



## REMMINGTON ELECTRIC TILLER



### **SAFETY RULES**

1. Read, understand, and follow all instructions on the machine and in this manual before attempting to operate. Keep this guide in a safe place for future and regular reference and for ordering replacement parts.
2. Be familiar with all controls and their proper operation. Know how to stop the machine and disengage them quickly.
3. Never allow children under 16 years old to operate this machine.
4. Do not put hands and feet near rotating parts.
5. Do not operate tiller near underground electric cables, telephone lines, pipes, or hoses. If in doubt contact City Utilities to locate underground services. You may also contact the National One Call referral number, 1-8888-258-0808, for local contact information.
6. Watch what you are doing. Use common sense. Do not operate tiller when tired.
7. Do not use tiller for any job except that for which it is intended.
8. Use only electrical voltage noted on model plate of tiller.
9. 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 line voltage resulting in loss of power and overheating.
10. Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit for use with this tiller.
11. Avoid dangerous environments. Do not operate tiller:
  - a. While under the influence of alcohol, medication, or drugs
  - b. In rain or in damp or wet areas

- c. Where highly flammable liquids or gases are present
  - d. If tiller is damaged, or not fully and securely assembled
12. Always wear eye protection.
  13. Always use face or dust mask if operating tiller in dusty conditions.
  14. Always dress properly. Wear the following clothing while using tiller:
    - a. Use of rubber gloves and substantial footwear is recommended
    - b. Wear protective hair covering to contain long hair
    - c. Avoid wearing loose clothing or jewelry that could get caught in the rotating tines
  15. Thoroughly inspect the area where the equipment is to be used. Remove all rocks, bottles, cans, or other foreign objects which could be picked up or thrown and cause personal injury or damage to the machine.

