



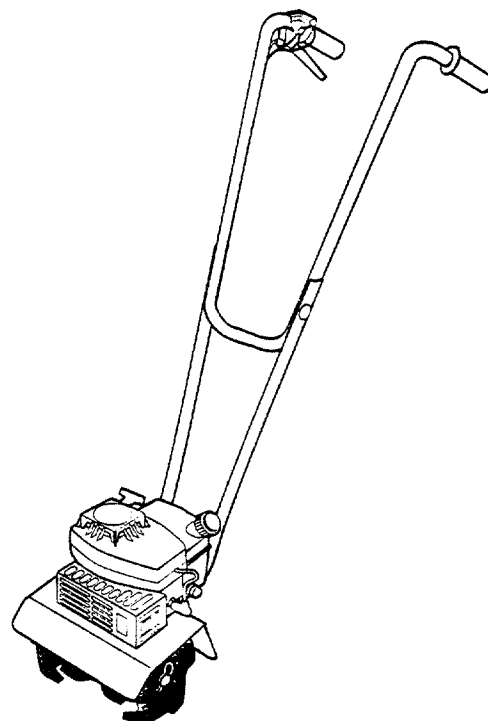
# Owner/Operator Manual

## TROY-BILT® MINI-TILLER CULTIVATOR

- Safety
- Assembly
- Operation
- Maintenance
- Parts Listing

### Model

12001  
12001C



To help you as quickly as possible when you write or call for parts or service assistance, we'll need to know your tiller serial number. This number tells us when your machine was made and what features it has.

The arrow in the picture to the right points to the location of the serial number. For your convenience and ready reference, please enter the serial number below and fill in the date your tiller was delivered.

The Serial Number On My Tiller Is:

--	--	--	--	--	--	--

Date Tiller was Delivered:

\_\_\_\_\_



*The Tiller Serial Number location.*

## CAUTION

### TO AVOID INJURY:

- READ THE OWNER / OPERATOR MANUAL.
- KNOW LOCATION AND FUNCTION OF ALL CONTROLS.
- KEEP ALL SAFETY DEVICES AND SHIELDS IN PLACE AND WORKING.
- NEVER ALLOW CHILDREN OR UNINSTRUCTED ADULTS TO OPERATE TILLER.
- SHUT OFF ENGINE AND DISCONNECT SPARK PLUG WIRE BEFORE UNCLOGGING TINES OR MAKING REPAIRS.
- KEEP BYSTANDERS AWAY FROM MACHINE.
- KEEP AWAY FROM ROTATING PARTS.
- USE EXTREME CAUTION WHEN REVERSING OR PULLING THE MACHINE TOWARDS YOU.

## WARNING:

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



## WARNING TO ALL CALIFORNIA AND OTHER POWER EQUIPMENT OPERATORS

Under California law, and under the laws of several other states, you are not permitted to operate an internal combustion engine using hydrocarbon fuels on any forest-covered, brush-covered, or grass-covered land, or on land covered with grain, hay, or other flammable agricultural crop, without an engine spark arrester in continuous effective working order.

The engine on your power equipment, like most outdoor power equipment, is an internal combustion engine that burns gasoline, a hydrocarbon fuel. Therefore, your power equipment must be equipped with a spark arrester muffler in continuous effective working order. The spark arrester must be attached to the engine exhaust system in such a manner that flames or heat from the system will not ignite flammable material. Failure of the owner / operator of the equipment to comply with this regulation is a misdemeanor under California law, and may also be a violation of other state and/or federal regulations, laws, ordinances, or codes. Contact your local fire marshal or forest service for specific information about what regulations apply in your area.

## TO THE OWNER:

Congratulations on the purchase of your new tiller/cultivator. You'll find it to be a very helpful addition to your current gardening tools. You can easily carry your equipment right to the garden or flower bed and begin tilling or spot cultivating.

The tiller is a rugged, easily operated and very dependable gardening tool. If properly cared for, it can give years of gardening enjoyment.

We have prepared this Manual to make sure that you know how to safely operate and maintain your machine. Please read this Manual all the way through before you assemble and operate your equipment. Before you even start the engine, make sure that you know both the functions of all controls and the procedure for quickly stopping the engine.

If someone else uses your tiller, give that person this Manual to read. Before using the machine, make sure that the operator knows how to safely operate and shut it off.

Of course, if you should ever have a question, need more information, or must order replacement parts, please contact your local Authorized Dealer or contact the Factory directly. The Factory telephone numbers and addresses are listed on the back cover of this Manual.

Thank you!

### **TROY-BILT FACTORY DIRECT 30-DAY TRIAL**

TROY-BILT Mfg. wants you to be completely satisfied with your product. If you are not totally satisfied with the condition or performance of your TROY-BILT product, you may exchange your product or receive a refund of the purchase price of your merchandise. To receive your refund, you must contact us within 30 days after you receive your order, and follow the return instructions.

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## ENGINE SERVICE

If your tiller engine ever needs service or repair, or parts are required, please contact your nearest Tecumseh Service Dealer.

To find the nearest Service Dealer, look in the Yellow Pages of your telephone book under "Engines— Gasoline", or "Gasoline Engines."

If you have problems getting engine service or parts locally, let us know so we can provide you with the name of the nearest Service Dealer.

## QUESTIONS OR PROBLEMS?

### 1. Check this Owner/Operator Manual:

The answer to your question or problem may be in this Manual. Refer to the Table of Contents on the previous page in this Manual to find the listing that concerns your problem. Turn to that page and read the information provided.

### 2. Contact your Local Dealer or the Factory:

If you can't find the answer to your question or problem in this Manual, please first contact your local Authorized Dealer. Factory assistance is available if needed. One of our helpful, friendly tiller experts will gladly help you. Be ready to provide your tiller model and the serial number of your tiller.

### 3. If you need a part:

Contact your local Authorized Dealer, or call or write to our Parts Department (see the Toll-Free telephone number below). Please have your tiller model and serial number at hand. Use the Parts Listing to find the part number, description, and quantity of the part you need. Remember that you can purchase many of the common hardware items at your local hardware store as well as ordering them from us.

### For Fastest Service, Use The Toll-Free Numbers Below

#### Within the U.S.A.:

Technical Service .....(800) 520-5520  
Parts Service .....(800) 648-6776

#### Within Canada:

All Calls .....(800) 225-3585

#### From Overseas:

Please Call .....(518) 391-7000

### Our Hours are (Eastern Standard Time):

#### In the U.S.A.

Mon - Fri.— 8 A.M. to 7 P.M.  
Saturday— 9 A.M. to 4 P.M.

#### In Canada

Mon - Fri— 8 A.M. to 5 P.M.

### If you would rather write to us, our mailing addresses are:

#### In the U.S.A.

Garden Way Incorporated  
102nd St. & 9th Ave.  
Troy, New York 12180

#### In Canada

Garden Way Incorporated,  
320 Van Sickle Road, Unit 12,  
St. Catherines, Ontario L2R 6P7

## IMPORTANT!

IF YOU NOTICE any freight damage or missing parts, either at the time of delivery or later during assembly, make sure that you put it in writing, within 15 days, and send your letter to the shipper to confirm that you intend to file a claim. Tell the driver, or inform the truck terminal, that you intend to file a written claim. They will advise you as to how to proceed. HOWEVER, if you have any problems with this procedure, please call us so that we can help you get satisfaction.

# Section 1: Safety Instructions

Your Tiller has been carefully designed and assembled. However, as with any other piece of powered equipment, the operator must follow safe operating practices at all times. Failure to do so could result in personal injury or damage to the equipment or property.

Before assembling, operating or servicing the Tiller or its engine, carefully read and follow all of the safety instructions found in this Owner / Operator Manual, in the separate Engine Owner's Manual, and in any other literature you may receive. If you ever have any questions, please contact your local Authorized Dealer, or contact us at the Factory.

If you ever lend your machine to someone, make sure that he or she reads, understands, and follows the Safety Instructions. Always use this equipment carefully and keep safety in mind.



**SAFETY ALERT SYMBOL.** This symbol is used to alert you to important safety messages in this Manual and on decals which are on your tiller regarding potential hazards. When you see this symbol, carefully read and follow its safety message. Failure to do so can result in personal injury or property damage.

## TRAINING

1. Carefully read this Owner/Operator Manual, the separate Engine Owner's Manual, and any other literature you may receive. Be thoroughly familiar with the controls and the proper use of the tiller/cultivator and its engine. Know how to stop the unit and disengage the controls quickly.
2. Never let children or uninstructed adults operate this equipment. Let adults operate the tiller only if instructed properly.
3. Keep the area of operation clear of all persons, particularly small children and pets.
4. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.

## PREPARATION

1. Thoroughly inspect the area where the tiller is to be used and remove all foreign objects.
2. Disengage all control levers before starting the engine.
3. Do not operate the tiller without wearing adequate outer garments. Avoid loose garments or jewelry that could get caught in moving parts of the tiller/cultivator or its engine.
4. Do not operate the tiller when barefoot or wearing sandals, sneakers, or light footwear. Wear footwear which grips well on slippery surfaces.
5. Do not till near underground electric cables, telephone lines, pipes or hoses. If in doubt, contact your telephone or utility company.
6. Handle fuel with care; it is highly flammable and its vapors are explosive. Follow these precautions:
  - a. Use an approved fuel container.
  - b. Add fuel before starting the engine. Never

remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot.

- c. Keep matches, cigarettes, cigars, pipes, open flames, and sparks away from the fuel tank and fuel container.
  - d. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors. Use a funnel or spout to prevent spillage.
  - e. Replace all fuel tank and container caps securely.
  - f. If fuel is spilled, do not attempt to start the engine, but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.
7. Never make adjustments when engine is running (unless specifically recommended by the manufacturer).

## OPERATION

1. The correct operator's position is when you are standing behind the handlebars, hands on handlebar grips, facing forward toward the engine. Do not leave this position while using the engine throttle lever.
2. Do not put hands or feet near or under rotating parts.
3. Exercise extreme caution when on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
4. After striking a foreign object, stop the engine, disconnect the spark plug wire and prevent it from touching the spark plug, then carefully look

at the tiller for damage, and repair damage before restarting and operating the tiller.

