



Wheel Horse®
36" Tiller
for
5xi Lawn and Garden Tractors
Model No. 79375 – 8900001 & Up

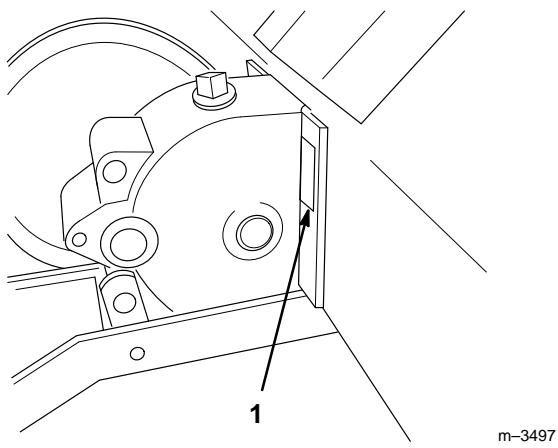
Operator's Manual

IMPORTANT: Read this manual, and **your tractor manual**, carefully. They contain information about your safety and the safety of others. Also become familiar with the controls and their proper use before you operate the product.

Introduction

We want you to be completely satisfied with your new product, so feel free to contact your local Authorized Service Dealer for help with service, genuine replacement parts, or other information you may require.

Whenever you contact your Authorized Service Dealer or the factory, always know the model and serial numbers of your product. These numbers will help the Service Dealer or Service Representative provide exact information about your specific product. You will find the model and serial number plate located in a unique place on the product as shown below.



1. Model and Serial Number Plate

For your convenience, write the product model and serial numbers in the space below.

Model No: _____
Serial No. _____

The warning system in this manual identifies potential hazards and has special safety messages that help you and others avoid personal injury, even death. **DANGER**, **WARNING** and **CAUTION** are signal words used to identify the level of hazard. However, regardless of the hazard, be extremely careful.

DANGER signals an extreme hazard that will cause serious injury or death if the recommended precautions are not followed.

WARNING signals a hazard that may cause serious injury or death if the recommended precautions are not followed.

CAUTION signals a hazard that may cause minor or moderate injury if the recommended precautions are not followed.

Two other words are also used to highlight information. "Important" calls attention to special mechanical information and "Note" emphasizes general information worthy of special attention.

The left and right side of the machine is determined by sitting on the seat in the normal operator's position.

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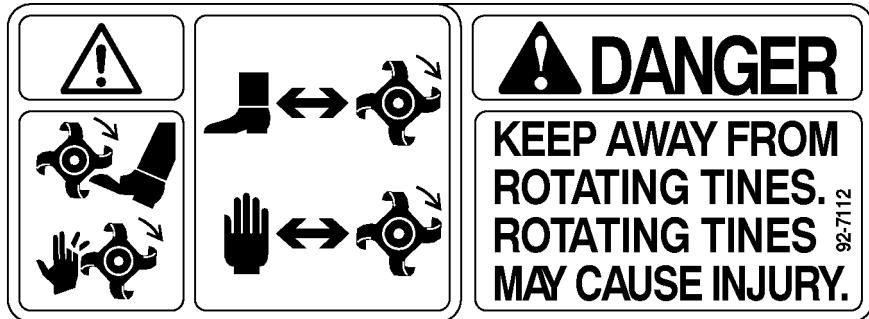
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Safety and Instruction Decals

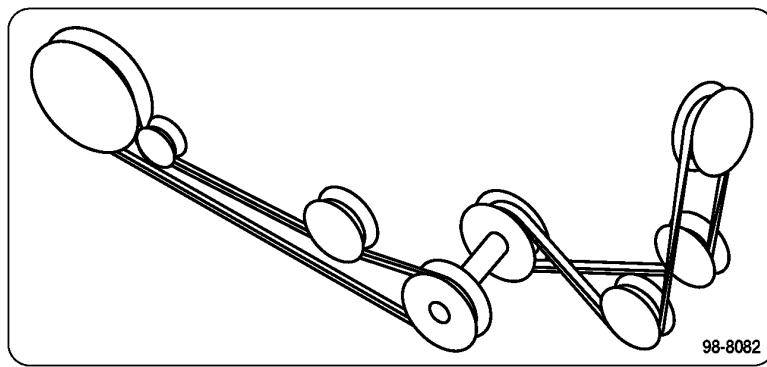


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.

ON TINE SHIELD
LEFT and RIGHT SIDE
(Part No. 92-7112)



ON PULLEY BOX
(Part No. 98-8082)



Installation

Loose Parts

Note: A rear-mount Attach-A-Matic™, which must be purchased separately, is required for this tiller. Use the chart below to identify other parts used for assembly.

