



Corded Tiller

Safety & Operating Instructions



NEUTON Power Equipment

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⚠ WARNING!

Read and understand this manual and all instructions before operating this Tiller.

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Conventions used in this Manual

WARNING!

This indicates a hazardous situation, which, if not avoided, *could result in death or serious injury.*

CAUTION!

This indicates a hazardous situation, which, if not avoided, *could result in minor or moderate injury.*

NOTICE

This information is important in the proper use of your Tiller. Failure to follow this instruction could result in damage to your Tiller or property.

TIP: This is a helpful hint to guide you in getting the most out of your NEUTON Corded Tiller.

NOTE: This information may be helpful to you in using your Tiller.

Neuton Power Equipment reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your equipment.

NEUTON Corded Tiller Product Specifications

Motor	
Input	120V AC
Controls	
ON/OFF	One (1) Lever Switch w/Lock-Off Button
Tiller Housing	
Material	Injected Polypropylene
Tiller	
Tilling Width	11 inches
Tilling Depth	8.5 inches
Tine Speed	320 RPM
Weight	23.7 lbs.

Chapter 1: Important Safety Considerations

We want you to enjoy years of safe and productive use from your NEUTON Corded Tiller. We do not want you injured, so please take a few moments to read the following instructions for safely operating your new Tiller.

Take a moment to study the following labels and make a note of their location *before* you operate the Tiller. Replace damaged or missing safety and information labels immediately.



WARNING Label located rear of Tines Hood, 286581



WARNING Label located rear of Tines Hood, 286571

Protecting Yourself and Those around You

WARNING!

This tilling machine, can cut, and sever parts of your body if they become in contact with the moving Tines. Always take the following precautions when operating the NEUTON Corded Tiller:

- Never place your hands, feet, or any part of your body near the Tines when operating the NEUTON Corded Tiller.
 - Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the Tiller and the activity of tilling. Never assume that children will remain where you last saw them.
 - Never allow bystanders, or pets in your work area when operating the Tiller. Stop the Tiller if anyone enters the area.
 - Before and while pulling the Tiller backwards, look behind and down for small children and for secure footing.
 - Only allow responsible individuals who have a thorough understanding of these instructions to operate the Tiller. Never allow children to operate the Tiller.
 - If you are ever unsure about an action you are about to take, please do not do it.
-

Dressing Appropriately

WARNING!

- Always wear protective goggles or safety glasses with side shields that are marked to comply with ANSI Z87.1 standard when using your NEUTON Corded Tiller to protect your eyes from possible thrown debris.
 - We recommend the use of ear protectors or earplugs rated for at least 20 DBA to protect your hearing.
 - Wear shoes with non-slip treads when using the Tiller. If you have safety shoes, wear them. Do not use the Tiller while barefoot or wearing sandals with exposed toes or heels.
 - We recommend wearing long pants and rubber gloves while using this tool.
 - Avoid wearing loose clothing or jewelry, which can catch on the machine's moving parts.
-

Preparing to Use Your Tiller

WARNING!

- Read, understand, and follow all instructions on the Tiller and in the manual. Be thoroughly familiar with the control and the proper use of the Tiller before starting.
 - Thoroughly inspect the area where you will be using the Tiller, and remove all wire, sticks, and any other foreign objects which could become entangled in or thrown by the Tiller Tines. Be particularly careful to avoid any wire bent outwardly into the path of the tool, such as barbs at the base of a chain link fence.
-

Operating Your Tiller Safely

WARNING!

- Do not use your NEUTON Corded Tiller for any job other than the intended use.
 - Avoid unintentional starting - do not transport the NEUTON Corded Tiller with your fingers on the ON/OFF Switch Lever.
 - Remove the power cord when inspecting, cleaning, or clearing any jammed material from the Tiller Tines.
 - Do not use this machine around underground pipes and wiring, large roots and surface rocks that you cannot remove.
 - Do not operate the Tiller in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.
 - Never over reach and keep proper footing and balance at all times.
 - Do not force the Tiller - it will do the job better and with less likelihood of a risk of injury when tilling at its own rate.
 - Never operate the Tiller in the rain.
 - Operate only in daylight or in an area well lit by artificial light.
 - Do not operate the tool when you are tired or under the influence of medication, drugs, or alcohol.
 - If the Tiller vibrates abnormally, stop the motor, remove the power cord, and inspect the tool for any damage. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other condition that may affect its operation. Repair the damage before restarting and operating the Tiller. **NOTE:** *Excessive vibration is generally a sign of trouble.*
 - Do not operate the Tiller if it does not start normally or stop normally with the ON/OFF Switch Lever.
 - Never use the Tiller with a damaged or missing Hood.
 - If you strike or entangle with an object, stop the Tiller immediately. Check for damage and have any damage repaired before further operation is attempted.
-

No list of Warnings and Cautions can be all-inclusive. If situations occur not covered by this manual, the operator must apply common sense and operate the NEUTON Corded Tiller in a safe manner. Visit our website at www.neutonpower.com or call Toll Free:

1-866-NEUTON1 (638-8661) for assistance.

