# **ASSEMBLY & SET-UP**

## **Contents of Carton**

- Tiller
- Handlebar Support
- Handlebar Assembly
- Hardware Pack
- Operator's Manual
- Engine Operator's Manual

**NOTE:** This Operator's Manual covers several garden tiller models. The tiller depicted may differ from yours.

## **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.

## **Recommended Tools for Assembly**

- Two 1/2" open-end wrenches
- Block of wood (to support tiller when removing wheels)
- Tire pressure gauge
- Clean oil funnel
- Motor oil. Refer to the Engine Operator's Manual for oil specifications and quantity required

# **Assembly**

## **Unpacking Instructions**

**NOTE:** While unpacking, do not severely bend any of the control cables.

- The tiller is heavy. You should not attempt to remove it from the shipping platform until instructed to do so.
- Remove any cardboard inserts and packaging material from the carton.
   Remove any staples from the bottom of the carton and remove the carton.
- Cut the large, plastic tie strap that secures the transmission tube to the shipping pallet. Leave the handlebars on top of the tiller to avoid damaging any cables.
- The hardware bag is inside the literature envelope. Check the contents with the list above.

#### Handle

**NOTE:** All references to the right or left side of the tiller are from the operator's position.

- Remove the knob from the center of the lower end of the handle by rotating it counter-clockwise. See Figure 1.
- Cut the large, plastic cable ties that secure the handlebar ends to the handlebar mounting tabs on the transmission top cover.
- Gently lift the handlebar (do not overstretch the attached cables) and place the handlebar cross-brace in front of the curved height adjustment bracket. See Figure 2.
- 4. With the forward clutch cable on the inside of the handlebar, position the handlebar ends on the outside of the two mounting tabs atop the transmission cover. See inset in Figure 2.



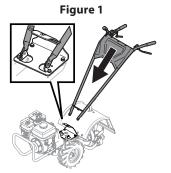
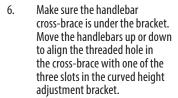


Figure 2

5. Loosely attach the handlebars to the mounting tabs with two shoulder screws (.437 x .268: 5/16-18), inserted through two washers (.439 x.817 x .061), then through the lower ends of the handle and the front holes on the bracket. Add flat washers (.349 x .879 x .063) on the ends of each and secure them by threading a hex nylock nut (5/16-18) on each end. See Figure 3.



- 7. Thread the height adjustment knob through the washer (.760 x 1.250 x .041) then into the hole in the handlebar cross-brace. See Figure 4.
- 8. Securely tighten the height adjustment screw.
- Securely tighten the shoulder screws and hex lock nuts from Step 5 on the ends of the handlebar.
- To remove the tiller from its shipping platform, first carefully unwrap the
  wheel gear cable with the attached lever from around the chassis. Move the
  neutral ENGAGE/DISENGAGE lever to the DISENGAGE position. This allows the
  wheels to rotate freely.

**NOTE:** See Controls & Operation section for location and operation instructions.

11. Use the handlebars to roll the tiller off the platform.

**NOTE:** Use the DISENGAGE position to move tiller only when the engine is not running. Before starting the engine, the neutral ENGAGE/DISENGAGE lever must be placed in the ENGAGE position (see the Controls & Operation section for details).

#### **Reverse Clutch Control**

- Carefully unwrap the reverse clutch control cable (red) from its shipping position and route it up the right side handle. Position the cable so that it rests above the small groove on the handle assembly in front of the reverse drive handle. See Figure 5.
- Insert the cable Z-connector into the slot in the control panel from the inside of the handle outward. See inset in Figure 5.
- 3. Snap the cable tab into place in the upper hole on the handle cable bracket. See Figure 6.

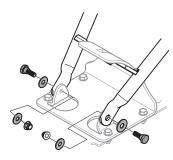


Figure 3

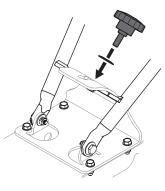


Figure 4

Red

Figure 5



Figure 6

# **ASSEMBLY & SET-UP**

4. Test the function of the reverse clutch control cable by pulling the knob back and releasing it. The knob should return to its neutral position against the tapered bushing. If it does not return when released contact your local authorized dealer or Customer Support for technical assistance.

#### **Forward Clutch Cable**

- Carefully free the forward clutch control levers from their shipping position by removing any fasteners (rubber bands, tape, etc.) that may secure the forward clutch control levers during shipping.
  - **NOTE:** The control handles should hang beneath the handlebars.
- 2. The forward clutch control cable (black) is hanging loosely near the right-side wheel. Being careful not to kink or stretch the cable, route the cable on top of the lower handle and under the handle panel then insert the Z-connector into the hole at the end of the forward clutch control linkage going from the outside inward. See Figure 7.
- Snap the cable tab into place in the lower hole on the handle cable bracket. See Figure 8.

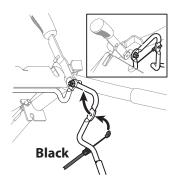


Figure 7

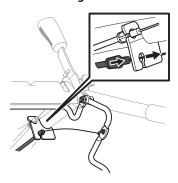


Figure 8

# Installing Emergency Stop Control (IF EQUIPPED)

## **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.

- Locate the emergency stop control wire on the right side of the unit behind the engine.
- 2. Route the emergency stop control wire up and around the back of the right side handle bar and secure it just under the handlebar pivot, along with the clutch cables using a cable tie.

  See 1 in Figure 9.

**NOTE:** It will be easier to make adjustments to cable ties and wire positioning if left somewhat loose until all cable ties are positioned as desired.

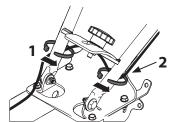


Figure 9

 Secure the wire with a cable tie on the left side handlebar, just under the handlebar pivot, and route the wire up the left handlebar. See 2 in Figure 9.
 IMPORTANT! It is necessary to leave enough slack in the wire when cable tying to the lower part of the handlebars to ensure a full range of motion when adjusting the handle height.

- 4. Secure the wire on the left handlebar with a cable tie just below the handle panel. See Figure 10.
- 5. Mount the emergency stop control ON/OFF switch onto the left handlebar with the #10-32 : 1.50 hex bolt and 10-32 flange lock nut. See 1 in Figure 11.
- 6. Secure the wire onto the left handlebar with a cable tie slightly above the handle panel. The wire must be routed along the outer side of the handlebar as shown, making sure that the wire does not interfere with movement of the drive control lever. See 2 in Figure 11.
- Adjust all positioning of the wire and cable ties as needed before fully tightening the cable ties. Make sure there is a full range of height adjustment for the handlebar.



Figure 10

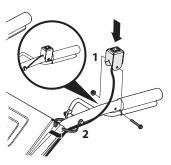


Figure 11

## Set-Up

## Tires

Use a tire pressure gauge to check the air pressure in both tires. Deflate or inflate both tires equally to between 15 PSI and 20 PSI.

**NOTE:** Be sure that both tires are inflated equally or the tiller will pull to one side.

#### Gas & Oil Fill-Up

# **A** 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 Engine Operator's Manual packed separately with your tiller. Read the instructions carefully.

## **Transmission Gear Oil**

The transmission was filled with gear oil at the factory. However, be sure to check the oil level at this time to make certain it is correct. See the Service section for instructions on checking and adding transmission gear oil.