

CE

Mantis

Electric Tiller/Cultivator 3000 Series



3450-01

MAN 430201

Rev. B 1-24-18

Operator's Manual and Safety Instructions for Electric Tiller/Cultivator
Original Operating Instructions



Welcome to the World of Mantis Gardening

IMPORTANT MESSAGE

Thank you for purchasing this Mantis tiller/cultivator. You have purchased a world class product, one of the best designed and built anywhere. This Operator's Manual contains Safety instructions. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand this manual. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this Mantis product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manual thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

Mantis designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manual, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

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This Operator's Manual is an integral part of the machine. Suppliers of both new and second-hand machines must make sure that this manual is provided with the machine. THESE INSTRUCTIONS ARE FOR YOUR SAFETY. PLEASE READ THROUGH THEM THOROUGHLY BEFORE USE AND RETAIN THEM FOR FUTURE REFERENCE.

Safety Rules & Warnings

You will notice throughout this Operator's Manual Safety Rules and Important Notes. Make sure you understand and obey these warnings and all instructions for your own protection.

I. SPECIAL SAFETY INFORMATION

WARNING

Attention: This symbol points out our important safety instructions. When you see this symbol, heed it's warning!! Stay alert!!

WARNING

To reduce the potential for accidents, comply with the safety instructions in this manual. Failure to comply may result in serious personal injury, and/or equipment and property damage.

II. SAFETY & WARNINGS

WARNING

Improper use or care of this tiller/cultivator or failure to wear proper protection can result in serious injury. Read and understand the rules for safe operation and all instructions in this manual. Wear hearing and eye protection, proper non-slip footwear, long trousers, protective covering to contain long hair and protective gloves.

III. SAFETY DECAL INFORMATION

On the product, the rating label, and within these instructions you will find among others the following symbols and abbreviations. Familiarise yourself with them to reduce hazards like personal injuries and damage to property.



Lock / to tighten or secure.



Unlock / to loosen.



Note / Remark.



Caution / Warning.



Read the instruction manual.



Wear hearing protection.



Wear eye protection.



Wear a dust mask.



Wear protective gloves.



Wear protective, slip-resistant footwear.



Wear tight-fitted protective clothes.



Remove plug from the mains immediately if the cable is damaged or cut.



Do not expose the product to rain or wet conditions (moisture).



Work across the slopes, never up and down.

III. SAFETY DECAL INFORMATION (CONTINUED)



Inspect the area where the tiller/cultivator is to be used and remove all objects which can be thrown by the tiller/cultivator. If objects are hidden while operating stop the motor, wait for moving parts to stop and remove the object.



Objects thrown by the tiller/cultivator could hit the user or other bystanders. Always ensure that other people and pets remain at a safe distance from the tiller/cultivator when it is in operation. In general, children must not come near the area where the tiller/cultivator is being used or stored.



Keep extension cord (not supplied) away from cutting device.



Tines continue to rotate after the tiller/cultivator is switched off. Wait until all machine components have completely stopped before touching the tiller/cultivator.



Pay special attention when working on the cutting device!



Remove plug from the mains immediately if the cable is damaged or cut.



Keep hands and feet away from sharp rotating parts – danger of injury! When cleaning, repairing, or inspecting, make certain the working tool and all moving parts have stopped.



Guaranteed sound power level value in 93dB.



This product is of protection class II. That means it is equipped with enhanced or double insulation.



The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.



WEEE symbol. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.

WARNING

If the tiller/cultivator is used improperly or safety precautions are not followed, the users risk serious injury to themselves, others and property. Read and understand this manual before attempting to operate this tiller.

CAUTION!

Moving parts will continue to run for several seconds after turning off the tiller/cultivator. Wait until the tines have completely stopped before lifting the tiller/cultivator or conducting inspection and maintenance.

IV. WARNINGS

Read the instructions carefully. Be familiar with the controls and the proper use of the product.

- Never allow children or people unfamiliar with these instructions to use the tiller/cultivator. Local regulations can restrict the age of the operator.
- Keep children, bystanders, and pets away – All spectators, including pets, should be kept a safe distance away from the work area.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to people or property.
- Dress properly - Always wear proper non-slip footwear and long trousers while working. Do not operate the product when barefoot or wearing open sandals. Do not wear loose clothing or jewelry as such articles can become caught in moving parts. Wear a protective covering to contain long hair. Wearing protective gloves is recommended when working outdoors. Use safety glasses and hearing protection.
- Thoroughly inspect the area where the tiller/cultivator is to be used and remove all objects which can be thrown by the product. Thrown objects can cause serious personal injury and property damage. Do not allow anyone in front of a running tiller/cultivator.

