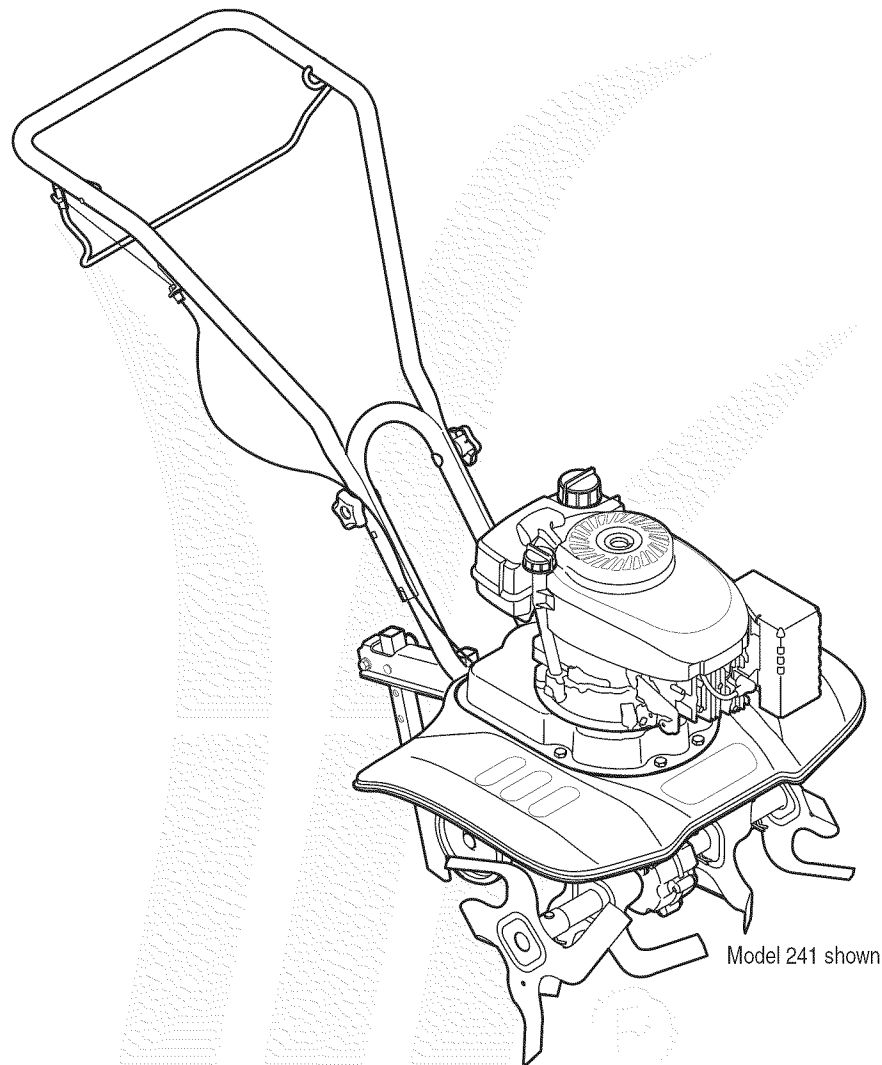


# OPERATOR'S MANUAL



## Front Tine Tiller — Model Series 240

### IMPORTANT

#### READ SAFETY RULES AND INSTRUCTIONS CAREFULLY BEFORE OPERATION

**Warning:** This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 361131 Cleveland, Ohio 44136-0019.

This Operator's Manual is an important part of your new tiller. It will help you assemble, prepare, and maintain the unit for best performance. Please read and understand what it says.

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This Operators Manual covers 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. MTD LLC reserves the right to change product specifications, designs and equipment without notice and without incurring obligation.

## Finding and Recording Model Number

BEFORE ASSEMBLING YOUR NEW EQUIPMENT, please locate the model plate on the equipment and copy the information to the sample model plate provided to the right. You can locate the model plate by looking at the rear of the tine shield. This information is important for use when visiting the manufacturer's web site, obtaining assistance from the Customer Support Department, or when contacting an authorized service dealer.

Model Number

Serial Number



MTD LLC  
P.O. BOX 361131  
CLEVELAND, OH 44136  
330-220-4683  
800-800-7310

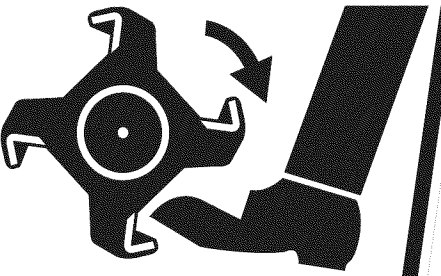
## Customer Support

Please do **NOT** return the unit to the retailer from which it was purchased, without first contacting Customer Support.

If you have difficulty assembling this product or have any questions regarding the controls, operation, or maintenance of this unit, you can seek help from the experts. Choose from the options below:

- Visit [www.mtdproducts.com](http://www.mtdproducts.com).
- Call a **Customer Support Representative** at 1-800-800-7310.
- 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 unit, for more information.

## Safety Labels Found On Your Tiller

<p><b>⚠ WARNING</b></p> <p><b>TO AVOID SERIOUS INJURY</b></p> <ol style="list-style-type: none"><li>1. READ THE OPERATOR'S MANUAL.</li><li>2. KNOW LOCATION AND FUNCTIONS OF ALL CONTROLS.</li><li>3. KEEP ALL SAFETY DEVICES AND SHIELDS IN PLACE AND WORKING.</li><li>4. NEVER ALLOW CHILDREN OR UNINSTRUCTED ADULTS TO OPERATE TILLER.</li><li>5. SHUT OFF ENGINE BEFORE UNCLOGGING TINES OR MAKING REPAIRS.</li><li>6. KEEP BYSTANDERS AWAY FROM MACHINE.</li><li>7. KEEP AWAY FROM ROTATING PARTS.</li><li>8. USE EXTREME CAUTION WHEN REVERSING OR PULLING THE MACHINE TOWARDS YOU.</li></ol>	<p><b>⚠ WARNING</b></p>  <p><b>KEEP AWAY FROM ROTATING TINES. ROTATING TINES WILL CAUSE INJURY.</b></p> <p>S32147</p>
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1

### Safety Labels



### WARNING

DO NOT remove safety (or any) labels from tiller for any reason.

# 2

## Safe Operation Practices



### WARNING

This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol, **HEED ITS WARNING!**



**WARNING:** Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to State of California to cause cancer and birth defects or other reproductive harm.