DESCRIPTION	QTY.	USE
Tiller housing	1	
Tiller lift frame	1	
Panel guard	1	Assemble the tiller
Cotter pin 1/8" x 1" (25 mm)	3	
Pulley	1	
Square key	1	Assemble tiller pulley
Set screw	2	
Belt guard	1	
Tiller belt (short belt)	1	
Idler pulley	1	Installing the belt guard
Bolt, 3/8-16 x 2" (51 mm)	1	
Nut, 3/8"	1	
Tiller pulley box	1	
PTO drive belt (long belt)	1	Install pulley box
Clevis pin 3/8" x 1" (25 mm)	2	
Hairpin cotter	2	Prepare tractor attachment lift
Cable guide	1	Install the cable guide
Jack shaft assembly	1	Connect drive belts
Lift cable	1	
Trunnion	1	
Clevis pin 5/16" x 1" (25 mm)	1	
Locknut	1	Install tiller to tractor
Hairpin cotter	2	
Washer	1	
Operator manual	1	Read before operating

Assembling the Tiller

1. Support the tiller housing so it sets in an upright position. Remove the 3/8 x 5-1/2" (140 mm) bolt, 3/8 x 4-1/2" (114 mm) bolt, and (2) 3/8" locknuts; discard the 1/2" nuts (used as spacers for shipping).
2. Attach the tiller lift frame to the tiller housing with the previously removed 3/8 x 4-1/2" (114 mm) bolt, 3/8-16 x 5-1/2" bolt (140 mm), and (2) 3/8" locknuts (Fig. 1). Torque the nuts to 30-32 ft-lbs.

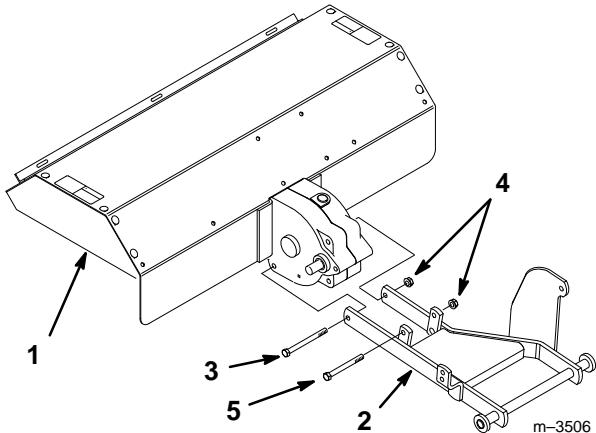


Figure 1

1. Tiller housing	4. Locknut 3/8"
2. Tiller lift frame	5. Bolt 3/8-16 x 4-1/2" (114 mm)
3. Bolt 3/8-16 x 5-1/2" (140 mm)	

3. Hook the panel guard into the slots on the end of the tiller housing (Fig. 2). Insert (3) cotter pins and bend the ends of the pins to secure the panel guard.

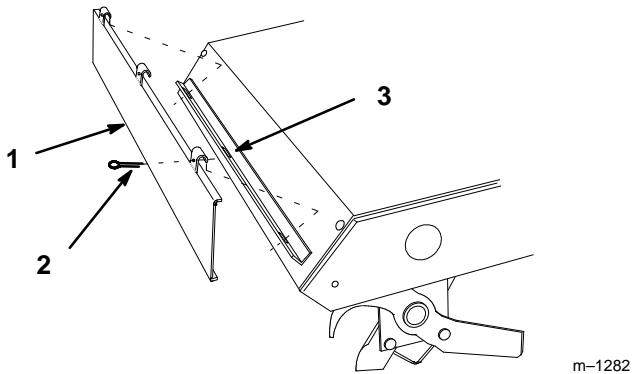


Figure 2

1. Panel guard	3. Slot
2. Cotter pin (3)	

4. Install the pulley by inserting the square key into the input shaft groove. Slip the pulley onto the shaft (hub toward the gear case) and align it with the flat idler pulley. Secure it with two square-head set screws (Fig. 3).

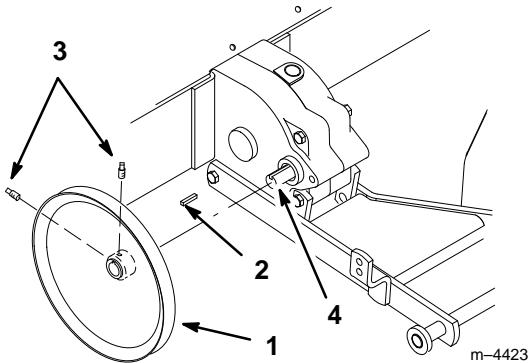


Figure 3

1. Pulley	3. Set screw
2. Key	4. Input shaft

5. Remove the nut from the gearcase bolt located just above the input shaft (Fig. 4). The belt guard mounts to this bolt.
6. Install the tiller belt (short belt) over the input pulley.
7. Assemble the belt guard to the gearcase bolt (step 5) and replace the nut loosely.

8. Install the idler pulley on the 3/8-16 x 2" (51 mm) bolt so that the extended hub of the pulley is toward the tiller lift frame. Route the belt under the idler pulley, and insert the bolt through the upper belt guard hole and upper hole in the tiller lift frame (Fig. 4). Tighten the nut securely.