**5.** Exercise caution to avoid slipping or falling.

**6.** If the machine should start to vibrate abnormally, stop the engine. Disconnect the spark plug wire and prevent it from touching the spark plug, and check immediately for the cause. Vibration is generally a warning of trouble.

**7.** Stop the engine, disconnect the spark plug wire and prevent it from touching the spark plug whenever you leave the equipment, before unclogging the tines, or when making any repairs, adjustments or inspections.

**8.** Before leaving the tiller unattended, always stop the engine. Disconnect the spark plug wire and prevent it from touching the spark plug.

**9.** Before cleaning, repairing, or inspecting, shut off engine and let all moving parts stop. Disconnect spark plug wire and prevent it from touching spark plug to prevent accidental starting.

**10.** Never operate tiller without proper guards, plates, or other protective safety devices in place.

**11.** Do not run the engine in an enclosed area. The exhaust fumes from the engine contain extremely dangerous carbon monoxide gas. Carbon monoxide gas is colorless, odorless, tasteless and deadly poisonous.

**12.** Keep children and pets away.

**13.** Be aware that the tiller may unexpectedly bounce upward or jump forward if the tines should strike extremely hardpacked soil, frozen ground, or buried obstacles such as large stones, roots, or stumps. If you are in doubt about the tilling conditions, always use the following operating precautions to assist you in maintaining control of the tiller:

**a.** Stand behind the tiller, using both hands on the handlebars. Relax your arms, but use a secure hand grip.

**b.** Start tilling at shallow depths, working grad-

ually deeper with each pass.

**c.** Clear the tilling area of all large stones, roots and other debris.

**d. In an emergency, stop the tines by releasing the Engine Throttle Lever on the right handlebar. To stop the engine, move the Engine Ignition Switch to OFF.**

**14.** Do not overload the tiller's capacity by attempting to till too deeply at too fast a rate.

**15.** Never operate the tiller on slippery surfaces. Look behind and use care when backing up.

**16.** Do not operate the tiller on a slope that is too steep for safety. When on slopes, slow down and make sure you have good footing.

**17.** Never allow bystanders near the unit.

**18.** Only use attachments and accessories that are factory-approved.

**19.** Never operate the tiller without good visibility or light.

**20.** Never operate the tiller if you are tired, or under the influence of alcohol, drugs or medication.

**21.** Do not tamper with the engine governor settings on the machine; the governor controls the maximum safe operating speed and protects the engine and all moving parts from damage caused by overspeed. Authorized service shall be sought if a problem exists.

**22.** Do not touch engine parts which may be hot from operation. Allow parts to cool before inspecting, cleaning or repairing.

**23.** Remember: You can stop the tines by releasing the Engine Throttle Lever. Move the Engine Ignition Switch to OFF to shut the engine off.

**24.** Never transport this machine when the engine is running. Shut the engine off before transporting the machine.

**25.** Terminals and non-insulated electrical parts shall be protected against shorting during normal servicing, refueling or lubrication.

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## **MAINTENANCE AND STORAGE**

**1.** Keep the tiller, attachments and accessories in safe working condition.

**2.** Check all nuts, bolts, and screws at frequent intervals for proper tightness to be sure the equipment is in safe working condition.

**3.** Never store the tiller with fuel in the fuel tank inside a building where fumes may reach an open flame or spark (hot water and space heaters, furnaces, clothes dryers, stoves, electric motors, etc.).

**4.** Allow the engine to cool before storing it.

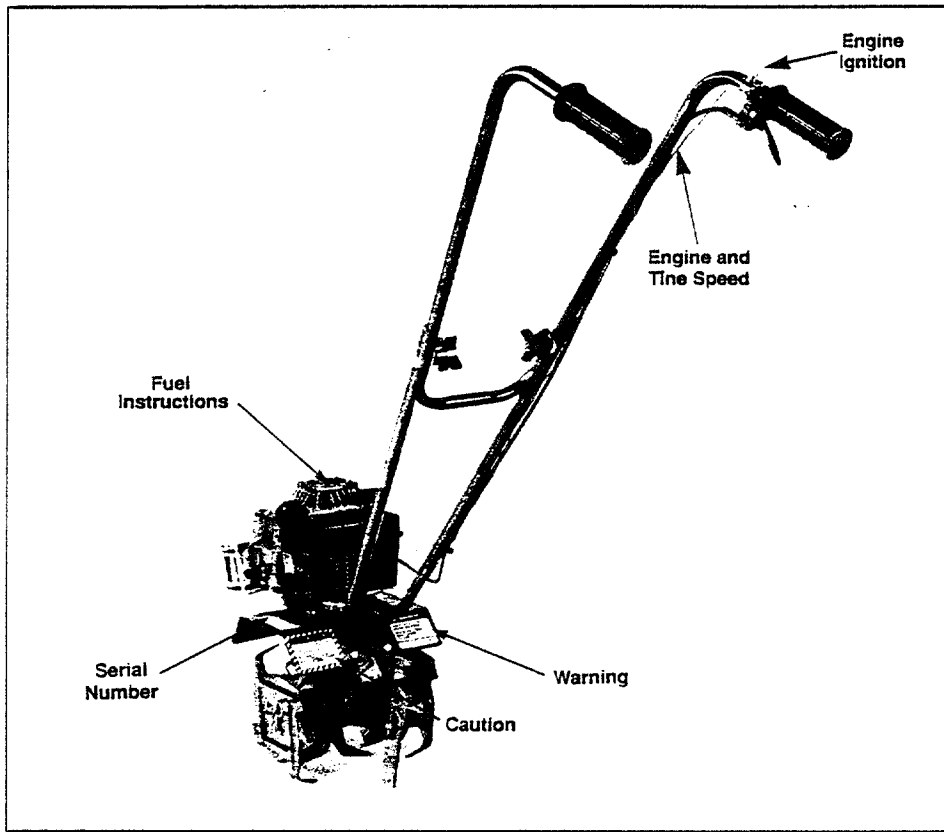
**5.** To reduce the chances of a fire hazard, keep the engine free of grass, leaves, or excessive grease.

**6.** Store gasoline in a cool, well-ventilated area, safely away from any spark or flame-producing equipment. Store gasoline in an approved container, safely away from the reach of children.

**7.** Never perform maintenance while the engine is running or the spark plug wire is connected, except when specifically instructed to do so.

## DECALS

If any of the decals below become illegible, damaged, or missing, order replacements immediately. See the Parts Ordering Information at the back of this Manual.



*Photo 1: Decals*



# Section 2: Easy Assembly

Please follow the steps in this Section to assemble your tiller and prepare it for use. These steps will not take long and will assure correct assembly of your new tiller. We recommend you read this Section all the way through first. Then begin the assembly steps.

## UNPACKING AND LOOSE PARTS

Your tiller was shipped fully assembled except for the parts shown in Photo 2. The small hardware items are inside a plastic bag.

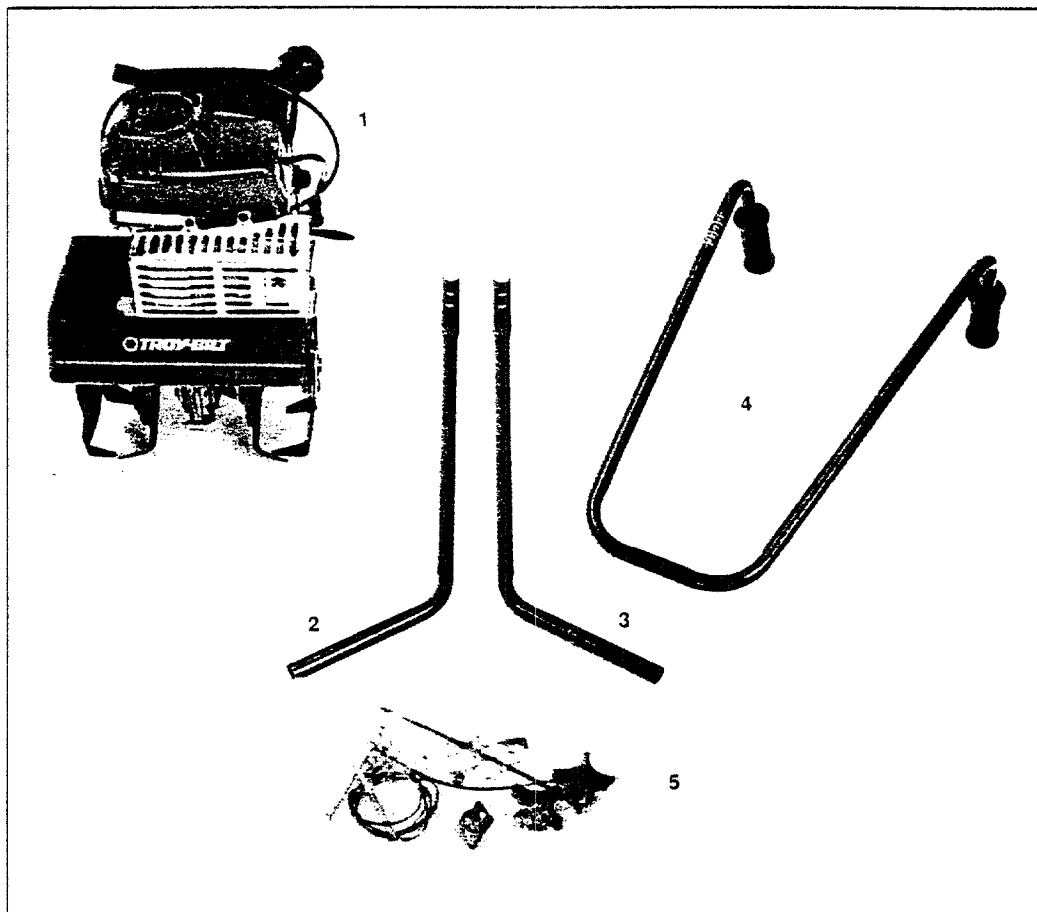


Photo 2: Contents of the shipping carton.

Compare the contents of the shipping carton with the items shown in Photo 2. If any items are damaged or missing, contact your local Authorized Dealer or our Technical Service Department for replacements or for advice on filing a damage claim with the motor freight carrier.

1. The engine/tines/transmission assembly.
2. The lower left handlebar.
3. The lower right handlebar.
4. The upper handlebar.
5. The hardware bag, which contains:
  - a. Two curved head carriage bolts (2" long).
  - b. Six 5/16" flat washers.
  - c. Two handlebar knobs.