Chapter 2: Unpacking and Assembling your NEUTON Corded Tiller

Carton Contents:

- NEUTON Corded Tiller w/Upper Handlebar and ON/OFF Switch Lever
- Lower Carrying Handle
- Cable Relief
- (4) M6 x 45 Bolts and Wing Nuts
- (2) Cable Clips
- *Safety and Operating Instructions*

Unpacking:

1. Carefully remove the Tiller, Lower Carrying Handle, Bolts & Nuts, Cable Relief & Clips, and the *Safety and Operating Instructions* from the Shipping Carton. Make sure that all items listed in the Carton Contents are included.
2. Inspect the product carefully to make sure no breakage or damage occurred during shipping. If you find damaged or missing parts, call Toll Free: **1-866-NEUTON1 (638-8661)** for assistance.

NOTE: Do not discard the Shipping Carton and packaging material until you are fully satisfied with your new NEUTON Corded Tiller.

Assembly:

! WARNING! Do not attach a power cord until assembly is complete. Failure to comply could result in accidental starting and possible serious injury.

1. Push in the GREEN Wheels Release Button (**Figure 1**), pull out the spring loaded Wheels Lock Pin (**Figure 1**), lower the Wheels and release the Pin to lock the Wheels in the down position.
2. Place the round hole in the Cable Relief on one end of the Lower Carrying Handle and position the Cable Relief as shown (**Figure 1**).
3. Align the mounting holes in the Lower Carrying Handle with the holes in the Lower Bar section (**Figure 1**) and attach with an M6 x 45 Bolt and Wing Nut both sides. Insert the Bolts through the aligned holes from the outside. Do not over tighten the Wing Nuts.
4. Position the Upper Handlebar as shown (**Figure 1**). Align the mounting holes in the Upper Handlebar with the holes in the Lower Carrying Handle (**Figure 1**) and attach with an M6 x 45 Bolt and Wing Nut both sides. Do not over tighten the Wing Nuts.
5. Snap the (2) Cable Clips on to the Lower Carrying Handle and the Lower Bar to hold the Power Control Cable in place (**Figure 1**).