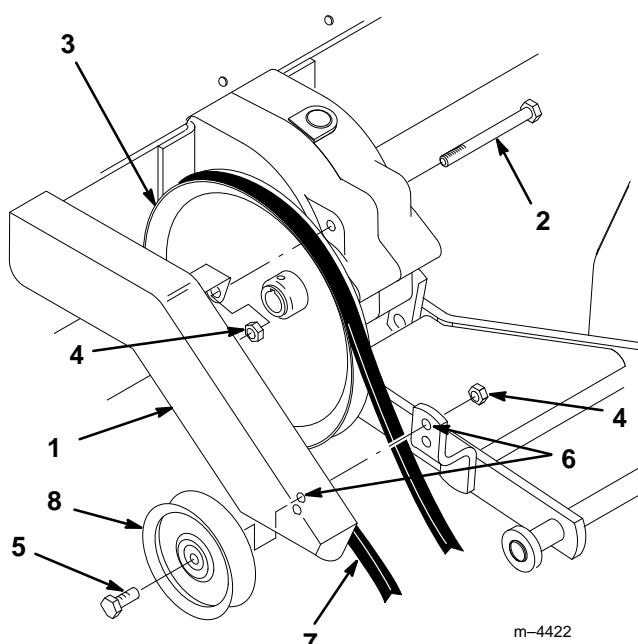


Figure 4

1. Belt cover	5. Bolt, 3/8-16 x 2" (51 mm)
2. Gearcase bolt	6. Upper hole
3. Input pulley	7. Tiller Belt (short belt)
4. Locknut, 3/8"	8. Idler pulley

9. Torque the nut on the gearcase (upper end of belt guard) to 30–32 ft-lbs.

Tractor Set-Up

Installing the Rear Attach-A-Matic™ to the Tractor

Follow the installation instructions that come with the rear Attach-A-Matic™ mount.

Installing the Front Pulley Box to the Tractor

1. Attach the pulley box that came with the tiller to the front Attach-A-Matic™.

IMPORTANT: The pulley box for the tiller and cutter deck are different. Make certain to always use the tiller pulley box with the tiller.

2. Make sure the latches on the tractor's front Attach-A-Matic™ are open (Fig. 5). Then slide the pulley box into the Attach-A-Matic™ latches and seat it. Close the latches.

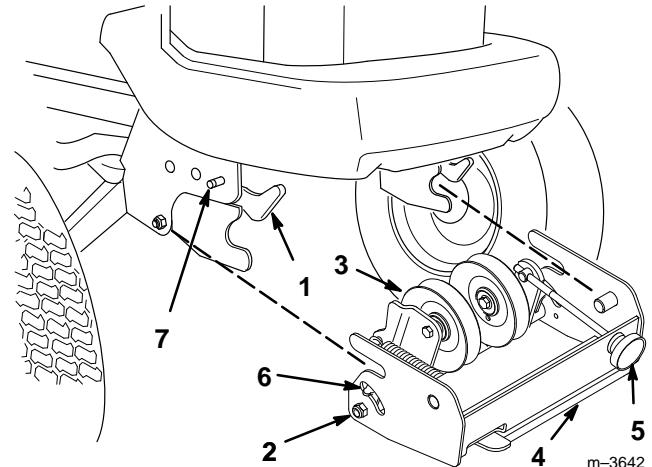


Figure 5

1. Attach-A-Matic™ latches	6. Belt tension indicators (one on each side)
2. Pulley box	7. Attach-A-Matic™ release button (one on each side)
3. Idler pulley	
4. Belt tension release arm	
5. Belt tension adjustment knob	

Remove the drawbar hitch

1. Remove the snap ring from the pin and slide from the drawbar and spacers. Remove the hitch from the tractor (Fig. 6).

Note: Save all hardware for use when re-installing the hitch.

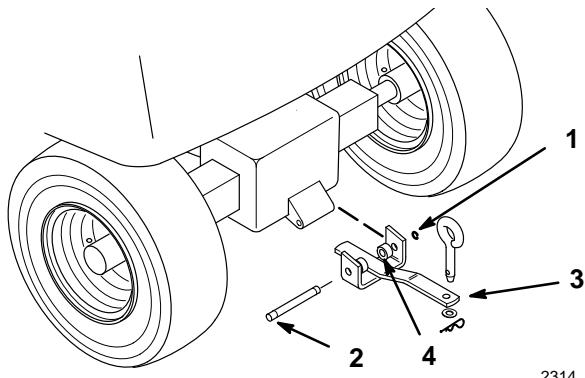


Figure 6

- 1. Snap ring
- 2. Pin
- 3. Drawbar
- 4. Spacer (2)

