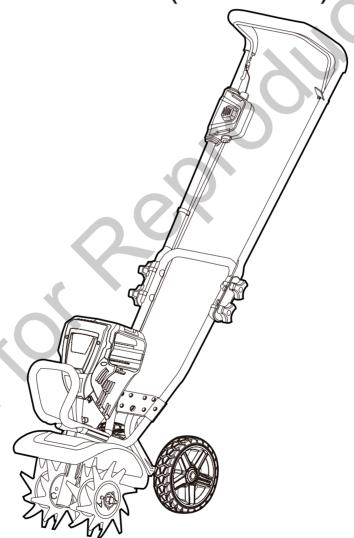


82V 10" Brushless Cultivator 1696869 (SXDC82)





Owner's Manual www.refurbproductsupport.com



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PRODUCT SPECIFICATIONS

82V 10" BRUSHLESS CULTIVATOR

Type	Cordless, battery-operated	
Motor	82V Brushless	
No-Load Speed		
Cultivating Path		
Tine Speed	up to 1,700 RPM	
Weight (without battery)		
Charge Time	30 minutes	
Disclaimer: * Maximum initial battery voltage (measured without a workload) is 82 volts. Nominal voltage is 72.		

SAFETY INFORMATION

A WARNING

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

Save all warnings and instructions for future reference.

- Use only identical manufacturer's replacement parts and accessories. Use of any other parts may create a hazard or cause product damage.
- Always wear safety glasses with side shields marked to 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 operating in dusty work spaces.
- Avoid Dangerous Environment Don't expose power tools to damp or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not use in rain.
- Keep all bystanders, children, and pets at least 50 ft. away.
- Do not use the power tools for any job except that for which it is intended.
- Avoid Unintentional Starting Do not carry appliance with fingers on the switch. Be sure the battery is removed while transporting.
- 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.
- Don't overreach Keep proper footing and balance at all times.
- Stay alert Watch what you are doing. Use common sense. Do not operate this unit when you are tired, ill or under the influence of alcohol, drugs or medication.
- Always store idle power tools indoors When not in use, power tools should be stored indoors in a dry place, out of reach of children.
- Power tool maintenance Replace tine if cracked, chipped, or damaged in any way. Be sure the tine is properly installed and securely fastened. Keep tine edge sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Keep handles dry, clean, and free from oil and grease. Failure to do so can cause serious injury.
- Check Damaged Parts Before further use of the appliance, 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, damaged mountings, 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 indicated elsewhere in this manual.
- Do not charge or operate cordless tools in damp or wet locations or in the rain. Following this rule will reduce the risk of electric shock.
- Remove or disconnect battery before servicing, cleaning or removing material from the gardening appliance.
- Do not dispose of the batteries in a fire. The cells 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.
- 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.
- 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 add unnecessary force to your power tool It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

SAFETY INFORMATION

- 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 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 appliance 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 power tools to fire or excessive temperature. Exposure to fire or temperature above 265°F (130°C) may cause explosion.

ACAUTION

Use only approved replacement batteries, other batteries may cause injury or damage to the cultivator. Use only with Briggs & Stratton batteries BSB2AH82 (2 amp-hour) / BSB4AH82 (4 amp-hour) / BSB5AH82 (5 amp-hour) and Briggs & Stratton charger BSSC82 / BSRC82.

AWARNING (PROPOSITION 65)

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, 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	Watt	Power
min	Minutes	Time
	Direct Current	Type or a characteristic of current
	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.
A	Safety Alert	Precautions that involve your safety.
50° 1500 M→#	Keep Bystanders Away	Keep all bystanders at least 50 ft. away.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and, as necessary, a full face shield when operating this product.
	Cutting Hazard	Keep feet and hands away from rotating tines.

