

# Mantis<sup>®</sup> Electric tiller

CE



No. 7252

ALL NEW

Mantis

Electric Tiller

EASY TO USE

## OWNER'S MANUAL

Original Instructions

# Welcome to the world of Mantis gardening !

Here's your new MANTIS Electric Tiller . . . the light-weight wonder that's "Changing the way we garden®."

Unlike big tillers, your MANTIS Electric Tiller weighs only 9 kg. So it lifts easily, handles smoothly, tills and weeds precisely. And, unlike other small tillers, it features serpentine tines that churn soil to 25 cm deep. It creates a soft, smooth seed bed, even in problem soil.

Once you know how to use your tiller correctly, we guarantee you'll love it. So first, please read this manual. It shows, step by step, how to use your tiller safely. Plus, it shows how the MANTIS Border Edger can make light work of your edging needs.

If you have questions about any topic in this Manual, or if you wish to order MANTIS Attachments contact your local authorized MANTIS dealer.



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# Safety rules and warnings



You will notice throughout this owners' manual, Safety Rules and Important Notes. Make sure you understand and obey these warnings for your own protection.

## A. Special safety information

**⚠ WARNING ⚠ DANGER ⚠**  
**ATTENTION: THIS SYMBOL POINTS OUT OUR IMPORTANT SAFETY INSTRUCTIONS.**  
**⚠ WHEN YOU SEE THIS SYMBOL ⚠**  
**HEED ITS WARNING! STAY ALERT!**

**⚠ WARNING ⚠ DANGER ⚠**  
**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.**

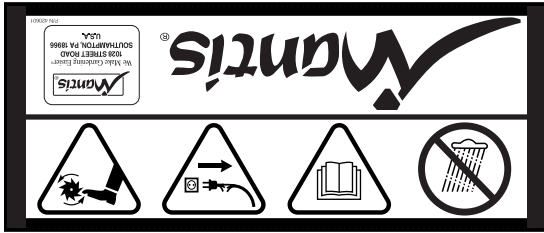
## B. Safety and warnings

**⚠ WARNING ⚠ DANGER ⚠**  
**IMPROPER USE OR CARE OF THIS TILLER 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.**

**⚠ WARNING ⚠ DANGER ⚠**  
**IF THE TILLER IS USED IMPROPERLY OR SAFETY PRECAUTIONS ARE NOT FOLLOWED, THE USERS RISK SERIOUS INJURY TO THEMSELVES AND OTHERS.**  
**READ AND UNDERSTAND THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS TILLER.**

## C. Safety label information

An important part of the safety system incorporated in this tiller are the warning and information labels found on various parts of the tiller. These labels must be replaced in time due to abrasion, etc. It is your responsibility to replace these labels when they become hard to read. The location and part numbers (P/N) of these labels are illustrated on pages 16 and 17.



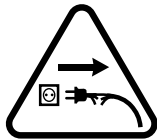
P/N 420601



P/N 420600



CUTTING HAZARD: KEEP FEET AND HANDS AWAY FROM ROTATING TINES.



DO NOT USE IF ELECTRICAL CORDS ARE DAMAGED OR BROKEN



READ OWNER'S MANUAL BEFORE USING TILLER, OR PERFORMING ANY REPAIR OR MAINTENANCE. KEEP OWNERS MANUAL IN A SAFE PLACE.



DO NOT USE IN RAIN OR WET CONDITIONS



WEAR EAR AND EYE PROTECTION.



CORRECT ASSEMBLY.



INCORRECT ASSEMBLY.



DO NOT CARRY THE TILLER IN THIS POSITION.



DOUBLE INSULATED



GUARANTEED SOUND POWER LEVEL



Disposal of equipment

This equipment is marked with the above recycling symbol. In the European Union this label indicates that at the end of the life of the equipment you must dispose of it separately at an appropriate collection point and not place it in the normal domestic unsorted waste stream. This will benefit the environment for all. Please contact your local authorities for a list of appropriate recycling points.

### SPECIFICATION:

Model 7252	230 VAC	50 Hz	.78 Kw	Max 5300 min <sup>-1</sup>	9.5 kg
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## E. Warnings - do's

Read and understand the owner's manual. Pay particular attention to all sections regarding safety.

1. Always keep a firm grip on both handles while the tines are moving. **BE AWARE!!** The tines may coast after the triggers are released. Make sure tines have come to a complete stop before letting go of the tiller.
2. Always maintain a firm footing and good balance. Do not overreach while operating the tiller. Before you start to use the tiller, check the work area for obstacles that might cause you to lose your footing, balance or control of the machine.
3. Thoroughly inspect the area where equipment is to be used and remove all objects, which can be thrown by the machine.
4. Always keep area clear of children, pets, and bystanders.
5. Always stay alert. Watch what you are doing and use common sense. Do not operate unit when fatigued.
6. Always dress properly. Do not wear loose clothing or jewellery, they might get caught in moving parts. Use sturdy gloves. Gloves reduce the transmission of vibration to your hands. Prolonged exposure to vibration can cause numbness and other ailments.
7. While working, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
8. Always wear eye protection. Eye protection must meet applicable CE standards.

