ASSEMBLY & SET-UP

Thank You

Thank you for purchasing this product. It was carefully engineered to provide excellent performance when properly operated and maintained.

Please read this entire manual prior to operating the equipment. It instructs you how to safely and easily set up, operate and maintain your machine. Please be sure that you, and any other persons who will operate the machine, carefully follow the recommended safety practices at all times. Failure to do so could result in personal injury or property damage.

All information in this manual is relative to the most recent product information available at the time of printing. Review this manual frequently to familiarize yourself with the machine, its features and operation. Please be aware that this Operator's Manual may cover a range of product specifications for various models. Characteristics and features discussed and/or illustrated in this manual may not be applicable to all models. We reserve the right to change product specifications, designs and equipment without notice and without incurring obligation.

If applicable, the power testing information used to establish the power rating of the engine equipped on this machine can be found at www.opei.org or the engine manufacturer's web site.

If you have any problems or questions concerning the machine, phone your local authorized service dealer or contact us directly. Customer Support telephone numbers, website address and mailing address can be found in the separate supplement. We want to ensure your complete satisfaction at all times.

Throughout this manual, all references to *right* and *left* side of the machine are observed from the operating position.

The engine manufacturer is responsible for all engine-related issues with regards to performance, power-rating, specifications, warranty and service. Please refer to the engine manufacturer's Owner's/ Operator's Manual, packed separately with your machine, for more information.

Contents of Carton

- Tiller
- Handlebar Assembly
- Shift Rod
- Depth Stake
- Operator's Manual
- Engine Operator's Manual

NOTE: This Operator's Manual covers several models. Garden tiller features may vary by model. Not all features in this manual are applicable to all garden tiller models and the garden tiller depicted may differ from yours.

NOTE: Reference to the right or left side of the tiller is determined from the operator's position behind the machine. All exceptions will be noted.

A WARNING

To prevent personal injury or property damage, do not start the engine until all assembly steps are complete and you have read and understand the safety and operating instructions in this manual.

Assembly

Unpacking Instructions

- 1. Remove the staples, break the glue on the top flaps, or cut the tape at the end of the carton and peel along the top flap to open carton.
- 2. Remove the loose parts included with the tiller (i.e., Operator's Manual, etc.).
- 3. Cut the corners and lay the carton down flat.
- 4. Remove the packing materials.
- 5. Roll or slide the tiller out of the carton. Check the carton thoroughly for loose parts.

6. Extend the control cable and lay it on the floor. Be careful not to bend or kink the control cable.

NOTE: This tiller is shipped without gasoline or oil in the engine. Be certain to service engine with gasoline and oil as instructed in the separate Engine Operator's Manual before operating your machine.

Depth Stake

\Lambda WARNING

Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.

- 1. Tip the tiller forward so that it rests on the front counterweight.
- 2. Unthread the T-knob from the top of the depth stake and remove the flat washer and hex bolt. Remove the cotter pin from the clevis pin. See Figure 1.



 Raise the tine shield Figure 1 hinge flap assembly and insert the depth stake assembly into the slot under the tine shield — and up through the tine shield assembly.

- 4. Insert the clevis pin through the tine shield and depth stake assemblies. Secure it with the hairpin clip.
- Insert the hex bolt into the top hole of the depth stake assembly. Place the flat washer on the hex bolt and thread the T-knob onto the hex bolt. Tighten securely. See Figure 1.
- 6. Tip the tiller back down so that it rests on the tines.

Handle

- 1. Remove the top two hex screws and flange lock nuts from the handle mounting brackets, but do not remove the bottom hex screw and flange lock nut. See Figure 2.
- 2. Place the handle assembly in position between the handle bracket. See Figure 3.
- 3. Line up the holes in the handle with the holes in the bracket and secure it with hardware previously removed.





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Installing Emergency Stop Control (IF EQUIPPED)

Some models come equipped with an emergency stop control switch. If equipped you will need to complete installation of this safety feature prior to operating the tiller.

A WARNING

Use extreme caution when reversing or pulling the machine towards you. To avoid getting pinned against a structure, ensure adequate distance before reversing near a wall or fence. For machines with powered reverse drive capability, familiarize yourself with the operation of the emergency stop control. It provides a means of stopping power to the tines and wheel drive in an emergency situation.

- To finish handle installation locate the emergency stop control wire on the right side of the unit behind the engine.
- 2. Route the wire up the handle shaft and secure with cable ties just above the lower handle adjust bracket and below the upper handle adjust bracket. See Figure 4.
- 3. Route the wire over to the left side of the handle and secure with a cable tie on the lower part of the handle. See Figure 5.