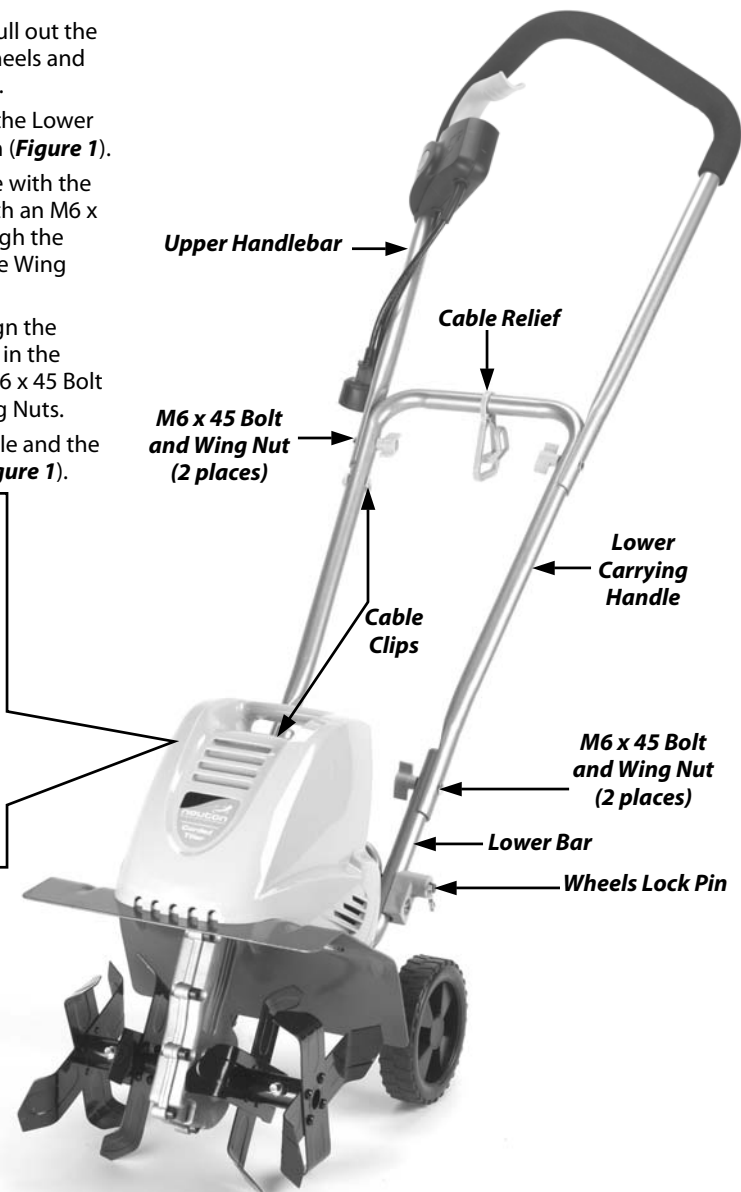


Figure 1

Chapter 3: Operating Your NEUTON Corded Tiller

Starting and Stopping the Tiller

NOTICE

- Starting, stopping, and restarting an electric Motor repeatedly within a few seconds can generate a great deal of heat and damage the Motor. To protect the life of your NEUTON Corded Tiller, always wait at least five (5) seconds after stopping before restarting the Tiller.
- Before you start the Motor, be certain that the Tines are not in contact with any object.

1. Perform the Daily Checks listed on the back cover of this manual.
2. Connect the Tiller to a working 120V outlet using a heavy-duty outdoor extension power cord.
3. Push the Lock-Off Button IN (**Figure 2**) with your left thumb and squeeze and hold the ON/OFF Switch Lever (**Figure 2**) up against the Handlebar with your right fingers. Once the Motor starts you can remove your thumb from the Lock-Off Button. If the Tiller does not start, make sure you plugged the power cord into a live 120V outlet (simply use a lamp to check the power outlet and cord) and firmly plugged the power cord into the Tiller power receptacle.
4. To stop the Tiller, simply release the ON/OFF Switch Lever.

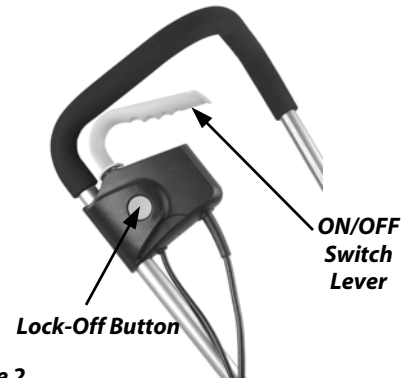


Figure 2

Using the Tiller

1. Make sure the Wheels Lock Pin (**Figure 1** on page 4) is securely in place with the Wheels locked down before transporting the Tiller to the sight that you plan to till.
2. Plug in the Tiller and hang the cord on the Cable Relief (**Figure 3**).
3. Pull out the Wheels Lock Pin and raise the Wheels until the spring loaded Wheels Release Button (**Figure 1** on page 4) retains them in place.
4. Push down on the Handlebar until the Tines are off the ground. Start the Tiller and slowly raise the Handlebar until the Tines start to till the soil.

TIPS:

- Use the NEUTON Corded Tiller without placing excessive body weight on the tool. The unit operates most efficiently with the weight of the Tiller itself.
- Walk slowly behind the Tiller slightly holding back on the Handlebar allowing the tool to till at the desired depth.
- Use common sense when using the Tiller. Learn to recognize the change in sounds when you overload the Tiller. Turn off the Motor immediately if the Tiller becomes jammed to prevent damage to the drive system.