## F. Warnings - don'ts

1. Don't use tiller with one hand. Keep both hands on handles with fingers and thumbs encircling the grips when the tines are moving.
2. Don't overreach. Keep a good footing at all times.
3. Don't run with the machine, walk.
4. Don't work on excessively steep slopes.
5. Don't attempt to clear tines while they are moving. Never try to remove jammed material before unplugging the cord and making sure the tines have stopped completely.
6. Don't allow children or incapable people to operate this tiller.

9. Start the tiller carefully, according to the instructions on page 8.
10. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
11. Use extreme caution when reversing or pulling the machine towards you.
12. Work only in daylight or good artificial light.
13. Always be sure of your footing on slopes.
14. Exercise extreme caution when changing direction on slopes.
15. Always keep a safe distance between two or more people when working together.
16. Always inspect your unit before each use and ensure that all handles, guards and fasteners are secure, operating, and in place. Be sure that all electrical cords are not damaged or broken.
17. Always maintain and examine your tiller with care. Follow maintenance instructions given in manual.
18. Always store tiller in a sheltered area (a dry place), not accessible to children.
19. Always stop the motor and unplug the power cord when carrying out maintenance and cleaning operations, when changing tools, and when being transported by means other than under its own power.
7. Don't operate while under the influence of alcohol or drugs.
8. Don't attempt to repair this tiller. Have repairs made by a qualified dealer or repairman. See that only original MANTIS parts are used.
9. Don't run the tiller in rain or wet conditions.
10. Don't allow children or people unfamiliar with these instructions to use the machine. Local regulations can restrict the age of the operator.
11. Don't pick up or carry the machine while the motor is running.

**⚠ WARNING ⚠ DANGER ⚠**

**IMPROPER ASSEMBLY OF THIS TILLER CAN RESULT IN SERIOUS INJURY.  
MAKE SURE TO FOLLOW ALL INSTRUCTIONS CAREFULLY.**

## A. Parts

Your MANTIS Electric Tiller comes partially assembled. You must install only the handlebars, the handle brace, and the tines. This will take just a few minutes if you follow the directions.

First, take all items out of the carton. But do not remove the cardboard from around the tiller's base.

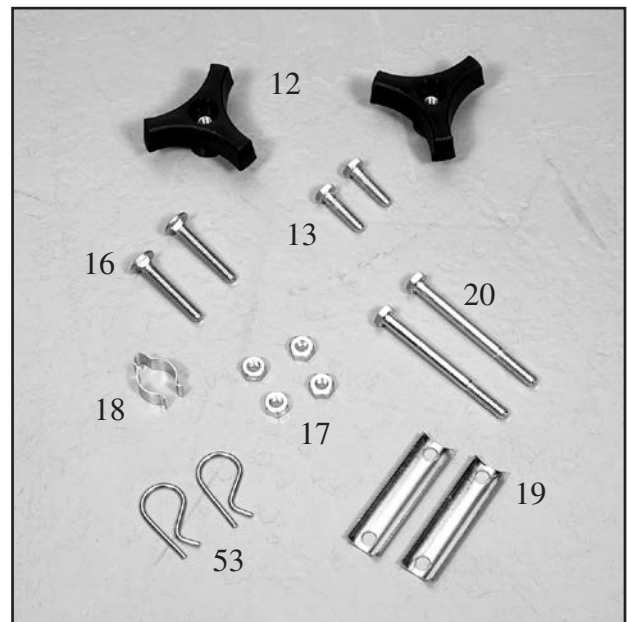
The list below, shows the parts that come with your tiller. Check to make sure you have them.

The bag of hardware is in the plastic bag containing the owner's manual and video.

To assemble your MANTIS Electric Tiller, you'll need two 7/16" (11 mm) wrenches. We suggest that you install all nuts and bolts only "finger tight" — that is, one-half to one full turn — until you've completed assembly. **The nuts are self locking, but you must use a wrench to tighten them completely.**



Qty.	Description	*Key no.
1	Upper handle assembly	7
1	Upper handle trigger assembly	1
2	Lower handles	10
1	Pair tiller/cultivator Tines	54/55
1	Motor assembly (includes fender guard, worm gear transmission & complete housing)	62**
1	Handle brace	14
1	Bag of hardware containing:	
2	Round head square neck bolts	16
4	Lock nuts	17
2	Bolts (7.6 cm long)	20
2	Tine retaining pins	53
2	Handle clamps	19
2	Bolts (2.5 cm long)	13
2	Knobs	12
2	Cable clamp	18



\*These numbers are the same numbers shown on the parts layout on pages 16 and 17.