- d. Two hex head screws (1/4"-20 x 5" long).
- e. Two 1/4"-20 locknuts.
- f. One throttle lever mounting screw (#10-16 x 1 1/2" self-tapping screw).
- g. One rectangular, rubber throttle lever mounting spacer.
- h. Two plastic tie straps.
- i. Two tine spacers (used when outer tines are removed for narrow tilling).
- j. One engine ignition switch with wire assembly.

## ASSEMBLY STEPS

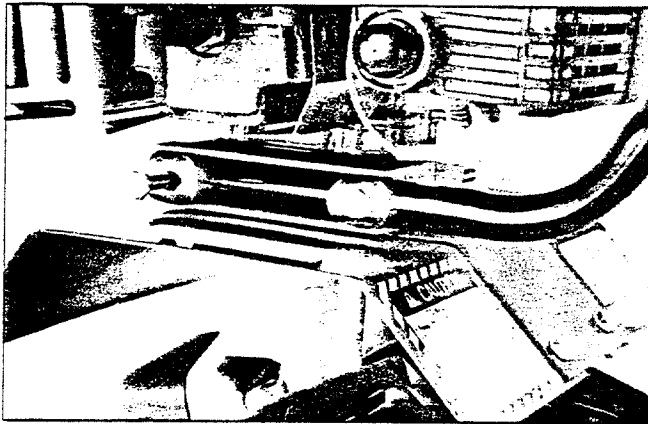
**You'll need the following tools for assembly:**

- Two 7/16" wrenches ( a 7/16" socket, extension, and ratchet can be substituted for one of the 7/16" wrenches).
- One Medium size Phillips head screwdriver.

1. Unwind the throttle cable from around the engine. Use care when unwinding the cable so it is not kinked or bent.

2. Place the engine/tines/transmission assembly so it is resting on its "face" (the product name logo label is face down).

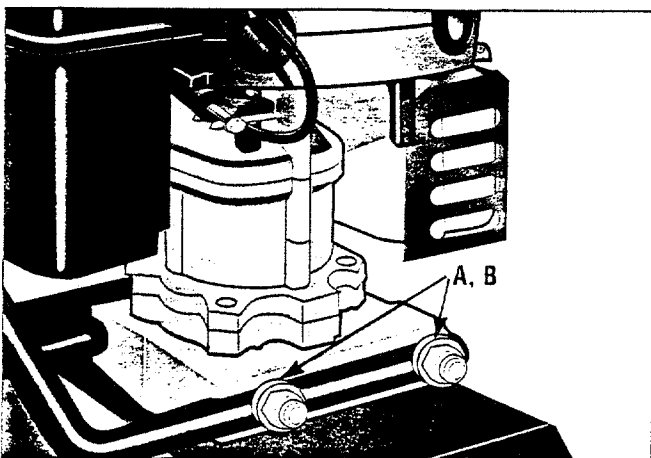
3. Place the lower left handlebar on the left side of the transmission (below the engine— above the tine cover). Align the two holes in the lower handlebar with the two holes in the transmission.



*Photo 3: Attaching Lower Left Handlebar.*

4. Install a flat washer on the two long (5") hex head screws provided in the hardware bag. Insert the two screws through the lower left handlebar and out the right side of the transmission. See Photo 3.

5. Place the lower right handlebar over the ends of the screws on the right side of the transmission. See Figure 4. Add a flat washer (A, Figure 4) and locknut (B) to each screw.



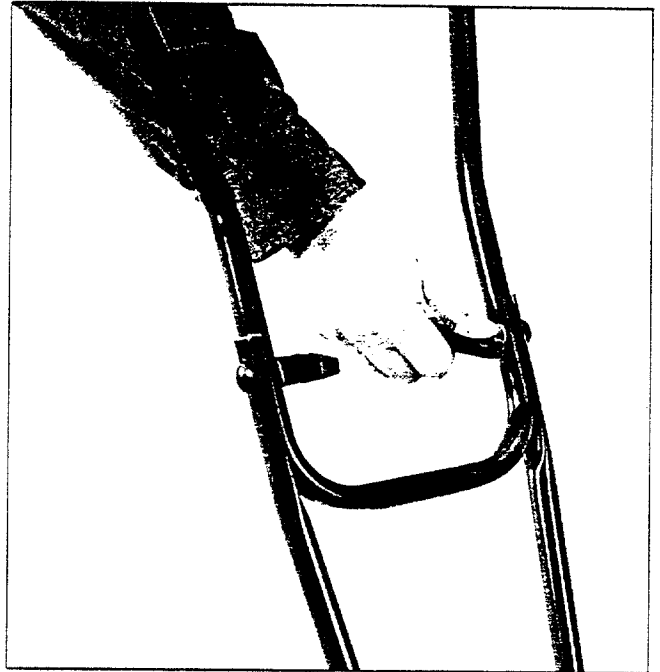
*Figure 4: Install Lower Right Handlebar. Secure with two flat washers (A) and two locknuts (B).*

6. Evenly tighten the two screws and locknuts that secure the lower handlebars. Snug the nuts down until tight, but do not overtighten them.

7. Place the upper handlebar between the top ends of the two lower handlebars.

8. From the outside, slide one of the curved head carriage bolts through the left handlebar. (Photo 5).

9. Place a flat washer over the end of this bolt. Install a handlebar knob on the carriage bolt. See Photo 5.



*Photo 5: Attach Upper Handlebar to Lower Handlebars.*

10. Repeat steps 8 and 9 for the other side.

11. Tighten both handlebar knobs.

12. Slip the throttle lever mounting screw (A, Figure 6) down through the hole in the Engine Ignition On/Off Switch bracket (B, Figure 6). Then insert the screw down into the hole that is in front of the right handlebar grip. Note that the switch and bracket are to the inside of the right handlebar.

13. Place the rectangular rubber throttle lever spacer (C) over the end of the screw (turn spacer so its "long" end points to the rear).

14. Position the Engine Throttle Lever assembly (D) on the end of the screw.

15. Hold the Throttle Lever Assembly in place. After you've started the screw, use a Phillips head screwdriver to firmly tighten it. See Figure 6.

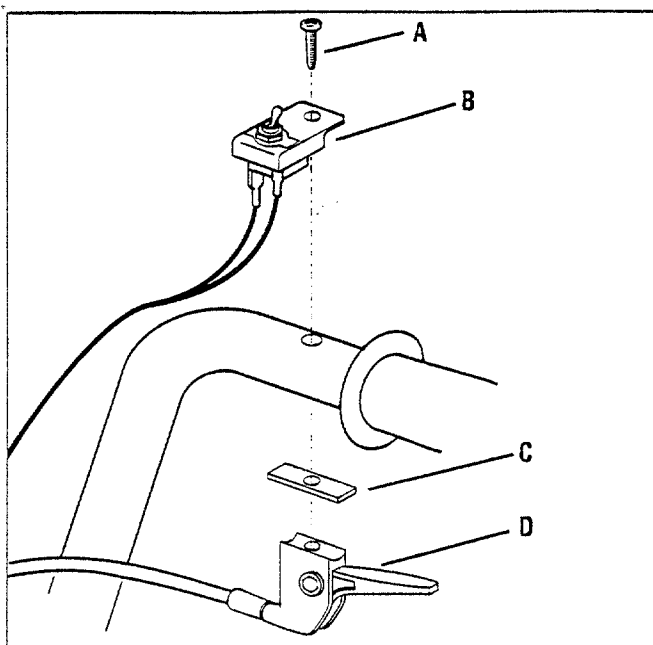


Figure 6: Installing Engine On/Off Switch (B) and Throttle Lever Assembly (D) to right handlebar.

16. Two wire leads come from the top of the On/Off switch assembly. See Figure 7. Each wire has a different color connector.

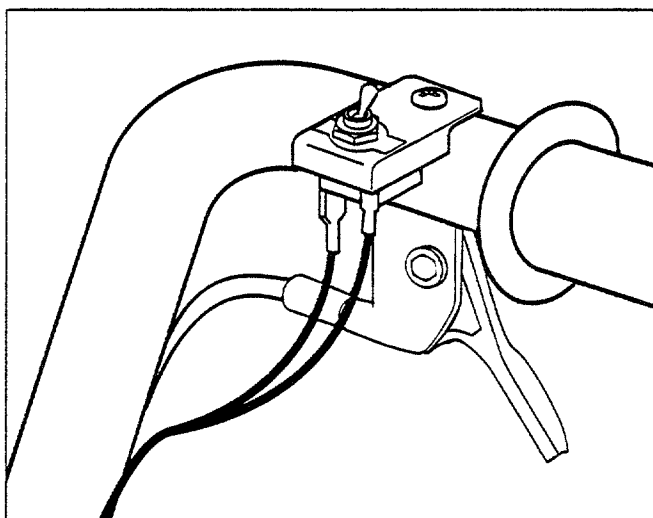


Figure 7: Both wire leads from the On-Off Switch must be connected to their corresponding engine leads.

17. Connect the loose ends of these two wire leads to the two loose wires shown in Figure 8. Plug the matching color connectors together. Red connector to red connector, and white connector to white connector.

18. Secure the throttle cable and the Engine Ignition On/Off switch wires to both the lower and the upper handlebars with the plastic ties (Photo 9). The serrated side of the ties should be on the inside when you loop the tie around the handlebar, wire, and throttle cable. Tighten the tie by pulling on its loose end. Snip off excess.

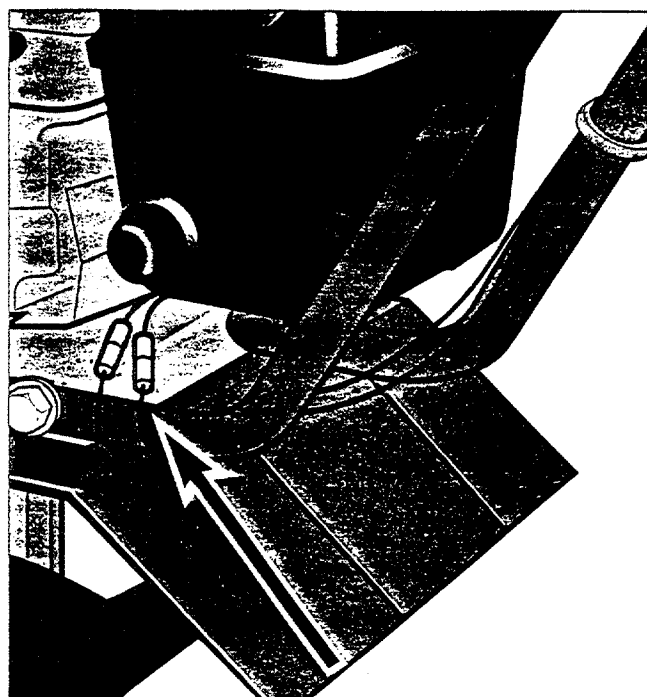


Figure 8: Snap together the two sets of wires having the same connector colors.



