# **OPTIONS & ATTACHMENTS**

### WHEEL AND TIRE ASSEMBLIES

Your Horse Model Troy-Bilt Tiller comes equipped with 4:80 x 8 tubeless tire mounted on a single piece steel wheel, shown in Photo 6/1. The wheel (which is described as an 8-inch wheel) has a self-contained hub section and includes an air valve.

The tires come in a Standard tread design that is either diamond shaped or a modified diamond shape. Bar tread tractor type tires are an option offered at additional expense. Bar tread tires which offer greater traction, are shown in Photo 6/2.

### 8" STANDARD TIRES AND WHEELS

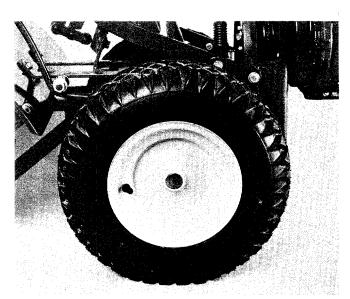
Standard tires are excellent for most tilling and cultivating jobs with average soil and crop conditions; however, you may want to put chains on Standard tires for snowplowing or for tilling in extra tall and juicy cover crops, or tilling in tall grass while breaking in new ground. More information about Bar tread and tire chains is below.

Tires and wheels can only by purchased as a complete tire and wheel assembly (part #9142 for Standard tires and #'s 9143 & 9144 for Bar tread tires) from Garden Way Manufacturing Company, Inc. We are unable to supply the wheels or the tires to you separately.

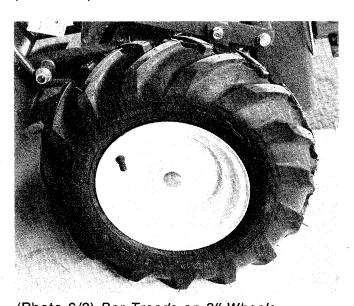
In order to prevent throwing the tiller off balance, which makes it difficult to guide the tiller in a straight line, we recommend that you keep tire pressure equal. Please maintain about 10 to 20 pound per square inch (PSI) air pressure in your tires for use in the garden.

### 8" BAR TREAD TIRES AND WHEELS

This type of tire is particularly helpful for tilling in loose soil, snowplowing, earth moving, or when using the furrower attachment while tilling soil that has not been previously tilled. Bar tread tires are especially useful while tilling light soils, or sandy soils. You can get more traction with Bar tread tires than with Standard



(Photo 6/1) 8" Wheel with standard tire.



(Photo 6/2) Bar Treads on 8" Wheels

tread tires. The 8-inch Bar tread tires and wheels can be used for all Troy-Bilt Horse Model Tillers (see Photo 6/2). Your tiller uses a 4:80/4:00 tire on an 8-inch wheel assembly (part #9143 and #9144, left and right). This is a tubeless tire, mounted on a single-piece, white steel wheel which is very similar to those on automobiles. They can be purchased only as a complete assembly.

#### **ORDERING TIRES AND WHEELS**

Please use the Master Parts Catalog for the Horse Model Troy-Bilt Roto Tiller-Power Composter and the Parts Order Form when ordering wheels and tires. Be sure to state the serial number of your tiller when ordering.

### **TIRE CHAINS**

When extra traction is needed because of certain soil conditions or when snowplowing, the use of tire chains for either standard or Bar Tread tires can be very helpful (see Photo 6/4 and Photo 6/5). Here are some of the jobs you can do better when you put tire chains on your tiller:

Tilling in loose, sandy soil.

Snowplowing with a Dozer/Snow Blade.

Tilling on wet, slippery clay.

Grading with a Dozer/Snow Blade on loose and sandy soil, or wet or muddy ground.

Making drainage ditches with a furrower.

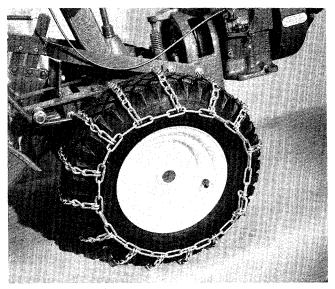
Tilling tall weeds, heavy cover crops, or extra thick vegetation.