\*\*This key no. is for assembly purposes only.

## B. Lower handle assembly

To identify part numbers, see page 5 and 17.

**1. Use the protective cardboard sleeve to stabilize your tiller. Stand the motor assembly (no. 62) up. (Picture 1)**

2. Lay the handle parts within easy reach. You'll need one of the handle clamps (no. 19) and one of the lower handles (no. 10). Note that the lower handles have a short leg on one end.

3. Fit the handle clamp along the outside of the short leg. Line up the holes on the clamp and the leg.

4. Choose one of the two 3-inch bolts (no. 20). Slide it through the first set of holes — near the elbow where the lower handle curves. (Picture 2)

5. Now slide the other lower handle onto the 3-inch bolt. Fit the other clamp onto this other handle's short leg. Add a nut and tighten finger tight. (Picture 3)

6. Locate the worm gear housing. It starts just above — and extends down through — the tiller's red fender guard. You'll notice that there's a recessed channel on either side of the housing's top. (Picture 4.)

7. Take the lower handles that you've just put together. Slide them into the two recessed channels. (Picture 5.)

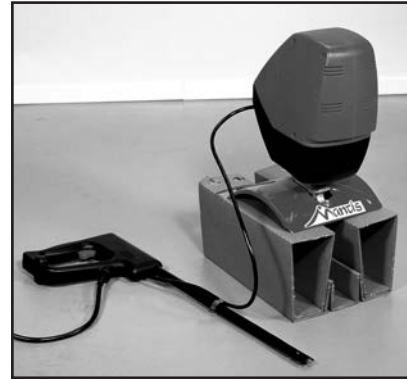
Make sure you insert them from the rear of the tiller - so that the bolt fits along the back of the housing.

8. Slide the second 3-inch bolt through the second set of holes in the short legs and clamps. Add a nut and tighten finger tight.

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**NOTE: THE NUTS ARE SELF LOCKING, BUT YOU MUST USE A WRENCH TO TIGHTEN THEM COMPLETELY.**

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Picture 1



Picture 2



Picture 3



Picture 4



Picture 5

## C. Upper handle assembly

1. Attach the upper handle assembly (no. 1) – the handle with the power cord – to the right lower handle (no. 10) and secure with the handle knob (no. 53). (Picture 1 and 2)
2. Follow the same steps to install the left upper handle onto the left lower handle. (Picture 3)
3. Use the clip (no. 18) to secure the power cord in place on the lower handle. (Picture 4)
4. Now install the handle brace (no. 14). Line it up with the holes on the upper handles. Then insert a bolt (no. 13) and a lock nut (no. 17) on either side (Picture 5)
5. Use a wrench to tighten Bolt (no. 13) and lock nuts (no. 17).
6. Now use wrench to tighten all nuts and bolts firmly and securely.

**⚠ WARNING ⚠ DANGER ⚠**  
**FOR PROPER INSTALLATION - THE HANDLE WITH THE THROTTLE MUST BE ATTACHED TO THE RIGHT SIDE LOWER HANDLE.**



Picture 1



Picture 2



Picture 3



Picture 4



Picture 5

## D. Assemble the tines for tilling

Assembling the tines for tilling

1. Remove the cardboard from around your Tiller's base.
2. Slide the tines onto the axle shafts. The "D" hole goes on the outside.
3. Make sure you've installed the tines properly for tilling. Liken the tines to your fingers. When your palm faces the ground, your fingers curl down. Stand behind the Tiller and hold your hand next to the tines. Do the tine blades curl down, as your fingers do? If so, they are in the *tilling* position. (To switch to the *cultivating* position, see page 12.)
4. To secure each tine to the axle, insert a tine retaining pin.



### IMPORTANT NOTE:

Before you use your MANTIS tiller, read the safety rules & warnings on pages 2-4.

## Before you begin tilling

### A. Starting

Starting your MANTIS Electric Tiller is easy.

1. Simply loop your extension cord through the built-in extension cord holder. This is provided to secure the extension cord and help prevent it from becoming detached.
2. Connect the extension cord to the power cord on the tiller. (Picture 1)
3. Plug the extension cord into an outlet.
4. Pick a speed. (Picture 2)
5. Squeeze the triggers to begin tilling. (Picture 3)



Picture 1



Picture 2



Picture 3

## B. Getting your tiller to the garden

### Walk it.

Put the tiller in 1st speed; you can “walk” it to your garden. Just squeeze the triggers and let the tiller “tip-toe” across your yard on its tines. It won’t hurt your lawn or driveway. (Picture 1)

### Carry It.

Make sure the power cord is unplugged from the extension cord. Then use one hand to grasp the convenient carrying handle. Use the other hand to hold the handlebars. (Picture 2) Then lift your tiller and carry it to your garden. Since it weighs only 21 pounds, it won’t strain your muscles or tire you out!