Photo 9: Install plastic ties to keep the cables next to the handlebars.

19. Inspect and tighten all hardware using regular household tools. **IMPORTANT: Do Not Tighten Or Adjust The Engine Governor Screw Shown in Figure 9A. It Is Factory-Adjusted For Proper Engine Operation!**

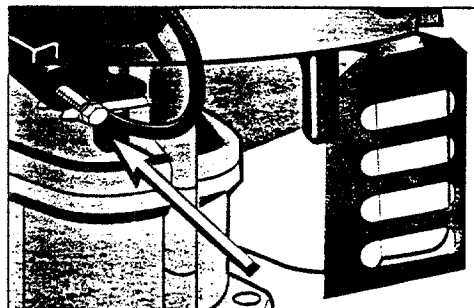


Figure 9A: Do not adjust or tighten the factory-set governor speed screw (see arrow).

# Section 3: Operation

Your equipment is now assembled and ready to be serviced with the correct fuel/oil mixture.

## THE GASOLINE / TWO-CYCLE ENGINE OIL MIXTURE

Since your tiller has a Tecumseh two cycle ("two-stroke") engine, you **MUST** mix together a quality two-cycle oil with gasoline. The mixture is 24 parts gasoline to 1 part two-cycle oil. If you do not do this, the engine will seize up from a lack of lubrication. (This is similar to allowing your car's engine to run out of oil.)



### WARNING

Gasoline is highly flammable. Keep gasoline away from possible ignition sources.

Do not smoke while mixing the fuel/oil or when filling the gasoline tank.

Failure to follow these precautions could result in the fuel igniting, resulting in personal injury or property damage.



### WARNING

Never mix gasoline and two-cycle oil directly in the machine's gas tank.

Use the proper fuel/oil mix.

Read the fuel/oil mixing instructions in this Manual and on the engine. Disregard any conflicting instructions on pre-mixed fuel/oil containers. Always use the proper oil.

Use unleaded regular gasoline (leaded regular gasoline is an acceptable substitute) — do not use high test gasoline.

Combine clean, fresh gasoline with clean, high-quality two-cycle oil.

Do not use a multi-viscosity two-cycle engine oil. Do not use regular engine oil. These types of oil may not lubricate the engine properly and may foul the spark plug. Also— do not use gasoline containing METHANOL (wood alcohol).

#### NOTE—

Use only clean two-cycle oil and gasoline. Store fuel mixture in an approved, clean container.

Use a clean funnel to fill the tank.

## To Make The Correct Mixture of Gasoline and Oil Use The Chart Below

To mix: first fill a clean container with one-quarter of the amount of gasoline you will be mixing. Then add ALL of the two-cycle oil required for the entire amount of fuel you're mixing. Mix this thoroughly. Then add the remaining three-quarter's of the amount of gasoline.

FUEL MIX CHART					
Mixture Ratio— 24:1					
U.S.		IMPERIAL		S.I.(Metric)	
Gas	Oil to Add	Gas	Oil to Add	Petrol	Oil to Add
1 gal	5 oz.	1 gal	6 oz	4 liter	.167 liter
2 gal	11 oz	2 gal	13 oz	8 liter	.333 liter

To fill the fuel tank on the engine: first wait until the engine cools. Then insert a clean funnel into the fuel tank. Slowly pour the fuel/oil mixture into the fuel tank, being careful not to overfill the fuel tank. (Fill the fuel tank up to, but no higher than, 1/2 inch from the top to allow room for gasoline expansion.)

## STARTING AND STOPPING

### Starting The Engine

1. Make sure the spark plug wire is connected.
2. Turn the Engine Ignition On/Off Switch to ON.
3. If your engine has fuel primer button, it should be used as follows:

**First Start-** When starting a new engine for the first time, after running out of gas, or after extended storage, use High-Volume priming (see Fig. 10)- squeeze sides of the primer button between thumb and index finger 8-to-10 times. Be sure to align your fingers with the colored line on the housing around the button.

**Cold Start-** If the engine has been sitting (or after brief storage), and still has fuel in the tank, use Standard-Volume priming (Fig.10)-push top of primer button two (2) times if above 55°F, three (3) times if below 55°F.

**Warm Start-** Do not push primer button after the engine has been stopped, still has fuel in the fuel tank, and has not cooled down completely.

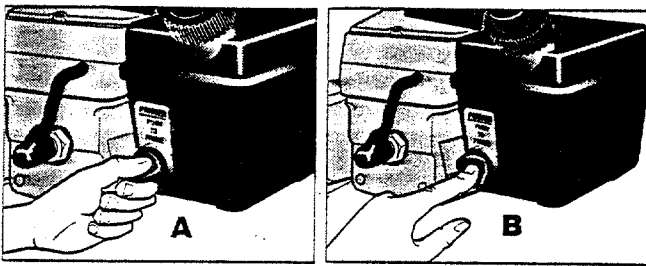


Figure 10: Select the right fuel priming technique: High Volume (A) or Standard Volume (B).

## ! WARNING

Do not touch the Throttle Control Lever while starting the engine.

The tines may propel the machine forward if the engine speed is advanced from idle.

Failure to follow these instructions can result in personal injury or property damage.

4. Support the Tiller with your left hand on its right handlebar so it doesn't fall over.
5. To start the engine, rapidly pull the engine starter rope out. Do not allow the engine starter rope to snap back. Slowly let the engine starter rope be pulled back into the recoil housing. Push the primer button once if the engine fails to start after three pulls, then pull starter rope again.



Photo 10A: Starting the engine.



Figure 11: Operating position. Do not use engine throttle lever unless you are in this position.

## ! WARNING

The muffler and surrounding areas become very hot during engine operation.

Avoid contact with this area. Failure to comply could result in personal injury.

### Stopping

To stop the engine, move the Engine On/Off Switch to its OFF position.

### NOTE

For the On/Off Switch to work properly, the On/Off Wires must be securely connected at both ends. Check regularly to see the wires are firmly connected.

## TILLING AND CULTIVATING

## ! WARNING

NEVER transport tiller when engine is on.

Failure to follow these instructions could result in personal injury or property damage.

1. Move the Tiller to the work area.
2. Check to make sure that the Engine On/Off Switch is in the ON position. Make sure the switch wires are connected to the push-on terminals of the wires from the engine.
3. Start the engine. Assume the operator's position behind the handlebars. Tilt the tiller back on its drag stake until the tines are off the ground. Squeeze the throttle lever and then release it. The engine should return to its idle speed. The tines should stop rotating or they may rotate slowly. If they do rotate slowly, lower the tines into some fairly soft soil. The tines should now stop any rotation. If tines continue to rotate (with engine still at idle speed) either the idle speed is too high or the centrifugal clutch is malfunctioning. Idle speed should be adjusted by your local Authorized Tecumseh Service Dealer.
4. Tilt the tiller back so its tines are clear of the ground. Squeeze the throttle lever.
5. Lower the tines to begin digging. When the tines contact the ground, the cultivator may tend to "walk" forward. Firmly hold the handlebars to prevent the tiller from moving forward too fast and to give the rotating tines sufficient time to dig into the earth.

6. If you need to make any adjustments to the tilling depth:

- a. Turn the engine OFF. Disconnect the spark plug wire.
- b. Remove the hairpin cotter and the clevis pin from the depth stake bracket.
- c. Move the depth stake down for deeper tilling and cultivating, or up for shallower work.
- d. Reinsert the clevis pin through the aligned holes (in depth stake and depth stake bracket), and secure it in place with the hairpin cotter.

## **GENERAL RECOMMENDATIONS**

**Avoid tilling and cultivating in soil that is too dusty or too wet.** Neither of these soil conditions lend themselves to proper cultivation.

If the tiller/cultivator tends to stay in one spot and just dig a hole instead of moving forward, move the handlebars from side to side to start the machine moving forward again.

When cultivating to get rid of unwanted plants, it is best to use a shallower setting to prevent bringing any weed seeds to the surface.

If you need to cultivate between very closely spaced plants, you can remove the outer tines as instructed in Section 4. This will give you a cultivating width of approximately 6 inches.

After you've finished cultivating, check the tines for any tangling. Stop the engine and disconnect the spark plug wire before untangling the tines. Be sure to reinstall the tines in the same position from which you removed them. If you reinstall the tines incorrectly, they will not work as well and will make the equipment jump.

To till deeply, hold the tiller/cultivator in one spot and allow it to dig as deep as you want.

The drag stake can be removed to allow the tiller/cultivator to dig to maximum depth.

If a rock should get stuck between the tines and the hood, you can remove the drag stake and use it to pry the rock loose. You can also use a block of wood and a hammer to remove the rock. The tines only turn in one direction (clockwise as viewed from the right side). Do not attempt to force them to turn the opposite way.

**IMPORTANT:** Running the engine when the tines are immobilized by a wedged rock or root can burn out the clutch. Always remove an obstruction binding the tines before damage occurs.

**IMPORTANT:** Your unit has a centrifugal clutch which is designed to operate within a specific RPM range of the engine. If you bog your engine down (below this range), the clutch will disengage and the tines will stop turning.

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## **TIPS AND TECHNIQUES**

### **Cultivating and Weeding**

For effective weed control: prepare the ground thoroughly, as early as you can, and till it again several times before you plant. Each time you do this, you bring buried weed seeds to the surface where they begin to sprout and are killed next time you till. Then, just before you plant, do one last *shallow* tilling to destroy the latest batch of weed sprouts. From then on, keep all cultivation shallow, so buried weed seeds stay buried too deep to germinate.