IV. WARNINGS

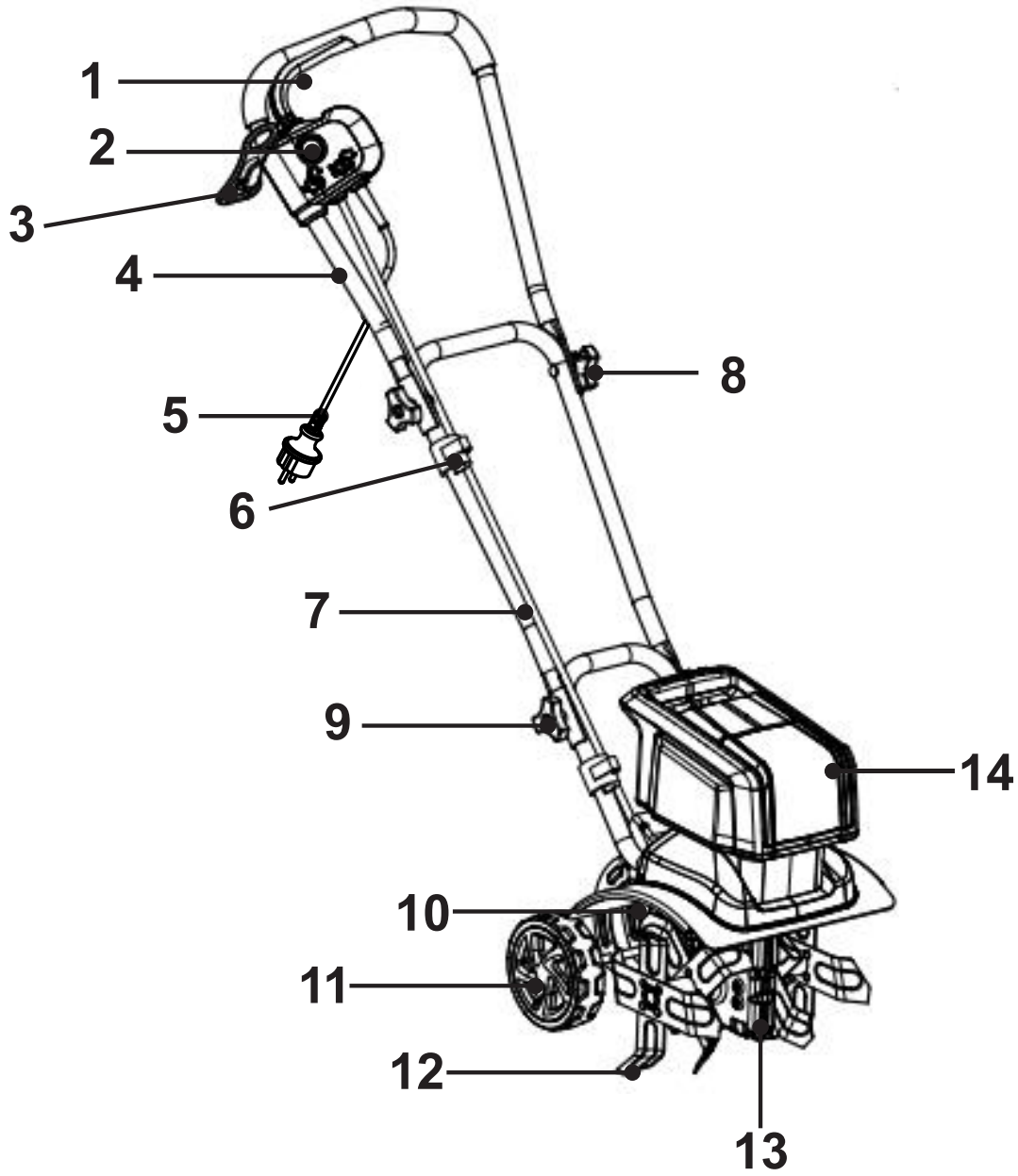
6. Before using, always visually inspect to see that the tines, tine bolts and tine assembly are not worn or damaged. Replace worn or damaged tines and bolts in sets to preserve balance.
7. Maintain the tiller/cultivator with care – Keep the cutting edges clean for optimal performance and to reduce the risk of injury. Inspect the extension cord periodically and immediately replace it if damaged. Keep the handles dry, clean, and free from oil and grease. Follow the additional recommendations described in the maintenance section of this manual.
8. Avoid accidental starting – Do not carry the garden tiller/cultivator with your finger on the switch. Make sure the switch is off before plugging-in or unplugging the unit.
9. Do not abuse the cord – Never pull the tiller/cultivator by the cord or yank the cord to disconnect it from the receptacle. Keep the cord away from heat, oil, and sharp edges.
10. Moving parts – Keep hands and feet away from moving parts. Keep guards in place and in proper working order.
11. Do not force the tiller/cultivator – It will perform better with less likelihood of personal or mechanical injury if it is used at the rate for which it was designed.
12. Do not overreach – Keep proper footing and balance at all times.
13. On multi-bladed machines, take care as rotating one tine can cause other tines to rotate.
14. Keep work area clean and well-lit – Cluttered, dark areas invite accidents. Work only in daylight or in good artificial light.
15. Always be sure of your footing on slopes.
16. Walk, never run with the tiller/cultivator.
17. Work across the slopes, never up and down.
18. Exercise extreme caution when changing direction on slopes.
19. Do not work on excessively steep slopes.
20. Use extreme caution when reversing or pulling the product towards you.
21. Start the motor carefully according to manufacturer instructions and with feet well away from the moving tines.
22. Do not put your hands or feet near or under rotating parts.
23. Never pick up or carry a tiller/cultivator while the motor is running.
24. Never operate the tiller/cultivator with defective guards or shields, or without safety devices, for example deflectors and/or catchers in place.
25. Stop the tiller/cultivator, and disconnect it from the power supply. Make sure that all moving parts have come to a complete stop...
 - before unclogging or changing the tines.
 - before checking, cleaning, servicing or working on the machine.
 - after striking a foreign object. Inspect the tiller/cultivator for damage and make repairs before restarting and operating the machine.
 - whenever you leave the tiller/cultivator. Never leave the tiller/cultivator running when unattended.
26. If the tiller/cultivator starts to vibrate abnormally (check immediately)
 - inspect for damage,
 - check for and tighten any loose parts,
 - replace or repair any damaged parts
27. Store idle tool indoors – When not in use, the tiller/cultivator should be stored indoors in a dry and high or locked-up place out of the reach of children.
28. Avoid dangerous environments – Do not use the tiller/cultivator in rain or in damp or wet locations. Do not operate the tiller/cultivator in gaseous or explosive atmospheres or use the tiller/cultivator near flammable or combustible liquids. Motors in these type of tools normally spark, and the sparks might ignite fumes.
29. Check for damaged parts – Before further use of the tiller/cultivator, 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.
30. Keep the tiller/cultivator free of grass, leaves, or grease to reduce the chance of fire hazard.
31. The motor housing remains hot for a short period after the tiller/cultivator is turned OFF. Allow the motor housing to cool completely before touching or storing near combustible material.
32. 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.
33. Be aware that the tiller/cultivator may unexpectedly bounce upward or jump forward if the tines should strike buried obstacles such as large stones, roots, or stumps.
34. Don't grasp the exposed tines or cutting edges when picking up or holding the tiller/cultivator.