Tilling previously untilled sod with the furrower attached.

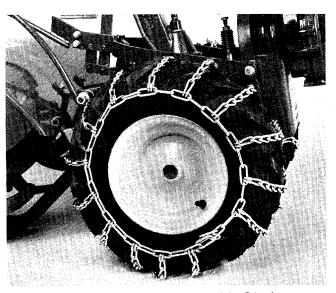
If your soil is extremely loose, light or sandy, then your tiller may tend to bury itself due to loss of wheel traction (spinning tires)—especially when tilling deep at low throttle speeds. This is where tire chains are extra helpful.

When using your Troy-Bilt Dozer/Snow Blade for snow removal, tire chains can make the difference between poor traction and the positive pushing power you need. Photo 6/5 shows how tire chains can easily give your tiller more traction to handle light and medium snow falls with the Dozer/Snow Blade.

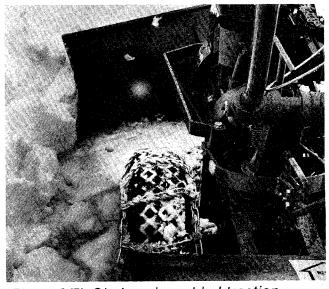
Tire chains can also be a great benefit if you use a dozer blade for moving soil or doing light grading. This is particularly true in wet grass or muddy ground.



(Photo 6/3) Standard Tires With Chains



(Photo 6/4) Bar Tread Tires With Chains



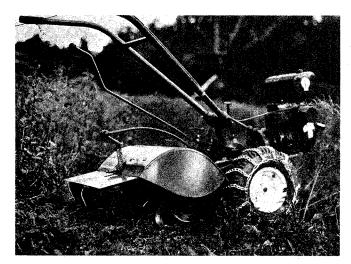
(Photo 6/5) Chains give added traction.

Chains can give added traction while you are working on those very tough tilling jobs—such as heavy cover crops, tall weeds and thick vegetation.

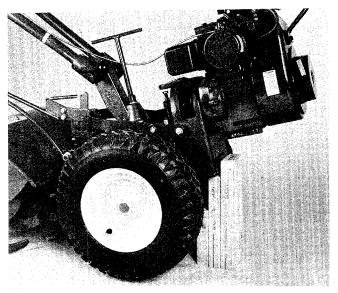
Many Troy-Bilt owners find that the use of tire chains can be very helpful while using the tiller with the furrower blade attached to turn under previously untilled sod with thick tall weeds (see Photo 6/6).

#### **HOW TO INSTALL CHAINS**

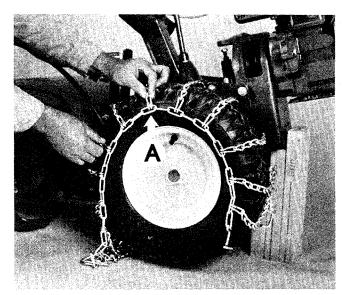
- 1. Prop the tiller up under the wheel shaft or transmission with brick, pieces of 2" x 4" wood, or something sturdy, to raise the wheel off the ground a few inches (see Photo 6/7).
- 2. Lay one chain over a wheel, making sure the curled ends of the outside cross-links curve away from the tire (see A in Photo 6/8).
- 3. Put the hook-shaped fastener loosely through the last chain link on the inside of the wheels (see Photo 6/9) and rotate the wheel one-quarter turn so the fastener is now located at the front of the tiller. Then, hook up the outside fastener in the same manner.
- **4.** Now, take up the slack in the cross-link chains at the bottom of the wheel by shifting the cross-chains around both sides of the wheel toward the top. (It is important that you take up as much slack as possible to fasten the chain).



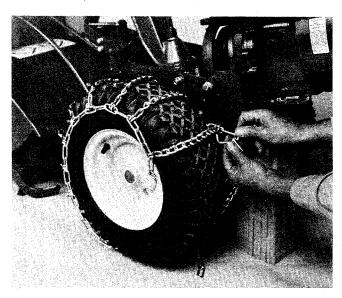
(Photo 6/6) Chains help in tall vegetation.