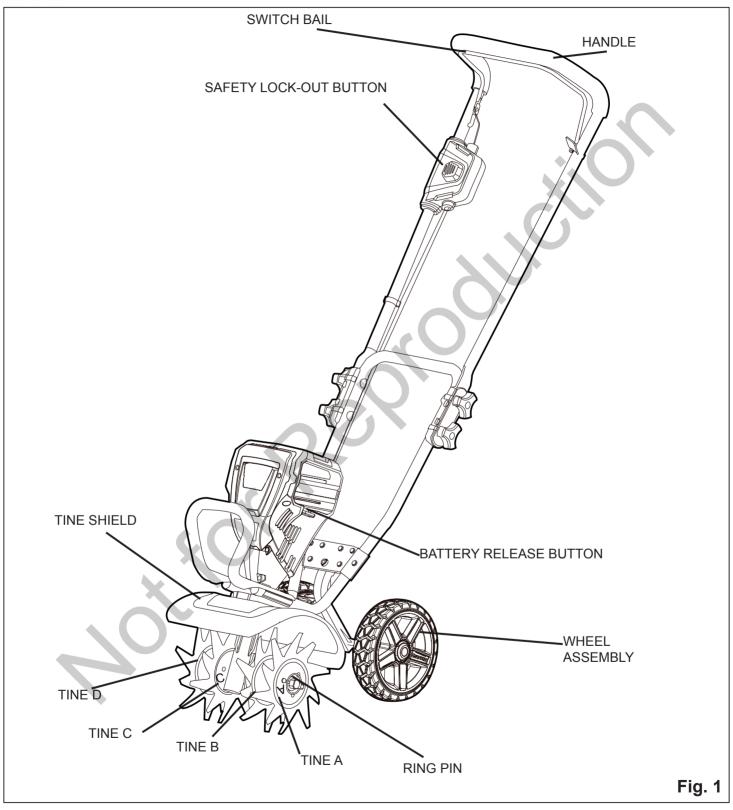
The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOLS	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.

SAVE THESE INSTRUCTIONS

FEATURES AND CONTROLS

Read this operator's manual and safety rules before operating your cultivator. Compare the illustration in Figure 1 to your cultivator in order to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.



ASSEMBLY

UNPACKING

- 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 1-800-317-7833 for assistance.

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 insert battery until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

A WARNING

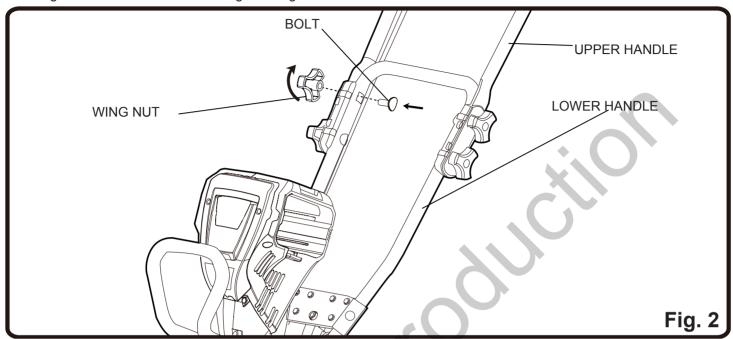
Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse, and could result in a hazardous condition leading to possible serious personal injury.

PACKING LIST

Part Name	Figure	Qty
Cultivator		1
Owner's manual	SHAPPER 100 BY The transcribing By The transcr	1
Wheel assembly		1
Wing nut		5
Hitch pin		2
Ring pin		2
Felt washer		2
Bolt) 	4
Bolt		1
Tine		4

ASSEMBLING THE UPPER HANDLE (See Figure 2)

1. Align the holes on the upper handle assembly with holes on the lower handle found on the cultivator. Insert the bolts through the handles and secure using the wing nut.

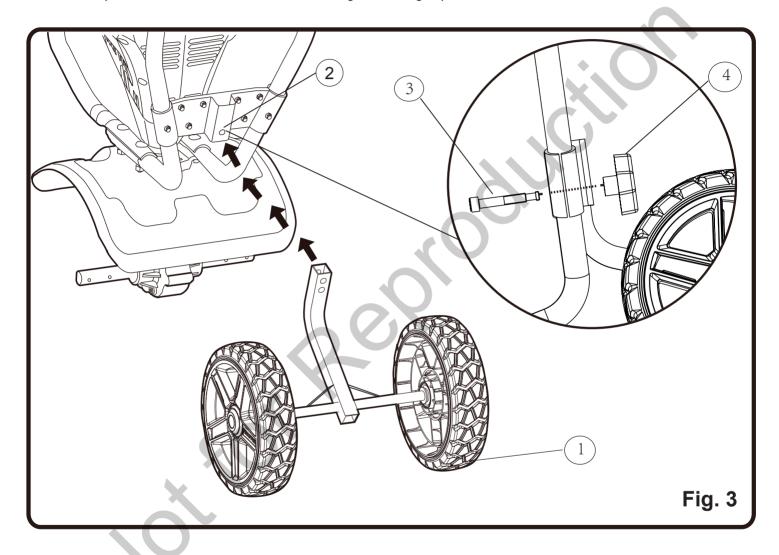


ASSEMBLY

ASSEMBLING THE WHEELS (See Figure 3)