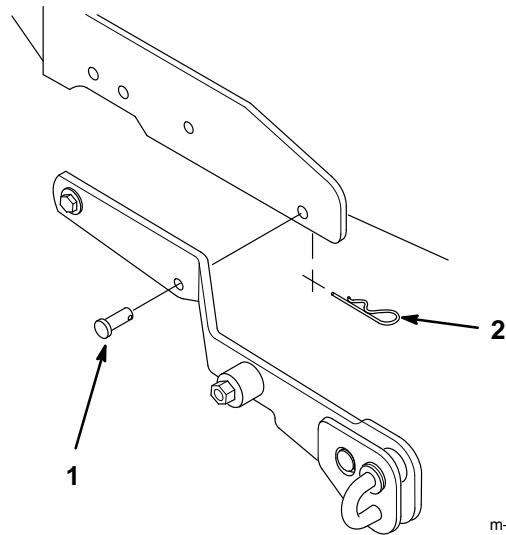


Figure 7

- 1. Clevis pin 3/8" x 1" (25 mm)
- 2. Hairpin cotter

Preparing the Tractor's Attachment Lift

If you have been using a mower, secure the tractor's attachment lift arms in the raised position.

1. Start the tractor.
2. Raise the attachment lift.
3. Set the parking brake and turn the ignition key to "STOP" to stop the engine. Remove the ignition key.
4. Install a 3/8" x 1" (25 mm) clevis pin into each side of the lift assembly in the positions shown in Figure 7. Secure them with (2) hairpin cotters.

These pins must be installed when operating with a blade, snowblower, or tiller attachment.

Note: The pins are removed to attach a mower.

Remove the Rear Transaxle Cover

Remove the transaxle cover from the back of the tractor (Fig. 8).

1. Remove the two bolts and locknuts securing the transaxle cover to the tractor frame.

Note: Save all parts and hardware for use when reinstalling the transaxle cover.

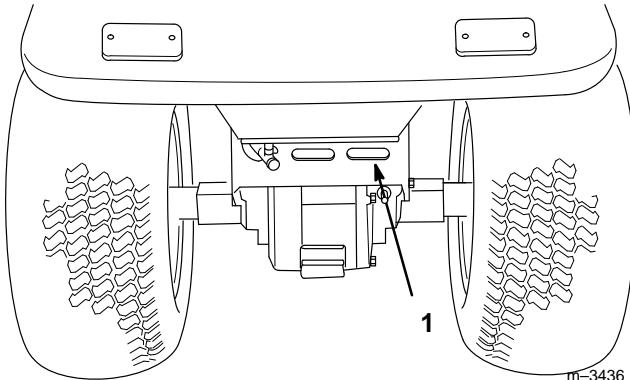


Figure 8

1. Rear transaxle cover

Installing the Cable Guide

The cable guide can be installed from the underside of the tractor. For more visibility, the drive shaft maintenance cover can be removed to aid in installation.

1. Disengage the power take off (PTO), set the parking brake and turn the ignition key to "STOP" to stop the engine. Remove the ignition key.

! DANGER

POTENTIAL HAZARD

- Rotating shaft or cooling fan can cause injury.

WHAT CAN HAPPEN

- Fingers, hands, feet, hair, etc. can get caught by shaft or fan.
- Loose clothing can get caught by shaft.

HOW TO AVOID THE HAZARD

- Do not operate the tractor without the drive shaft cover in place.
- Keep hands and arms clear of rotating shaft or fan.

2. Remove the two bolts in the plastic fan baffle (Fig. 9) and remove the baffle.
3. Remove the clip nut from the left side of the plastic fan baffle and install over the hole in the bent tab of the cable guide (Fig. 9).
4. Remove the nut from the pivot bolt on the left hand attachment lift arm (Fig. 9). Leave the bolt in place.
5. Install the rear hole of the cable guide to the left hand lift arm pivot bolt and replace the nut loosely (Fig. 9).
6. Reinstall the plastic fan baffle with one of the previously removed bolts in the right hand side only (Fig. 9). Leave the bolt loose.
7. Align the front of the cable guide with the hole in the left hand side of the plastic fan baffle and reinstall the other bolt previously removed. Tighten all bolts and nuts securely.

- Replace the drive shaft maintenance cover (if removed).

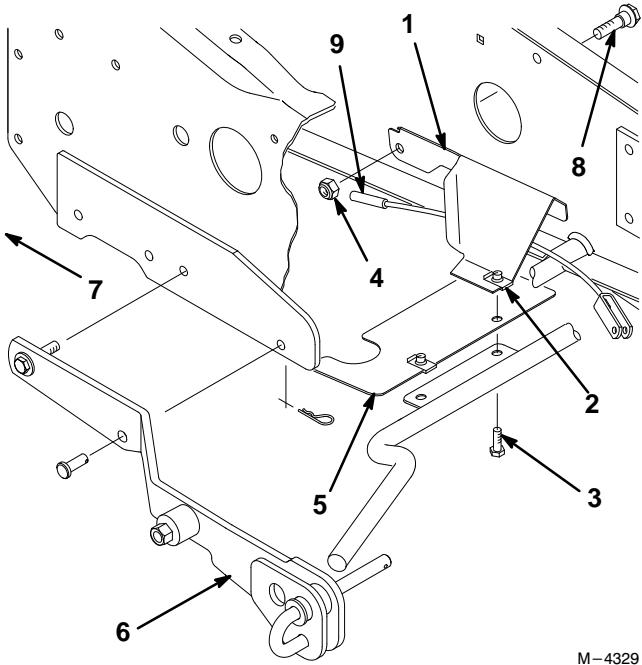


Figure 9

1. Cable guide	6. Right hand attachment lift arm
2. Clip nut	7. Rear of tractor
3. Fan baffle bolt	8. Pivot bolt
4. Left hand lift arm pivot bolt nut	9. Lift cable
5. Plastic fan baffle	