**DANGER:** This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

### Training

1. Read, understand, and follow all instructions on the machine and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Be familiar with all controls and their proper operation. Know how to stop the machine.
3. Never allow children under 14 years old to operate this machine. Children 14 years old and over should read and understand the operation instructions and safety rules in this manual and should be trained and supervised by a parent.
4. Never allow adults to operate this machine without proper instruction.
5. Keep bystanders, helpers, pets and children at least 75 feet from the machine while it is in operation. Stop machine if anyone enters the area.
13. Replace gasoline cap and tighten securely.
14. If gasoline is spilled, wipe it off the engine and equipment. Move machine to another area. Wait 5 minutes before starting the engine.
15. Never store the machine or fuel container inside near an open flame, spark or pilot light (e.g. furnace, water or space heater, clothes dryer, etc.).
16. Allow machine to cool 5 minutes before storing.

### Operation

### Preparation

1. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, and other foreign objects which could be tripped over and cause personal injury.
2. Wear sturdy, rough-soled work shoes and close fitting slacks and shirt. Loose fitting clothes or jewelry can be caught in movable parts. Never operate this machine in bare feet or sandals.
3. Disengage clutch levers and shift (if provided) into neutral ("N") before starting the engine.
4. Never leave this machine unattended with the engine running.
5. Never attempt to make any adjustments while engine is running, except where specifically recommended in the operator's manual.
6. To avoid personal injury or property damage use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on yourself or your clothes which can ignite. Wash your skin and change clothes immediately.
7. Use only an approved gasoline container.
8. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
9. Never fuel machine indoors.
10. Never remove gas cap or add fuel while the engine is hot or running.
11. Allow engine to cool at least two minutes before refueling
12. Never over fill fuel tank. Fill tank to no more than ½ inch below bottom of filler neck to provide space for fuel expansion.
1. Do not put hands or feet near rotating parts. Contact with the rotating parts can amputate hands and feet.
2. Do not operate machine while under the influence of alcohol or drugs.
3. Never operate this machine without good visibility or light. Always be sure of your footing and keep a firm hold on the handles.
4. Keep bystanders, helpers, pets, and children at least 75 feet from the machine while it is in operation. Stop the machine if anyone enters the area.
5. Be careful when tilling in hard ground. The tines may catch in the ground and propel the tiller forward. If this occurs, let go of the handle bars and do not restrain the machine.
6. Exercise extreme caution when operating on or crossing gravel surfaces. Stay alert for hidden hazards or traffic.
7. Never operate the machine at high transport speeds on hard or slippery surfaces.
8. Exercise caution to avoid slipping or falling.
9. Look down and behind and use care when in reverse or pulling machine towards you.
10. Start the engine according to the instructions found in this manual and keep feet well away from the tines at all times.
11. After striking a foreign object, stop the engine, disconnect the spark plug wire and ground against the engine. Thoroughly inspect the machine for any damage. Repair the damage before starting and operating.
12. Disengage all clutch levers (if fitted) and stop engine before you leave the operating position (behind the handles). Wait until the tines come to a complete stop before unclogging the tines, making any adjustments, or inspections.
13. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
14. Muffler and engine become hot and can cause a burn. Do not touch.
15. Use caution when tilling near fences, buildings and underground utilities. Rotating tines can cause property damage or personal injury.

16. Do not overload machine capacity by attempting to till soil to deep at too fast of a rate.
17. If the machine should start making an unusual noise or vibration, stop the engine, disconnect the spark plug wire and ground it against the engine. Inspect thoroughly for damage. Repair any damage before starting and operating.
18. Keep all shields, guards, and safety devices in place and operating properly.
19. Never pick up or carry machine while the engine is running.
20. Use only attachments and accessories approved by the manufacturer. Failure to do so can result in personal injury.
21. If situations occur which are not covered in this manual, use care and good judgment. Contact your dealer or telephone 1-800-800-7310 for assistance and the name of your nearest servicing dealer.

### Maintenance & Storage

1. Never tamper with safety devices. Check their proper operation regularly.
2. Check bolts and screws for proper tightness at frequent intervals to keep the machine in safe working condition. Also, visually inspect machine for any damage.
3. Before cleaning, repairing, or inspecting, stop the engine and make certain the tines and all moving parts have stopped. Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.
4. Do not change the engine governor settings or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
5. Maintain or replace safety and instruction labels, as necessary.
6. Follow this manual for safe loading, unloading, transporting, and storage of this machine.
7. Never store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer, etc.
8. Always refer to the operator's manual for proper instructions on off-season storage.
9. If the fuel tank has to be drained, do this outdoors.
10. Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.

### Your Responsibility

1. Restrict the use of this power machine to persons who read, understand, and follow the warnings and instructions in this manual and on the machine.
2. The safety labels on the tiller are shown in the "Safety Labels" section. To ensure safe operation of the tiller, follow the instructions on all labels closely.

# 2

## Safe Operation Practices



**WARNING**

This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol, **HEED ITS WARNING!**

# 3

## Assembly



Stand behind the tiller as if you were going to operate it. Your right hand corresponds to the right side of the tiller; your left hand corresponds to the left side of the tiller.

This operator's manual may cover various models of tillers. The units illustrated may vary slightly from your unit.

**IMPORTANT:** This unit is shipped without gasoline or oil in the engine. Fill up gasoline and oil as instructed in the accompanying engine manual **BEFORE** operating your machine.

## Assembly

1. Remove the star handle knobs and carriage bolts from the lower handle, Figure 3-1.

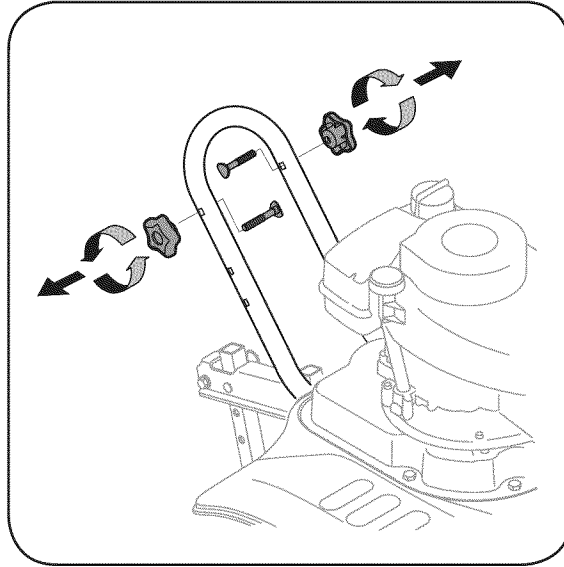


Figure 3-1: Remove hardware from lower handle.

2. Position the upper handle onto the lower handle, Step A Figure 3-2. Align the holes on lower handle with the holes on the upper handle (choose the upper or lower holes depending on the desired handle height).
3. Insert carriage bolts through the holes and secure with star knobs, Step B Figure 3-2. Make certain carriage bolts are seated securely into one of the two positions provided.