### Take It for a Ride.

You can easily transport your MANTIS Electric Tiller to a friend’s or relative’s house. Simply fold down the handles, then store your tiller in the trunk of your automobile or truck. It fits easily. And you can put it in and take it out without straining your back. (Picture 3)



Picture 1



Picture 2

**⚠ WARNING ⚠ DANGER ⚠**  
**NEVER CARRY YOUR TILLER AS THE PERSON IN PICTURE 4 IS DOING. IF YOU DO, AND THE TINES ENGAGE, YOU COULD SUFFER SERIOUS INJURY.**



Picture 3



Picture 4



**⚠ WARNING ⚠ DANGER ⚠**  
**THE OPERATOR OF THIS TILLER IS RESPONSIBLE FOR ACCIDENTS OR HAZARDS OCCURRING TO HIMSELF, OTHER PEOPLE OR THEIR PROPERTY.**

## A. Now you're ready to use your MANTIS Electric Tiller

If you've seen other tillers, your MANTIS Electric Tiller may surprise you. It tills best when you pull it backward! When you pull your MANTIS Electric Tiller backward, you give extra resistance to the tines, so they dig deeper. (Picture 1).

What's more, when you go backward, you erase footprints. So your soil stays light and fluffy. While other tillers, by contrast, you walk right over the soil you've just tilled, packing it down.



Picture 1

## B. Run your MANTIS Electric Tiller like a vacuum

Place your tiller at the head of the row or area you want to till. Turn it on. Then use an easy rocking motion. First, pull your Tiller backward. Then use an easy rocking motion. Again, pull your tiller backward. Then let it move forward just a little bit. Then pull it backward again. This will help you till deeper.

Keep repeating these steps until you've tilled an entire row. Start again on the next row. It's a lot like running a vacuum. (Picture 2)



Picture 2

## C. You can even control depth

### For deeper tilling:

Move your tiller slowly back and forth, as you would a vacuum cleaner. Work the same area over and over until you've dug to your desired depth. (Picture 3)

### For shallow tilling:

Switch the tines to the cultivating position. (See pg. 12 to learn how) Then move you tiller quickly over your soil surface.

### For big weeds or tough roots

Let your tiller rock back and forth over the tough spot, until the tines slice through the weed or root.



Picture 3

## D. Your MANTIS Electric Tiller handles special tilling projects

Want to turn part of your lawn into a colorful flower border?

Your MANTIS Electric Tiller makes it easy! Just run your tiller back and forth until the sod begins to break up. Then continue tilling. Your tiller will chop the clumps of sod until they're fine. Then, it will work them into the soil. Pretty soon, you'll have a soft, fresh planting bed.

## Tilling/cultivating

**▲ WARNING ▲ DANGER ▲**

**IF YOUR TINES GET JAMMED OR ENTANGLED, TURN OFF THE TILLER AT ONCE. REMOVE THE OBSTRUCTION ONLY WHILE THE TILLER IS UNPLUGGED.**

**NEVER TRY TO REMOVE AN OBSTRUCTION WHILE THE TILLER IS IN THE ON POSITION OR PLUGGED IN. SERIOUS INJURY CAN RESULT.**

### A. How About a family-size vegetable garden?

Nowadays many gardeners prefer small gardens — especially in the suburbs, where space is at a premium. But, if you're fortunate enough to own a large lot, you can create a bigger garden — a half acre or more. Here's how:

1. First, hire someone with a tractor or big tiller to break ground for you. This is a one-time-only investment that's well worth the small cost.

2. Then, use your tiller to break up any remaining clumps of soil or sod. Unlike a tractor or big tiller, your MANTIS Electric Tiller is a precision tool. It will pulverize your soil into a smooth seed bed.

### B. Your MANTIS Electric Tiller makes weeding a pleasure!

As a tiller, your MANTIS Tiller works the soil down to 10" (25.4 cm) deep. But, as a cultivator, it gently cultivates the surface, only 2" to 3" (5.09 cm to 7.62 cm) deep.

First, you must switch the tines to the weeding position. This takes less than a minute.

Then, your MANTIS Electric Tiller's sharp "tine teeth" will slice up those pesky weeds, burying them as you go along. And, since the tines in this position won't dig too deep, they won't hurt your plants' precious root systems.

The result? Your tiller will cut your weeding time in half, and turn a tiresome chore into a pleasure.

## C. How to switch from tilling to cultivating position

1. Make sure your Tiller is off and unplugged.
2. Remove the retaining pins from the tines.
3. Remove the tines from the axle.
4. Place the right-side tine onto the left-side axle. Place the left side tine onto the right-side axle. The “D” hole should be to the outside.
5. Here is how to make sure you’ve installed the tines properly. Stand behind the tiller and hold your hand, palm up, next to the tines. Do the tine points curl up, as your fingers do? If so, they are in the correct cultivating position. (See photos below)
6. Reinsert the pins.