V. EMERGENCY

Familiarize yourself with the use of this product by reading of this instruction manual completely. Memorize the safety directions and follow them to the letter. This will help to prevent risks and hazards.

1. Always stay alert when using this tiller/cultivator, so that you can recognize and handle risks early. Watch what you are doing. Use common sense. Do not operate the tiller/cultivator when you are tired or under the influence of drugs, alcohol, or other medication. Fast intervention can prevent serious injury and damage to property.
2. Switch off and disconnect from the power supply if there are malfunctions. Have the tiller/cultivator checked by a qualified professional and repaired, if necessary, before you operate it again.
3. For assistance contact the Mantis customer service center at the number listed on the warranty statement located at the end of these operating instructions.

Assembly



- 1. On/off switch
- 2. Lock-off button
- 3. Cord retainer
- 4. Upper handle
- 5. Power cord with plug
- 6. Cord clip
- 7. Middle handle
- 8. Upper handle knob and bolt (2)

- 9. Middle handle knob and bolt (2)
- 10. Guard
- 11. Wheels
- 12. Steel Tines (blades)
- 13. Gear box
- 14. Motor housing

Technical Specifications

General:

- > **Type:** 3450-01
- > **Rated voltage, frequency** 220 – 240 V~ ,50 Hz
- > **Rated power input** 1000 W
- > **Rated no load speed n_0** 310 min^{-1}
- > **Protection class** Class II or Double Insulated
- > **Tilling width** 300mm
- > **Weight** approx. 11 kg

Sound values

- > **Sound pressure level L_{pA}** 78.3 dB(A)
- > **Uncertainty K_{pA}** 2.5 dB(A)
- > **Measured sound power level L_{WA}** 91.34 dB(A)
- > **Uncertainty K_{WA}** 1.18 dB(A)
- > **Guaranteed sound power level L_{WA}** 93 dB(A)

Hand arm vibration values

- > **Hand arm vibration a_h** <2.5 m/s^2
- > **Uncertainty K** 1.5 m/s^2



The sound values have been determined according to noise test code given in 2000/14/EC. The sound intensity level for the operator may exceed 80dB(A) and ear protection measures are necessary.

WARNING

Adopt proper measures to protect yourself against vibration exposures. Take the whole work process including times the tiller/cultivator is running under no load or switched off into consideration. Proper measures include among others regular maintenance and care of the product and accessories, keeping hands warm, periodic breaks and proper planning of work processes.

Assembly

BEFORE YOU START

- Remove packing materials and unpack all parts and lay them on a flat, stable surface.
- Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the tiller/cultivator but contact the Mantis customer service center at the number listed on the warranty statement located at the end of these operating instructions. Using an incomplete or damaged tiller/cultivator represents a hazard to people and property.
- Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

WARNING

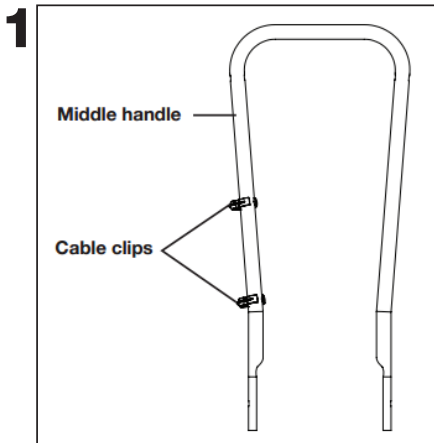
The tiller/cultivator and the packaging are not children's toys! Children must not play with plastic bags, sheets and small parts! There is a danger of choking and suffocation!

WARNING

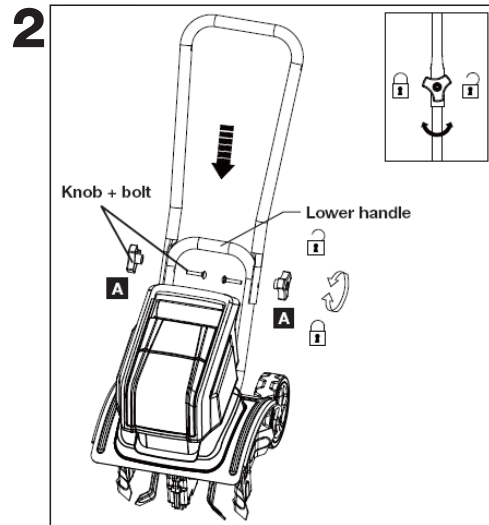
The tiller/cultivator must be fully assembled before operation! Do not use tiller/cultivator that is only partly assembled or assembled with damaged parts! Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product! Do not connect the tiller/cultivator to power supply before it is completely assembled! Failure to comply could result in accidental starting and serious personal injury.

