# TIP: UNPACK CAREFULLY AND KEEP ENGINE IN IT'S CARDBOARD CRADLE. IT WILL MAKE IT EASIER TO ASSEMBLE!





handles short leg. Add a lock nut (T14) and tighten by hand.

holes in the short legs, add a lock nut and tighten finger tight.

**E.** Slide the second 3-inch bolt through the second set of

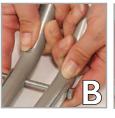
Call 800-366-6268 or go to www.mantis.com

the clamp and the leg

into them as shown.

**NEED HELP?** 

(or you'll be tilling backwards!).

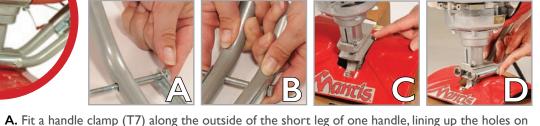


**B.** Take one of the two 3-inch bolts (T11) and slide it through the first set of holes – near the

C. Locate the recessed channels below the engine, and slide the handles you've just put together

elbow where the lower handle curves. Then slide the other clamp onto the other

D. Insert them from the rear so that they come from behind the Mantis logo as shown









over tighten.







Cap the exposed bolt with an acorn nut

(T13) and hand tighten until snug. Do not

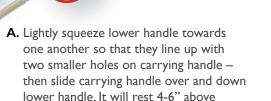
**C.** Repeat step B to install other handle.

**D.** Use the clip(T9) to secure the black cable and wire in place on the lower

**E.** Install the handle brace. Line it up with the holes on the upper handles. Then insert a cap screw (T15) and lock nut (T14) on either side. Use a wrench to tighten cap screws and lock nuts, and then tighten all nuts and bolts throughout the assembly firmly and securely.

Screw on knob and tighten (T12).

**STEP 2:** ATTACH UPPER HANDLES



**B.** Take upper handle with trigger and line it up with the lower handle. Insert the carriage bolt (T42) from the outside in.

### **WARNING** Do not operate the engine in a confined

space where dangerous carbon monoxi fumes can collect.

**N** WARNING

Fuel is extremely flammable. Handle it with are. Keep away from ignition sources. Do no smoke while fueling your equipment

**↑ WARNING** Avoid accidental blade engagement. Do not squeeze the throttle trigger when starting. laintain proper idle speed adjustment (2500-3100 rpn

# 4-CYCLE TILLER FUELING AND OIL

fuel tank. It is important to position the Mantis 4-Cycle Tiller as shown

so the oil will properly fill the crankcase Failure to do so will

cause engine damage

• Remove the oil plug.

• Pour in 2.7 fl. oz. of approved, 4-cycle engine oil. • Always check the oil level before each use.

The oil level should reach the inner first thread of the reservoir. Do not overfill.

Replace the oil plug.

• Then return the unit to the upright position and put the kickstand down.

Fueling your Mantis 4-Cycle Tiller/Cultivator is easy. Unscrew the gas cap and fill the tank about four-fifths of the way up with 89 octane unleaded gasoline. And remember, always drain the gas when transporting the unit from one location to another.

### lack N WARNING

ALTERNATIVE FUELS, SUCH AS E-15 (20% ETHANOL), E-85 (85% ETHANOL) OR ANY FUELS NOT MEETING HONDA REQUIREMENTS ARE NOT APPROVED FOR USE IN GASOLINE ENGINES. USE OF ALTERNATIVE FUELS MAY CAUSE PERFORMANCE PROBLEMS, LOSS OF POWER, OVERHEATING, FUEL VAPOR LOCK AND UNINTENDED MACHINE OPERATION, INCLUDING, BUT NOT LIMITED TO, IMPROPER CLUTCH ENGAGEMENT. ALTERNATIVE FUELS MAY ALSO CAUSE PREMATURE DETERIORATION OF FUEL LINES, GASKETS, CARBURETORS AND OTHER ENGINE COMPONENTS.

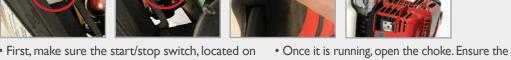
### **NIMPORTANT**

IT IS NORMAL FOR YOUR 4 STROKE ENGINE TO SMOKE FOR THE FIRST MINUTE OR TWO OF OPERATION, HOWEVER IT IS NOT NECESSARY FOR THIS TO OCCUR EVERY TIME. THIS IS A RESULT OF THE OIL BEING PULLED THROUGH THE ENGINE FOR LUBRICATION







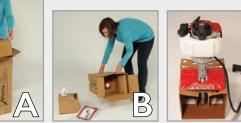


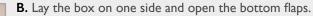
- the throttle handle, is in the start position, which is indicated by the "l" symbol.
- Close the choke by moving the choke lever to the up position.
- Press the primer bulb approximately 6 times until he bulb is filled with gas. Once it is filled, press it two more times.
- Pull the starter cord lightly until you feel resistance and then give it a short, brisk pull. Your tiller should start immediately. Do not pull the cord all the way out and do not let it snap back into the starter housing.



- lever is fully down • To stop the engine, simply push the start/stop
- switch to the stop position "O."
- To start a warm engine, follow the same procedure. Except now you can leave the choke lever in the down position and there is no need to pump the primer bulb.
- Before using the tiller, let the engine run for a minute to warm up. And before shutting it down, let the engine idle briefly to cool down.