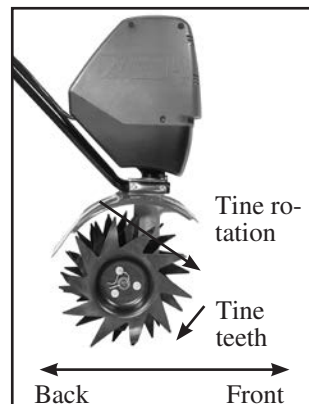
## D. Now You’re Ready to cultivate or weed.

Guide your tiller where you want to weed and start it up. Pull your tiller backward slowly, then let it move forward a bit, in a gentle rocking motion. Watch it slice, shred, and bury those weeds!

Got tough weeds? Select a slower speed to slow your Tiller down. Then work back and forth until your Tiller chops up the weeds. It’s easy and effective!

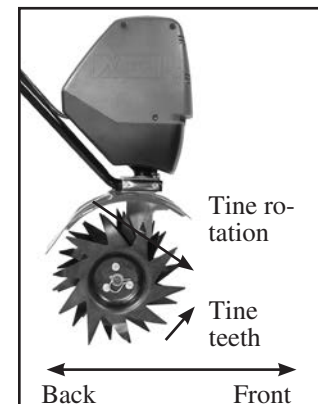
Remember, any tiller will tangle in tall grass, stringy vines, or super-big weeds. So, if you have a “backyard jungle,” first use a knife, pruner, or brush cutter to chop up the overgrowth. If the tines become tangled anyway, turn the motor and unplug the tiller before trying to clear them.

The optional tine Detangler (Item no. 1322) will clear tines in a jiffy. Contact your local authorized MANTIS dealer.



**Tilling position**

Tine teeth point in the same direction as the rotation of the tine; or toward the front of the Tiller, away from the operator.



**Cultivating position**

Tine teeth point in the opposite direction as the rotation of the tine. Tines point toward the back of the tiller, or toward the operator.

## E. Your MANTIS Electric Tiller will weed between narrow rows!

Your MANTIS Electric Tiller is a precision weeder that easily fits in tight places. So don't be afraid to weed anywhere: between plants and shrubs; in corners; against fences; on raised beds; in wide rows; even in very narrow rows. Your MANTIS Electric Tiller weeds 25\* to 23 cm wide. So you can run it in a tightly planted garden without damaging your delicate plants. That's good news for suburban gardeners, who often have to plant rows close together!

\*With optional Planter/ Furrower attachment (Item no. 6222.)





## A. What to do if your Electric Tiller stops running

1. If nothing happens when you squeeze the triggers, make sure the tiller is plugged in or that the cord is not damaged.
2. If it still does not work, unplug the Electric Tiller from the power source.
3. Inspect the tines to make sure your tines are clear of rocks or debris. Clear any debris that may be preventing the tines from spinning.
4. Remove the tines to make sure all of the debris has been cleared.
5. Check the circuit breaker on the Electric Tiller. Make sure the button hasn't popped.
6. If the button has popped, press the button back in. If the circuit breaker button doesn't stay in, wait approximately 30 seconds and retry. (Picture 1)
7. Make sure that the circuit breaker hasn't been tripped at your power source: whether it's your house, a generator, or an outdoor outlet.



Picture 1

## B. How to reseal the motor housing

At some point, you may find that the tines won't turn when you squeeze the throttle. This may mean the motor isn't sitting all the way down on the worm gear housing.

Perhaps you've been using your Tiller for several years. The housing screw bolt (Key no. 22) may have come loose and lifted the motor up.

If this happened you'll notice a gap between the bottom of the bottom housing (Key no. 24) and the top of the worm gear housing. (Picture 2)

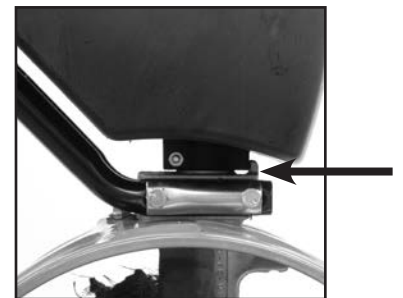
To fix this, loosen the housing screw. Take the motor and housing off the worm gear housing. Notice the hex head on top of the drive shaft (Key no. 21). Inside the bottom housing, you'll find the coupler driver (Key no. 26). Make sure the hex head lines up with the coupler driver inside the bottom housing.

Then put the motor back on the worm gear housing.

If you've followed these steps properly, there will be no gap between the bottom housing and the worm gear housing. (Picture 3) Make sure you tighten the housing screws!



Picture 2



Picture 3

## C. The tines don't seem to dig like they used to

If the tines are not performing as they did when you first bought the tiller, inspect them for excessive wear. If they are worn, you can order a new pair direct from MANTIS.