Your tiller is ideal for this kind of shallow cultivating, and the work goes quickly because you only need to dig an inch or so deep. Some other tips:

- Set the depth stake with its sloped edge forward (point backward) to minimize tangling on weeds and to speed up cultivating. Don't set it too deep; cultivating must be shallow.
- For weeding and cultivating in very tight spots, you can remove the outer tines and work with just the inner tines which provide a 6" tilling width. In these tight situations, you may want to remove the depth stake too.

- The machine can be "steered" by tipping it slightly to either the left or the right.

- To catch weeds growing very close to more mature garden crops or plants, you can pull the tiller backward so the tines lift up the plant leaves. This allows close weeding without damage to the foliage.

- When cultivating around short ornamentals or flowers, place the machine on the *far side* of the plant so the earth is moved toward it, rather than stripped away from its roots.

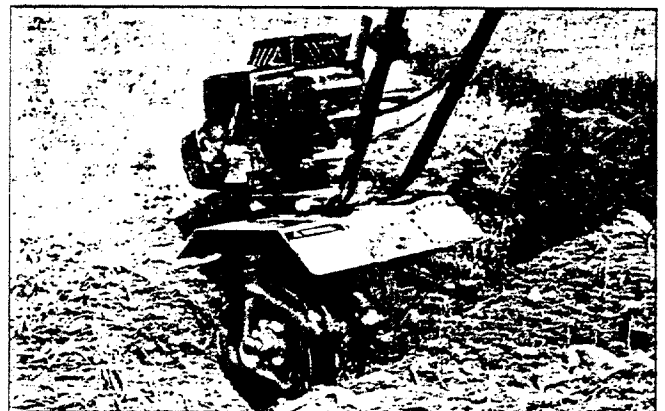


Photo 11A

## Some Special Techniques

Your handy tiller can do some impressive tricks for you after you've had a fair bit of practice with it. Here are a few:

- To make a furrow, remove the two outer tine gangs and replace them with the short tine spacers. Also remove the depth stake. Use a high engine throttle setting and pull the machine slowly straight backward, allowing earth to spill out on each side. You'll have a fine furrow.

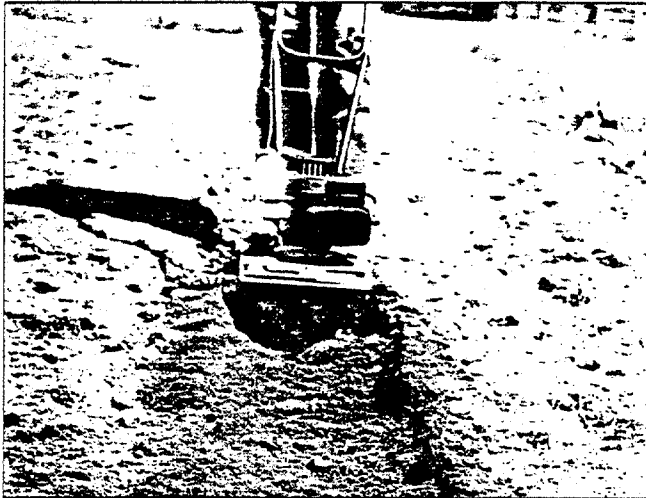


Photo 11B

- For hills and raised beds, keep all the tines in place and pull the machine backward at a tilt, so you "hill" up the earth on one side.
- You don't have to carry your tiller across the lawn to a work area. If you prefer, you can start the engine and "walk" the machine lightly over the grass. Keep the engine speed as low as possible—just high enough to keep the tines rotating at your walking pace, or the tines will try to dig into the lawn.

## Tilling Sod

- Set the depth stake with its point facing forward and adjust it deeply enough so the machine will



Photo 11C

pull itself along at a steady pace.

If you set the stake too deep, the machine won't pull itself at all; if too shallow, it will want to move ahead too quickly. Keep in mind that one depth stake height adjustment either way can make a big difference. Take a little time and experiment. Different soils and tilling depths require different stake adjustments.

- Occasionally, "sweeping" the tiller from side to side is helpful when the going is tough. This lets the tines undercut roots and stones, leaving a completely tilled path. This can also be accomplished with multiple passes (normally required when breaking sod with a powered tiller).

## Tilling Seedbeds

Your tiller will also do a nice job of digging up a small plot of soil for planting. This is usually easier than tilling sod. Once again, set the stake with the point facing forward and take time to get the depth adjusted correctly.

- Here's a trick to smooth the bed for seeding after it's well-tilled: Hold the machine level and pull it quickly backward over the ground like a large hoe. The slower you work and the higher the engine speed, the more earth you'll move, so just use a quick motion and you'll reduce the need for raking.

## Tilling in Stony Soil

Your tiller was specifically designed to have a very small center tine gap, allowing it to weed more effectively and to mix the soil more thoroughly.

However, when tilling deeply in stony soil, you'll find that stones can frequently lodge between the tines and tiller hood, stopping tine motion. **If a rock jam occurs, shut off the engine and disconnect the spark plug wire.** Take off the tine gangs to free the lodged stone. If this doesn't remove the jam, pry out the rock by using a block of wood and a hammer. (Wear safety glasses if you need to do this.) Don't try to rotate the tines backward, and don't wear out the clutch trying to drive the jammed tines forward using engine power. Once loose, toss the stone away from the garden area.

## A Special Tine Pattern For Stony Soils

If you encounter frequent rock jams in the tines when working in very stony soils, here's a simple change in the tine pattern that will generally minimize the problem.

*Wearing heavy gloves, remount the four tine gangs in the following order: move the inner-left tine gang to the inner-right position, and the inner-right gang to the inner-left position. Keep the outer tine gangs as is. Remember—the curved tine edges enter the soil first!*

Remounting the tine gangs takes just a couple of minutes and you'll need a pliers at most. The figures to the right show the conventional tine configuration where there is a narrow gap between the center (inner) tines, and the special stony soil tine pattern where the inner tine gangs have been swapped in position. The stony pattern creates a much wider gap between the inner tine gangs— rocks are much less likely to become lodged between them and the tine hood.

**Important:** Remember that when you remount the tines on the tine shaft, they must be turned in the direction that allows the curved portions of the blades to enter the soil first! Don't turn the tines so they face backwards or tilling will be very difficult.

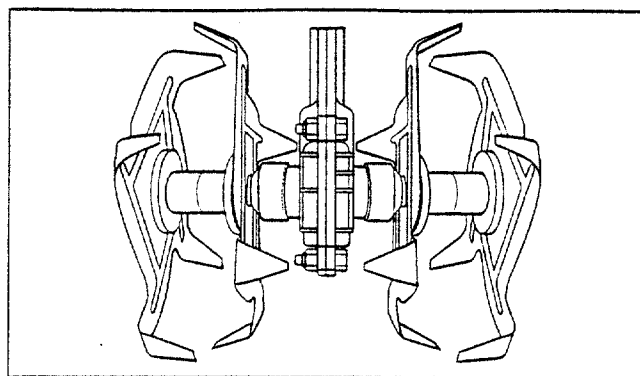


Figure 11D: Normal tine gang pattern.

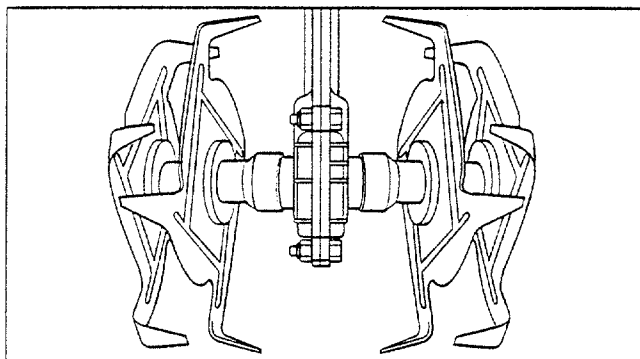


Figure 11E: Tine gang pattern for very stony soil.

## Section 4: Maintenance

### ENGINE LUBRICATION

The engine on your Tiller is a two-cycle ("two-stroke") engine. Engine lubrication is provided by mixing the proper type and amount of two-cycle oil with the gasoline. Refer to "The Gasoline/Two-Cycle Engine Oil Mixture" for correct proportions and mixing instructions.

Attempting to run the engine on just gasoline alone (without the correct amount and type of two-cycle oil mixed with it) will cause the engine to overheat and seize from lack of lubrication.

### TRANSMISSION MAINTENANCE

Your transmission was factory-lubricated with high-quality grease and should not require any additional regular lubrication.

However, you should *check* for sufficient lubricant after the initial five hours of operation, and very twenty-five operating hours afterward.

If needed, use grease that is a high quality, automotive petroleum-base grease usually available at most hardware or auto parts stores.

#### to check the transmission:

1. Lay the machine on the left side so the tine shaft is vertical.
2. Remove both right-side tines (see "Tine Removal" this Section).

3. Clean any dirt or debris away from the transmission so none will enter the housing.
4. Remove all three threaded plugs from the right side of the transmission. See Figure 12 for their locations. Lubricant should be visible in the top two holes. If so, replace the three plugs securely. If lubricant is needed, see the following steps.

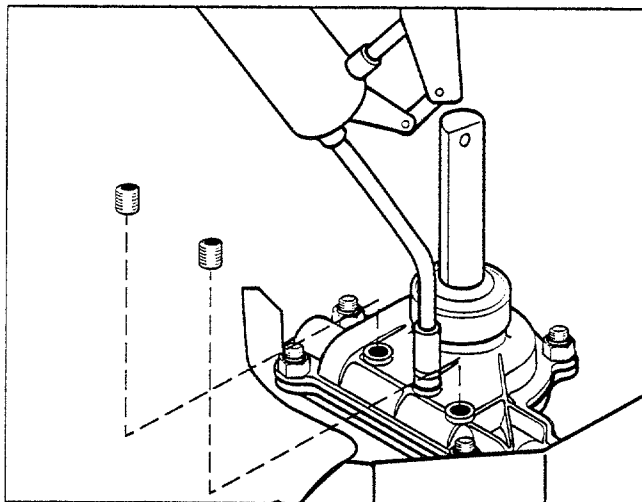


Figure 12: Check top two plug locations for presence of lubricant. If needed, add lubricant to these two locations with a standard grease gun. See text for full instructions.