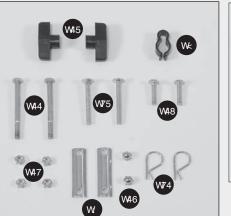
C. Return the box to an upright position and pull the box straight up and over the enclosed tiller. The engine and throttle handle will be sitting upright in the cradle to assist in assembly, as shown. Locate the hardware bag. (It may be in the cardboard cradle) NOTE: Keep cardboard cradle on for assembly.

HAT'S IN THE BOX?	
THE DOM:	
M M	
2 × 2 × 2 × 2 × 2 × 2 × 2 × 2 × 2 × 2 ×	
Mantis	
6	
11 1100	

Key	Qty.	Part No.	Description
T7	2		Handle Clamps
T9	1		Throttle Clip
T11	2		Bolts (3" long)
T12	2		Knobs
T13	2		Acorn Nuts
T14	4		Lock Nuts
T15	2		Cap Screws
T41	2		Tine Retaining Pins
T42	2		Carriage Bolts
T49	1		Kickstand
T50	1		Kickstand Bracket and Screws

### TOOLS NEEDED TO ASSEMBLE THE TILLER:

- Two (2) 7/16" wrenches
- One (1) 3/8" wrench for kickstand assembly









and lay it on its side. Open tine box. Remove tines

other has a D shaped hole.

and retaining pins (T41). Pins are in the hardware bag.

**B.** Attach tine so that O hole slides onto axle first. When axle

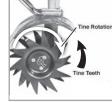
protrudes from top side, it will line up with D shaped hole.

Note: one side of the tine has an O shaped hole while the

C. Slide retaining pin through hole in axle to secure tine. Repeat on the other side.



attach the tines so the points of the blades face forward away from the operator. The tines' points will contact the ground first.



reverse the tines so that

FOR CULTIVATING.

the points of the tines face contact the ground first.

# backward — toward the

FOR TILLING,

operator. Now the long flat part of the tine's blade will



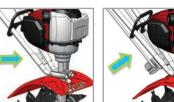


- A. Lean the Tiller Handles against a sturdy surface, so the tiller is supported in the upright position. Place the Top Bracket over the Lower Handles and below the Carry Handle. B. Place the Bottom Bracket of the Kickstand Stand Assembly (T49) under the Lower Handles
- C. Insert two screws through the holes in the Top Bracket and into the threaded inserts of the Lower Bracket. Tighten with the 3/8" wrench.

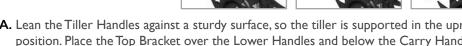
KICKSTAND POSITION: Place kickstand in the folded (up) position. Kickstand should be centered between Lower Handles. If not, loosen screws slightly, adjust as necessary and re-tighten the screws.

# **STEP 4:** ATTACH KICKSTAND







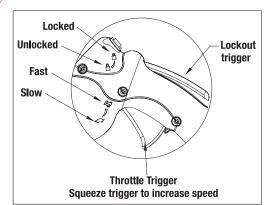


# and line up the holes in both brackets.



### NEED HELP? Call 800-366-6268 or go to www.mantis.com

# THROTTLE OPERATION



The tines won't turn unless you squeeze the throttle trigger on the handlebars. When you release the throttle trigger, the tines will stop.

With engine running, and both hands on the handles, hold down the throttle lockout trigger (see inset), then squeeze the throttle trigger gradually to increase the engine speed and engage the tines.

NOTE: This step must be repeated each time your tiller trigger is released.



# NOW YOU ARE READY TO USE YOUR MANTIS

If you've seen other tillers, your MANTIS Tiller may surprise you. It tills best when you pull it backward! You see, when you pull your MANTIS Tiller backward, you give extra resistance to the

tines, so they dig deeper. In addition, when you go backward, you erase your footprints. So your soil stays light and fluffy. With other tillers, by contrast, you walk right over the soil you've just tilled, packing it down, so it's less plantable.

# **RUN YOUR MANTIS LIKE A VACUUM CLEANER**

Place your Tiller at the head of the row or area you want to till. Start it up. 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 much like running a vacuum cleaner! (see image to the right)



# OPTIONAL ATTACHMENTS MAKE YOUR TILLER EVEN MORE USEFUL



### PLANTER/FURROWER

- Create raised beds, till in narrow areas dig drainage trenches with ease
- Dig deep planting beds for flower bulbs



### BORDER EDGER

- Cuts neat edges for flower beds & lawns
- Easy-on, Easy-off with quick release pins

Plow easily forward or backward



### WHEEL SET

· Easily roll your Mantis to the garden

LAWN AERATOR

Reduces soil compaction

Height adjustable to 6 different positions



## Comes with balancing wheel and fender

patios or sidewalks

CREVICE CLEANER

38 tough steel bristle brushes

Removes weeds and dirt from cracks in



- Trimmer bars attach easily to any Mantis 2-Cycle Tiller/Cultivator
- Available in 24" double edge or 30" single edge
- Trim hedges & shrubs, promotes new growth
- Cuts branches up to 1" thick

# Learn more at www.mantis.com



### LAWN DETHATCHER

- 60 strong, flexible spring-steel picks pull up grass along with other dead material harmful to lawns
- 15" wide for faster completion
- Use in spring or fall before seeding or fertilizing

Thank you for purchasing this Schiller Grounds Care, Inc. product. You have purchased a world class product, one of the best designed and built anywhere.

In addition to this Quick Start Guide, this tiller comes with an Operator's Manual that includes operation and safety instructions, parts and service instructions and engine instructions. This guide is not a replacement for the Operator's Manual and the useful life and good service you receive from your tiller depends to a large extent on how well you read and understand the manual and guide.