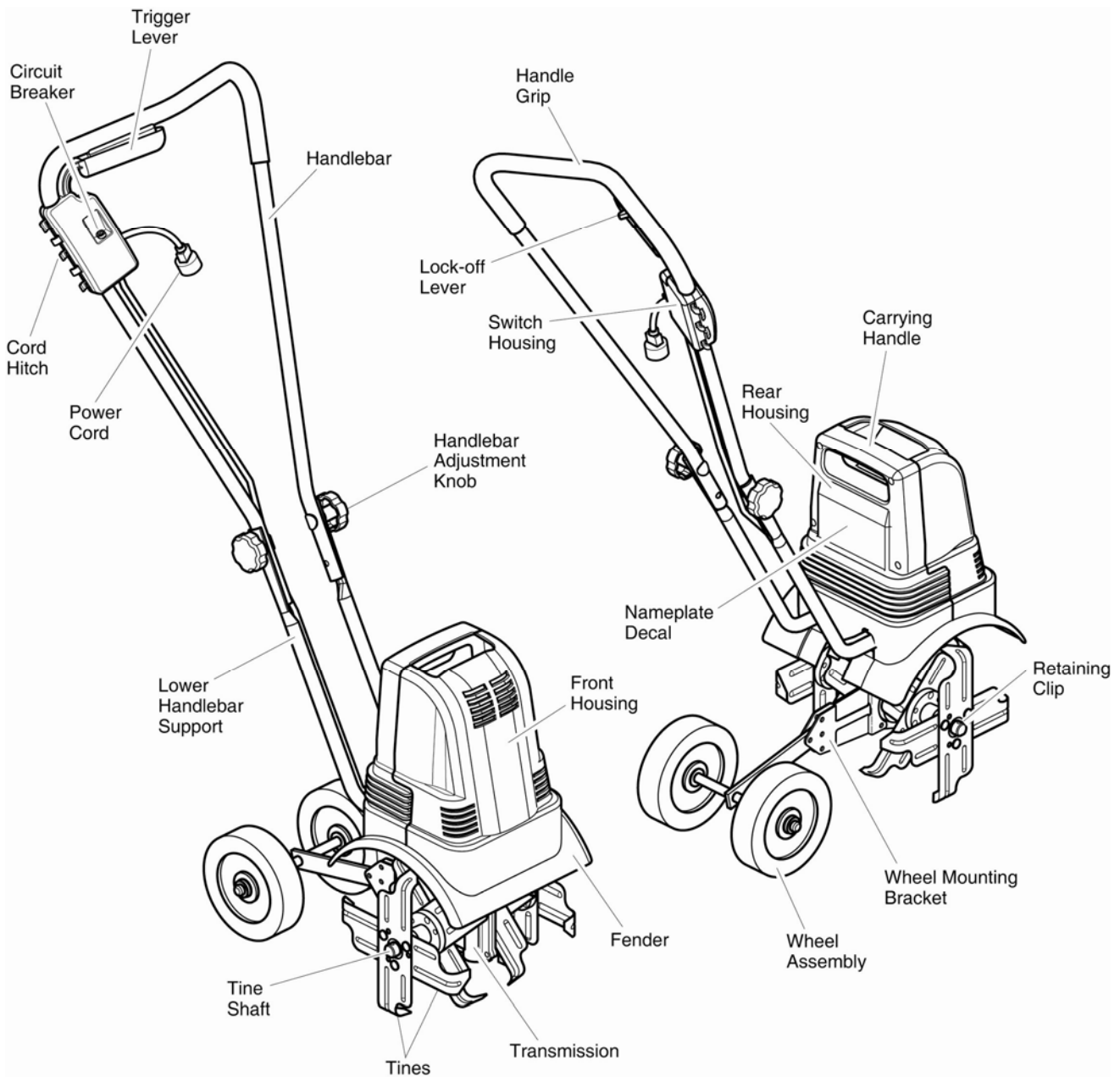
## **Operation**

1. Do not put hands and feet near rotating parts.
2. Be aware of extension cord while operating tiller. Be careful not to trip over cord. Keep cord away from tines at all times.
3. Keep all children, animals, and bystanders away from tiller and extension cord. Keep the area of operation clear of all persons and pets.
4. Grip handlebar firmly with both hands. Never operate tiller with one hand.
5. Be aware that tiller may unexpectedly bounce upward or jump forward if the tines should strike extremely hard, packed soil, frozen ground, or buried obstacles such as large stones, roots, or stumps.
6. Do not over reach. Maintain proper footing and balance at all times.
7. Do not operate tiller on a slope that is too steep for safe operation. When on slopes, slow down and make sure you have good footing.
8. **IMPORTANT:** you can stop the tines by releasing the trigger lever.
9. Before starting tiller, make sure tines are not touching foreign objects.
10. Do not allow hands or any body part or clothing near the rotating tines.
11. Move tiller from one place to another:
  - a. With tiller stopped and unplugged.
  - b. By rolling on attached wheel assembly in the down “transport” position.
  - c. By holding carrying handle. Never use handlebars, tines, tine shaft, or fender to carry tiller.
12. Do not abuse power cord. Never carry tiller by power cord or yank it to disconnect from receptacle. Keep power cord from heat, oil, and sharp edges.
13. Do not force tiller. It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.

## **Maintenance & Storage**

1. Unplug tiller from power source:
  - a. When not in use.
  - b. Before moving from one place to another.

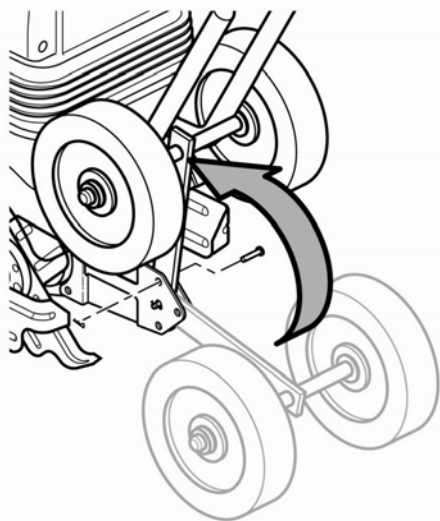
2. Inspect tiller before and after each use. Check for any damage that may affect operator safety or operation of tiller. Check for broken or damaged parts. Do not use tiller if damage affects safety or operation. Have damage repaired by authorized service center.
3. Maintain tiller with care.
  - a. Never expose to rain or water.
  - b. Keep handlebar dry, clean, and free of oil or grease.
  - c. Keep all screws and nuts tight.
  - d. Inspect power cord often. If damaged, bring back to UNA immediately.
  - e. Inspect extension cords often and replace if damaged.