TILLER/CULTIVATOR ASSEMBLY

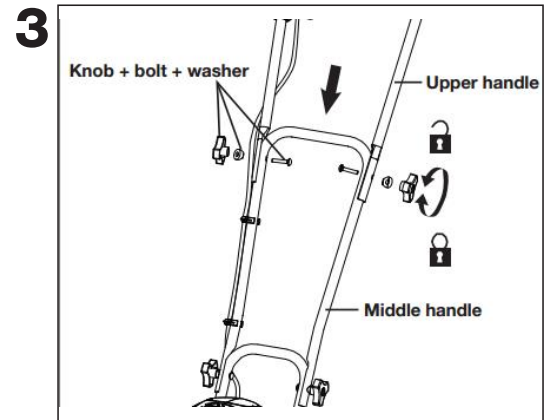
NOTE: Take care of small parts that are removed during assembly or when making adjustments. Keep them secure to avoid loss.



- Attach the cable clips to the middle handle bar

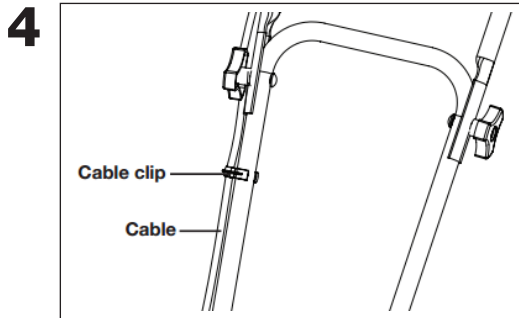


- Secure the middle handle to the lower handle using the first set of knobs, bolts, and plastic washers. Tighten the knobs on each side to ensure a secure fit.



- Connect the upper handle to the middle handle using the second set of knobs, bolts and plastic washers. Tighten the knobs on each side to ensure a secure fit.

Assembly (Continued)



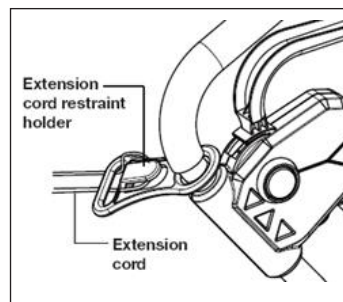
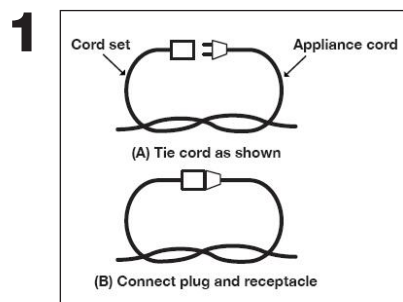
- Secure the cable inside the cable clips.

CONNECTION TO POWER SUPPLY

For safety reasons the tiller/cultivator is equipped with a short power cord. Do not connect the tiller/cultivator directly to the power supply using this power cord. A proper extension cord is required for operation. Observe the technical requirements for this product when purchasing an extension cord.

! WARNING

For your safety, it is required that the plug attached to tiller/cultivator is always connected to an extension cord! The extension cord must be suitable for outdoor use with sockets protected against water splashing! Ensure the extension cord is of the proper size and type for your product ($\geq 0.75 \text{ mm}^2$)! Always use a residual current supply (RCD) protected supply.



- Double the extension cord back, about 30 cm from the end and lead the loop through the hole on the guard. Pull it over the cord retainer and gently tug on the cord to ensure that it is firmly secured
 - To prevent the short power cord from disconnecting from the extension cord during operation, use the onboard extension cord restraint hook and/or make a knot with the two cords
- 2** Connect the power cord to the socket of the extension cord.
 - 3** Make sure the on/off switch is not squeezed or otherwise engaged.

! WARNING

Make sure all handle knobs are properly tightened before using the product.

! WARNING

Use only a UL-, CSA-, or ETL- rated extension cord for outdoor, all-weather use. Do not use an extension cord over 100 ft (30m).

EXTENSION CORD CHART

Extension Cord Length	Up to 50 ft (15 m)	+50 ft - 100 ft (+15 m - 30 m)
Wire Gauge (A.W.G.):	16	14

- 4** Connect the plug of extension cord into a suitable socket.

! WARNING

Check the voltage! The voltage must comply with the information on the rating label! If using an extension cord it must be suitable for outdoor use with sockets protected against water splashing.

- 5** Your tiller/cultivator is now ready to be used.
- 6** Do not abuse the cord. Never pull the tiller/cultivator by the cord or yank the cord to disconnect it from the receptacle. Keep the cord away from heat, oil, and sharp edges.

Electric Tiller/Cultivator Operation

INTENDED USE

This tiller/cultivator is intended for loosening and working up the soil in a garden and for tilling coarse soil for mixing in fertilizer, peat and compost in planting areas. This tiller/cultivator should not be used to till extremely dry or wet soil.