- 1. Remove the battery from the unit.
- 2. Insert the wheel assembly (1) into the support rod (2).
- 3. Align wheel assembly hole to desired position. Slide bolt (3) through hole and attach fastening knob (4) to bolt (3).
- 4. Tighten the fastening knob (4).

NOTE: The wheels are used to control the depth of operation. To adjust the height of the cultivator, move the bolt to a higher or lower hole position. The wheels can be removed for greater tilling depth.



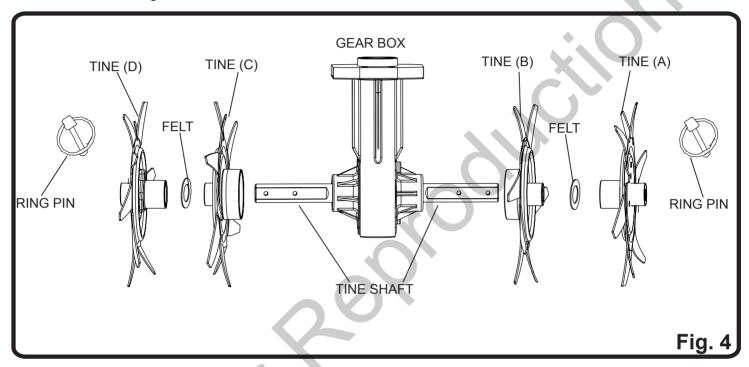
INSTALLING THE TINES (See Figure 4)

A WARNING

To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the tool when assembling parts.

- 1. Remove the battery from the unit.
- 2. Lean the unit back on its wheels so that it is resting securely with the handlebar on the ground.

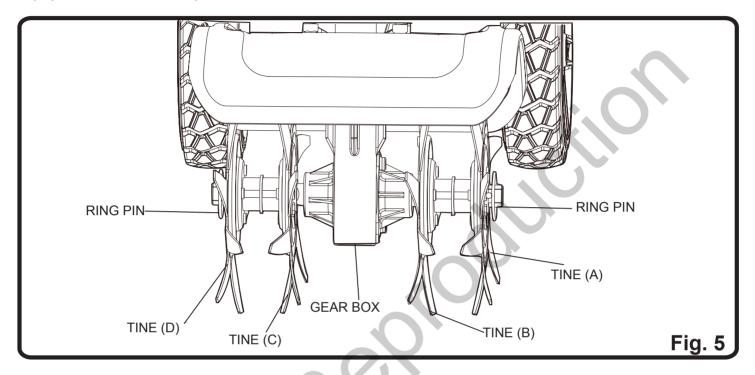
NOTE: This view of the gearbox is from the front of the cultivator.



- 3. Place tine (C) on the tine shaft to the left of the gear box. The stamped side of the tine should face away from the gear box.
- 4. Place tine (B) on the tine shaft to the right of the gear box. The stamped side of the tine should face away from the gear box.
- 5. Place a felt on each side of the tine shaft, and slide to rest against the inner tine.
- 6. Place the outer time stamped (D) on the left side of the time shaft. The stamped side should face in toward time (C).
- 7. Place the outer tine stamped (A) on the right side of the tine shaft. The stamped side should face in toward tine (B).
- 8. To secure the tines to the tine shaft, insert the ring pins into the holes located on either side of the tine shaft.