(Photo 6/7) Raise wheel off ground.



(Photo 6/8) Curled ends face outside.



(Photo 6/9) First fasten chains loosely.

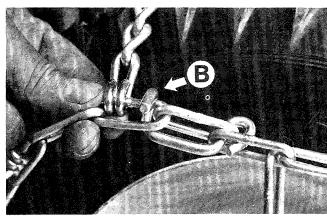
- 5. Bend the fastener on the inside of the wheel (nearest the tiller) backward and hook it around the link that is before the one holding the fastener (see **B** in Photo 6/10).
- 6. Bend the fastener on the outside of the wheel (furthest from the tiller) backward and hook it around the link that is before the one holding the fastener (see Photo 6/11).

**7** Repeat steps 1 through 6 to attach the chains for the other wheel.

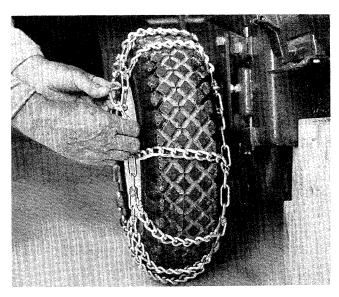
NOTE: If you would like you chains tighter, first run the tiller for ten or fifteen minutes until the chains properly locate themselves on the wheel. Then remove the fasteners and put them through the second link from the end of the chain. Then, repeat steps 5 and 6 (above).

### **ORDERING CHAINS**

On your tiller and all tillers with serial numbers 31456 and up which have 4:80/4:00 x 8" tires, be sure you order 8" chains.



(Photo 6/10) Fasten chain tightly (tiller side).



(Photo 6/11) Fasten chain tightly on outside.

### DOZER/SNOW BLADE AND BUMPER ATTACHMENT BRACKET

Add year-round versatility to your Troy-Bilt Tiller and even get an extra bonus—because the attachment bracket also performs as a protective Bumper!

The Dozer/Snow Blade gives your tiller extra versatility—making it more useful in all four seasons. For those who must cope with snow, the dozer blade does a surprisingly good job in moving snow out of the way. For others, the dozer blade has been a great help in digging a base for a small swimming pool or even the pool itself! But, it's especially useful around the garden and yard.



(Photo 6/12) It's easy to relax when you have the Dozer blade to do the heavy work for you.

You can use the dozer to move dirt piles (see Photo 6/13), or create them, to clear stones from a garden or lawn area you're preparing, or doing light grading and to backfill trenches you've dug to bury pipe or outdoor wiring. Incidentally, you can dig those trenches with the help of a furrower and even the dozer.

If you have a large compost pile that you want to move around the dozer will use the Troy-Bilt's power to make light work of the task.

Some folks have used the dozer regularly to clean out a barn, while others have used it to assist them in making terraces for hillside gardening (please see Section 5 of this manual for our recommendations for tilling on a hillside and terracing).

The versatile Dozer/Snow Blade lets you use Troy-Bilt tractor power instead of hand-power. This, of course, could avoid the need to rent equipment for those occasional heavier jobs you're sure to run into. You'll save lots of time, and won't have to struggle with those heavy tasks when you have a Dozer/Snow Blade Attachment for your Troy-Bilt.

Put your tiller to work for you in winter months. Move a foot or more of light snow or 6-8 inches of heavy, wet snow, see Photo 6/14. Clear driveways and sidewalks clean to the pavement, or cut paths to your garage or outbuildings. (You probably ought to order tire chains for better traction in deep snow or icy conditions.)

#### **BUILT TO BE EVER-SO-USEFUL**

Maneuvering is solid and sure thanks to the driving power of the large wheels. The operator can control just how much dirt (or snow) the dozer moves with the handlebars.

The Bumper attachment bracket is manufactured from 1-inch steel tubing and it protects the carburetor and the engine blower housing from unexpected impacts (from trees, fences, walls, doorways, etc.).