To order replacement tines contact your local authorized MANTIS dealer.

### IMPORTANT NOTE:

**To keep your MANTIS Electric Tiller running as efficiently as possible, always make sure the tines are clear of rocks and debris.**

**If you continue to experience problems, contact your local authorized MANTIS dealer.**

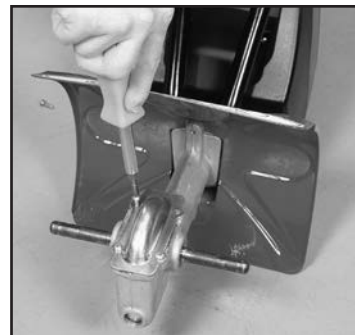
# Maintenance

## A. How to check the grease level inside the worm gear housing

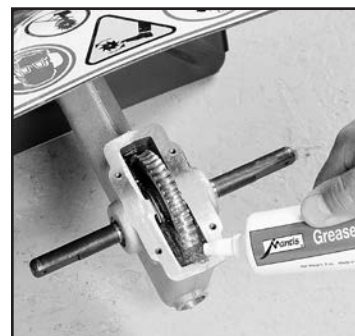
When we built your MANTIS Electric Tiller, we lubricated the worm gear housing thoroughly.

It is imperative that you inspect the grease level once a year. Simply remove the cover plate on the worm gear housing. (Picture 1) Then check to make sure the grease comes almost to the top of the housing. If it doesn't, add lithium no. 0 grease (Item M9985.) This is the only way to add grease to the worm gear housing. (Picture 2) To purchase MANTIS grease, contact your local authorized MANTIS dealer.

Please do not overfill. Too much grease can create pressure, which could cause seals to fail or the clutch to slip.



Picture 1



Picture 2

# Storage

1. Clean dirt, grass and other materials from the entire machine.
2. Wipe the tines with oil or spray them with WD-40, to prevent rusting.
3. Check the grease level in the gear housing, as described on page 13.
4. Order new parts to replace any that are badly worn or broken. Contact your local authorized MANTIS dealer.
5. Store your tiller in a clean, dry place. You can store with the handles in an extended position (Picture 3) or folded down. (Picture 4)
6. To fold down the handles, follow these easy steps: Loosen the handle knobs (no. 12), fold the handles forward or back. (Picture 4) Tighten knob securely. Your handles are now folded and ready to store in a smaller area.

### IMPORTANT NOTE:

**Handles can fold back or forward. When folding handles back, as show in picture no. 4, be careful not to damage the 3-speed switch.**