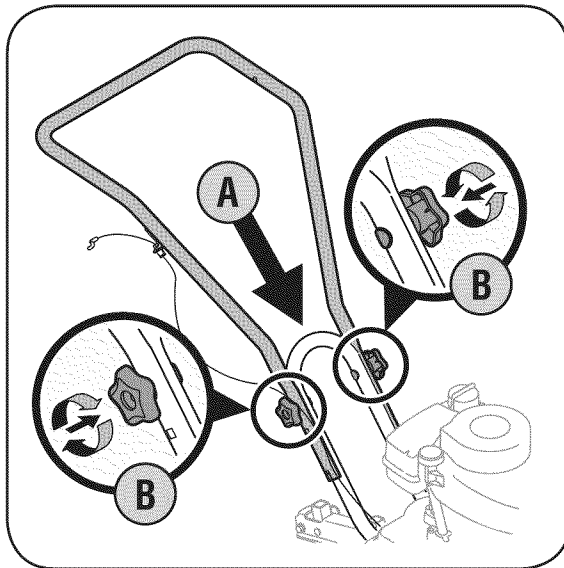


Figure 3-2: Attach and secure upper handle.

4. Insert left end of tine clutch control into the hole on the left side of the upper handle, Figure 3-3.

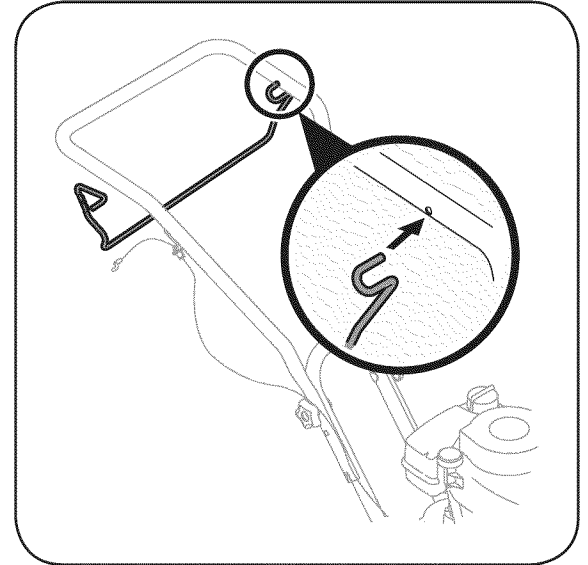


Figure 3-3: Install left side of the tine clutch control.

5. Insert the Z-fitting on the clutch cable into the hole on the tine clutch control. Hook the "Z" end into the opening from the inside to the outside as shown in Figure 3-4.

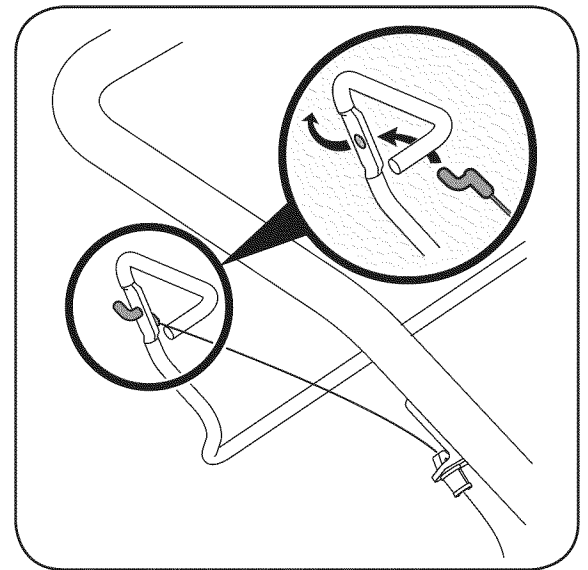


Figure 3-4: Hook cable into tine clutch control.

6. Squeeze the tine clutch control inward.  
Insert right end into the hole on the right side  
of the upper handle, Figure 3-5.

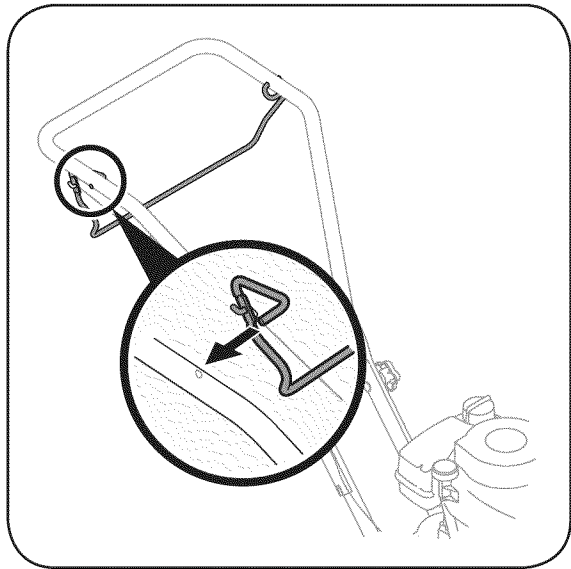


Figure 3-5: Install right end of tine clutch control.

# 3

## Assembly



Stand behind the tiller as if you were going to operate it. Your right hand corresponds to the right side of the tiller; your left hand corresponds to the left side of the tiller.

This operator's manual may cover various models of tillers. The units illustrated may vary slightly from your unit.

# 4

## Operating Your Tiller



### WARNING

The tine clutch control is a safety device. Never attempt to bypass its operation.

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 other sources of ignition.

Keep hands and feet away from the tines. Refer to warning label on the unit.



This operator's manual may cover various models of tillers. The units illustrated may vary slightly from your unit.