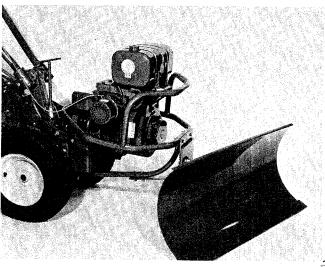
You can set the blade at any one of five positions: straight ahead or at either of two angles on the right or left so you can do special jobs faster and better—see Photos 6/15 and 6/16. With this flexibility, you can move snow to either side of a walk, or backfill in one pass. Changing the blade angle in seconds is simply a matter of removing a pin and changing blade position.



(Photo 6/13) Enlarging a pile of soil.



(Photo 6/14) Clearing a driveway of snow.



(Photo 6/15) Dozer/Snow Blade Attachment.

## A GOOD MATCH BETWEEN BLADE AND TILLER

You get lots of "PUSHING POWER" for the tiller's size because of the Troy-Bilt's geared down transmission and two forward speeds. Having a High and Low gear is especially handy because it helps you get the greatest force or speed advantage, depending on whether the work is light or heavy. Of course, the tiller and blade is not a bulldozer meant to cut into unbroken soil or push very heavy loads...but it's a great investment at this very reasonable price!

During the summertime, spread any loose material like sand, mulch, compost, topsoil or organic materials...evenly and quickly—see Photos 6/16 and 6/17. Some people also use the tines to loosen soil up first—and then grade or

remove layers of unwanted soil. You'll also find that backfilling, depending on the size of the trench, is a lot less work with this sturdy blade.

Just like your Troy-Bilt Tiller, the Dozer/Snow Blade is built to last a lifetime. The Blade is made of tough steel, braced with ¼-inch bar stock. Its Bumper attaching bracket is made of one-inch, high-strength, steel tubing. All components are welded for added strength and then finished with our own special Troy-Bilt red paint.

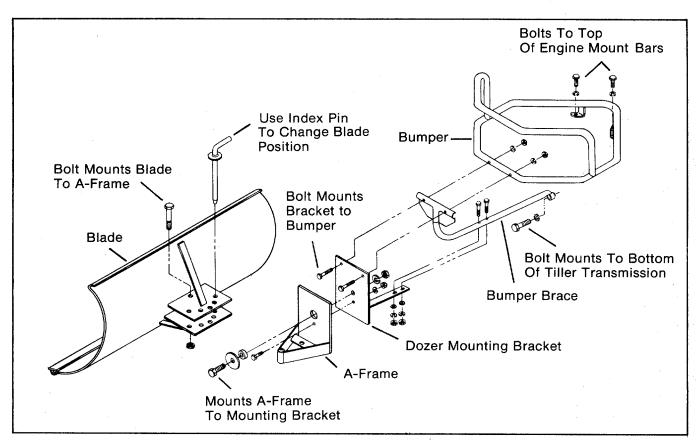
Assembly is easy with the simple step-bystep instructions sent along with the Dozer Blade. And, there's no need for special tools or skills. It takes just a few minutes to take off the Blade (you just remove two bolts and the positioning pin) so you can do many different jobs at your convenience.



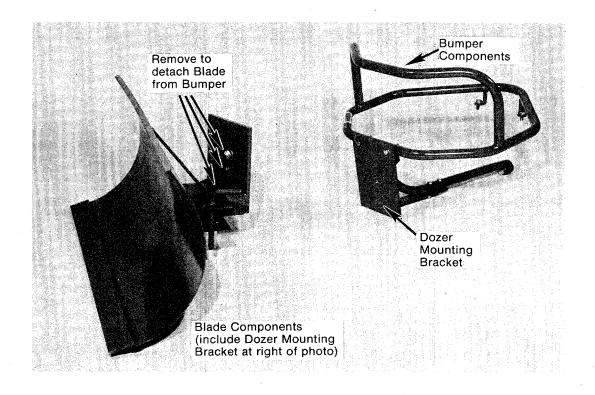
(Photo 6/16) Angle blade to one side to put soil where you want it.