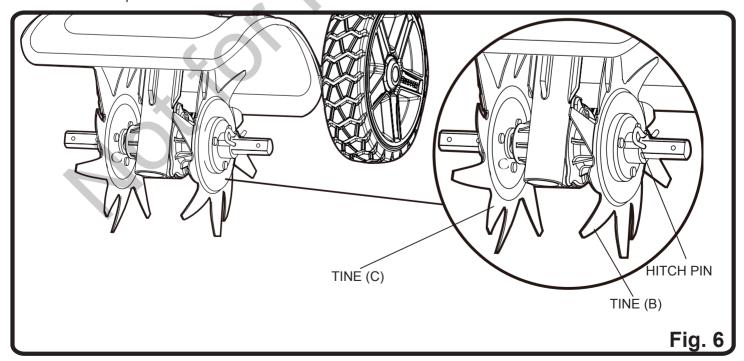
INSTALLING THE TINES CORRECTLY (See Figure 5)

NOTE: when the tines are installed correctly, the flute on the tines should line-up, and the angled edge of the tine blades should point towards the ground. The cultivator will not operate properly if the tines are not installed correctly. If there is a problem with the cultivating operation of the cultivator, check the tines for proper positioning. The directional arrow that is displayed on each tine should point toward the front.



INSTALL TWO TINES FOR TILLING A NARROW AREA (See Figure 6)

- 1. Place tine (B) onto the shaft, and place tine (C) onto the other side shaft.
- 2. Insert the hitch pins into the holes in order to secure the tines to the tine shaft.



A WARNING

Do not allow hands, feet, or any other part of the body or clothing near the rotating tines or any other moving part. The tines begin to rotate forward once the switch trigger is depressed. The tines continue to rotate until the switch trigger is released. Failure to avoid contact could cause serious personal injury.

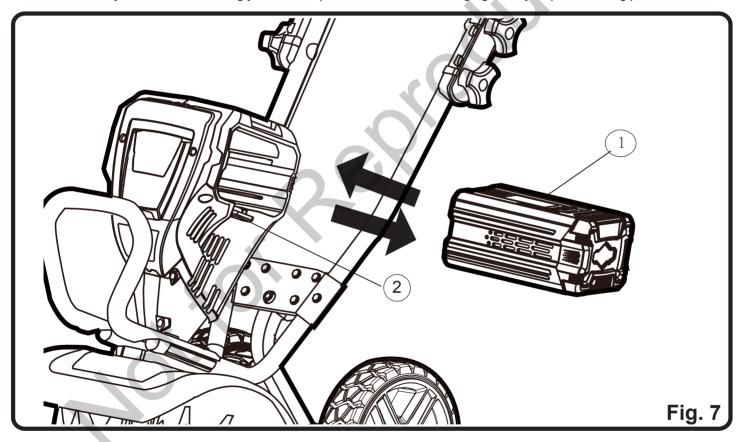
INSTALLING THE BATTERY (See Figure 7)

- 1. Align the battery (1) with the cavity on the cultivator.
- 2. Hold the unit.
- 3. Insert the battery in the opening until the battery release button (2) locks into place. You should hear a "click" once it is installed.

REMOVE THE BATTERY (See Figure 7)

- 1. Press the battery release button (2). This will cause the battery (1) to raise out of the tool.
- 2. Hold the unit. Pull the battery (1) out of the cultivator.

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



OPERATION

A 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.

A WARNING

Always wear safety goggles or safety glasses with side shields when operating tools. Failure to do so could result in objects being thrown into your eyes, resulting in possible serious injury.

A WARNING

Use only as described in this manual. Use only manufacturer's recommended attachments. The use of attachments or accessories not recommended can result in serious personal injury.

A WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

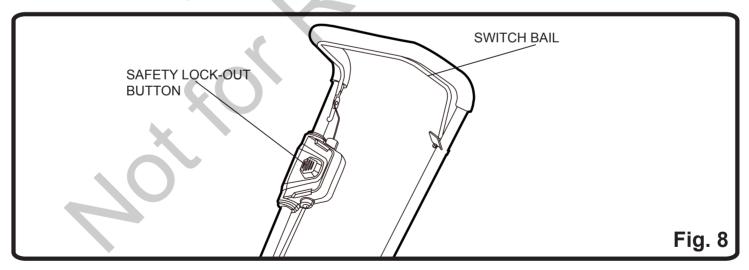
Before each use, inspect the entire product for damaged, missing, or loose parts, such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced.

STARTING THE CULTIVATOR (See Figure 8)

- 1. Insert the battery into the unit until it clicks securely into the battery housing.
- 2. Press the safety-lock out button and pull the switch bail upwards to the handle bar to begin the rotation. Release safety lock-out button while continuing to hold upward on bale switch to continue use.