## Know Your Tiller

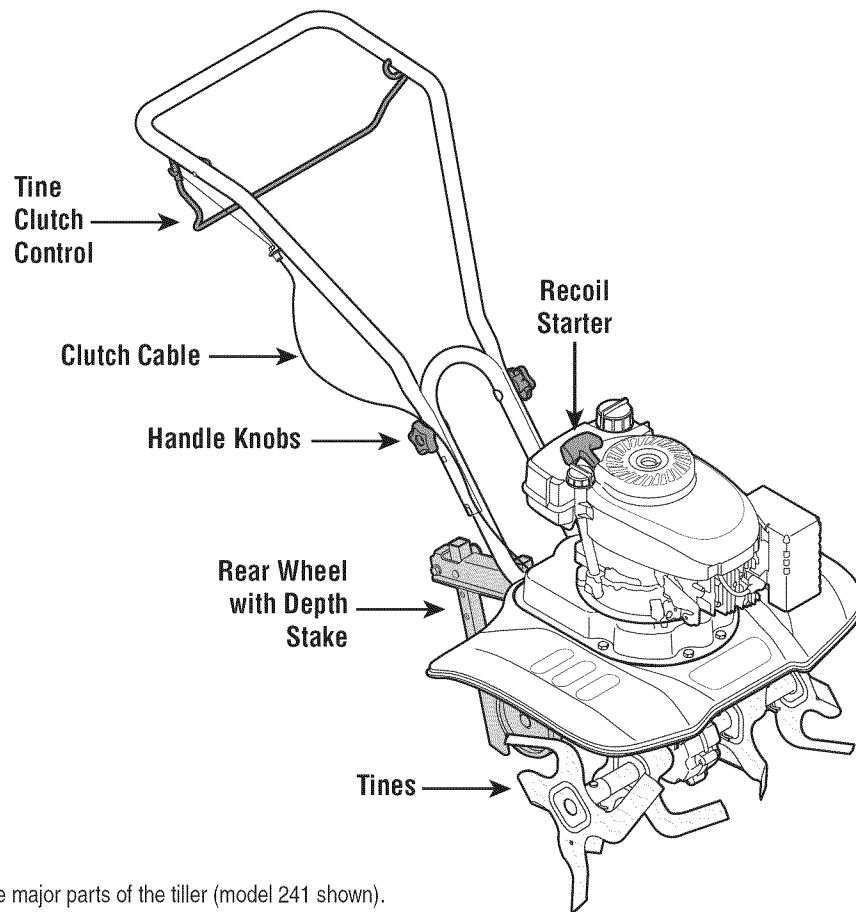


Figure 4-1: The major parts of the tiller (model 241 shown).



**WARNING:** Read, understand, and follow all instructions and warnings posted on the machine and in this manual before operating.

### Tine Clutch Control

The clutch control lever is located on the upper handle. Squeezing the lever against the handle engages the tine drive. Release the lever to stop the tines from turning.

### Rear Wheel with Depth Stake

The depth stake and wheel are located at the rear of the tiller. Both may be adjusted. Refer to the "Wheel Position" and "Depth Stake" sections for instructions.

### Handle Knobs

The handle height may be adjusted. Loosen the knobs and remove the carriage bolts to change the position. Reinstall and tighten the hardware when complete.

### Engine Controls

**NOTE:** See the separate engine manual for additional engine information and functions.

### Recoil Starter

The recoil starter is located on the engine and is used to manually start the engine.

### Throttle Control

The throttle controls the engine's speed and stops the engine. Tecumseh engines come with a fixed speed throttle and run at a full constant speed. Briggs & Stratton engines come with a variable speed throttle.

Units with Variable Speed Throttle:

- With the throttle control moved completely to the left, the carburetor is in START or FAST position. Use maximum engine speed for deep tilling.
- Move the throttle control lever to the right to reduce engine speed. Throttle control should be at IDLE for transporting the tiller.
- Move the throttle all the way to the right to stop the engine.

### Primer

The primer, located on the engine, is used to pump gas into the carburetor and aid in starting the engine. Use it to start a cold engine, but do not use it to restart a warm engine after a short shutdown.



**WARNING:** Read, understand, and follow all instructions and warnings posted on the machine and in this manual before operating.

## Before Starting

### Gas And Oil Fill-Up

Service the engine with gasoline and oil as instructed in the engine manual packed with your tiller. Read instructions carefully.

**WARNING:** Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel machine indoors or while the engine is hot or running.

## Starting the Engine

**WARNING:** Be sure no one is standing in front of the tiller while the engine is running or being started.

Refer to the engine manual shipped with your unit for engine-specific instructions.

1. Attach spark plug wire to spark plug. Make sure the metal cap on the end of the spark plug is fastened securely over the metal tip on the spark plug.
2. Make sure that the tine clutch control is disengaged.
3. For units with Briggs & Stratton engine, place the throttle control in the FAST position.

For units with Tecumseh engine, move lever on engine to RUN position.

4. For first time start-up, firmly press engine primer five (5) times. For all future starts, press three (3) times. Wait about two seconds between each press.
5. Place left hand on gas tank. Grasp recoil starter and pull rope out slowly until engine reaches the beginning of its compression cycle (rope will pull slightly harder at this point).
6. Pull rope with a rapid, continuous, full arm stroke. Keep a firm grip on handle. Let rope rewind slowly. Do not let recoil starter snap back against engine. Repeat until engine starts.

## Stopping the Engine

1. Move the control lever on the engine to the STOP or OFF position.
2. Disconnect spark plug wire from spark plug and ground against the engine.

## Using Your Tiller

Your tiller (also known as a cultivator) is a precision built machine designed for seed bed preparation, cultivating, furrowing, and mulching. It is engineered to minimize the hardest work in the vegetable or flower garden, to till the soil for planting and cultivating, and to perform

many other useful labor saving tasks in the garden. After engine is running and appropriate speed set on throttle (if equipped), squeeze tine clutch control (see Figure 4-1) against upper handle to engage the tine drive. Release the lever to stop the tines from turning.

## Wheel Position

The tiller is shipped with the wheel adjusted such that the unit sits level. Before tilling, the wheel must be raised. To do this, remove the clevis and cotter pins, raise the wheel to the desired position, then reattach pins to secure, Figure 4-2. For transporting the tiller, reverse the steps to lower the wheel.

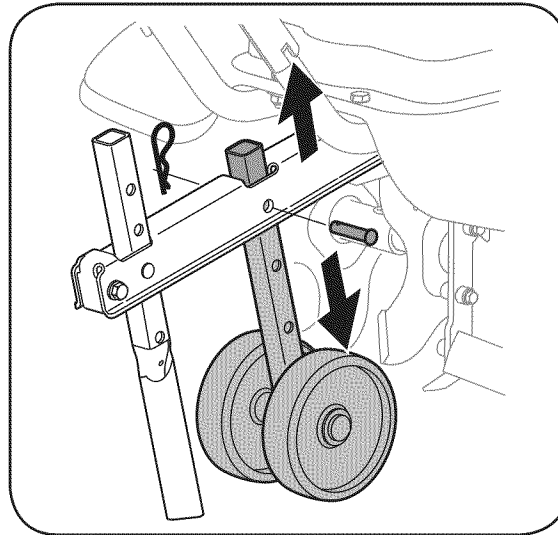


Figure 4-2: Wheel Adjustment

## Depth Stake

The depth stake acts as a brake for the tiller and controls the depth and speed at which the machine will operate, Figure 4-3. Remove the clevis and cotter pins, raise or lower the depth stake, then reattach pins to secure.

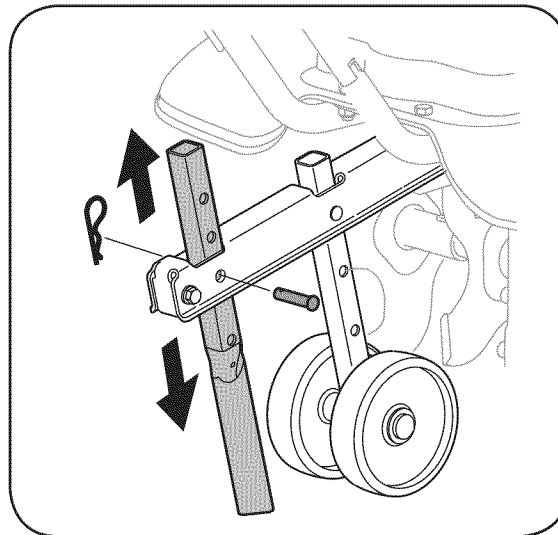


Figure 4-3: The Depth Stake

# 4

## Operating Your Tiller



### WARNING

Be sure no one other than the operator is standing near the tiller while starting engine or operating the unit. Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from any moving parts on engine and tiller.