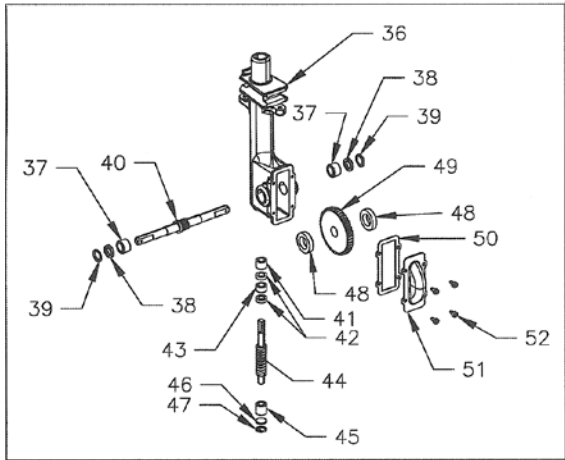
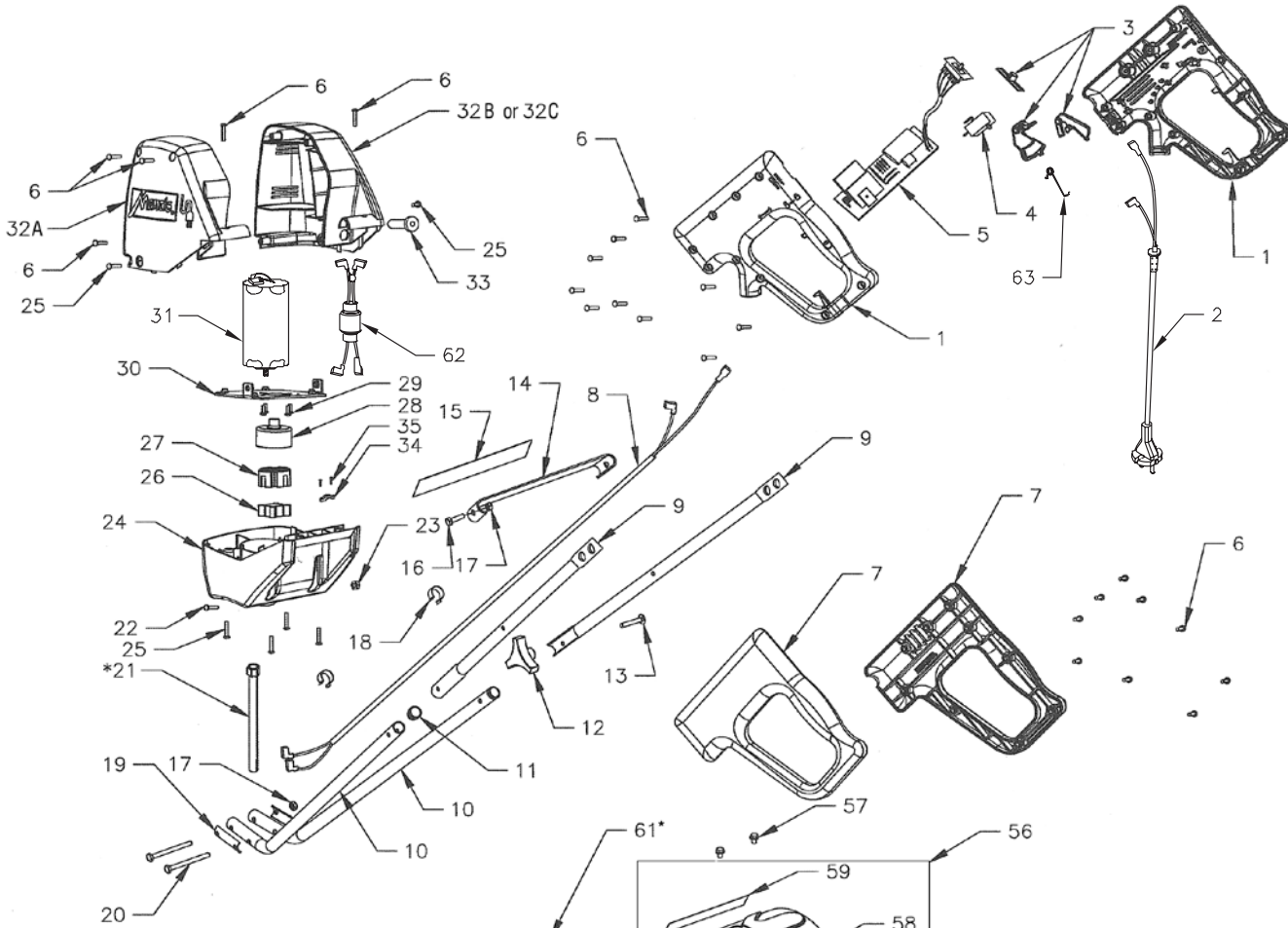


Picture 3

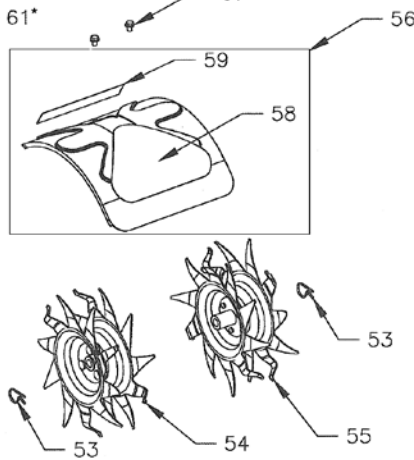


Picture 4

# Parts explosion



\*Key #61 includes Key #21



**P/N 438LA**

DIRECTION

Raised hub

Teeth point in a clockwise direction

When you look at a tine with the raised hub facing you and the teeth are pointing in a **CLOCKWISE** rotation, you have a **LEFT HAND TINE**.

---

**P/N 438RA**

DIRECTION

Raised hub

Teeth point in a counter clockwise direction

When you look at a tine with the raised hub facing you and the teeth are pointing in a **COUNTER CLOCKWISE** rotation, you have a **RIGHT HAND TINE**.