Installing the Tiller to the Tractor

- Position the tiller on a level surface with enough space behind it to accommodate the tractor.
- Start the tractor and back it into position. Lower the attachment lift and turn the ignition key to "STOP" to stop the engine. Remove the ignition key.
- Place the jack shaft assembly between the tractor wheels and oriented with the tiller as shown (Fig. 10).

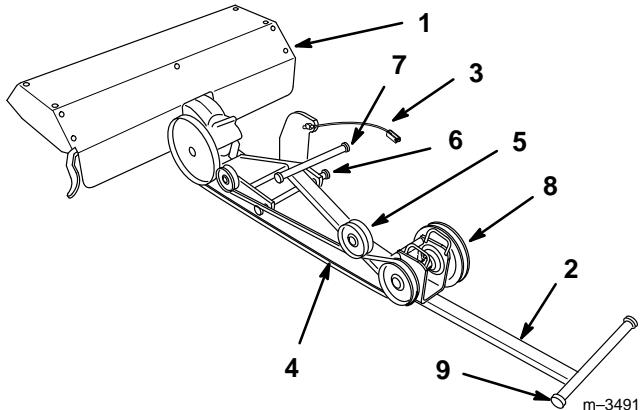


Figure 10

1. Tiller	6. Tiller hitch bar
2. Jack shaft assembly	7. Smaller jack shaft bar
3. Lift cable	8. Jack shaft/PTO drive belt pulley
4. Tiller belt (short belt)	9. Larger jack shaft bar
5. Idler pulley	

- Open the latches on the rear Attach-A-Matic™. Place the smaller bar of the jack shaft assembly into the slots on the front of the rear Attach-A-Matic™ (Fig. 11).

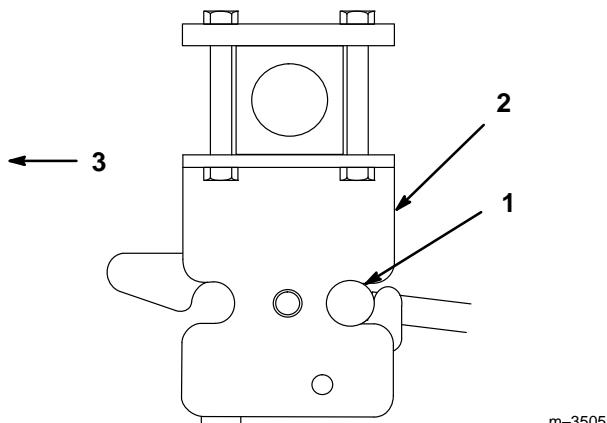


Figure 11

1. Smaller jack shaft bar	3. Rear
2. Rear Attach-A-Matic™	

- Open the latches on the mid Attach-A-Matic™. Install the larger bar at the other end of the jack shaft assembly to the mid Attach-A-Matic™. Then turn the lever of the Attach-A-Matic™ counterclockwise to lock the jack shaft assembly to the tractor (Fig. 12).

Note: The rear Attach-A-Matic™ may need to be loosened and realigned with the mid Attach-A-Matic™ to accept the jack shaft assembly. Tighten the rear Attach-A-Matic bolts™ securely.

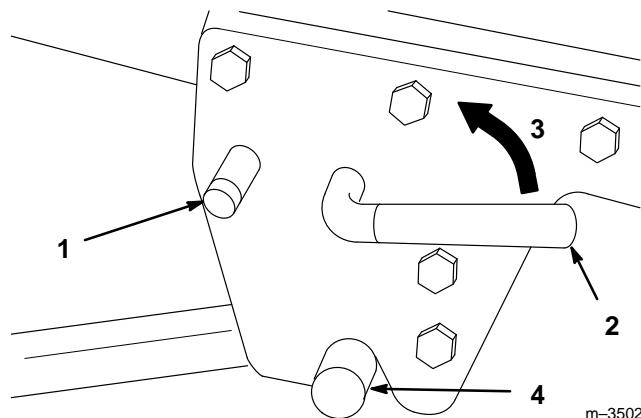


Figure 12

1. Attach-A-Matic™ button	3. Lock
2. Attach-A-Matic™ lever	4. Larger jack shaft bar

- Place the tiller hitch bar into the slots in the rear of the rear Attach-A-Matic™. Press on the latches at the rear until they lock both the tiller and the jack shaft assembly in place (Fig. 13).