STOPPING THE CULTIVATOR (See Figure 8)

1. Release switch bail to stop the cultivator.



OPERATION

GENERAL TILLING/CULTIVATING

Shallow cultivating (less than 2 in. [5 cm] 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 get tangled in the tines of the cultivator.

The two outside blades can be removed from the unit to allow a narrower cultivating width.

- 1. With the wheel assembly installed to the desired depth position as described on page 10, roll the cultivator to the work area.
- 2. Insert the battery into the unit.
- 3. Stand behind cultivator, with tines on ground and the work area clean and free of obstructions.
- 4. Start the cultivator.

NOTE: It may take several passes over the same path in order to reach the desired depth. Do not try to dig too deep on the first pass. If the cultivator jumps or bucks, allow it to move forward at a slightly faster pace. In order to dig deeper, lift up on the handlebar pushing the front harder into the ground. Apply downward pressure on the handlebar, pulling unit down towards you for more shallow cultivating. 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.

IMPORTANT: If weeds, roots, vines or other growth gets collected around the bottom of the cultivator it is important to stop cultivator. Disconnect from power source and clean tines using a screwdriver or other object (not included) which can help remove debris. If necessary, removes tines to untangle debris from shaft and tines.

- Do not attempt to till sod into the soil. Instead, remove the sod using a shovel.
- · Remove rocks and roots before tilling in order to prevent damage to the cultivator.



BATTERY & CHARGER

CHARGING PROCEDURE

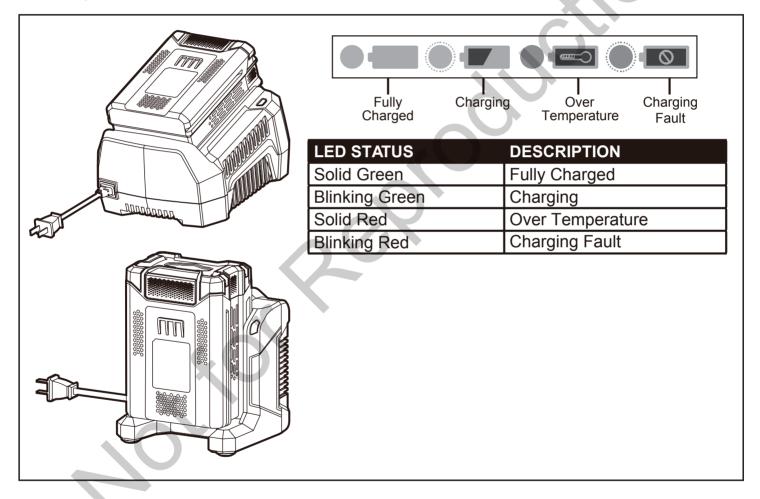
NOTE: The battery is not shipped fully charged. It is recommended to fully charge before first use to ensure that maximum run time can be achieved. This lithium-ion battery will not develop a memory and may be charged at any time.

Low voltage charging:

If the battery has been stored with little to no charge for a long period of time, the charger will go into recovery mode, which will take 20 hrs to fully charge the battery. This will enhance the life of the battery. Once it is fully charged, the next charge will return to standard charging.

- 1. Plug the charger into an AC power outlet.
- 2. Insert the battery pack into the charger.

This is a diagnostic charger. The Charger LED Lights will illuminate in specific order to communicate the current battery status. They are as follows:



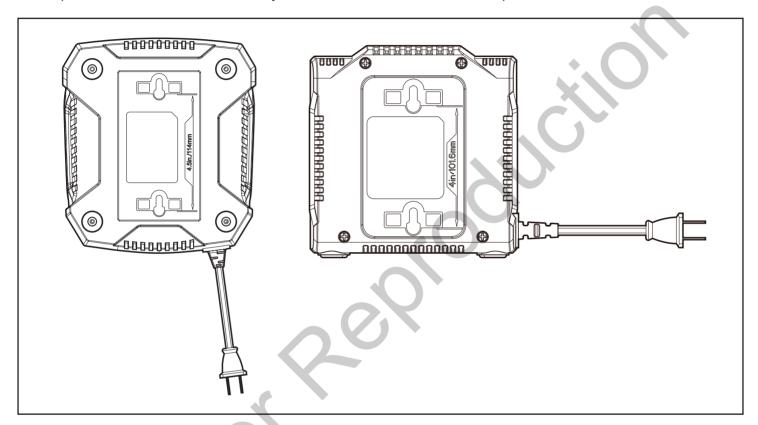
False defect note:

When the battery is inserted into the charger and the status LED blinks RED, remove the battery from the charger for 1 minute, then reinsert. If the status LED blinks GREEN, then the battery is properly charging. If the status LED is still blinking RED, remove the battery and unplug the charger for 1 minute. After 1 minute, plug in the charger and reinsert the battery. If the status LED blinks GREEN, then the battery is properly charging. If the status LED is still blinking RED, the battery is defective and needs to be replaced.

BATTERY & CHARGER

CHARGER MOUNTING

- 1. This charger can be installed hanging on a wall using two #8 screws (not included).
- 2. Locate the placement for the charger to be wall mounted.
- 3. If fastening to wood studs use 2 wood screws (not included).
- 4. Drill two holes on center 4.5 in. apart ensuring that they are vertically aligned.
- 5. If fastening to drywall use wall anchors (not included) and screws to secure the charger to the wall.
- 6. This power unit is intended to be correctly orientated in a vertical or floor mount position.



NOTE: If the battery and the charger won't be used for a long time, remove the battery from the charger and pull out the AC power plug.

MAINTENANCE

A WARNING

When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

AWARNING

Always wear safety goggles or safety glasses with side shields during product operation. If operation is dusty, also wear a dust mask.

A WARNING

Before inspecting, cleaning, or servicing the machine, disconnect the battery from unit and wait for all moving parts to stop. Failure to follow these instructions can result in serious personal injury or property damage.

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

AWARNING

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., Come in contact with plastic parts. Chemicals can damage, weaken, or destroy plastic which may result in serious personal injury. Only the parts shown on the parts list are intended to be repaired or replaced by the customer. All other parts should be replaced at an authorized service center.

STORING THE CULTIVATOR

The following steps should be taken before storing the cultivator for the season.

- · Clean dirt, grass, and other materials from the entire unit.
- Wipe the tines with oil or spray them with silicone lubricant to prevent rusting.
- Oil the switch trigger cable and all visible moving parts. Do not remove the motor cover.
- Order new parts to replace any that are badly worn or broken.
- Store in an upright position in a clean, dry place. Store with the handles in the extended position, or loosen handle knobs and fold handles down. Do not allow switch trigger cable to become pinched when lowering the handlebar.

PREPARING FOR USE AFTER STORAGE

The following steps should be taken before using the cultivator after it has been stored.

- Unfold the handles into the upright position and secure by tightening handlebar knobs. Do not allow the switch trigger cable to become pinched when raising the handlebar.
- Follow the steps to restart the cultivator.

ENVIRONMENTALLY SAFE BATTERY DISPOSAL

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



AWARNING

Toxic materials must be disposed of in a specified manner in order to prevent contamination of the environment. Before disposing of damaged or worn out Lithium-lon battery packs, contact your local waste disposal agency for information and specific instructions. Take the battery to a local recycling and/or disposal centre that is certified for disposal. If the battery pack cracks or breaks, whether it leaks or not, do not recharge it and do not use it. Dispose of it and replace it with a new battery pack. DO NOT ATTEMPT TO REPAIR IT!

Follow these instructions in order to avoid injury and the 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 components of the battery pack.
- Do not attempt to open the battery pack.
- If a leak develops, the electrolytes that are released are corrosive and toxic. Do not get the solution in the eyes or on the skin, and do not swallow it.
- Do not place batteries in regular household trash.
- DO NOT incinerate batteries.
- DO NOT place batteries where they will become part of any waste landfill or municipal solid waste stream.
- Dispose of batteries at a certified recycling or disposal center.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Motor fails to start when switch trigger is depressed.	Battery pack is not inserted or connection is loose.	To secure the battery pack, make sure the latch on bottom of the battery pack snaps into place.
	Cultivator circuit overload protection is tripped.	Let unit rest for 4 minutes, then repeat steps to start.
Motor runs but tines do not move.	Gear train failure.	Take unit to authorized service center.