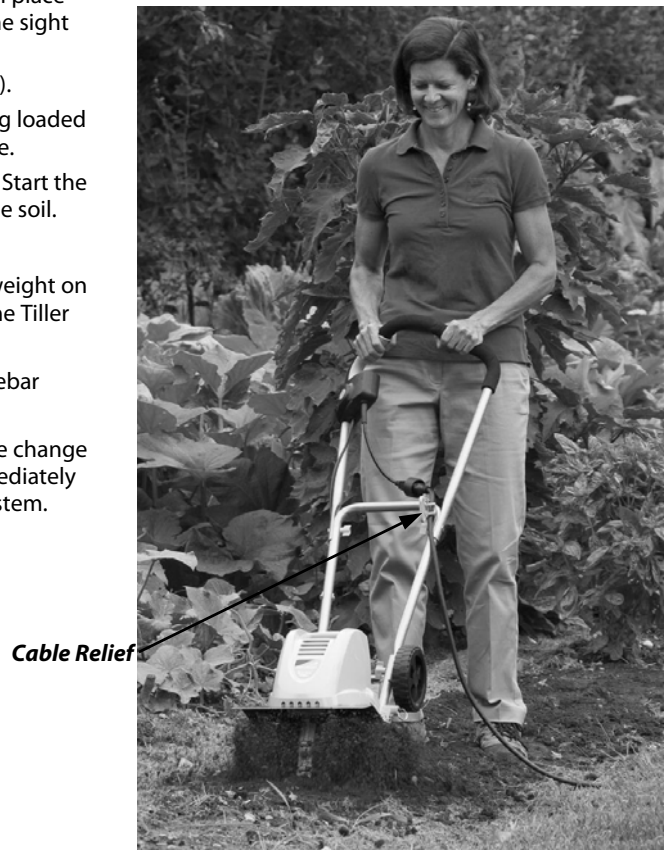


Figure 3

Chapter 4: Maintaining Your NEUTON Corded Tiller

This chapter covers maintenance procedures that will ensure the best performance and long life of your NEUTON Corded Tiller.

! WARNING!

When performing any maintenance, you must first shut off the Motor; wait five (5) minutes to allow parts to cool and disconnect the power cord.

Lubrication

The Tines Drive Transmission Case has grease installed at the factory. We recommend that once a year to have the Transmission opened by a qualified service professional and the grease level checked. Add a molythium type grease only if the level of the grease is below the top of the gears. DO NOT OVERFILL.

Tine Set Assembly Remove and Replace

TIP: For ease of disassembly and assembly, lower the Wheels and tilt the Tiller back on the Handlebar so that the Tines are off the ground.

Tools Required:

- 13mm Wrench or Socket w/extension (Lock Nut)
 - 14mm Wrench or Socket w/extension (Bolt Head)
1. Remove the Bolt and Lock Nut from the Tine Set that you want to replace and slide the Tine Set from the Drive Shaft (**Figure 4**).
 2. Slide the new Tine Set onto the Drive Shaft; align the mounting holes in the Tine Set and the Drive Shaft. Insert the Bolt, attach the Lock Nut, and tighten.

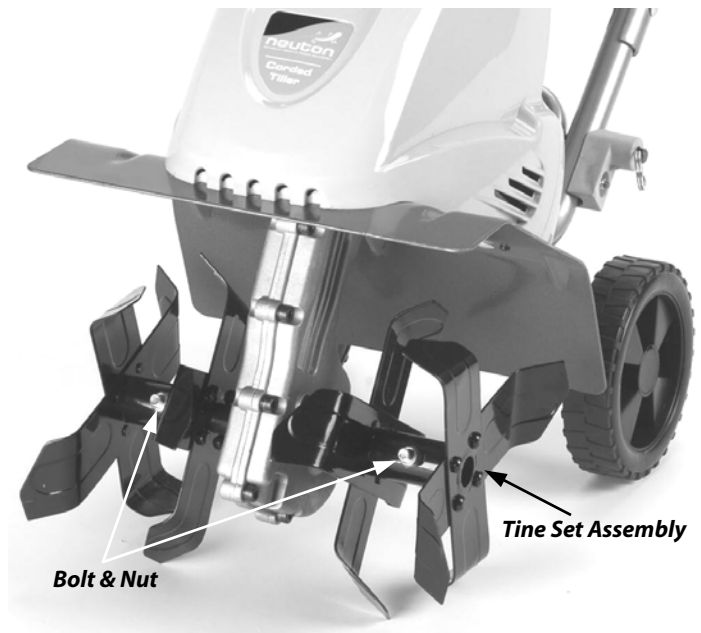


Figure 4

Chapter 5: Troubleshooting Your NEUTON Corded Tiller

Troubleshooting Tips

Most difficulties are easy to fix. Consult the Troubleshooting Table for common problems and their solutions. If you continue to experience problems or need repairs beyond these minor adjustments, visit our website at www.neutonpower.com or call Neuton Power Equipment Toll Free at: **1-866-NEUTON1 (638-8661)** for assistance.

! WARNING!

Always unplug the power cord before performing any adjustments, maintenance, or repairs to your Tiller.