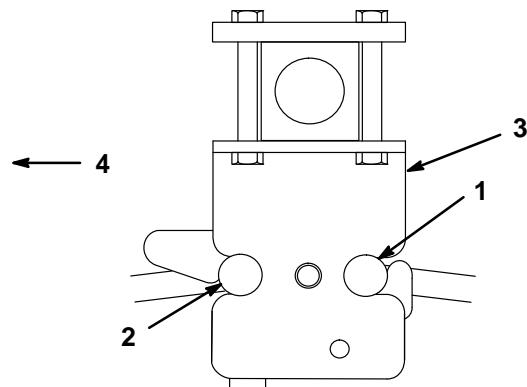


Figure 13

1. Smaller jack shaft bar	3. Rear Attach-A-Matic™
2. Tiller hitch bar	4. Rear

- Install the tiller belt (short belt) between the tiller and jack shaft assembly (Fig. 10). Route the belt under the idler pulleys and over the jack shaft pulley.
- Attach the clevis end of the lift cable to the rear hole in the tractor's attachment lift arm located just in front of the previously installed cable guide (Fig. 14). Insert a clevis pin and hairpin cotter.

Note: Attachment lift arm may be different than shown in Fig. 14. On some models there may be only a single hole in which to mount the clevis.

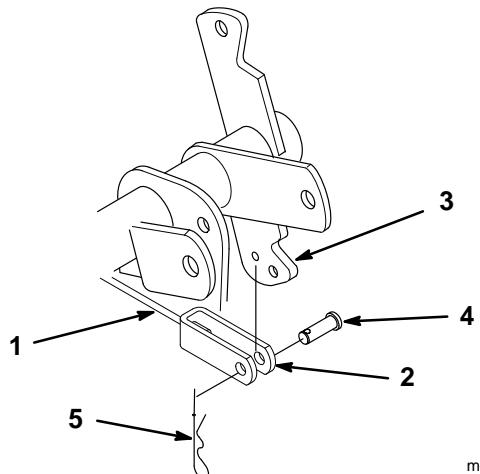
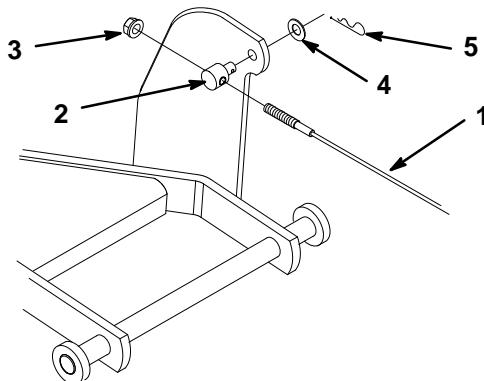


Figure 14

1. Lift cable	4. Clevis pin 5/16" x 1" (25 mm)
2. Clevis	5. Hairpin cotter
3. Attachment lift arm	

m-3504



m-3503

Figure 15

1. Lift cable	4. Washer
2. Trunnion	5. Hairpin cotter
3. Locknut	

9. Route the lift cable under the cable guide and over the rear axle (Fig. 9).
10. Connect the lift cable to the trunnion by threading the trunnion onto the lift cable (Fig. 15).
11. Attach the trunnion to the hole in the tiller lift cable mount with a washer and hairpin cotter (Fig. 15).

Note: There should be slack in the cable so the tiller will drop into the ground. The amount of cable that is threaded into the trunnion determines the maximum depth of tilling and lift height.

12. Secure the lift cable to the trunnion with a locknut (Fig. 15).
13. Remove the tractor grille by pulling it out toward you.

⚠ CAUTION

POTENTIAL HAZARD

- Components under the hood will be hot if the tractor has been running.

WHAT CAN HAPPEN

- Touching hot components can cause burns.

HOW TO AVOID THE HAZARD

- Allow the tractor to cool before performing maintenance or touching components under the hood.

14. Route the PTO drive belt around the jack shaft's PTO pulley (Fig. 10), then through the center of the pulley box between the two pulleys.
15. Release the belt tension release arm of the pulley box housing and swing it out toward you (Fig. 18).

16. Position the end of the PTO belt (long belt) into the groove of the engine PTO pulley (Fig. 16), making sure it is also under the pulleys in the pulley box. The wide, flat surface of the belt needs to be in contact with the wide, flat surface of the backside idler pulley (Fig. 17). Additional belt slack can be obtained (if needed) by turning the belt tension adjustment knob.