### ***To lubricate the transmission:***

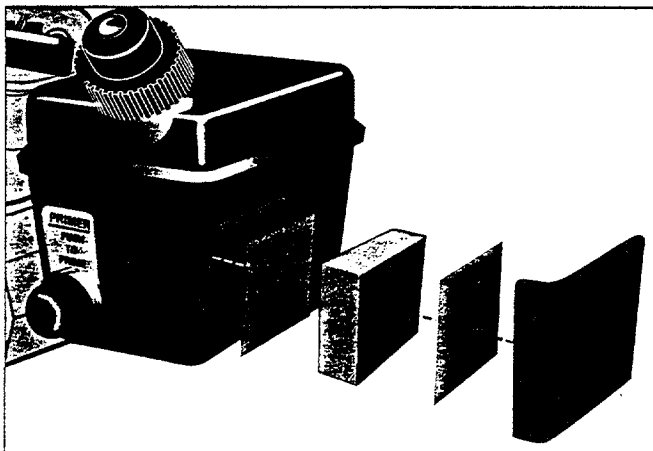
5. Place the nozzle of a grease gun on the rim of the middle hole. Push the nozzle firmly up against the opening.
6. Apply grease until it begins to come out of the bottom hole. Replace the bottom plug securely. Then apply grease to the top plug hole. Add until it begins to come out of the middle hole. Reinstall the plugs in the middle and top holes.
7. Reinstall the right-side tines. Before reinstalling the tines, use a fine grade of sandpaper to clean any rust off the tine shaft. Then coat the tine shaft with a few drops of oil or anti-seize compound to make future tine removal easier.

## **ENGINE AIR FILTER**

After using your Tiller for 25 operating hours or after a 3-month period (more frequently in dirty or dusty areas), the engine air filter system will need to be cleaned.

Use the following instructions:

1. Remove the air cleaner outer cover by taking out the two cover screws shown in Figure 13. Put cover aside. Remove the thin, outer flocked filter, the thick foam filter, and the thin, inner flocked filter. (Your assembly may have one or two thin flocked filters which need to be cleaned.) Clean the body of the air filter housing and the cover with a clean rag.
2. Inspect the flocked filters and thick foam filter for dirt. If dirty, continue with step 3.
3. Wash the thick foam filter in detergent and water. Squeeze to remove dirt—do not twist it.
4. Rinse the foam filter in clean water thoroughly.
5. Wrap in a cloth and squeeze until dry.
6. Saturate the foam filter with clean engine oil and squeeze out any excess oil.
7. The thin flocked filters should be washed in a water and detergent solution, rinsed thoroughly in clean water, and air dried. **Do not oil them.**
8. Reassemble all components carefully.



*Figure 13: The engine air filter assembly.*

## **CARBURETOR ADJUSTMENT**

Your Tiller is designed to run at full speed when you are tilling or cultivating with it. When you release the throttle lever, the engine should return to its idle speed.

### **NOTE**

The tines may slowly rotate when you have them out of the soil and the engine is idling.

The tines should stop rotating (when engine is idling) when you lower the tines into soft soil. If the tines continue to rotate (when engine is idling) in soft soil, the idle speed may be set too high or the centrifugal clutch may be malfunctioning.

If you think your carburetor or the engine speed require adjustment, see your nearest Authorized Tecumseh Service Outlet.

**Never tamper with the engine governor which is factory-set for the proper engine speed. Overspeeding the engine above the factory high-speed setting can be dangerous.**

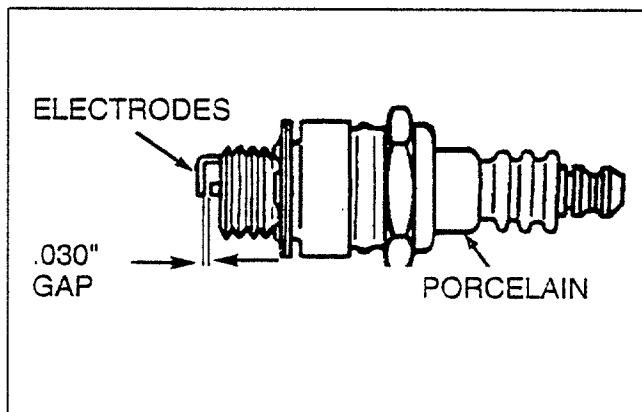
## **COOLING SYSTEM**

**Important:** Frequently remove debris from the engine cooling fins, around the air intake screen and levers and linkage. This will help to ensure adequate cooling and correct engine speed.

## **SPARK PLUG**

Check the spark plug once yearly or every 5 operating hours. Clean around the spark plug, then remove it for inspection. Replace the plug if the electrodes (see Figure 14) are pitted or burned, or the porcelain is cracked.

Check the electrode gap with a wire feeler gauge and adjust the gap to .030" if necessary.



*Figure 14: Set spark plug gap at .030\"/>*

## TINE REMOVAL & INSTALLATION

### WARNING

Worn tines may become sharp. Wear heavy gloves when removing, handling, or reinstalling tines to prevent personal injury.

### IMPORTANT

The four tines are not interchangeable. They must be reinstalled in the same positions from which you removed them and their cutting edges must face forward in order for the cultivator to function properly.

If you are replacing tines due to wear, you should replace all four as a set, rather than replacing a single, worn tine.

To be sure of reinstalling the tines in the correct order, mark the tines as follows: (Do this the very first time that you remove the tines to be sure of marking them correctly.) Disconnect the spark plug wire. Use a sharp nail or awl to scratch the tine location on the tine (Outer L/H, Inner L/H, Outer R/H, and Inner R/H).

#### 1. To remove the tines:

A. Pull the hairpin cotter out of the hole in the outboard end of the tine shaft. It is easier to first turn the hairpin cotter 90° (so it "stands" away from the outer tine) and then slip it off, over the tip of the axle, than it is to attempt to pull the hairpin cotter out of the hole in the tine shaft.



Photo 15: Removing the hairpin cotter.

B. Slide the two tines off the tine shaft.

**NOTE:** If you don't plan to reinstall the tines right away, reinsert the hairpin cotter in the hole in the tine shaft to prevent it from being accidentally misplaced.

C. Repeat steps A and B for the other side.

#### 2. To reinstall the tines:

When reinstalling the tines, refer to Photo 16 for the correct location of each tine.

A. Double check that the dust cover and felt washer (underneath the dust cover) are in place. They should be on the tine shaft, against the side of the transmission. The set screws on the dust covers should be tight and not allow the dust covers to move. See Photo 18.

Clean the tine shafts and then use fine-grade sandpaper to remove any rust or burrs. Apply a thin coating of oil to the tine shafts to make future tine removal easier.

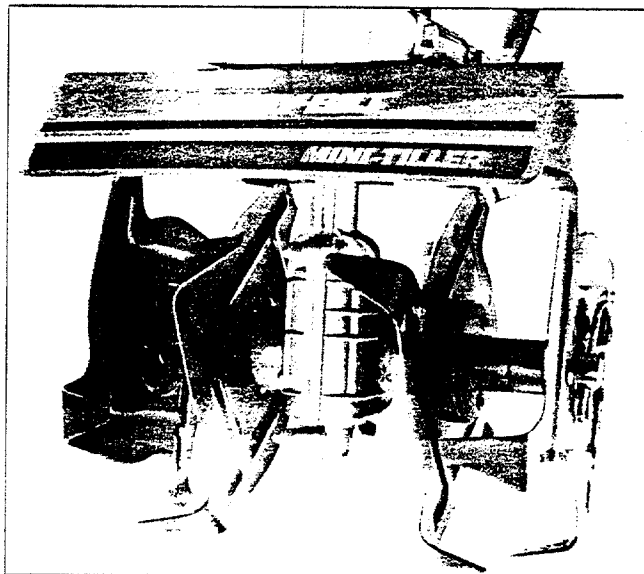


Photo 16: The correct position of the tines.

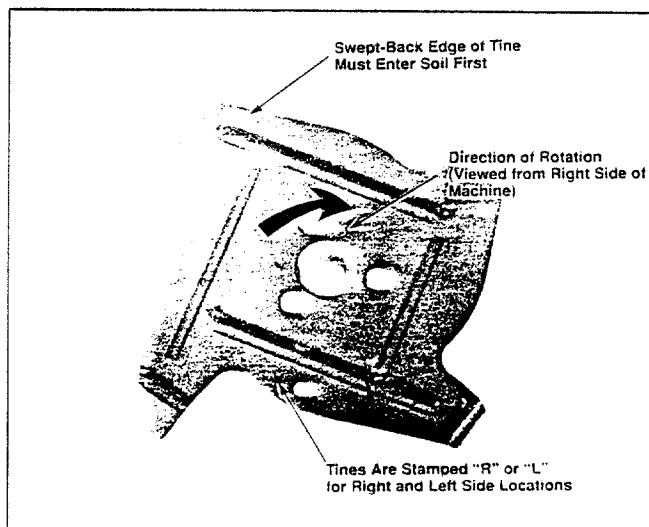


Photo 17: Side view of a tine.



Photo 18: Installing an inner tine.

- B. Slide the inner tine over the tine shaft.
- C. Slide the outer tine over the tine shaft.
- D. Secure the tines to the tine shaft by inserting the hairpin cotter in the outer hole in the tine shaft. It is easier to install the hairpin cotter by inserting it through the hole in the tine shaft 90° from its installed position and then turning it so it lies flat against the outer tine.
- E. Repeat steps A, B, C, and D on other side.

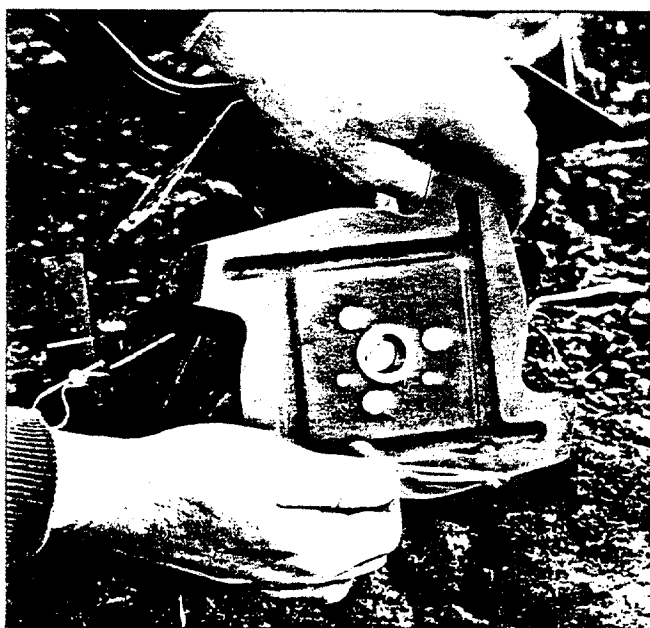


Photo 19: Installing an outer tine.

