

# **80V CORDLESS CULTIVATOR**

## **TL80L00** (2800002 / 2800302)



Read all safety rules and instructions carefully before operating this tool. www.greenworkstools.com/80V-PRO



## CONTENTS

Contents	2
Product specifications	2
General safety rules	3-4
Specific safety rules	5-6
Symbols	7-8
Know your snow shovel	9
Assembly instructions	10-14
Operation	15-16
Battery & Battery charger	17-19
Maintenance	
Troubleshooting	
Warranty	
Exploded View	
Parts List	24

## PRODUCT SPECIFICATIONS

### **80V CULTIVATOR**

Motor	Cordless, Battery-powered
Motor Voltage	
No-load speed	
Cultivating Path	
Tine speed	up to 1700 strikes per minute
Approximate Weight (without battery)	
Charge Time	up to 30 minutes
Optimum Charging Temperature	



## 

when using electric gardening appliances, basic safty precautions should always be followed to reduce the risk of fire, electric shock and personal injury including the following.

## 🛦 WARNING

READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

#### READ THESE INSTRUCTIONS BEFORE USING CULTIVATOR

- Read the operator's manual carefully, and thoroughly familiarize yourself with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
- Do not operate cultivator in the presence of flammable liquids, gases, or dust. Cultivators create 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 Do not expose to rain or use cultivator in damp or wet locations. Water entering a cultivator will increase the risk of electric shock.
- · Store indoors, and do not expose to rain or water, avoid direct sun light.
- 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 may not protect against impacts. 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 which 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. Secure long hair so it is above shoulder level to prevent entanglement in any moving parts. Wear heavy long pants, long sleeves, boots, and gloves. Avoid loose garments or jewelry that could get caught in moving parts of the machine or its motor.
- Do not force cultivator 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 cultivator while under the influence of alclhol or drugs.
- · Keep hands and feet away from tines.

## GENERAL SAFETY RULES

- Do not overreach or extend past stable footing when using the cultivator.
- Avoid Unintentional Starting Do not carry cordless appliance with your finger on the trigger. Be sure switch is off when inserting the battery.
- Never pick up or carry the cultivator while the tines are turning or the motor is running.
- Keep cultivator 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 unit free of grass, leaves, or grease to reduce the chance of a fire hazard.
- Do not use cultivator 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 appliance from the power supply when not in use, before servicing, when changing accessories such as blades, and the like. Such preventive safety measures reduce the risk of starting the cultivator accidentally.
- Before cleaning, repairing or inspecting, unplug the cultivator and make certain all moving parts have stopped.
- · Never spray water directly into the motor compartment of the cultivator.
- Service on the cultivator must be performed by qualified repair personnel only. Service or maintenance performed by unquallified personnel could result in injury to the user or damage to the product.
- Use only identical replacement parts when servicing the cultivator. Use of unauthorized parts may create a risk of serious injury to the user or damage to the product.

#### 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 cultivator. 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 cultivator off if a child or any other person enters the working area.
- · Look behind and down for small children before and while cutting backwards.
- 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 cultivator.

## 🔺 W A R N I N G

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.

## SPECIFIC SAFETY RULES

- 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 unit strikes a foreign object, stop the motor, disconnect the battery, thoroughly inspect the machine for any damage, and repair the damage before restarting and operating the machine.
- 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 cultivator when you are tired, ill, or upset.
- 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 50ft (15 m) away from cultivator while in use.
- Replace worn or damaged parts only with identical replacement parts.
- · Ensure that work area is free of wet spots or excessive quantities of stone.
- Start the cultivator carefully according to instructions from a normal operating position and with feet well away from the tines. Do not force cultivator. It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- Remove the battery from unit 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.
- Store Idle Appliances Indoors When not in use, appliances should be stored indoors in a dry, and high or locked place out of reach of children.
- Maintain Appliance with Care Keep tines clean for best performance and reduce the risk
  of injury. Follow instructions for lubrication and changing accessories. Inspect cultivator cord
  periodically. If damaged have it replaced. Keep handles dry, clean, and free from grease and
  oil.
- Keep Children Away All visitors and bystanders should be kept at a distance of at least 50 feet from work area.
- Do not use appliance for any job except that for which it is intended.
- Don't grasp the exposed cutting blades or cutting edges when picking up or holding the appliance.
- Check for damaged parts, before using cultivator, guard and other parts should be carefully checked to determine that it will operate properly and perform its intended functions. 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 product.
- Use only with 2901302 battery and 2901402 charger