This tiller/cultivator should not be used in rain or humid environments.

For safety reasons it is essential to read the entire instruction manual before first operation and to observe all the instructions.

This tiller/cultivator is intended for private household use only, not for any commercial trade use. It must not be used for any purposes other than those described.

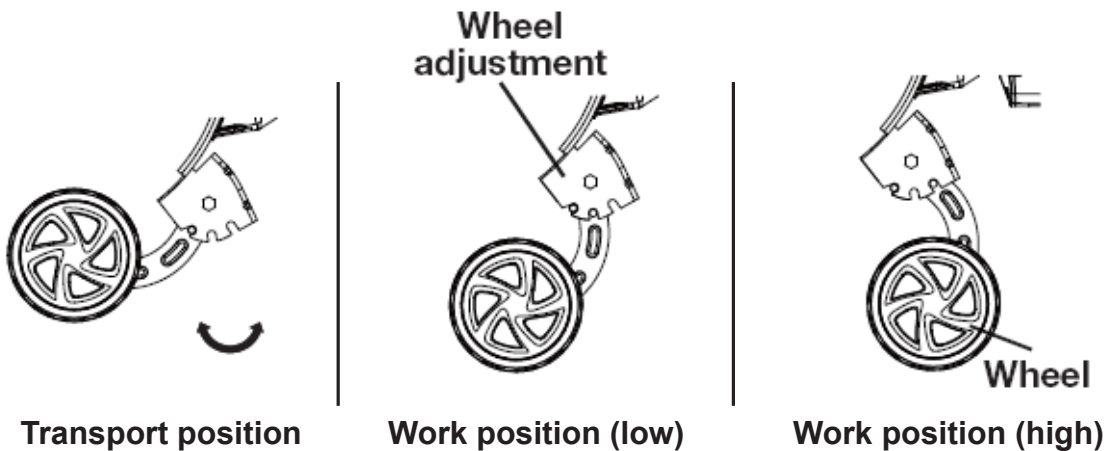
WHEEL ADJUSTMENT

The wheels can be adjusted to 3 positions. Lower the wheel height for shallow soil penetration. Raise the wheel height for deeper soil penetration.

Adjust the wheels when the tiller/cultivator is off, wait for moving parts to stop and disconnected from the power supply. Tilt the tiller/cultivator forward to rest on the motor housing. Grasp the wheel assembly by the axle and pull toward you. Move the assembly up or down (as needed) and allow the pins on the assembly to slot into one of the three pre-set positions.

! WARNING

Always switch the product off and wait for moving parts to stop. Disconnect it from power supply before making any adjustments!

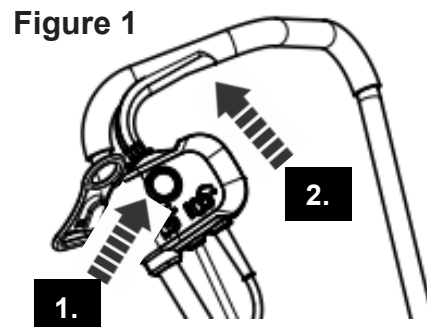


! WARNING

The wheels can be adjusted in 3 different positions. Always ensure the wheels are securely locked! Do not attempt to use the tiller/cultivator with the wheels in any other position or unlocked!

SWITCHING ON/OFF

1. Press the lock-off button and hold it in position (Figure 1, step 1).
2. Squeeze the on/off switch to switch the product on (Figure 1, step 2), release the lock-off button afterwards.
3. Release the on/off switch to switch the product off.



Electric Tiller/Cultivator Operation (Continued)

GENERAL OPERATION

1. Check the tiller/cultivator, its power cord and plug as well as accessories for damage before each use. Do not use tiller/cultivator if it is damaged or shows wear.
2. Double check that the tines are properly fastened.
3. Always hold the tiller/cultivator by its handles. Keep the handles dry to ensure safe support.
4. During transportation of the tiller/cultivator, the operator must control the handles with two hands.
5. Ensure that the air vents are always unobstructed and clear. Clean them if necessary with a soft brush. Blocked air vents may lead to overheating and damage the product.
6. Switch the tiller/cultivator off immediately and wait for moving parts to stop if you are interrupted while working by other people entering the working area. Always let the tiller/cultivator come to a complete stop before taking your eyes off the machine.
7. Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the tiller/cultivator.

WARNING

In some countries regulations define at what time of the day and on what special days products are allowed to be used and what restrictions apply! Ask your community for detailed information and observe the regulations in order to preserve a peaceful neighborhood and avoid committing administrative offences!

TILLING

1. Make sure that the working area is clear of stones, sticks, wire or other objects that could damage the tiller/cultivator or its motor. Be aware that the tiller/cultivator may unexpectedly bounce upward or jump forward if the tines should strike buried obstacles such as large stones, roots, or stumps.
2. Do not till very wet soil because it tends to accumulate around the tines, preventing proper rotation. It could also cause you to slip and fall.
3. Always maintain a firm grip on the tiller/cultivator. For better guidance apply light pressure to the handles (Figure 2). Hold onto the tiller/cultivator with both hands during operation. Ensure the grips are dry.
4. Do not try to till too deeply or force the product into soil that is extremely hard or resistant.
5. Walk the tiller/cultivator backwards through the soil at a normal pace and in as straight a line as possible.
6. Till in slight overlapping rows. The most effective pattern for tilling soils is moving the tiller/cultivator up and down in vertical lines, then move the tiller/cultivator in horizontal lines from left to right (Figure 3). This will keep the rows even and ensures that all the ground is tilled without missing any spots.
7. Pay special attention when changing direction. Apply light pressure onto the handle so that the tines are lifted to make a turn. Turn the product around guided by the wheels. Gradually release pressure and move the tines back to the ground.