NOTE: Leave a little extra slack in the emergency stop control wire between the cable ties in steps 2 and 3 of this section to allow full range of motion for the upper handle adjust.

- Mount the emergency stop control ON/OFF switch onto the left side of the handlebar with the #10-32 : 1.50 hex bolt and 10-32 flange lock nut. See 1 in Figure 6.
- 5. Secure the wire near the top of the handlebar with a cable tie on the left handlebar. See 2 in Figure 6.

Clutch Cable

Attach the clutch cable to the handle as follows: (be careful not to kink the cable)

1. Remove the threaded eyebolt and nut from the cable end.



Figure 4





Figure 6

2. Route the clutch cable to the right side of the handle mounting brackets and underneath the handle.

- 3. Push the cable through the hole in the center of the handle and snap into the plastic fitting. See Figure 7.
- Remove the machine screw, flange lock nut and washer from the clutch control. See Figure 8.
- 5. Fasten the threaded eyebolt onto the bail by securing it from the top with the machine screw, washer and flange lock nut.
 - Thread the eyebolt and nut removed earlier into the internally threaded tube at the end of the cable. Thread engagement should be about 3/4". Tighten





the nut against the tube at the end of the cable. See Figure 8.

NOTE: Do not overtighten the clutch cable. Too much tension may cause it to break. Be certain to check the clutch cable adjustment before operating the tiller. See Clutch Cable under Adjustments in this section for cable adjustment instructions.

Control Rod

2.

6.

- 1. Make sure the handle assembly is in the highest position. Refer to the Controls & Operation section.
 - Remove the cotter pins from the control rod, leave the rubber washers on the control rod. See Figure 9.



Figure 9

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6.

- Insert the shorter (angled) end of the control rod through the indicator bracket on the shift cover and secure with the cotter pin that was previously removed. See Figure 10.
- 4. Insert the longer end of the control rod through the hole in the gear selector handle and secure with the cotter pin. See Figure 10.



Set-up

Tires

The tires on the tiller may be over-inflated for shipping purposes. Reduce the tire pressure before operating the tiller. Recommended operating tire pressure is approximately 20 PSI (check the sidewall of the tire for the manufacturer's recommended pressure). Be sure that both tires are inflated equally or the tiller will pull to one side.

Gas & Oil Fill-up

\Lambda WARNING

Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel the machine indoors or while the engine is hot or running. Extinguish cigarettes, cigars, pipes and any other sources of ignition.

Service the engine with gasoline and oil as instructed in the separate Engine Operator's Manual packed with your tiller. Read the instructions carefully.

Adjustments

Clutch Cable

NOTE: Service the engine with oil and gasoline before checking this adjustment. Refer to the separate Engine Operator's Manual packed with your tiller for proper fuel and engine oil recommendations.

- 1. Position the tiller so the front counterweight is against a solid object, such as a wall.
- 2. With the gear selection lever in NEUTRAL, start the engine. Refer to the separate Engine Operator's Manual.
- 3. Standing on the right side of the tiller, examine the belt (inside the belt cover). It should not be turning.

\Lambda WARNING

Do not put your fingers under the belt cover.

- 4. If the belt turns without bail engaged, adjust it by unthreading the internally threaded tube at the end of the cable a few turns clockwise (when standing in the operator's position) and then retighten the nut against the tube.
- 5. Move the shift lever to the FORWARD position.

Carefully engage the clutch by lifting the clutch control bail against the handle. The wheels should spin. If the wheels do not spin with the tiller in forward, adjust by unthreading the tube at the end of the cable a few turns counter-clockwise, when standing in the operator's position. See Figure 11.

- 7. Retighten the nut against the tube.
- 8. Recheck both adjustments, and readjust as necessary.
- 9. After tilling, if the tines stop moving, re-adjust the cable.

NOTE: A secondary cable adjustment is available if you reach the point that additional adjustment is needed. See the Service section for secondary adjustment instructions.

Internally

Threaded Tube

Handle

The handle should be adjusted so that when the tiller is digging 3-4" into the soil, the handle falls to about waist-high. Rotate the handle adjustment lock rearward, move the handle to the desired position and then lock into place by rotating the handle adjustment lock forward to secure the handle. See Figure 12.

Handle Adjustment Look Tighten

Figure 11

Figure 12