See your engine manual packaged with your unit for detailed instructions pertaining to starting the engine.

# 4

## Operating Your Tiller



### WARNING

Be sure no one other than the operator is standing near the tiller while starting engine or operating the unit. Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from any moving parts on engine and tiller.



See your engine manual packaged with your unit for detailed instructions pertaining to engine controls.

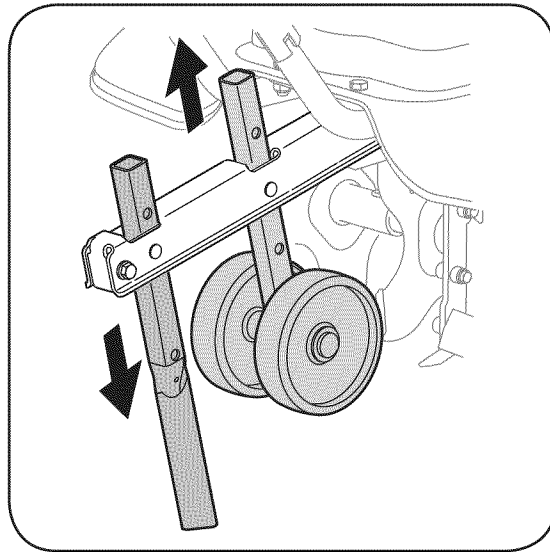


Figure 4-4: Lower the depth stake and raise the wheel when tilling.

For tilling, the depth stake must be lowered and the wheel must be raised, Figure 4-4.

By increasing the depth of the depth stake, the forward speed of the machine is reduced and the working depth is increased. When the depth stake is raised, the working depth of the machine is reduced and the forward speed is increased. The working depth of the machine may be predetermined by setting the depth stake so that the wheels are about four inches from the ground when the tines and depth stake are resting on the ground. This setting will permit a working depth of about four inches. When presetting the working depth, the handles should be adjusted so the hand grips are a little above waist. The tiller will be lower when the tines and depth stake penetrate the ground.

## Controlling Speed and Tilling Depth

When tilling, leave approximately eight inches of untilled soil between the first and second tilling paths, then make the third path between the first and second, Figure 4-5. In some soils, the desired depth is obtained the first time over the garden. In other soils, the desired depth is obtained by going over the garden two or three times. Passes should be made across the length and width of the garden alternately. Rocks which are turned up should be removed from the garden area.

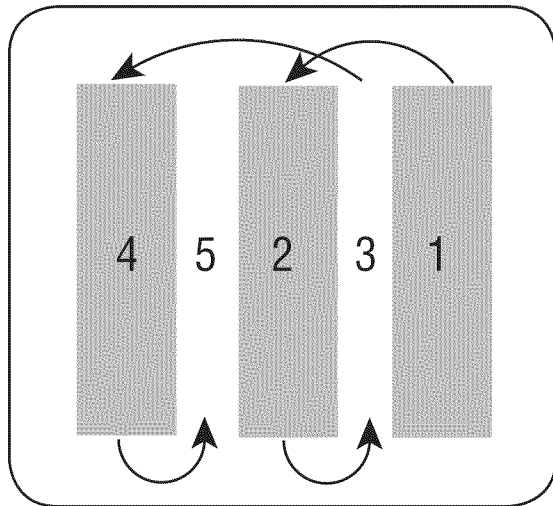


Figure 4-5: Recommended tiller paths.

### Handle Pressure

Further control of tilling depth and travel speed can be obtained by variation of pressure on the handles.

A downward pressure on the handles will reduce the working depth and increase the forward speed. An upward pressure on the handles will increase the working depth and reduce the forward speed.

The type of soil and working conditions will determine the actual setting of the depth stake and the handle pressure required.

### Cultivating

For cultivating, a two to three inch depth is desirable. The throttle (if equipped) should be set to control forward movement to a slow walking speed. With the outer tines installed, the working width of the machine is 22 or 24 inches.

For cultivation, this may be reduced to 13 inches by removing the outer tines, refer to the Adjustment Section. When laying out plant rows, be sure to allow enough width to permit cultivation between the rows. In growing corn or similar crops, check-row planting will permit cross cultivation and practically eliminate hand hoeing, Figure 4-6.

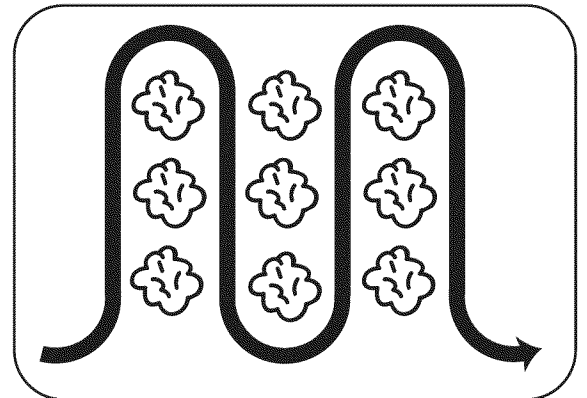


Figure 4-6: Allow enough area between rows.

The tiller has many uses other than tilling and cultivating a garden. One of these is the preparation of lawn area for seeding. The tiller will prepare a deep seed bed which

will be free of hard untilled spots, allowing a better stand of grass to grow. The tiller is very useful for loosening hard soil for excavation with a shovel; No tedious handwork will be necessary. Your tiller may be used for mixing compost in the pile or for mixing it with the soil in your garden. This should be done after the soil has been broken to the full working depth. The compost should be worked in to a depth of six to seven inches. This may be done by working the length of the garden and then by making separate passes across its width. The addition of decayed organic matter will substantially increase the fertility of your garden. For proper decaying action, fertilizer should be applied and worked in with the mulch materials. Breaking up leaves and straw and mixing it with several inches of soil allows proper aeration of the plant root system and retards the growth of weeds.

## Transporting and Storing the Tiller

To transport the tiller, lower the wheel and move the depth stake to the highest position, Figure 4-7.

To store the tiller, lower the wheel and orient the depth stake so both are touching the ground, Figure 4-8.