Figure 2

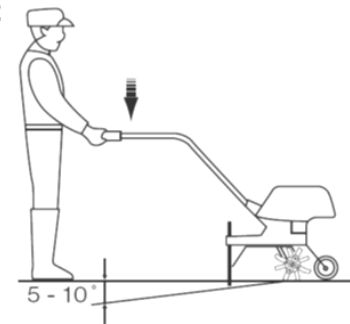
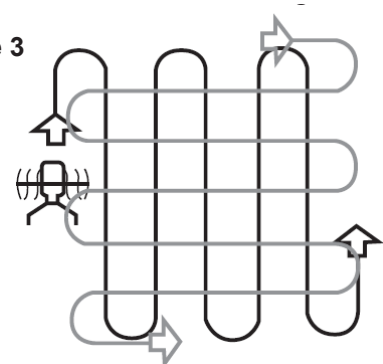
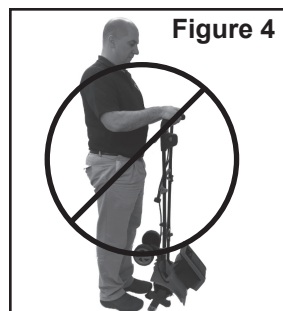


Figure 3



WARNING

Never carry this tiller/cultivator as the person in figure 4 is doing. If you do, and the tines engage, you could suffer serious injury.



WARNING

Stop the motor, if the tiller/cultivator strikes a foreign object! Switch the tiller/cultivator off, wait for moving parts to stop, disconnect it from the power supply and let it cool down. Inspect the tiller/cultivator thoroughly for damage! Have any damage repaired before restarting! Extensive vibration of the tiller/cultivator during operation is an indication of damage! Stop the motor. The tiller/cultivator should be promptly inspected and repaired!

Electric Tiller/Cultivator Care

AFTER USE


1. Switch the tiller/cultivator off, wait for moving parts to stop, disconnect it from the power supply and let it cool down.
2. Check, clean and store the tiller/cultivator as described below.

RULES FOR CARE

1. Keep the tiller/cultivator clean. Remove debris from it after each use and before storage.
2. Regular and proper cleaning will help ensure safe use and prolong the life of the tiller/cultivator.
3. Inspect the tiller/cultivator before each use for worn and damaged parts. Do not operate it if you find broken and worn parts.

GENERAL CLEANING

1. Clean the tiller/cultivator with a dry cloth. Use a brush for areas that are hard to reach.
2. In particular clean the air vents after every use with a cloth and brush.
3. Remove stubborn dirt with high pressure air (max. 3 bar/40 psi).

 **NOTE: Do not use chemical, alkaline, abrasive or other aggressive detergents or disinfectants to clean this tiller/cultivator as they might be harmful to its surfaces. Do not use cleaning fluids or solvents or spray the machine down with water (especially water under pressure) when cleaning the tiller/cultivator.**

4. Check for worn or damaged parts. Replace worn parts as necessary or contact the Mantis customer service center at 1-800-366-6268 for assistance before using the tiller/cultivator again.

UNDERSIDE AND TINES

1. Keep the underside and tines clean and free of debris. Remove soil with a proper brush or tool.
2. All nuts and bolts must be checked periodically for tightness before operation. After prolonged use, especially in sandy soil conditions, the tines will become worn and lose some of the original shape. Tilling efficiency will be reduced and the tines should be replaced.
3. Have worn or damaged tines replaced with new ones of the same type.
4. To prolong the life span of tines and the tiller/cultivator it is recommended that the tines are lubricated after each use.

POWER CORD

If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a safety hazard.

WARNING

Always switch the tiller/cultivator off, wait for moving parts to stop, disconnect the tiller/cultivator from the power supply and let the tiller/cultivator cool down before performing inspection, maintenance and cleaning work!

WARNING

Only perform repairs and maintenance work according to these instructions! All further works must be performed by a qualified specialist!



WARNING

Wear protective gloves when working on the tiller/cultivator or close to it! Use proper tools to remove debris, e. g. a wooden stick! Never use your bare hands!

CAUTION!

Moving parts will continue to run for several seconds after turning off the machine. Wait until the tines have completely stopped before lifting the tiller/cultivator or conducting inspection and maintenance.

Electric Tiller/Cultivator Maintenance

REPAIR

This tiller/cultivator does not contain any parts that can be repaired by the consumer. For assistance contact the Mantis customer service center at the number listed on the warranty statement located at the end of this operating instructions.

SPARE PARTS/REPLACEMENT PARTS

The following parts of this product may be replaced by the consumer. Spare parts are available through Mantis customer service.

Description	Model Number
Tine.....	8440-990101-01
Bolt.....	8NH-08D
Nut.....	8SFDD-40D

! WARNING

Always use only original Mantis replacement parts. The use of any unauthorized replacement parts, attachments or accessories can be dangerous and could cause injury or mechanical damage.

MAINTENANCE

Before and after each use, check the tiller/cultivator for wear and damage. If required, exchange worn or damaged parts for new ones as described in this instruction manual. Observe the technical requirements.