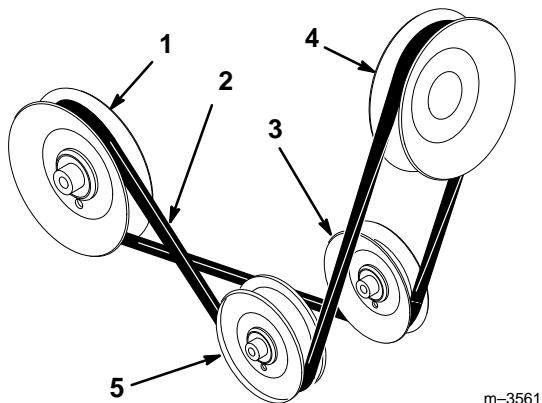


Figure 16

1. Jack shaft PTO drive belt pulley	3. V-groove idler pulley
2. PTO belt (long belt)	4. Engine PTO pulley
	5. Backside idler pulley

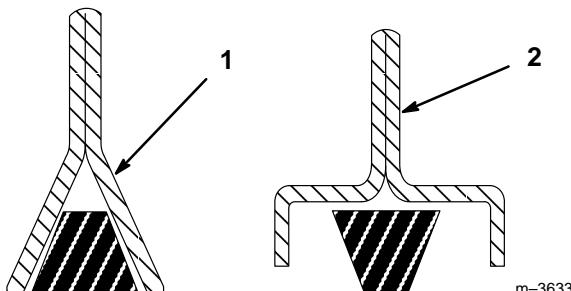


Figure 17

1. V-Groove pulley	2. Backside pulley
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17. Now adjust the belt tension.

- Push the belt tension release arm back toward the pulley box to tension the belt.
- Check the tension indicators on each side of the pulley box.

- If the tension indicators are not in the same position on both the left and right sides, release the belt tension, turn the adjustment knob and repeat steps A and B until the indicators move to the same position (Fig. 18).
- Once the indicators are in the same position on both sides, swing the tension release arm into the pulley box by moving it into the position shown in Figure 18.

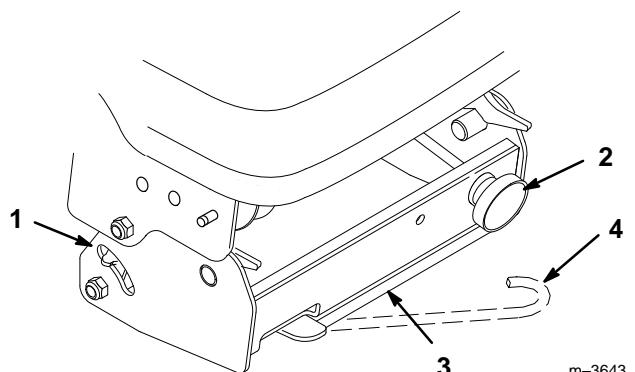


Figure 18

1. Belt tension indicator (2)	3. Seating position for belt tension release arm
2. Belt tension adjustment knob	4. Belt tension released

18. Replace the front grille of the tractor.

Removing the Tiller

Note: Save all hardware, washers and hairpin cotters for use when installing tiller.

1. Park the tractor on a level surface with enough space in front of it to disengage from the tiller.
2. Lower the attachment lift, set the parking brake, and turn the ignition key to "STOP" to stop the engine. Remove the ignition key.
3. Remove the tractor grille by pulling it out toward you.

! CAUTION

POTENTIAL HAZARD

- Components under the hood will be hot if the tractor has been running.

WHAT CAN HAPPEN

- Touching hot components can cause burns.

HOW TO AVOID THE HAZARD

- Allow the tractor to cool before performing maintenance or touching components under the hood.

4. Release the belt tension release arm (Fig. 18), then remove the PTO belt from its position around the PTO pulley (Fig. 19). Additional belt slack can be obtained (if needed) by turning the belt tension adjustment knob.
5. Replace the front grille of the tractor.

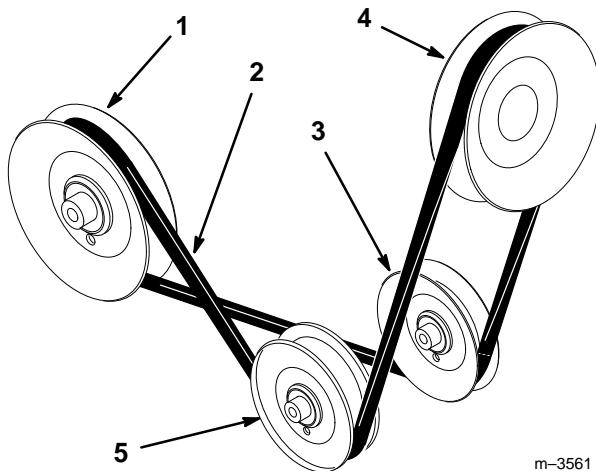


Figure 19

1. Jack shaft PTO drive belt pulley	3. V-groove pulley
2. PTO belt (long belt)	4. Engine PTO pulley
	5. Backside idler pulley

6. Release the tension on the tiller belt by lifting up on the idler pulley (Fig. 10). Remove the belt from the pulleys.
7. Disconnect the lift cable by removing the clevis pin from the clevis and remove the cable from the attachment lift arm (Fig. 20).

