINE

- Clean the machine before storage.
- Make sure that the motor is not hot when you store the machine.

- Make sure that the machine does not have loose or damaged parts. If it is necessary, do these steps/instructions:
 - Replace the damaged parts.
 - Tighten the bolts.
 - Speak to a person of an approved service center.
- Store the machine in a dry area.
- Make sure that children cannot come near the machine.

7 TROUBLESHOOTING

Problem	Possible cause	Solution
The motor shuts down whilst working.	The battery pack is not installed tightly.	Make sure that you tightly installed the battery pack in the machine.
	The battery pack is out of power.	Charge the battery pack.
	The machine has damage.	Do not use the machine and speak to service center.
The machine smokes during operation.	The machine has damage.	<ol style="list-style-type: none"> 1. Immediately stop the machine. 2. Remove the battery. 3. Speak to service center.
Motor runs but tines do not move.	The machine has damage.	Do not use the machine and speak to service center.
	The tines are blocked.	Remove battery then clear blockage from the tines.
	Gear train failure.	Speak to service center.

8 TECHNICAL DATA

Voltage	80V
No load speed	170 (±5%) RPM
Cultivating path	10" (25 cm)
Weight (without battery pack)	29.3 lbs. (13.3 kg)
Cultivating depth	5" (13 cm)

9 LIMITED WARRANTY



Greenworks hereby warrants 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.

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
2. 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.

HELPLINE:

Warranty service is available by calling our toll-free helpline, at 1-855-345-3934.

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.

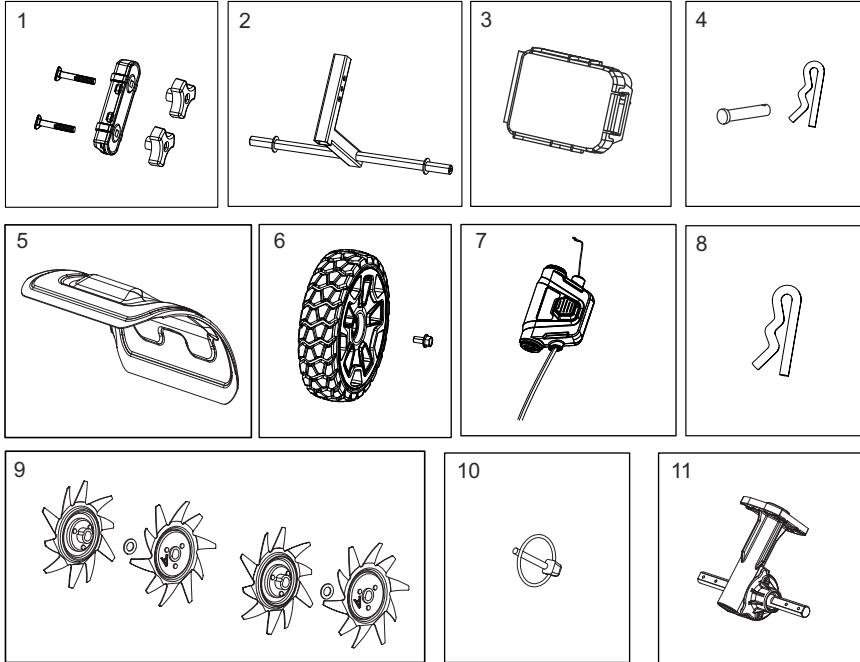
USA address:

Greenworks Tools
P.O. Box 1238
Mooresville, NC 28115

Canadian address:

Greenworks Tools Canada Inc.
1110 Stellar Drive Unit 102
Newmarket, ON, L3Y 7B7

10 EXPLODED VIEW



No .	Part No.	Qty	Description	No .	Part No.	Qty	Description
1		1	Handle Knob Assembly	7		1	Motor Engagement Box
2		1	Wheel Shelf Assembly	8		1	Large Hitch Pin
3		1	PCBA	9		1	Tine Assembly
4		1	Small Hitch Pin	10		1	Ring Pin
5		1	Shield	11		1	Gear Box
6		1	Wheel				