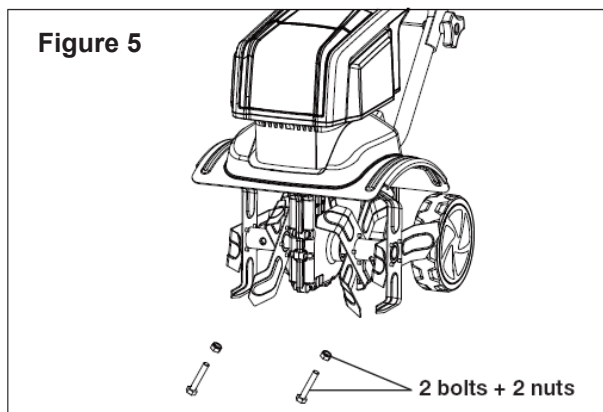
1. Follow the maintenance and repair instructions for this tiller/cultivator. Never carry out any modifications of this product. Information about maintenance and repair is provided in this user manual.
2. Keep all nuts, bolts and screws tight to ensure the tiller/cultivator is in safe working condition.
3. Make sure that air vents are not covered with debris
4. Replace worn or damaged parts for safe operation.
5. Be sure that tines are clear and can rotate freely – Accumulation of debris around the tines could impair performance or damage the motor. Inspect and clean the area around the tines before every use.

CHANGING THE TINES

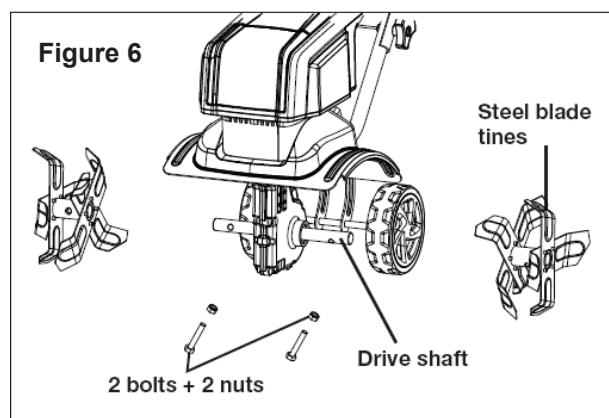
NOTE: The tiller/cultivator is fitted with four tilling tines that can easily be changed in pairs. Always change both tine pairs at the same time to avoid imbalance and damage to the machine.

To replace the tines, follow the steps below:

1. While standing on a flat and stable surface, switch off the unit, wait for moving parts to stop and remove the plug from the extension cord.
2. Remove the 2 bolts and 2 nuts, then remove the steel tines (Figure 5).



3. Clean the drive shaft
4. Place the new tines onto the drive shaft so that the holes on the tine hub line up with the holes on the drive shaft.
5. Insert the 2 bolts through the holes and secure them with the 2 nuts (Figure 6).



IMPORTANT: The tines must be set in the correct turning direction. Note the way the old tines came off and replace the new ones exactly the same way.

Electric Tiller/Cultivator Maintenance & Storage

VIBRATION AND NOISE REDUCTION

To reduce the impact of noise and vibration emission, limit the time of operation, as well as wear personal protective equipment.

Take the following points into account to minimize the vibration and noise exposure risks:

1. Only use the tiller/cultivator as intended by its design and these instructions.
2. Ensure that the tiller/cultivator is in good condition and well maintained.
3. Use correct tines and ensure they are in good condition.
4. Keep tight grip on the handle grips.
5. Maintain this tiller/cultivator in accordance with these instructions and keep tiens well lubricated.
6. Plan your work schedule to spread product use across a longer period of time.

RESIDUAL RISKS

Even if you are operating this tiller/cultivator in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the use of this product:

1. Health defects resulting from vibration emission if the product is being used over long periods of time or not properly managed and maintained.
2. Injuries and damage to property due to broken components or the sudden impact of hidden objects during use.
3. Danger of injury and property damage caused by thrown objects.

WARNING

This tiller/cultivator produces an electromagnetic field during operation! This field may under some circumstances interfere with active or passive medical implants! To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product!

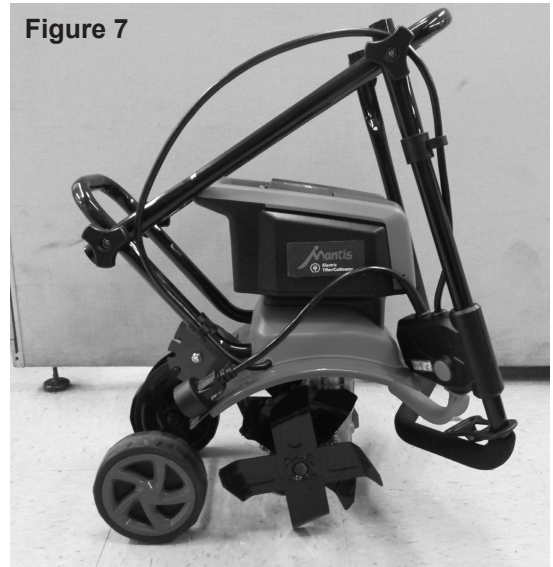
STORAGE

1. Switch the product off, wait for moving parts to stop and disconnect it from the power supply.
2. Clean the tiller/cultivator as described above.
3. Store the tiller/cultivator in a sheltered, dry, frost-free, well-ventilated place.
4. When not in use, the tiller/cultivator should be stored indoors in a dry and high or locked-up place out of the reach of children. The ideal storage temperature is between 50°F (10°C) and 86°F (30°C).
5. We recommend using the original package for storage or covering the tiller/cultivator with a suitable tarp or enclosure to protect it against dust.
6. You can store your tiller/cultivator with the handles in an extended position or folded down (Figure 7). Loosening handle knobs will allow the handles to fold down as shown.