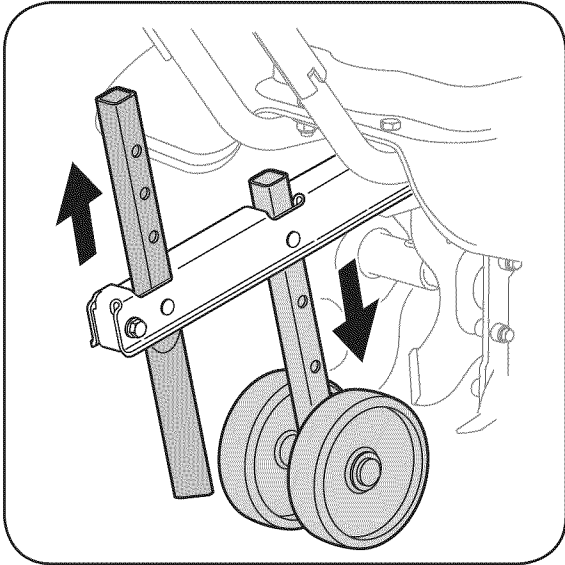


Figure 4-7: For transport, lower wheel and raise depth stake.

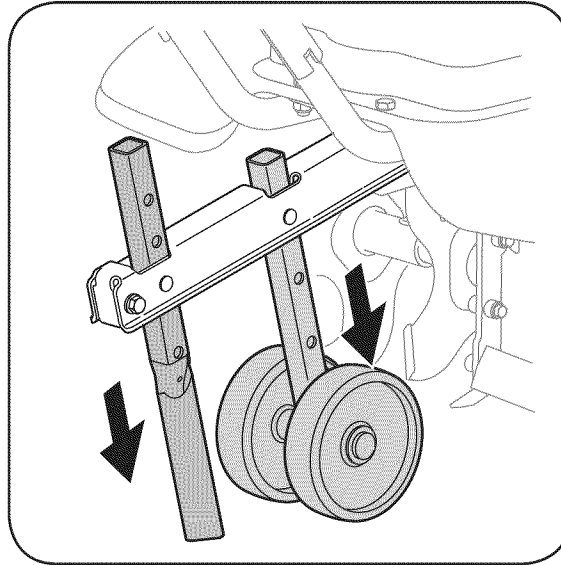


Figure 4-8: For storage, lower wheel and depth stake.

# 4

## Operating Your Tiller



### WARNING

Be sure no one other than the operator is standing near the tiller while starting engine or operating the unit. Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from any moving parts on engine and tiller.



See your engine manual packaged with your unit for detailed instructions pertaining to engine controls.

# 5

## Adjustments



This manual may cover various models of tillers. The units illustrated may vary slightly from your unit.

Stand behind the tiller as if you were going to operate it. Your right hand corresponds to the right side of the tiller; your left hand corresponds to the left side of the tiller.

## Making Adjustments



**Warning:** Disconnect the spark plug wire and ground it against the engine before performing any adjustments.

### Engine Adjustment

Refer to the separate engine manual for engine adjustment instructions.

### Tine Width Adjustment

The tilling width of the unit is 22 inches. Tilling width can increase to 24 inches by removing the clevis and cotter pins, sliding each outer tine out one inch, and securing in this position with the pins. For cultivation, reduce the tine width to 13 inches by removing the outer tines completely, Figure 5-1.

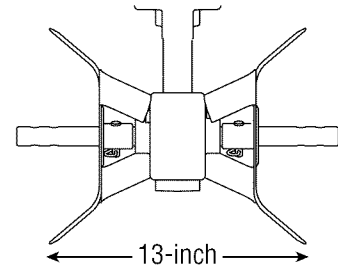
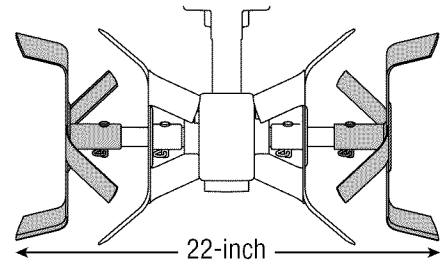
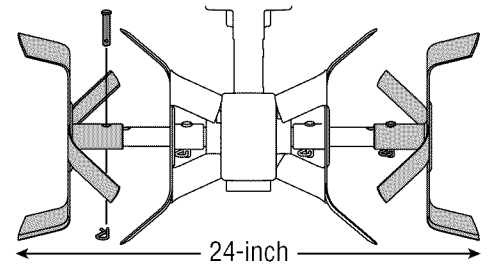


Figure 5-1: Tine width adjustment.



**WARNING:** Always stop engine, disconnect spark plug, and ground against engine before cleaning, lubricating or performing any maintenance on your machine.

## Engine

Refer to the separate engine manual for engine maintenance instructions.

- Maintain engine oil as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.
- Service air cleaner every ten hours under normal conditions. Clean every hour under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. To service the air cleaner, refer to the separate engine manual packed with your unit.

**i** **IMPORTANT:** Never run your engine without air cleaner completely assembled.

- The spark plug should be cleaned and the gap reset every 25 hours of engine operation. Spark plug replacement is recommended at the start of each tiller season; check engine manual for correct plug type and gap specification.
- Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clean to permit proper air circulation which is essential to engine performance and life. Be certain to remove all dirt and combustible debris from muffler area.

## Lubrication

### Transmission

The transmission is pre-lubricated and sealed at the factory. It requires no checking. See an authorized service dealer for any service issues.

### Tine Shafts

Remove tine assemblies and lubricate the tine shafts at least once a season.

### Wheel Shaft

Remove wheel assembly and lubricate the axle shaft at least once a season.

## Cleaning Tine Area

Clean the underside of the tine shield after each use. The dirt washes off the tines easier if rinsed off immediately instead of after it dries. Always towel dry the tiller afterwards and apply a light coat of oil or silicone to prevent rusting or water damage.

**i** **IMPORTANT:** Never use a “pressure washer” to clean your tiller. Water can penetrate tight areas of the tiller causing serious damage.

## Replacing the Belt

Your tiller has been engineered with a belt made of special material for longer life and better performance. It should not be replaced with an off-the-shelf belt. See the retailer from which you purchased your tiller, an authorized MTD Service Dealer, or call 1-800-800-7310 for information regarding price and availability.

1. Remove the frame and engine by removing the six screws and lock nuts holding the engine and frame to the shield, Figure 6-1.

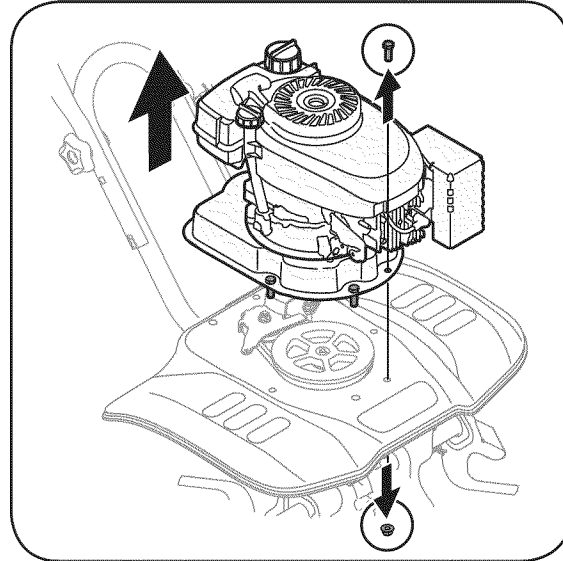


Figure 6-1: Remove engine and frame to gain access to the belt. (Model 241 shown)

2. Loosen the lock nut shown in Step A Figure 6-2.
3. Unloop the belt from the pulleys, Step B Figure 6-2.
4. Reassemble the new belt and tighten the lock nut.
5. Reattach frame and engine using the hardware removed earlier.