## NARROW CULTIVATING

The two outer tines can be removed for a narrower tilling or cultivating width of 6 inches.

To do this, simply remove the outer tines (see previous instructions). Then place a tine spacer (included with your machine) over the tine shaft. Secure the spacer in place with the hair pin cotter inserted through the outer hole.

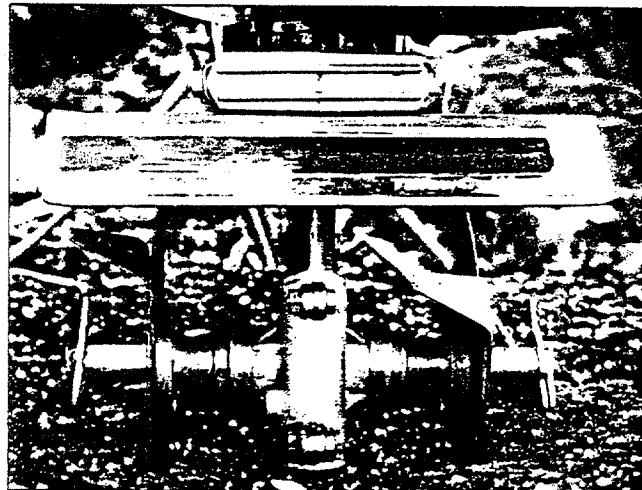


Photo 20: Outer tines off for narrow cultivating.

## STORAGE

### WARNING

Never store the tiller when there is gasoline in the fuel tank.

Never place the tiller near any source of sparks or open flame (such as a hot water heater, space heater or clothes dryer).

Failure to comply can lead to serious personal injury or property damage.

To prepare your tiller for extended storage:

1. Prepare the engine for storage by following the "STORAGE" instructions in the separate Engine Owner's Manual.
2. Allow the engine to cool. Then clean any dirt and debris from the engine cooling fins, linkage and other engine surfaces.
3. Cover the engine and store this equipment in a dry, sheltered location.
4. Remove the tines, and clean all soil and debris away from the dust covers and the tine shaft. Lubricate the tine shaft.

## ***MAINTENANCE CHECKLIST***

	Before Each Use	Regularly	Every 25 Hrs Of Use	Every 75 Hrs Of Use	Every 100 Hrs. Of Use	After Season
Are ignition switch wires securely attached?	X					
Make sure air cleaner assembly is secure.	X					
Check all nuts and bolts for tightness.		X				
Clean cooling system by removing debris from cylinder fins and carburetor area.		X				
Check transmission lubricant.*			X			X
Remove and service the air filters. (service more frequently in dusty conditions)			X			
Have engine exhaust ports cleaned by an Authorized Tecumseh Engine Dealer.				X		
Clean dirt and debris from the equipment.						X
Clean and lubricate the tine shafts.		X				X
Check spark plug.**						X

\* After the first five (5) hours of use. Unless there is an obvious leak, the transmission should not require that any lubricant be added.

\*\* Annually or every 5 operating hours.

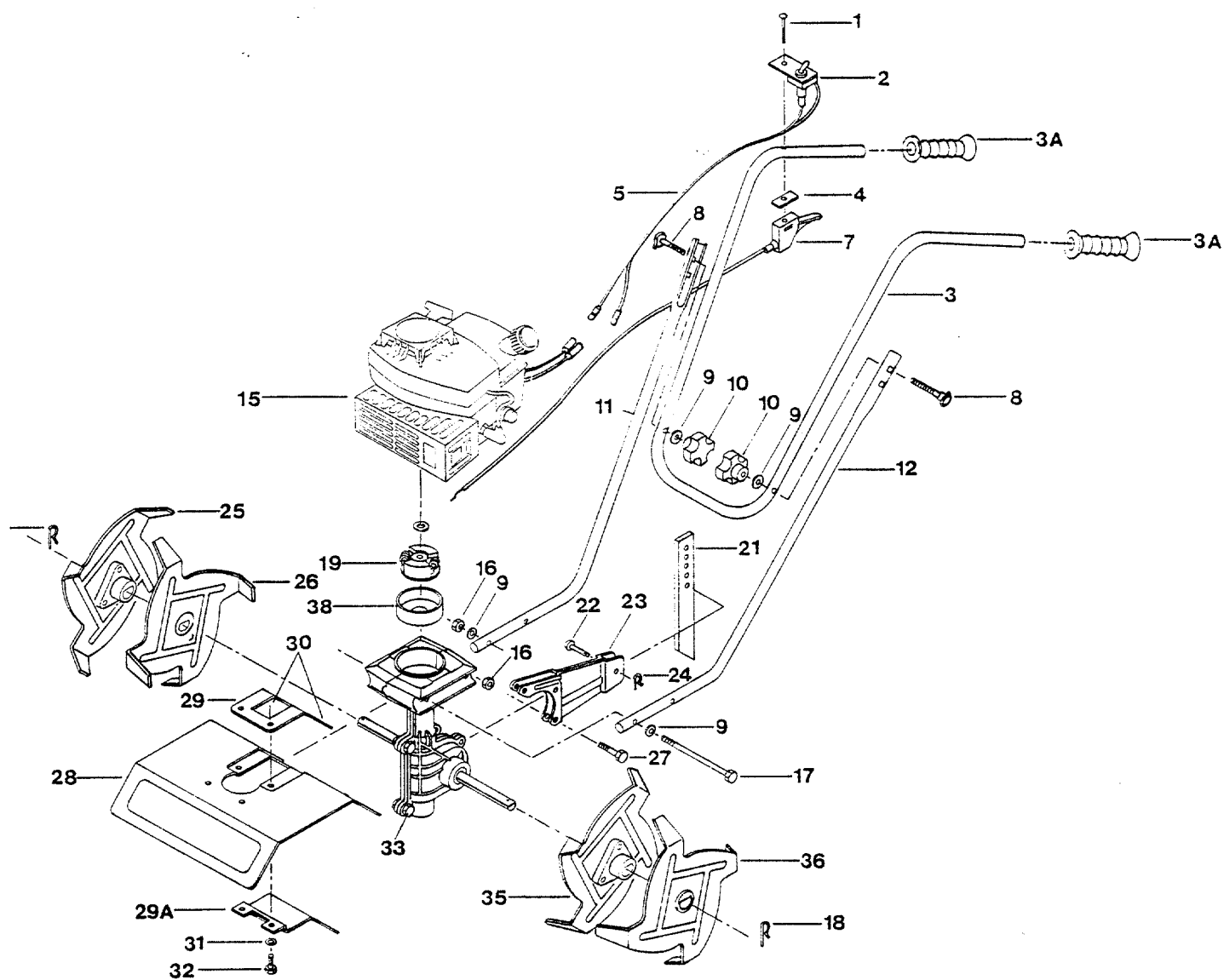
Note: For carburetor and engine speed adjustments, see your Authorized Tecumseh Service Outlet.

## ***PARTS ORDERING INFORMATION***

If you should ever need any replacement parts for your Tiller, please use the exploded parts illustration and parts listing which follow to determine which parts you'll need to order.

You may order replacement parts directly from a local Authorized Dealer. Should you need to order any replacement parts from the Factory, please see the address and telephone information on the back cover of this Owner/Operator Manual.

# EXPLODED VIEW OF THE TILLER/CULTIVATOR



<u>Ref. No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty.</u>
1	Screw, 10-16 x 1-1/2", Panhead*	1750608	1
2	Switch, Engine Ignition	1983718	1
	Bracket Switch	1981012001	1
3	Handlebars, Upper, with grips and decals	1981046	1
3A	Grip, Handlebar	1983728	2
4	Spacer, rectangular rubber	1983649	1
5	Wire, Engine Ignition, "On/Off"	1909812	1
6	Ref. Number Not Used		
7	Lever and Cable Assembly, Throttle	1986201	1
8	Bolt, Carriage, 5/16"-18 x 2"	1731025	2
9	Flat Washer, 5/16" I.D.	1107382	6
10	Knob, Handlebar	1763767	2
11	Handlebar, Lower Right	1984509001	1
12	Handlebar, Lower Left	1984510001	1
13	Washer, Flat #8*	1187293	1
14	Screw, Hex Head #8 - 32 x 1" *	1983661	1
15	Engine, Tecumseh TC-200-2106 (Available through Local Tecumseh Service Dealers)		
16	Locknut, 1/4"-20 *	1817146	10
17	Bolt, Hex Head 1/4"-20 x 5" *	1983663	2
18	Hairpin Cotter	1185590	2
19	Clutch Rotor	1909487	1
20	Ref. Number Not Used		
21	Drag Stake	1981014001	1
22	Clevis Pin, 5/16" x 7/8"	1983723	1
23	Drag Stake Bracket	1981010001	1
24	Hairpin Cotter	1703011	1
25	Tine, Outer, Right-Hand Side	1984430	1
26	Tine, Inner, Right-Hand Side	1984429	1
27	Bolt, 1/4"-20 x 1-1/8" * (drag stake to transmission)	1983658	3
28	Tine Cover (with Decals)	1904124	1
29	Plate, Rear, Tine Cover	1981022010	1
29A	Rock Shield	1981018010	1
30	Screw, #10-32 x 1/2", self-tapping (for rear tine cover plate)	1983662	2
31	Lockwasher, 1/4" *	1100241	4
32	Bolt, 1/4"-20 x 2" (Grade 5)	1100807	4
33	Bolt, 1/4"-20 x 7/8" (Grade 5)	1111600	5
34	Ref. Number Not Used		
35	Tine, Inner, Left-Hand Side	1984427	1
36	Tine, Outer, Left-Hand Side	1984428	1
37	Ref. Number Not Used		
38	Clutch Drum and Hub	1909486	1