**Figure 1 - Electric Tiller**

## **OPERATING THE ELECTRIC TILLER**

### **Adjusting Wheel Assembly**



**Figure 7 - Adjusting Wheel Assembly to Tilling Position**

For Transport:

- Be sure that the pin and clip are secured so that the hole in the wheel assembly lines up with the center hole in the mounting bracket.

For Tilling:

- Remove the retaining clip from the clevis pin and remove the pin from the mounting bracket and wheel assembly.
- Rotate the wheel assembly up and forward as shown in fig. 7 until the hole in the wheel assembly lines up with the upper hole in the mounting bracket.
- Insert the clevis pin through the aligned holes and insert the retaining clip into the clevis pin. The wheels are now mounted in the tilling position.

### **Securing Extension Cord**

The switch housing has an extension cord hitch made from a series of alternating hooks (see figure 11). This feature can be used to secure the receptacle end of the extension cord to the tiller handle to prevent accidental disconnection from the power cord.

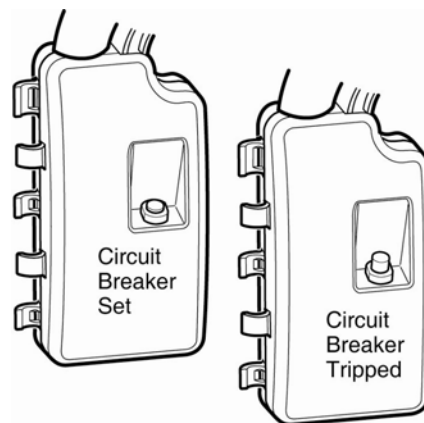
### **Circuit Breaker Protection**

This tiller is equipped with a circuit breaker located in the top of the switch housing (see figure 10). The circuit breaker provides over-current protection to the tiller motor should the tines become jammed or locked by a stone, root, or other obstruction.

If the circuit breaker should trip during use, the white circuit breaker button will pop up out of the case and the electric motor and the tines will stop rotating.

### **Resetting the breaker:**

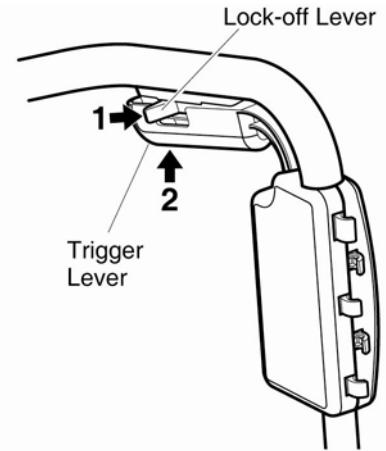
1. Fully release the trigger lever.
2. Unplug the tiller power cord from the extension cord.
3. Dislodge or remove any obstacles from the tines which may have caused the tines to jam.
4. Press the white circuit breaker button back into the housing to reset (see figure 10). The button should stay depressed when released. Plug the tiller power cord back into the extension cord.
5. Firmly grasp the tiller grip area on the handlebar, and resume tilling.



**Figure 10 - Circuit Breaker Button**

### Starting Tiller

1. Grasp grip area on handlebar firmly with both hands.
2. Use your thumb to slide the lock-off lever all the way to the right (see figure 11). This releases the trigger lever.
3. Squeeze the trigger lever all the way in. The motor will start and the tines will begin to rotate. Once the tiller is started, the lock-off lever can be released.
4. **IMPORTANT:** To stop the tiller, release the trigger lever.



**Figure 11 - Lock-off Lever and Trigger Lever**

### Tilling Operation and Patterns

Use the tiller for breaking sod, preparing seed beds, and for cultivating gardens and flower beds. The tiller can also dig small holes for planting sapling or potted plants.