## SPECIFIC SAFETY RULES

- Do not charge appliance in rain, or in wet locations.
- Remove or disconnect battery before servicing, cleaning or removing material from the appliance.
- Do not dispose of batteries in fire, the cell may explode, check with local codes for possible special disposal instructions.
- Do not open or mutilate 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, earrings and bracelets. The battery is made with conductive materials which may overheat and cause burns if contact is made.

## 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
A	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
<b>&amp;</b>	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.
	Keep Bystanders Away	Keep all bystanders at least 50 ft. away.
Ð	Eye Protection	Always wear safety goggles or safety glasses with side shields and, as necessary, a full face shield when operating this product.
	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.
	Ricochet	Thrown objects can ricochet and result in personal injury or property damage.
	Cutting Hazard	Keep feet and hands away from rotating tines.
	No Hand Symbol	Failure to keep your hands away from the blade will result in serious personal injury.

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.

#### 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.

### A WARNING

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(855)345-3934 for assistance.

#### 🛕 W A R N I N G

The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend 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.

## SAVE THESE INSTRUCTIONS

## KNOW YOUR CULTIVATOR

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



#### 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 tool carefully to verify 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(855)345-3934 for assistance.

#### PACKING LIST

- Cultivator
- Hitch Pins (3) + U shape Hitch Pins(2)
- Bolt (1)
- Inner Tines (2)
- Outer Tines (2)
- Felts (2)
- · Wheel Assembly
- · Operator's Manual

### 🛕 W A R N I N G

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.

## 🛕 W A R N I N G

Do not attempt to modify this tool or create accessories that are not recommended for use with this tool. Any such alteration or modification constitutes misuse, and could result in a hazardous condition that may lead to serious personal injury.



🚺 W A R N I N G

Do not insert the battery into unit until assembly is complete. Failure to comply could result in accidental starting, and possible serious personal injury.

## ASSEMBLY INSTRUCTIONS

### ASSEMBLING THE WHEELS (See Figure 2)

The wheels are used to control the depth of operation, and adjust the height of the cultivator.

- 1. Remove the battery from the unit.
- 2. Place cultivator in a stable position as shown in Fig. 2
- 3. Insert the wheel assembly (2) into the support rod (3). (Fig. 2)
- 4. Align wheel assembly hole to desired position. Slide bolt (5) through hole and attach hitch pin (6) to bolt.
- 5. The highest tilling position is Position A and lowest tilling position is Position B.
- 6. Wheels can be removed for greater tilling depth.



## ASSEMBLY INSTRUCTIONS

### **INSTALLING THE TINES** (See Figure 3)

The cultivator comes with four tines—For correct operation of the unit, the tines must be installed in the correct order. The cultivator may be used with four tines or two tines.

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



To install the tines, lean the unit back on its wheels so that the handlebar rests on the ground. NOTE: This view of the gearbox is from the front of the cultivator.

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.

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.

Place a felt washer on each side of the tine shaft, and slide to rest against the inner tine.

Place the outer tine stamped (D) on the left side of the tine shaft. The stamped side should face in toward tine (C).

Place the outer tine stamped (A) on the right side of the tine shaft. The stamped side should face in toward tine (B).

Note: When installed correctly, the angled edge of the tine blades should face the ground.

To secure the tines to the tine shaft, insert the hitch pin into the holes located on either side of the tine shaft.

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.

## ASSEMBLY INSTRUCTIONS

### TINES INSTALLED CORRECTLY (See Figure 4)

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.

NOTE: The tiller will not operate properly if the tines are not installed correctly. If there is a problem with the cultivating operation of the tiller, check the tines for proper positioning.

NOTE: The directional arrow that is displayed on each tine should point toward the front.



#### INSTALL TWO TINES FOR TILLING A NARROW AREA (See Figure 5)

Place tine (A) onto the shaft, and place tine (D) onto the other side shaft. Insert the hitch pin into the holes in order to secure the tines to the tine shaft.



### ASSEMBLING THE HANDLEBAR (See Figure 6)

• Align the holes on the upper handle with the holes on the lower handle. Insert the bolts, and tighten them using the wing nuts provided.



### WARNING

Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

### 🔺 W A R N I N G

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

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.

### 🛕 W A R N I N G

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.

#### STARTING THE CULTIVATOR (See Figure 7)

- 1. Insert the battery into the unit until it clicks securely into the battery housing.
- Press the Safety-lock out button (1) and pull the Bale Switch (2) 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 7)

Release bale switch to stop the cultivator.



#### PREPARING THE SEED BED

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

#### TILLING SOD:

Tilling sod into the soil is not recommended. If sod must be removed to perform application then it is suggested to do as follows:

- 1. Map out the area of sod required to be removed.
- 2. Cut into 16" x 36" sections using a spade shovel or edger at a depth of 3 inches.
- 3. Lift the sod from the edges using a shovel sliding below at the roots.
- 4. Remove the sod. Carry sod to compost or other pile turned grass down to allow grass to decompose.
- 5. Once sod layer is removed, begin to till the soil to desired depth.

#### **GENERAL TILLING/CULTIVATING**

Shallow cultivating (less than 2" [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 tiller.

The two inner blades can be removed from the unit to allow a narrower cultivating width. See pages 13 for correct tine installation process.

- 1. With the wheel assembly installed to the desired depth position as described on page 11, roll the tiller to the work area.
- 2. Insert the battery into the unit.
- 3. Stand behind tiller, with tines on ground and the work area clean and free of obstructions.
- 4. Start the tiller using directions from page 15.

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 tiller 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 tiller stays and digs in at one spot, try rocking it from side to side in order to start it moving forward again. If the soil is very hard, water it a few days before cultivating. Avoid working soil that is soggy or wet. Wait a day or two after heavy rain for the ground to dry.

**IMPORTANT:** If weeds, roots, vines or other growth gets collected around the bottom of the tiller it is important to stop tiller. Disconnect from power source and clean tines using a screwdriver or other object which can help remove debris. If necessary, removes tines to untangle debris from shaft and tines.

#### QUICK TIPS:

Remove rocks and roots before tilling in order to prevent damage to the tiller. Work the soil when it is neither too wet nor too dry. To test the moisture level of the soil, take a handful of soil and squeeze it. If it remains in a tight ball when you release your grip, it is too wet. If it crumbles, it is ready to till. Dry soil is difficult to cultivate, and valuable topsoil can be blownaway when tilling on a windy day. Fall tilling presents many advantages over spring tilling. It eliminates blown away the need to till in the spring, and it allows for earlier planting. Soil moisture and temperature conditions are favorable for decomposition of the organic matter that is turned under in the fall. Furthermore, disease organisms, insects, and perennial weeds can be reduced by tilling in the fall.

### CHECKING BATTERY CAPACITY

80V secondary Li-ion Battery: 2901302 Battery: 80V m (144Wh) Lithium-Ion Charge time: up to 30 minutes Weight: 3.22 lbs (1.46 kg)

Press the battery capacity indicator (BCI) button. The lights will illuminate according to the batteries current power level. See chart below:

BATTERY CAPACITY INDICATOR (BCI) BUTTON			
	Lights	Capacity	
	3 Green Lights	The battery is more than 75% capacity	
	2 Green Lights	The battery is between 35% and 75% capacity	
	1 Green Light	The battery is less than 35% capacity	
	Lights go out	The battery requires charging immediately	
		·	

#### SAFETY NOTES AND PRECAUTIONS

- 1. Do not disassemble the battery.
- 2. Keep battery out of reach of children.
- 3. Do not expose the battery to water or salt water, and always store the battery in cool and dry environment.
- 4. Do not place the battery in high-temperature locations, such as near a fire, heater, etc.
- 5. Do not reverse the positive terminal and the negative terminal of the battery. 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.
- 6. Do not knock, strike, step on the battery.
- 7. Do not soder directly onto the battery or pierce the battery with nails or other edged tools.

## A WARNING

To avoid risk of fire, electric shock, or electrocution:

- Do not use a damp cloth or detergent on the battery or battery charger.
- Always remove the battery pack before cleaning, inspecting, or performing any maintenance on the tool.

#### SPECIFICATION

80V Li-ion Battery charger: 2901402 Input: 120VAC, 50Hz, 5A Output: 80VDC, 4A Weight: 3.3 lbs (1.5kg) Class 2 Battery Charger

#### CHARGING PROCEDURE

NOTE: T h e battery is not shipped fully charged. It is recommended to fully charge before first use to ensur e t hat max imum run time c an b e achieved. This lithium -ion battery will not dev elop a m emory 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 cycle. A fully discharged battery pack will require approximately 30 minutes to fully charge from a discharged state. Plug the charger into an AC power outlet.

• Insert the battery 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 fo llows:



#### 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 blinks GREEN, then the battery is properly charging. If the status LED blinks GREEN, then the battery is properly charging. 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.

#### CHECKING THE CHARGE

If the battery pack does not charge properly:

- Check the current at the power outlet with another tool. Make sure that the outlet is not turned off.
- · Check that the charger contacts have not been shorted by debris or foreign material.
- If the air temperature is above 100°F or below 45°F, move the charger and battery pack to a room temperature location.
- Be sure voltage selector is in correct voltage position before plugging in.
- For use in the U.S.A., the voltage selector switch must be placed in the 120 volt position. For use in countries other than the U.S.A., the voltage selector may need to be placed in other than the 120 volt position. Confirm the voltage available at each country location before using the product.
- This power unit is intended to be correctly orientated in a vertical or floor mount position

### A WARNING

If the battery is inserted into the charger when warm or hot, the CHARGING LED indicator light on the charger may switch on and illuminate RED. If this occurs allow the battery to cool inside of the charger for up to 30 minutes. Charging should automatically start once battery has cooled.

#### **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.

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.

### A WARNING

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 F ROM 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.

#### A WARNING

DO NOT AT ANY TIME LET BRAKE FLUIDS, GASOLINE, PETROLEUM-BASED PRODUCTS, PENETRATING OILS, ETC., COME IN CONTACT WITH PLASTIC PARTS. CHEMICALS CAN DAMAGE, WEAKEN, OR DESTROY PLASTIC WHICH MAY RESULT IN SERIOUS PERSONAL INJURY. 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.

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION	
Motor fails to start when	The battery is not inserted	Insert the battery into unit.	
switch trigger is depressed.	in or connection is loose.	insert the battery into unit.	
Motor runs but tines do not	Gear train failure.	Take unit to authorized service center	
move.		Take unit to authorized service center.	

## LIMITED FOUR-YEAR WARRANTY





GREENWORKS<sup>®</sup> 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<sup>®</sup>, 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 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, 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.

#### GREENWORKS® HELPLINE (1(855)345-3934):

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**<sup>®</sup>.

## EXPLODED VIEW



ITEM NO.	PART NO.	DESCRIPTION	QTY
1	332011050AG	BALE SWITCH	1
2	311051662	UPPER HANDLE ASSY	1
3	311061662	LOWER HANDLE ASSY	1
4	332031662	SCREW	4
5	311071662	WHEEL ASSY	1
6	32208261	NUT	4
7	31103281	TINE (B)	1
8	32203289	BOLT	4
9	31102281	TINE (A)	1
10	33210289	ROUND HITCH PIN	2
11	31115281	TINE (D)	1
12	31114281	TIEN (C)	1
13	311081662	GEAR BOX ASSY	1
14	33301289-1	COVER	1
15	332011662	SOFT SHAFT	1
16	331021662	LIFT HANDLE	1
17	311091662	POWER HEAD	1
18	34901282-1	FELT	2



**Greenworks Tools** 

**PO Box 1238** 

Mooresville, NC 28115

TOLL-FREE HELPLINE: 1(855)345-3934

Rev: 00 (22-07-16)



Printed in China on 100% Recycled Paper