Troubleshooting Table

PROBLEM	CORRECTIVE ACTION
<i>The Tiller Motor fails to start.</i>	⇒ Check that you installed the power cord properly into the Tiller power cord receptacle and you plugged the power cord into a live 120V outlet. ⇒ Make sure that you fully push in the Lock-Off Button before squeezing the ON/OFF Switch Lever.
<i>The Motor runs well but labors when tilling.</i>	⇒ The operator is being too aggressive; raise the Tines by pushing down on the Handlebar.
<i>Excessive bounce and difficult handling.</i>	⇒ The area you are tilling may be too dry and hard. Moisten the ground or wait for conditions that are more favorable. ⇒ If your NEUTON Corded Tiller still bounces, visit our website at www.neutonpower.com or call Neuton Power Equipment Toll Free at: 1-866-NEUTON1 (638-8661) for assistance.
<i>The tilled soil balls up or clumps.</i>	⇒ The ground that you are trying to till is too moist.

Chapter 6: Parts List, Schematic Diagram, and Warranty

Parts List & Schematic Diagram for NEUTON Corded Tiller

NOTE: Part numbers listed are available through Neuton Power Equipment

Ref#	Part#	Description
1	289711	Upper Handlebar
2	289721	ON/OFF Switch Assembly w/Lever
3	289731	Cable Relief
4	289741	M6 x 45 Bolt
5	289751	M6 Wing Nut
6	289761	Lower Carrying Handle
7	289771	Cable Clip
8	289781	Wheels Assembly
9	289801	Tine Set Assembly, Left Hand
10	289791	Tine Set Assembly, Right Hand



101119

2-Year Limited Warranty

Terms and Conditions

The NEUTON® Corded Tiller has a warranty for two (2) years against defects in materials or workmanship when put to personal residential household use. For the purposes of the warranty, "personal residential household use" refers to non-commercial residential use and further excludes misuse, accidents, or damage due to inadequate maintenance.

Neuton Power Equipment certifies that the NEUTON® Corded Tiller is fit for ordinary purposes for which a product of this type is used. Neuton Power Equipment however, limits the implied warranties of merchantability and fitness in duration to a period of two (2) years in personal residential household use.

The 2-Year Limited Warranty on the NEUTON® Corded Tiller starts on the date the tool shipped from our factory. The 2-Year Limited Warranty is applicable only to the original owner.

The owner is responsible for the performance of all the required maintenance as defined by the manufacturer's owner manual.

The owner is responsible for the replacement of normally wearing parts such as the Tine Assemblies.

During the warranty period, the owner is responsible for all shipping and transportation charges, if required.

SOME STATES DO NOT ALLOW LIMITATIONS ON THE LENGTH OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Neuton Power Equipment shall not be liable under any circumstances for any **incidental or consequential damages or expenses** of any kind, including, but not limited to, cost of equipment rentals, or cost of hiring services to perform tasks normally performed by the NEUTON® Corded Tiller. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

Daily Checklist, Cleaning and Storing for your NEUTON Corded Tiller

To help maintain your NEUTON Tiller for optimum performance, we recommend you follow this checklist each time you use your Tiller.

WARNING!

Do not plug in a power cord until you have completed all of the daily checks.

[] **INSPECT:** Before plugging in a power cord, inspect for any visible damage to the Tine Sets, Handlebar, Switch Assembly, or Motor Housing.

Inspect and remove any debris from the Tiller.

[] **NOISES:** If you notice anything unusual, such as a vibration or odd sound, shut the Tiller OFF immediately. Remove the power cord and check the Tiller for any damage.

If you cannot find the cause of the problem or are uncertain what to do, then have the Tiller inspected by a qualified repair shop before using it or visit our website at www.neutonpower.com.

CAUTION!

- Remove the power cord and allow the Tiller to cool for at least five (5) minutes before servicing or storing.
- If you drop the Tiller, carefully inspect it for damage. If the Tines Hood is broken, Housing cracked, or Handlebar broken or if you see any other condition that may affect the Tiller's operation, visit our website at www.neutonpower.com or call Neuton Power Equipment Toll Free 1-866-NEUTON1 (638-8661) for assistance before putting it back into use.

Cleaning the Tiller

Use only mild soap and a damp cloth to clean the Tiller. Never let any liquid get inside the Tiller Housing and NEVER immerse any part of the Tiller Housing into a liquid.

Storing

[] Do not store the Tiller near chemicals, such as fertilizers, organic or other solvents. Do not expose brake fluids, gasoline, petroleum-based products, penetrating oils, etc., to the plastic parts of the Tiller. These products are often highly corrosive and may cause permanent damage, weaken, or destroy the plastic to your Tiller.

[] When not in use, your NEUTON Corded Tiller should be stored indoors in a dry and high or locked-up place, out of reach of children.

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Documentation

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Neuton Power Equipment

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