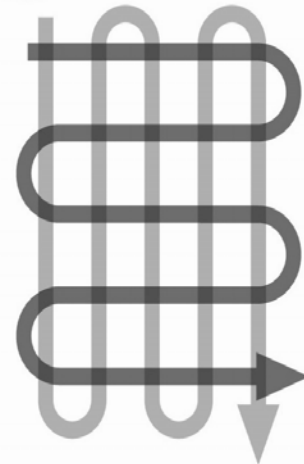
Let the tiller do most of the work. The tines will pull the tiller forward during operation. By pulling tiller back towards yourself, the tines will dig deeper and more aggressively.

For breaking sod or deep tilling, allow the tines to pull the tiller forward to the end of your arm's reach, then firmly pull the tiller back towards you. By repeatedly allowing the tiller to move forward and then pulling the tiller back to you, the tiller will be most effective.

If the tiller digs deep enough to stay in one spot, gently rock the tiller side to side to start the tiller moving forward again.

For preparing seed beds, we recommend using one of the tilling patterns shown in figure 12

Tilling Pattern One - Make two passes over area to be tilled, the second at a right angle to the first.



Tilling Pattern Two - Make two passes over area to be tilled, the second overlapping the first.



**Figure 12 - Suggested Tilling Patterns**

## **Extension Cord Management**

A convenient belt clip is included with the tiller to enable you to attach the extension cord to your waist and ease cord management. Maintain enough slack between the tiller and the belt clip for easy maneuvering.

If tilling rows, start with the row that is closest to the household outlet you are using as an electrical power source. Begin tilling the row in a direction which will keep the extension cord on your belt clip side. When the tiller reaches the end of the row, turn to position the tiller in the opposite direction for the next row. Remember, keeping the extension cord behind you and on your right side will make it easier to manage the extension cord.

**WARNING:** BE AWARE OF EXTENSION CORD WHILE OPERATING TILLER. BE CAREFUL NOT TO TRIP OVER CORD. KEEP CORD AWAY FROM TINES AT ALL TIMES.

## **Cleaning Tines of Foreign Objects**

During use, a stone or root could become lodged in the tines, or tall grass or weeds may become wrapped around the tine shaft.

To clear the tines, release the trigger lever. Unplug the tiller, and dislodge or remove any obstacles for the tines or tine shaft.

**WARNING:** ALWAYS UNPLUG THE TILLER BEFORE PLACING HANDS NEAR THE TINES. ALWAYS WEAR GLOVES TO PROTECT YOUR HANDS FROM THE SHARP EDGES OF THE TINES.

## **CLEANING AND MAINTENANCE**

**WARNING:** UNPLUG TILLER FROM POWER SOURCE BEFORE CLEANING OR SERVICING. SEVERE INJURY OR DEATH COULD OCCUR FROM FIRE, ELECTRICAL SHOCK OR BODY CONTACT WITH MOVING TINES.

**WARNING:** WHEN CLEANING TILLER, DO NOT SUBMERGE TILLER IN LIQUIDS

### **Cleaning Tiller**

1. To clean front and rear cover and fender, use a soft cloth dampened with a mild soap and water mixture. Do not spray or pour water directly onto the front or rear cover. Wipe the front and rear covers and fender with the dampened cloth.
2. To remove soil and debris from the tines and transmission, use a stiff brush or a dampened cloth. Do not spray or pour water directly onto tiller.

## **TROUBLESHOOTING**

Note: for additional help, visit [www.desatech.com](http://www.desatech.com)

<u>OBSERVED FAULT</u>	<u>POSSIBLE CAUSE</u>	<u>REMEDY</u>
Motor does not run when you squeeze trigger lever	1. Lock-off lever not pressed to release trigger lever	1. Fully depress lock-off lever before trigger
	2. Extension cord Connection is loose	2. Check cord connection
	3. Circuit breaker is tripped on tiller	3. Check circuit breaker on tiller
	4. Household circuit breaker is tripped on open line fuse	4. Check circuit breaker or line fuse
	5. Bad motor brushes	5. Return to UNA
	6. Open wiring on tiller	6. Return to UNA
Motor runs, but tines do not move	Gear train failure	Return to UNA
Tiller smokes	Tiller is damage. Do not use.	Return to UNA