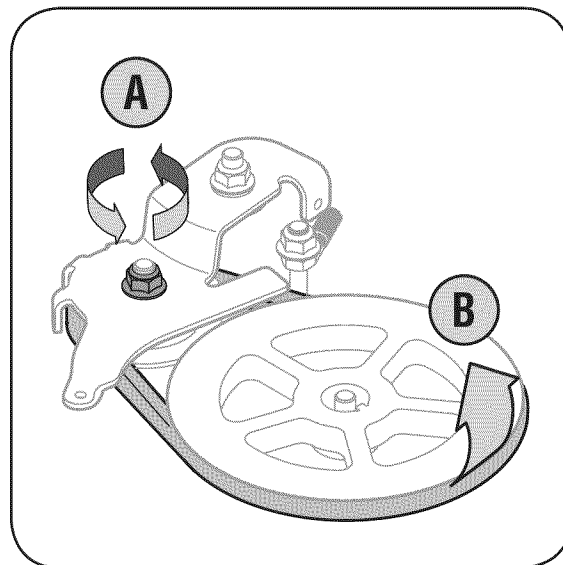


Figure 6-2: Loosen the nut to remove the belt.

# 6

## Maintaining Your Tiller



### WARNING

Always stop engine, disconnect spark plug, and ground against engine before cleaning, lubricating or performing maintenance on your machine.



**IMPORTANT:** Never use a pressure washer to clean your tiller. Water can penetrate tight areas of the tiller causing serious damage to the unit.

**IMPORTANT:** Never run your engine without the air cleaner completely assembled.

# 7

## Trouble Shooting



*For repairs beyond the minor adjustments listed here, contact an authorized service dealer.*

Problem	Cause	Remedy
Engine fails to start	<ol style="list-style-type: none"> <li>1. Spark plug wire disconnected.</li> <li>2. Fuel tank empty or stale fuel.</li> <li>3. Throttle control lever not in correct starting position (if equipped)</li> <li>4. Choke not in ON position.</li> <li>5. Blocked fuel line.</li> <li>6. Faulty spark plug.</li> <li>7. Engine flooding.</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect wire to spark plug.</li> <li>2. Fill tank with clean, fresh gasoline.</li> <li>3. Move throttle lever to start position.</li> <li>4. Move lever to ON position.</li> <li>5. Clean fuel line.</li> <li>6. Clean, adjust gap, or replace.</li> <li>7. Wait a few minutes to restart, but do not prime (if equipped)</li> </ol>
Engine runs erratic	<ol style="list-style-type: none"> <li>1. Spark plug wire loose.</li> <li>2. Unit running on CHOKE.</li> <li>3. Blocked fuel line or stale fuel.</li> <li>4. Vent plugged.</li> <li>5. Water or dirt in fuel system.</li> <li>6. Dirty air cleaner.</li> <li>7. Carburetor out of adjustment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect and tighten spark plug wire.</li> <li>2. Move choke lever to OFF.</li> <li>3. Clean fuel line; fill tank with clean, fresh gasoline.</li> <li>4. Clear vent.</li> <li>5. Drain fuel tank. Refill with fresh fuel.</li> <li>6. Clean following engine manual.</li> <li>7. Refer to engine manual.</li> </ol>
Engine overheats	<ol style="list-style-type: none"> <li>1. Engine oil level low.</li> <li>2. Dirty air filter.</li> <li>3. Air flow restricted.</li> <li>4. Carburetor not adjusted properly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill crankcase with proper oil.</li> <li>2. Clean air cleaner.</li> <li>3. Remove blower housing and clean.</li> <li>4. Refer to engine manual.</li> </ol>
Tines do no engage	<ol style="list-style-type: none"> <li>1. Foreign object lodged in tines.</li> <li>2. Tine clevis pin(s) missing.</li> <li>3. Belt worn and/or stretched.</li> <li>4. Pulley and idler not in correct adjustment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Stop tiller completely, check and discard foreign object.</li> <li>2. Replace tine clevis pin(s).</li> <li>3. Replace belt.</li> <li>4. Take unit to authorized service</li> </ol>

## Off-Season Storage

If the tiller will not be used for a period longer than 30 days, the following steps should be taken to prepare the tiller for storage.