# Parts list

Key No.	Part No.	Qty.	Description	Key No.	Part No.	Qty	Description
1	420200	1	Handle, Right Side Assy	32C	420145	1	Right Housing 230v w/o Circuit Breaker (can be sold as a replacement part)
2	420115	1	Power Cord				
3	420203	1	Trigger, Trigger lock, Button	33	420138	1	Circuit Breaker
4	3033	1	Switch Normally Open	34	3016	1	Strain Relief
5	420124	1	Assembled PC Board w/Switch	35	3041	2	3.5 x 13mm Ph Pan Metric Tapping Screw DIN 7981, Steel, Zinc
6	310500	24	#8-11 x 3/4 Combo SI Torx T-20 Pan Steel Plastite 45-1 Case Harden				
7	420207	1	Handle, Left Side Assy	36	466	1	Worm Gear Housing
8	420137	1	Motor Cord	37	432	2	Worm Gear Bearing
9	420213	2	Handle Upper FDH- Black	38	434	2	Bearing Seal
10	420214	2	Handle Lower FDH- Black	39	435	2	Bearing Seal Retainer
11	400230	2	Plug Handle	40	431	1	Tine Shaft
12	400510	2	Handle Knob	41	423	1	Roller Bearing
13	400509	2	Bolt	42	425	2	Worm Bearing Race
14	420113	1	Handle Brace	43	424	1	Worm Thrust Bearing
15	420602	1	Label Brace Elec. Tiller	44	400204	1	Worm
16	410	2	Cap Screw 1/4-20 x 1" Lg.	45	458	1	Roller Bearing
17	972	4	Locknut 1/4-20	46	426	1	Worm Disk
18	478	2	Cable Clamp	47	428	1	Retaining Ring
19	377	2	Handle Clamp	48	430	2	Worm Gear Thrust Washer
20	470	2	1/4-20 x 3" Bolt	49	400205	1	Worm Gear
21	468	1	Drive Shaft (Also in Key #61)	50	436	1	Gasket
22	420513	1	8-32 x 7/8 6-Lobe Torx Equiv Pan M/S, with T-20 Driver Size	51	437A	1	Housing Cover
				52	651	4	Rd. Hd. Self Tapping Screw
23	420514	1	8-32 Hex Machine Screw Nuts, Steel, Zinc	53	418-1	2	Tine Retaining Hair Pin
				54	438LA	1	Tine Assembly (L.H.)
				55	438RA	1	Tine Assembly (R.H.)
24	420134	1	Bottom Housing	56	430206	1	Fender Guard with Labels
25	420512	6	10-32 x 1/2 6-Lobe Torx Equiv Pan M/S, with Spec T-20 Driver Size	57	140	2	Bolt 1/4-20 x 3/8" Lg.
				58	420600	1	Warning Fender Label
26	420224	1	Coupler Driver	59	4058	1	Mantis Label
27	420222	1	Coupler Shock Absorber	61	400011	1	Electric Tiller Trans w/ drive shaft
28	420223	1	Coupler Housing	62	420147	1	Ferrite Core Assembly
29	420511	4	1/4-20 x 1/2 Socket Head Cap Screw,	63	420110	1	Spring
			Plain Steel	64	420139	1	Conversion Cord (Not Shown)
30	420107	1	Motor Mounting Plate				
31	420910	1	230V PM Motor				
32A	420132	1	Left Housing Half				
32B	420142	1	Right Housing Half w/230v Circuit Breaker				

# DECLARATION OF CONFORMITY

**The Undersigned Manufacturer:**

Schiller Grounds Care, Inc.  
1028 Street Road  
Southampton, PA 18966, USA

Pat Cappucci  
President



Date: 19<sup>th</sup> August, 2010

**EU Authorized Representative:**

Earlsmere Limited  
Unit 18 Valley Road  
Station Road Industrial Estate  
Wombwell, Barnsley, South Yorkshire, S73 OBS UK

Jim White  
Managing Director



Date 19<sup>th</sup> August, 2010

**Notified Body:**

Société Nationale de Certification et  
d'Homologation (SNCH) No. 0499  
11, route de Luxembourg L-5230 Sandweiler

**Declare that the machine described below:**

Make & Type . . . . .	<b>Mantis Electric Motor Hoe (Tiller), 230V</b>
Category . . . . .	<b>Hand held-pedestrian controlled, cord connected, electrically driven motor hoe (tiller)ered</b>
Series (model) . . . . .	<b>7252</b>
Speed . . . . .	<b>5300 R.P.M</b>
Net Installed Power. . . . .	<b>0.78 KW</b>
Operation Width . . . . .	<b>229mm (9")</b>

Complies with the provisions of the following European Directives and Amendments and the Regulations transposing it into national law:

Machinery Directive . . . . .	<b>2006/42/EC</b>
EMC Directive . . . . .	<b>2004/108/EC</b>
Noise in the Environment Directive. . . . .	<b>2000/14/EC - Annex VI Procedure 2</b>
Vibration Directive. . . . .	<b>2002/44EC</b>
Pedestrian Controlled Motor Hoe . . . . .	<b>BSEN 709:1997 + A2 :2009</b>

**Sound:**

Sound levels were determined in accordance with Directive 2000/14/EC amended by 2005/88/EC, Annex VI

Measured Sound power level . . . . .	<b>79 dB (A)</b>
Guaranteed Sound power level . . . . .	<b>83 dB (A)</b>
Sound Pressure . . . . .	<b>63 dB (A)</b>

**Vibration:**

Hand/arm vibration was measured at the right and left operator handles per ISO 5349-1-2001 and ISO 5349-2-2001. Vibration is given as the vector sum of acceleration in the x, y and z axes. Only the highest of the left and right readings is given.

Vibration measurements. . . . . **8.9 m/s<sup>2</sup>**

**Intended Use:** These machines is designed for use in the garden for tilling soil up to 25cm (10") deep or gently cultivate the surface 5-7.8cm (2"-3"deep)

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