(Photo 6/17) Moving soil to where it's needed.



(Sketch 6/18) Dozer/Snow Blade components.



(Photo 6/19) Blade easily detaches from the tiller by removing two bolts and the index pin. It then leaves the useful Bumper and the blade attachment bracket on the tiller. The latter can be left in place, if desired.

## ADJUSTING THE HANDLEBARS FOR EASY USAGE

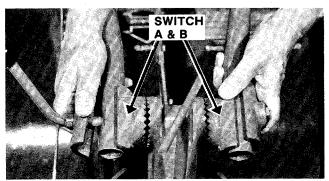
When snowplowing or soil dozing, adjust the handlebars lower (slightly less than waist high) to give yourself more leverage to raise the Blade for banking, clearing obstables and backing up.

If you lower the handlebars and find the crossbar interferes with your shifting into Reverse, as shown in Photo 6/20, switch inside ratchets shown in Photo 6/21 and that should give you a few more inches of clearance. If that doesn't work, you can bend the Forward/Reverse Lever a little by placing a wood 2x4 across the hood and pushing down on the lever. This will give you extra clearance and won't hurt the lever or its performance.

When dozing and plowing, keep your depth regulator on the tiller to protect the bottom of the tiller housing from the ground during banking operations and while clearing obstacles.



(Photo 6/20) If lever hits handlebar...



(Photo 6/21)—Switch the left and right hand inside ratchets with each other for added clearance.



(Photo 6/22) If needed, bend lever.

**SAFETY NOTE:** Remove tines in gangs while snow dozing especially. Icy drives are dangerous with revolving tines. It's best to remove when dozing dirt and stone too.

#### **DIRT DOZING SUGGESTIONS**

Your Dozer Blade is handy for lots of dirt moving jobs. In combination with the Hiller/Furrower and tines, you can make culverts, fill ditches, make a trench to bury cable, clean out barns, and do light grading, to name a few. Again, you'll get the most work from your. Troy-Bilt Tiller and Dozer Blade if you use these hints ... and then carefully experiment.

First, the Blade should be used for moving loose dirt...it can't dig into unbroken soil or hard packed piles like a big bulldozer. Thoroughly loosen soil with the tines (before you take them off for safety).

Next, the soil (or mulch, or manure) is best moved when it's nearly dry. If it's very wet, it can stick to the Blade, and the moisture's extra weight means you move less per pass. Also, when nearly dry, you can spread the material more evenly. It doesn't clump up.

Don't try to take too big a bite from a pile at once. Angle the Blade away from the pile and start at one edge. Then, spread the load evenly, with the Blade straight ahead. This way, when you "cut away" at a pile, the pile breaks itself up for you.

As for backfilling, that depends on how much you've dug up. Sometimes one or two passes will do it, with the blade angled toward the trench. Experimentation will help you find the best way.



(Photo 6/23) Tine removal permits you to raise the front higher, and the blade banks easier.

## SNOWPLOWING SUGGESTIONS

Your Dozer/Snow Blade can move a remarkable amount of snow in a short time when you know how. Here are two snowplowing techniques we've developed that speed things up with a minimum of reverse maneuvering and Blade angle changing. Use the patterns as a guide and adapt them to your needs.

In deep snow, it is best to remove a top layer several inches thick in the first passes before attempting to remove all the snow. You might even start near the end of the drive in deeper snow and gradually work yourself back toward the house or garage.

For light snowfalls, make the first pass (Sketch 6/24) in the center of the area being plowed, with the Blade angled right. The Blade can remain in this position, until the last pass, when the Blade is angled left as shown. Then you can finish off the job by building up snowbanks at the end of the cleared area by positioning the Blade straight ahead.

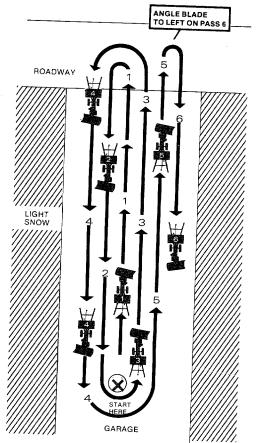
In moderate snow, begin plowing on the outer edge and work toward the middle (Sketch 6/25). The Blade should be angled away from the center for this operation. At the end of the last pass down the center follow the pattern for

light snow (Sketch 6/24). By moving the snow in this fashion, you will be duplicating some work, but deeper snows can be handled much more easily.

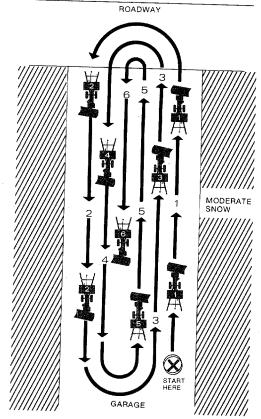
Another tip: If you bank snow down by the main road, in most towns, you should bank it on the right-hand side of the driveway. This way, when the town snowplow comes through, it won't push your snowbanks back into the entrance to your driveway, which it would if you had banked snow on the left.

Snowplowing should be done in high gear so you can "wing" the snow with the blade, and with the engine throttle cut back about 25 percent. Throttling down is very important. You should bank snow in low gear. Slowing down prevents too much buildup of momentum. If your Dozer Blade strikes an immovable object at high speed (which you're not likely to see under snow), the resulting shock could damage the gears in your transmission.

Also, don't try to drive the tiller when the wheels are frozen in the ground. Use hot water, for example, to free the wheels before you try to move the tiller under its own power and make sure that you've switched to SAE 90 gear oil in the tiller transmission.



(Sketch 6/24)



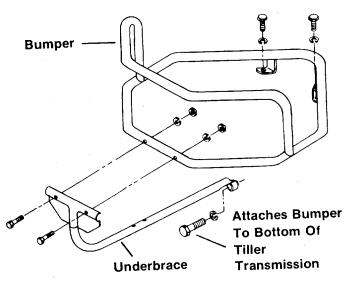
(Sketch 6/25)

# **BUMPER ATTACHMENT**

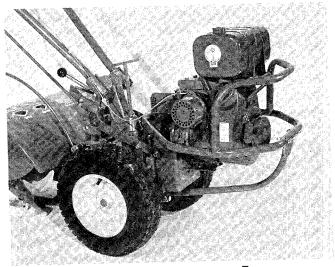
The Bumper comes as an extra bonus when you buy the complete Dozer/Snow Blade Attachment, however, the Bumper is very useful in its own right. So, whether you purchase the complete Dozer/Snow Blade Attachment for the extra "two-in-one value," or just buy the Bumper alone, you will have a very useful addition to your Troy-Bilt.

Here's what it will do for you...It will protect the engine against breakage from all sorts of blows (we've even tested the Bumper and the tiller in the worst circumstances to make sure that it protects the carburetor and the blower housing, and it does).

The Bumper will protect your carburetor against mishaps such as bumping into trees, fences, posts (see Photos 6/27 and 6/28), garage and barn doorways, stone walls and parked vehicles. The cost of replacing a carburetor today is well worth avoiding a mishap.



(Sketch 6/25A) Bumper Attachment



(Photo 6/26) The multi-purpose Bumper.



(Photo 6/27) Protects carburetor and engine from fences.

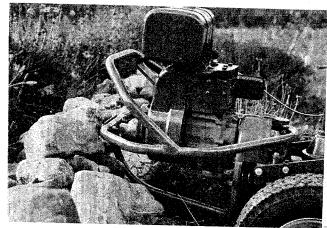


(Photo 6/28) Protects carburetor from fences, trees and doorways

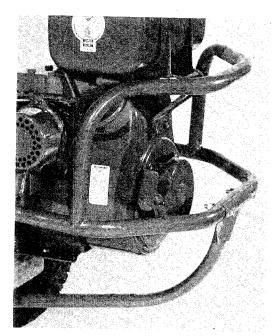
The Bumper also protects your entire blower housing. You don't want to dent in the blower housing because the dented metal could rub or hit the flywheel, see Photos 6/29 and 6/30. The Bumper protects your tiller from that kind of damage. It also prevents a bent recoil starter cover which could interfere with the recoil starting mechanism—see Photo 6/31.

The Bumper will serve as a very handy tiedown in a trailer or a pickup truck. It will also give you a reliable handhold to pull or lift the tiller. If your attachment bolts are tight, don't worry, you can lift the entire tiller up in the air with the Bumper—we've tested that too. We have picked up tillers suspended only by the Bumper long enough to ensure that the Bumper would hold the weight for lifting the tiller into a pickup. Of course, we recommend simply driving the tiller up ramps into a pickup truck or van. It's a lot easier and more sensible.

If you decide to purchase a Dozer/Snow Blade after you have a Bumper—we have a special kit #1407 which includes easy-to-follow instructions for attaching the blade. All you'll need do is add a blade mounting bracket to your Bumper (see Photo 6/32) and attach the "A" frame to the blade and the mounting bracket.



(Photo 6/30) Solid obstacles like stone walls won't damage recoil starter.



(Photo 6/31) Protects the recoil starter.



(Photo 6/29) Bumper protects engine while tiller is tilted for maintenance.



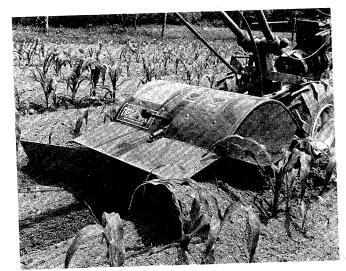
(Photo 6/32) It's easy to add the Dozer/Snow Blade to the Bumper—just add the brackets, the blade, and you're ready to go!

# TROY-BILT HILLER/FURROWER

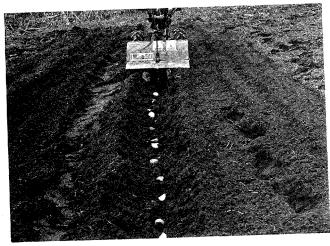
THE TROY-BILT HILLER/FURROWER COMBINES TWO TOOLS INTO ONE—WITH MANY WORKSAVING USES...

### It Makes It Easier To:

- Drain wet garden areas to plant earlier.
- Make ditches for irrigation.
- Kill most weeds IN rows and BETWEEN plants.
- Mark rows to plant corn, beans, peas and many other vegetables and fruits.
- Transplant asparagus, strawberries, and most plants started indoors—like tomatoes, cabbages or melons.
- Grow better crops in wet or heavy soils by using "raised rows."
- Plant potatoes. First furrow, then hill them.



(Photo 6/33) The Hiller/Furrower "weeds" as it hills between the plants.



(Photo 6/34) The instant on-off Hiller/Furrower speeds and simplifies planting of potatoes. It makes furrows up to 8 inches deep.



(Photo 6/35) When seed potatoes are in the ground, the labor saving Hiller wings will bury them. As potatoes grow, hill them as needed.

### MAKE PLANTING CORN EASY

You can plant corn easily with the furrower. Just plant corn at the bottom and use chicken wire strips to keep the birds from eating the kernels you planted. Support the wire every 6 feet or so with sticks and hold the wire down with rocks—see Photo 6/36.

# USE RAISED ROWS FOR WET SOIL OR HEAVY CLAY

It's easy to make raised rows with the Hiller/ Furrower. Most crops can't grow in wet soil or heavy clay conditions because they can't get the air or nutrients they need for growth.

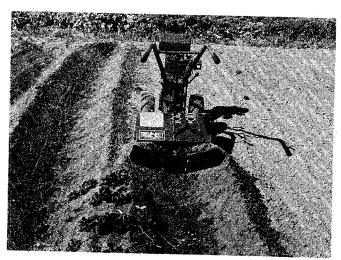
To correct these problem areas, make two parallel passes about three feet apart while the Hiller is angled upward. This will leave the middle area between passes as a "raised row."

### TO GET BEST RESULTS FROM YOUR HIL-LER/FURROWER...

Tines should be left on the tiller when using the Hiller, or when furrowing. The tines throw soil at the Furrower and the Hiller wings move it ahead and to the side. So, make sure your soil is well broken up and loose before starting. If you plan to furrow in heavy clay or tough sod, till the soil thoroughly first. This will make it easier for you and your Troy-Bilt.



(Photo 6/36) Make an 8-inch furrow and plant corn and cover it with an inch of soil—gently tamped down. Then, cover the furrow with chicken wire strips.



(Photo 6/37) Raised rows help in wet soil.



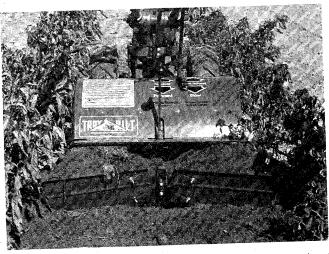
(Photo 6/38) Some plants don't like to get their feet wet—"raised rows" avoid that.



(Photo 6/39) The Hiller/Furrower can save you back breaking work by eliminating much of your weeding chores.



(Photo 6/42) Dirt smothers weeds within row and also sturdies corn or other plant against storm damage.



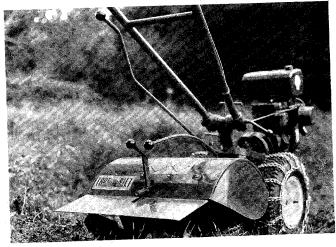
(Photo 6/40) Hiller wings push dirt into plant rows.



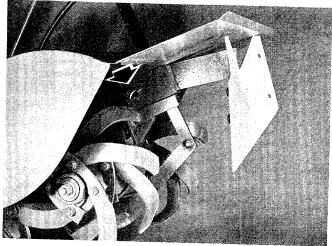
(Photo 6/43) Furrower can dig drainage ditch to dry up an area for early planting in springtime.



(Photo 6/41) Wings and tines work together. Tines chop up growth between rows.



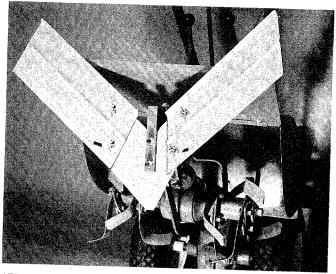
(Photo 6/44) In tackling tough sod, furrower can hold tiller back to allow tines more time to dig (use chains for traction).



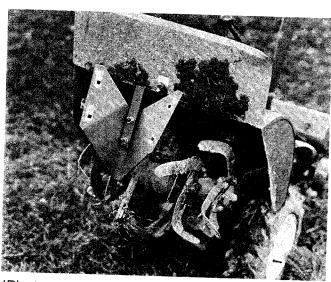
(Photo 6/45) The Furrower is held in place or released quickly by clinch pin (arrow).



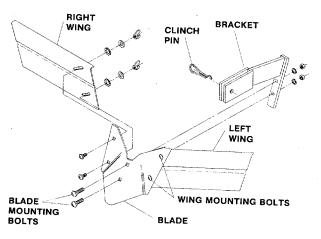
(Photo 6/48) Push "U" shaped bracket over depth adjustment bar. Install clinch pin.



(Photo 6/46) Hiller/Furrower. Wings can be quickly adjusted or removed.

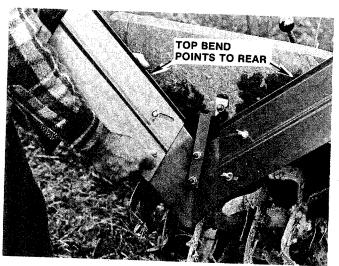


(Photo 6/49) Large carriage bolts go through blade first, then bracket.



HILLER/FURROWER—Part #1317.
(Viewed from front of tiller)

(Sketch 6/47) Complete attachment and its parts bolt together simply.



(Photo 6/50) Wings attach and adjust easily by hand. Wings go behind blade star washers up against wing.