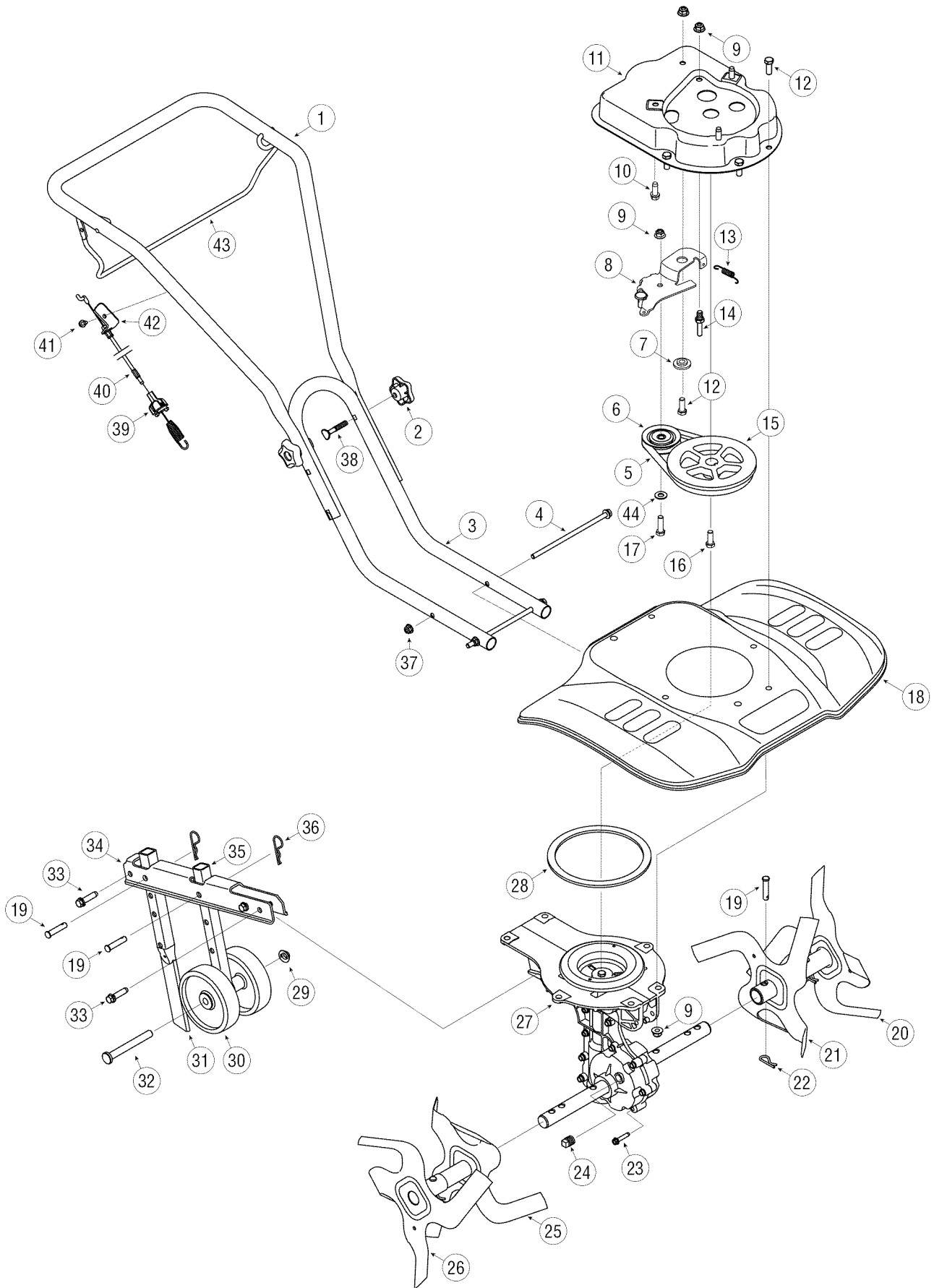
- Clean the exterior of engine and the entire tiller thoroughly. Lubricate the tiller as described in the lubrication instructions.
- We do not recommend the use of pressure washers to clean your unit. They may cause damage to spindles, pulleys, bearings, or the engine. The use of pressure washers will result in shortened life and reduce serviceability.
- Refer to the engine manual for correct engine storage instructions.
- Wipe tines with oiled rag to prevent rust.
- Store tiller in a clean, dry area. Do not store next to corrosive materials, such as fertilizer.
- When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment and especially any springs, bearings, and cables.

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## Off-Season Storage



**NOTE:** When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment and especially any springs, bearings, and cables.





1	749-04282	Upper Handle
2	720-04072	Star Handle Knob
3	749-04281	Lower Handle
4	710-04398	Flange Screw 5/16-18 x 7.5
5	754-04123	Belt
6	756-04163	Idler Pulley
7	748-04125	Shoulder Spacer
8	686-04080	Idler Bracket
9	712-04065	Flange Lock Nut: 3/8-16
10	710-0654A	TT Screw 3/8-16 x 1.00
11	786-04303	Frame
12	710-0514	HH Cap Screw 3/8-16 x 1.00
13	732-0418	Extension Spring
14	738-04139	Stud 33 x 1.5 x 3/8-16
15	756-04217	Flywheel Pulley
16	710-0591	HH Cap Screw 3/8-24 x 1.00
17	710-0520	HH Cap Screw 3/8-16 x 1.50
18	786-04256	Tine Shield 61 cm
19	711-0415	Clevis Pin
20	642-0005	Outer Tine Assembly LH
21	642-0003	Inner Tine Assembly LH
22	714-0149B	Internal Cotter Pin
23	710-0809	TT Screw 1/4-20 x 1.25
24	GW-9727	Pipe Plug 3/8 NPT
25	642-0002	Inner Tine Assembly RH
26	642-0004	Outer Tine Assembly RH
27	618-04276A	Case Assembly
28	721-04157	Gasket
29	726-0299	Push Cap
30	734-0973	Wheel 5 x 1.38
31	749-04265	Depth Stake Tube
32	711-04520	Axle Shaft
33	710-1007	TT Screw 3/8-16 x 1.50
34	786-04296	Wheel Bracket
35	749-04266	Rear Wheel Tube
36	714-3020	Internal Cotter Pin
37	712-04063	Flange Lock Nut: 5/16-18
38	710-0487	Carriage Bolt
39	731-05385	Clutch Cable Fitting
40	746-04247	Clutch Cable
41	710-0599	TT Screw 1/4-20 x .50
42	786-04307	Cable Mount Bracket
43	747-04508	Clutch Bail
44	736-0300	Flat Washer .406 x .875 x .059

# 9

## Parts List



To order  
replacement parts, call  
**1-800-800-7310**  
or visit  
[www.mtdproducts.com](http://www.mtdproducts.com)

For a proper working machine, use Factory Approved Parts. V-BELTS are specially designed to engage and disengage safely. A substitute (non-OEM) V-Belt can be dangerous by not disengaging completely.

Tiller features/components vary by model. Some parts listed may not be available on your unit.

# Notes

Use this page to take notes.

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Use this page to take notes.

## Notes

The right side of the page features a vertical rectangular area with a light gray, textured background, resembling a notebook cover. This area is divided into two sections by a horizontal dotted line. The word "Notes" is printed in a bold, black font at the top right of the page, within this textured area.

# MANUFACTURER'S LIMITED WARRANTY FOR



The limited warranty set forth below is given by MTD LLC with respect to new merchandise purchased and used in the United States, its possessions and territories.

"MTD" warrants this product against defects in material and workmanship for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any part, accessory or attachment not approved by MTD for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Normal wear parts are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date of purchase. Normal wear parts include, but are not limited to items such as: batteries, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates, auger spiral rubber and tires.

**HOW TO OBTAIN SERVICE:** Warranty service is available, WITH PROOF OF PURCHASE, through your local authorized service dealer. To locate the dealer in your area, check your Yellow Pages, or contact MTD LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-800-800-7310 or 1-330-220-4683 or log on to our Web site at [www.mtdproducts.com](http://www.mtdproducts.com).

This limited warranty does **not** provide coverage in the following cases:

- a. The engine or component parts thereof. These items may carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions.
- b. Log splitter pumps, valves, and cylinders have a separate one year warranty.
- c. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.
- d. Service completed by someone other than an authorized service dealer.

e. MTD does not extend any warranty for products sold or exported outside of the United States, its possessions and territories, except those sold through MTD's authorized channels of export distribution.

f. Replacement parts that are not genuine MTD parts.

g. Transportation charges and service calls.

**No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind MTD. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.**

**The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. MTD shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

**HOW STATE LAW RELATES TO THIS WARRANTY:** This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**IMPORTANT:** Owner must present Original Proof of Purchase to obtain warranty coverage.