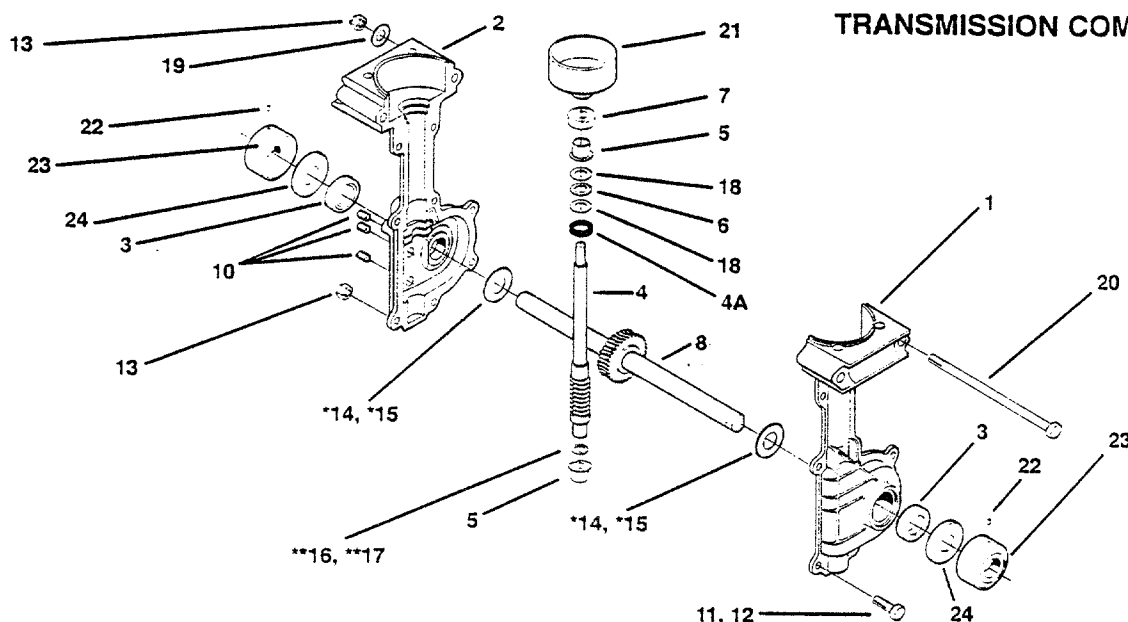
\* Denotes items usually available from a quality hardware store as well as from the Factory.

### **Decals**

Product Name Logo Decal (on front lip of tine cover)	1984529	1
Caution Decal (located on rear of tine cover)	1983094	1
Warning Decal (located on rear of tine cover)	1983095	1
Engine / Tine Speed Decal (located on the right handlebar)	1983096	1
Engine Ignition Switch Identification Decal (on right handlebar)	1983097	1

### **Kits and Accessories**

Tine Spacers (install when outer tines are off for cultivating)	1983648	2
Cup, Oil Measuring	1983647	1
Replacement Tines (incl. Ref. No.'s 25, 26, 35, 36)	1982393	1
Transmission Assembly	1909803	1
Tie Strap, 6", nylon	1983727	2
Tine Spacer Kit (incl. two 1983648)	1981053	1



**TRANSMISSION COMPONENTS**

Ref. No.	Description	Part No.	Qty.
1	Transmission Case, with pressed-in bushing, left side	1915039	1
2	Transmission Case, with pressed-in bushing, right side	1915040	1
3	Oil Seal	1983632	2
4	Shaft, worm— input	1983634	1
4A	Oil Seal, input	1909923	1
5	Bearing, input	1983731	2
6	Bearing, thrust	1983636	1
7	Ball Bearing	1983637	1
8	Shaft Assembly, incl. pressed-on worm gear	1981052	1
9	Ref. Number Not Used		
10	Plug, 1/8"	1185741	3
11	Screw, 1/4"-20 x 7/8" (five locations on transmission case)	1111600	5
12	Screw, 1/4"-20 x 1-1/8" (three locations on transmission case)	1983658	3
13	Lock Nut, Nyloc, 1/4"-20	1817146	8
*14	Thrust Washer, output (.050")	1983635	As Req'd.
*15	Thrust Washer, output (.040")	1983640	As Req'd.
**16	Thrust Washer, input (.020")	1983641	As Req'd.
**17	Thrust Washer, input (.025")	1983642	As Req'd.
18	Thrust Washer	1983638	2
19	Flat Washer, 1/4"	1100254	2
20	Screw, Hex Hd., 1/4"-20 x 5"	1983663	2
21	Clutch Drum and Hub	1909486	1
22	Set Screw, #10-32 x 1/4"	1983052	2
23	Dust Cover	1983622	2
24	Felt Washer	1983713	2

\* Use as required to reduce slack and center the worm gear in the transmission case

\*\* Use as required to reduce slack.

## SPECIFICATIONS

Maximum Height— 51"

Height with Handlebars off— 17-1/4"

Width (at Handlebar Grips)— 16-1/4"

Tilling Width— 9" (approx.)

Tilling Width (outer tines off)— 6" (approx.)

Tine Construction— stamped steel, heat-treated, non-interchangeable

Controls: Engine Throttle Speed Lever

Engine Ignition Switch

Fuel Primer Button or Choke Lever

Depth Stake

Starting System— Manual rope pull (automatic rope rewind)

Fuel Tank Capacity— 20 ounces

Engine Make: Tecumseh TC-200-2106

Engine Type: two-cycle (2-stroke), air-cooled.

Engine Displacement: 32.8cc (2 cu in). 1.6HP

Maximum Engine RPM: 5200

Fuel Mix Requirements: Use a ratio of 24 parts of unleaded regular gasoline to 1 part of quality two-cycle engine oil. See Page 12 in the Manual for specific instructions.

Engine Lubrication: Quality two-cycle engine oil must be mixed in the correct ratio (see above) with unleaded regular gasoline.

Spark Plug: Refer to separate Engine Owner's Manual. Gap plug to .030".

## LIMITED WARRANTY

<b>Products Covered</b>	This warranty is for the following TROY-BILT® branded products and their attachments or accessories: chipper/shredders, chipper/vacs, walk-behind mowers, riding mowers, tractors, snow throwers, brush-cutters, sprayers, carts, composters and the Mini-Tiller.
<b>Date Warranty Begins</b>	The warranty begins on the date of purchase.
<b>What is Covered</b>	<p>This product (except for the engine, as explained below) is warranted by Garden Way Incorporated to <b>the original purchaser only</b>, to be free of defects in material and workmanship under normal use and service for the following time periods:</p> <p style="text-align: center;">NON-COMMERCIAL RESIDENTIAL USE. . . . .7 Years COMMERCIAL OR OTHER NON-RESIDENTIAL USE. . . . .90 Days</p> <p><b>ENGINES:</b> Engines used for non-commercial residential purposes are covered by the engine manufacturer's separate Limited Warranty. Garden Way Incorporated does, however, extend the length of the engine manufacturer's limited warranty, providing you with coverage for a total of 3 years. Please refer to the separate engine owner's manual for details concerning the engine manufacturer's Limited Warranty.</p> <p><i>Engines used for commercial or other non-residential purposes are warranted by their respective manufacturer for the time periods indicated in the Limited Warranty printed in the separate engine manufacturer's owner's manual.</i></p>
<b>What is Not Covered</b>	<ol style="list-style-type: none"> <li>1. This warranty does not cover the periodic, normal replacement of parts that wear out such as belts, seals, blades, batteries, etc.</li> <li>2. This warranty does not cover damage, malfunctions or failures due to: <ol style="list-style-type: none"> <li>a) Use of unauthorized accessories or attachments.</li> <li>b) Misuse, accidents, or a lack of reasonable and necessary maintenance as specified in your product's Owner/Operator Manual (you may wish to keep records of maintenance and service).</li> </ol> </li> </ol>
<b>What We Will Do For You</b>	We will, at our option, repair or replace any part found to be defective in material or workmanship, without charge for parts and labor. However, charges for pick-up, delivery, and service calls are not covered by this warranty.
<b>How to Obtain Non-Engine Related Warranty Service</b>	<ul style="list-style-type: none"> <li>• You may be required to provide proof of the date of purchase (your sales receipt, for example).</li> <li>• Contact any TROY-BILT® Authorized Service Dealer (if purchased from a dealer, we recommend that you contact the same dealer you purchased this product from in order to give the dealer the opportunity to service you to your satisfaction). Refer to your local telephone directory for the name of your nearest dealer or call the TROY-BILT® Technical Service Department (see Toll-Free number below) for assistance.</li> </ul> <p style="text-align: center;">-OR-</p> <ul style="list-style-type: none"> <li>• Contact the TROY-BILT® Technical Service Department in Troy, N.Y. at this Toll-Free number: <b>1-800-520-5520</b>.</li> </ul>
<b>How to Obtain Engine Warranty Service</b>	Contact any service dealer that is authorized by the manufacturer of your engine. Please refer to the engine manufacturer's Limited Warranty for exact details on how to obtain warranty service. If you have any questions or concerns regarding engine warranty service, please call the TROY-BILT® Technical Service Department for assistance.
<b>Disclaimer of Consequential Damages</b>	<p>Garden Way Incorporated shall not be liable under any circumstances for any incidental or consequential damages or expense of any kind, including but not limited to cost of equipment rental, loss of profits, or cost of hiring services to perform tasks normally performed by the equipment.</p> <p>Any implied warranties, including without limitation any implied warranty of merchantability or fitness for a particular purpose, shall be limited in duration to a period of seven years (90 days if product is purchased for commercial or other non-residential use) from the date of sale.</p>
<b>Limitation of Implied Warranties</b>	<p>SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. THEREFORE, THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.</p> <p>This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.</p> <p><b>Garden Way Incorporated, 102nd St. &amp; 9th Avenue, Troy, New York 12180</b></p>

**For customer assistance, contact your nearest authorized dealer or:**

In the U.S.A.: **Garden Way Incorporated • 102nd St. & 9th Ave. • Troy, New York 12180**  
For Technical Service: (800) 520-5520 — For Parts: (800) 648-6776

In Canada: **Garden Way Incorporated • 320 Van Sickie Road, Unit 12 • St. Catharines, Ontario L2R 6P7**  
For Technical Service or Parts: (800) 225-3585