TRANSPORTATION

1. Switch the tiller/cultivator off, wait for moving parts to stop and disconnect it from the power supply.
2. Attach transportation guards, if applicable.
3. Always carry the tiller/cultivator by its transportation handle.
4. Protect the tiller/cultivator from any heavy impact or strong vibrations which may occur during transportation in vehicles.
5. Secure the tiller/cultivator to prevent it from slipping or falling over.

Figure 7



Electric Tiller/Cultivator Troubleshooting

Troubleshooting

Suspected malfunctions are often due to causes that users can fix themselves. Therefore check malfunctions using this section. In most cases the problem can be solved quickly.

WARNING

Only perform the steps described within these instructions! All further inspection, maintenance and repair work must be performed by an authorized service centre or a similarly qualified specialist if you cannot solve the problem yourself! For assistance contact the Mantis customer service center at the number listed on the warranty statement located at the end of this operating instructions.

Problem	Cause	Remedy
1. Tiller/cultivator does not start	1.1. Not connected to power supply 1.2. Power cord or plug is defective 1.3. Other electrical defect to the product	1.1. Connect to power supply 1.2. Check by a specialist electrician 1.3. Check by a specialist electrician
2. Tiller/cultivator does not reach full power	2.1. Extension cord not suitable for operation with this product 2.2. Power source (e.g. generator) has too low voltage 2.3. Air vents are blocked	2.1. Use a proper extension cord 2.2. Connect to another power source 2.3. Clean the air vents
3. Unsatisfactory result	3.1. Tines are dull/damaged 3.2. Tines not suitable for ground material	3.1. Replace with new tines 3.2. Use product only on suitable ground
4. Excessive vibration or noise	4.1. Tines are dull/damaged 4.2. Bolts/nuts are loose	4.1. Replace with new tines 4.2. Tighten bolts/nuts



RECYCLING AND DISPOSAL

The product comes in a package that protects it against damage during shipping. Keep the package until you are sure that all parts have been delivered and the product functions properly. Recycle the package afterwards.

WEEE symbol. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.



LIMITED WARRANTY

MANTIS extends this limited warranty against defects in material and workmanship for a period of two (2) years from the date of purchase by the original purchaser.

MANTIS will repair or replace, at its option, any part or parts of the product found to be defective in material or workmanship during the warranty period. Warranty repairs and replacements will be made without charge for parts or labor. All parts replaced under warranty will be considered as part of the original product, and any warranty on the replaced parts will expire coincident with the original product warranty. If you think your MANTIS TILLER/CULTIVATOR is defective in material or workmanship, please contact our Customer Service Department at 0161 474 1525 or via our Contact Us page on www.mantis.uk.com/contact/

United Kingdom

Mantis UK

4th floor, Lincoln House

300 High Holborn

London WC1V 7JH

You are responsible for pickup and delivery charges; the product must be returned to us postage paid.

MANTIS assumes no responsibility in the event that the product was not assembled or used in compliance with any assembly, care, safety, or operating instructions contained in the Operator's Manual or accompanying the product. This limited warranty does not cover damages or defects due to normal wear and tear, lack of reasonable and proper maintenance, failure to follow operating instructions or owner's manual, misuse, lack of proper storage or accidents or routine maintenance parts and service. This limited warranty shall not be effective if your MANTIS TILLER/CULTIVATOR has been subjected to negligence or has been repaired or altered by anyone other than an authorized dealer or authorized service center.

You must maintain your MANTIS TILLER/CULTIVATOR by following the maintenance procedures described in the owner's manual. Such routine maintenance, whether performed by you or a dealer, is at your expense.

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Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, but are subject to change without notice.

DECLARATION OF CONFORMITY

Business name of the manufacturer: MANTIS France SARL.

full address of the manufacturer: 20, rue des Garennes, 57155 Marly, France

name and address of the person (established in the Community) compiled the technical file:

Robert A. Kurzyna; 20, rue des Garennes, 57155 Marly, France

We declaring that the machinery

product name: Motor hoe

commercial name: Motor hoe

function: service for tilling

model: 3450-01, 3450-02

type: AC tool

Serial Number: N/A

Seriennummer: N/A

fulfils all the relevant provisions of Directives

entspricht allen relevanten Anforderungen folgender Richtlinien

2006/42/EC, 2014/30/EU, 2000/14/EC&2005/88/EC

tested in accordance with below standards

EN 60335-1:2012+A11; EN 709:1997+A4, EN 62233: 2008, EN ISO 12100:2010;

EN 55014-1:2006+A1+A2, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013

Measured sound power level: 91.34 dB(A), K=1.18 db(A).

Guaranted sound power level: 93 dB(A)

Notified Body for EC Directive 2000/14/EC

AV TECHNOLOGY LTD

UNIT 2 EASTER COURT, EUROPA BOULEVARD, WARRINGTON, CHESHIRE, WA5 7ZB.

place and date of declaration:

1/2/18

signature of the person:

