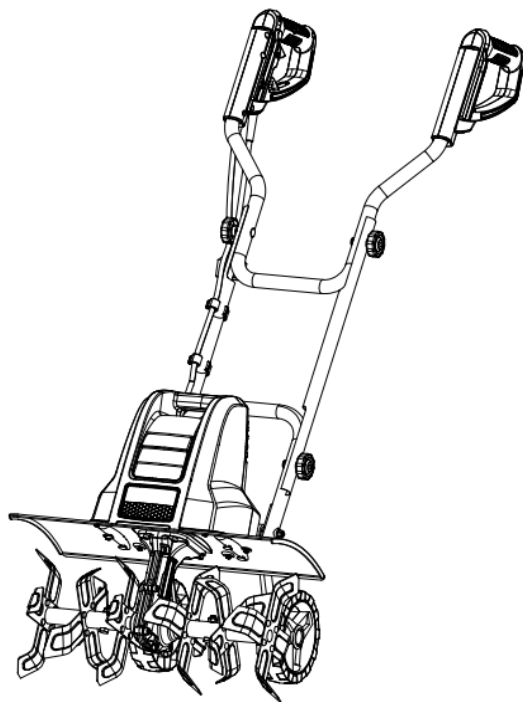


ELECTRIC TILLER

OPERATOR MANUAL



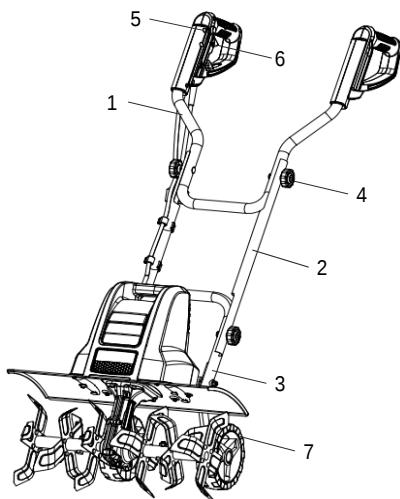
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1 DESCRIPTION

1.1 PURPOSE

The machine 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 | 5 Safety lock button |
| 2 Middle handle | 6 Switch |
| 3 Lower handle | 7 Wheel |
| 4 Wing nut | |

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 mains-operated (corded) power tool.

2.1 WORK AREA SAFETY

- **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*

- **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.*
- **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2.2 ELECTRICAL SAFETY

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges and moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- **If operating a power tool in a damp location is unavoidable, use a RESIDUAL CURRENT DEVICE (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

2.3 PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used appropriately will reduce personal injuries.*
- **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack and when picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.**
- **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*

- **Do not over-reach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust related hazards.*
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*

2.4 POWER TOOL USE AND CARE

- **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- **Disconnect the plug from the power source and/or remove the BATTERY pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

2.5 SERVICE

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

3 GENERAL SAFETY RULES

- **Replacement Parts** – When servicing use only identical replacement parts.
- **Avoid Dangerous Environment** – Don't use appliances in damp or wet locations.
- **Don't Use In Rain.**
- **Keep Children Away** – All visitors should be kept at a distance from work area.
- **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.
- **Use Safety Glasses** – Always use face or dust mask if operation is dusty.
- **Use Right Appliance** – Do not use appliance for any job except that for which it is intended.
- **Warning** – To reduce the risk of electric shock, use only with an extension cord intended for outdoor use, such as an extension cord of cord type SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A. or SJTOW-A.
- **Avoid Unintentional Starting** – Don't carry plugged-in appliance with finger on switch. Be sure switch is off when plugging in.
- **Don't Abuse Cord** – Never carry appliance by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- **Don't grasp the exposed cutting blades or cutting edges when picking up or holding the appliance.**
- **Don't Force Appliance** – It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- **Don't Overreach** – Keep proper footing and balance at all times.
- **Stay Alert** – Watch what you are doing. Use common sense. Do not operate appliance when you are tired.
- **Disconnect Appliance** – Disconnect the appliance from the power supply when not in use, before servicing, when changing accessories such as blades, and the like.
- **Store Idle Appliances Indoors** – When not in use, appliances should be stored indoors in dry, and high or locked-up place – out of reach of children.

- **Maintain Appliance With Care** – Keep cutting edge sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Inspect appliance cord periodically, and if damaged, have it repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
- **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, 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 indicated elsewhere in this manual.

4 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)
	Type or a characteristic of current
	Keep feet and hands away from rotating tines.
	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.
	Keep all bystanders at least 15m away.
	Do not expose the product to rain or moist conditions.
	Double-insulated construction.

5 RISK LEVELS

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

SYM-BOL	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.

6 DOUBLE INSULATED

Double insulation is a concept in safety in electric power tools, which eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. Double insulated tools do not need to be grounded.

WARNING

The double insulated system is intended to protect the user from shock resulting from a break in the tool's internal insulation. Observe all normal safety precautions to avoid electrical shock.

Servicing of a product with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service, we suggest you return the tool to your nearest authorized service center for repair. Always use original factory replacement parts when servicing.

7 EXTENSION CORDS

When using a power tool at a considerable distance from a power source, be sure to use an extension cord that has the capacity to handle the current the product will draw. An undersized cord will cause a drop in line voltage, resulting in overheating and loss of power. Use the chart to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

When working outdoors with a product , use an extension cord that is designed for outside use. This type of cord is designated with "W-A" or "W" on the cord's jacket. Before using any extension cord, inspect it for loose or exposed wires and cut or worn insulation.

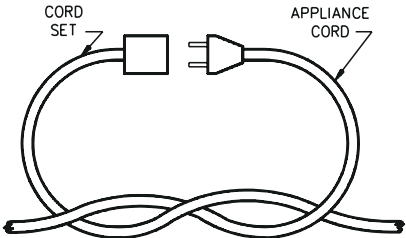
MINIMUM GAUGE FOR EXTENSION CORDS (AWG) (WHEN USING 120 V ONLY)

Ampere Rating		Total Length of Cord in Feet (meters)			
More Than	Not More Than	25' (7.6 m)	50' (15 m)	100' (30.4 m)	150' (45.7 m)
0	6	/	/	/	/
6	10	/	/	/	/
10	12	/	/	/	/
12	16	14	12	Not Recommended	

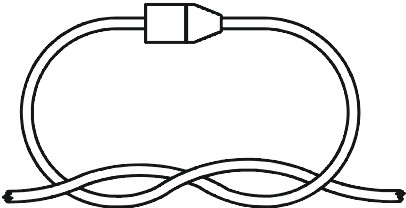
Extension Cord – Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized extension cord will cause a drop in voltage resulting in loss of power and overheating. The table shows the correct size to use depending on cord length and name plate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord. To reduce the risk of disconnection of appliance cord from the extension cord during operating:

1. Make a knot as shown in Figure A.
2. Or use one of the plug-receptacle retaining straps or connectors.

METHOD OF SECURING EXTENSION CORD



(A) THE CORD AS SHOWN



(B) CONNECT PLUG AND RECEPTACLE

▲ WARNING

Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools, or other obstructions while you are working with a power tool. Failure to do so can result in serious personal injury.

▲ WARNING

Check extension cords before each use. If damaged replace immediately. Never use the product with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.

8 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.

Save these instructions.

9 INSTALLATION

▲ WARNING

Do not change or make accessories that are not recommended by the manufacturer.

▲ WARNING

Do not connect the machine to the power supply until you assemble all the parts.

9.1 UNPACK THE MACHINE

▲ WARNING

Make sure that you correctly assemble the machine before use.

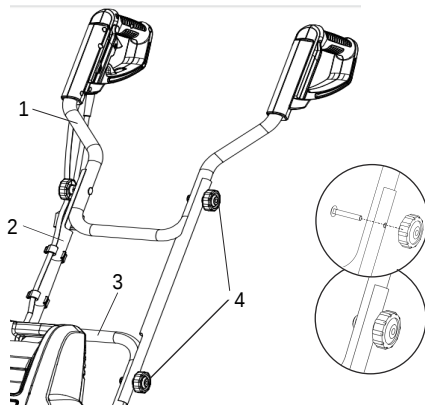
▲ WARNING

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

1. Open the package.
2. Read the documentation provided in the box.
3. Remove all the unassembled parts from the box.
4. Remove the machine from the box.

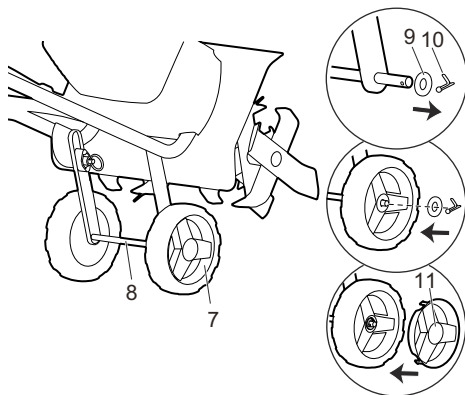
5. Discard the box and packing material in compliance with local regulations.

9.2 INSTALL THE HANDLE



1. Align the holes on the middle handle (2) with holes on the lower handle (3).
2. Align the holes on the upper handle (1) with holes on the middle handle (2).
3. Insert the bolts through the handles.
4. Use the wing nuts (4) to tighten them.

9.3 INSTALL THE WHEEL



1. Remove the washer (9) and the R pin (10) from the support rod (8).
2. Insert the wheel (7) into the support rod (8).
3. Secure it with the washer (9) and the R pin (10).
4. Insert the wheel cap (11).

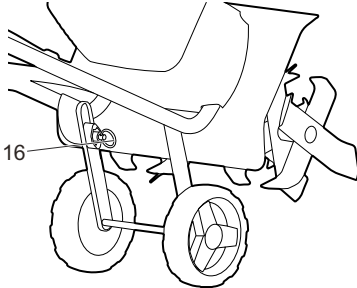
10 APPLICATIONS

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

10.1 ADJUST THE WHEEL HEIGHT

The wheel position of the machine is adjustable.

1. Pull the lock pin (16).



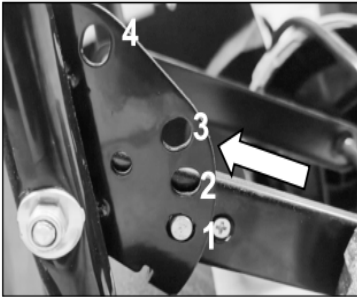
2. Move the wheel assembly to desired position.

1-position wheel adjustment---working:transport

2-position wheel adjustment---working:shallow tillage

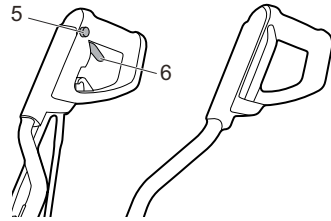
3-position wheel adjustment---working:medium tillage (shallow tillage, controlled by human body)

4-position wheel adjustment---working:deep tillage (shallow/medium tillage, controlled by human body)



3. Release the lock pin and make sure it locks into place.

10.2 START THE MACHINE



1. Connect the machine into an approved outdoor extension cable.
2. Press the safety lock button (5).
3. Press the switch (6) while you hold the safety lock button.
4. Release the safety lock button (5).

WARNING

Hold the machine with two hands during operation.

NOTE

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

10.3 STOP THE MACHINE

1. Release the switch (6) to stop the machine.

10.4 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.

- 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.

11 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.

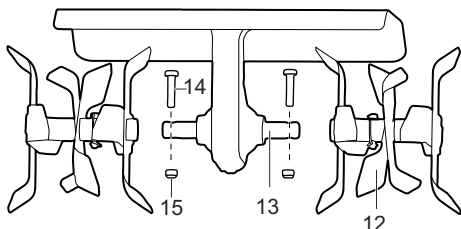
CAUTION

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

▲ WARNING

Disconnect the machine from the power supply before maintenance.

11.1 REPLACE THE TINES



▲ WARNING

Use only approved replacement tines.

▲ WARNING

Wear adequate clothing, gloves and goggles before carrying out any maintenance.

- Stop the machine.
- Disconnect the machine from the power supply.
- Put the machine on a flat and smooth surface.
- Remove the screw (14), nut (15) and tine (12) from the tine shaft (13).
- Install the new tine. Align the hole on the tine with hole on the tine shaft.
- To secure the tine to the tine shaft, insert the screw (14) into the hole and tighten the nut (15).

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.

11.2 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.

12 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.

13 TROUBLESHOOTING

Problem	Possible cause	Solution
Motor fails to start when bail switch is depressed.	Power cord is not plugged in or connection is loose.	Plug in the power cord.
	Household circuit breaker is tripped.	Check circuit breaker.

Problem	Possible cause	Solution
The machine smokes during operation.	The machine has damage.	1. Immediately stop the machine. 2. Unplug the machine. 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.	Unplug the machine then clear blockage from the tines.
	Gear train failure.	Speak to service center.

14 TECHNICAL DATA

Power	120V, 60Hz, 13.5A
No load speed	380 RPM
Cultivating width	18" (45cm)
Weight	24.3 lbs (11 kg)
Cultivating depth	8.7" (22 cm)