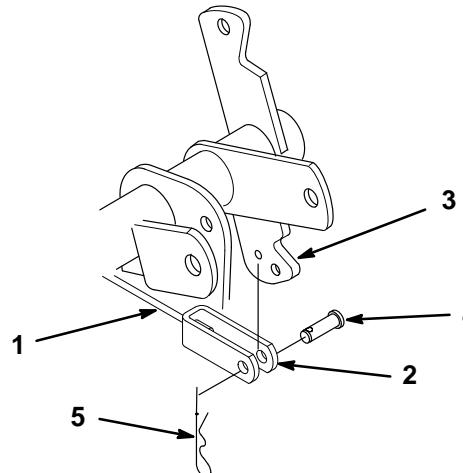


Figure 20

1. Lift cable	4. Clevis pin 5/16" x 1" (25 mm)
2. Clevis	5. Hairpin cotter
3. Attachment lift arm	

8. Press the release button and open the rear latches of the rear Attach-A-Matic™. Remove the tiller hitch bar (Fig. 21).

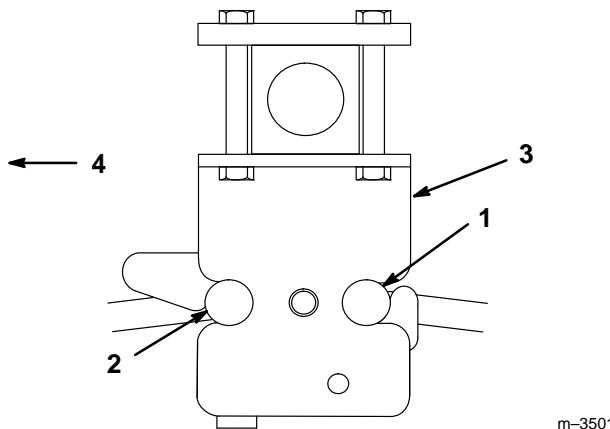


Figure 21

1. Smaller jack shaft bar	3. Rear Attach-A-Matic™
2. Tiller hitch bar	4. Rear

9. Press the release button on the mid Attach-A-Matic™ and turn the lever clockwise to open the latches (Fig. 22). Remove the jack shaft assembly.

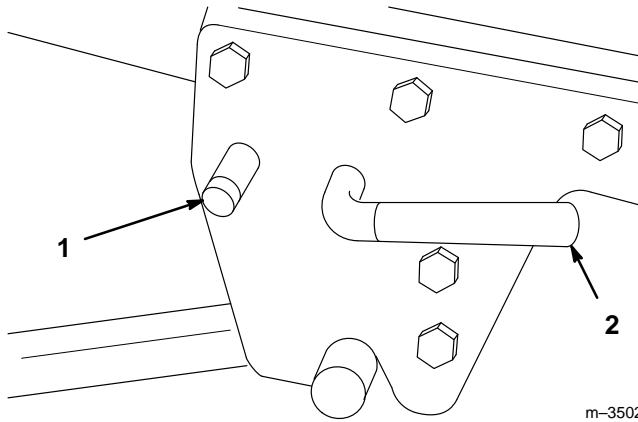


Figure 22

1. Attach-A-Matic™ button	2. Attach-A-Matic™ lever
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10. Replace the rear transaxle cover.

11. Replace the drawbar hitch.

Operation

DANGER

POTENTIAL HAZARD

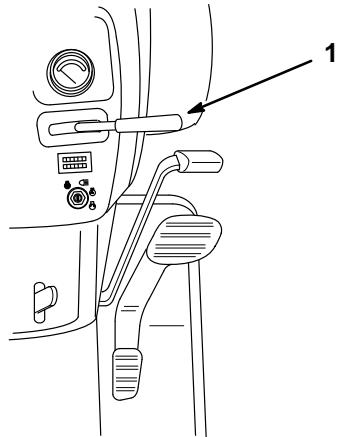
- Contact with rotating tines may cause injury.

WHAT CAN HAPPEN

- Rotating tines can cut hands, feet or other body parts.

HOW TO AVOID THE HAZARD

- Keep away from the rotating tines while operating the tiller.
- Keep your hands, feet, and any other part of your body or clothing away from rotating parts.
- Before adjusting, cleaning, repairing and inspecting the tiller, shut off the engine and wait for all moving parts to stop. Move the power take off (PTO) to "OFF" and rotate the ignition key to "OFF." Remove the ignition key.



m-3258

Figure 23

1. Attachment power lift

Attachment Power Lift

The attachment power lift (Fig. 23) is used to raise and lower attachments.

WARNING

POTENTIAL HAZARD

- When the engine is off, attachments in the raised position can gradually lower.

WHAT CAN HAPPEN

- Someone nearby may be pinned or injured by the attachment as it lowers.

HOW TO AVOID THE HAZARD

- Always lower the attachment lift each time you shut off the tractor.

Lowering Attachments

1. Start the tractor.
2. Push the lift lever DOWN to lower the attachment (Fig. 24).

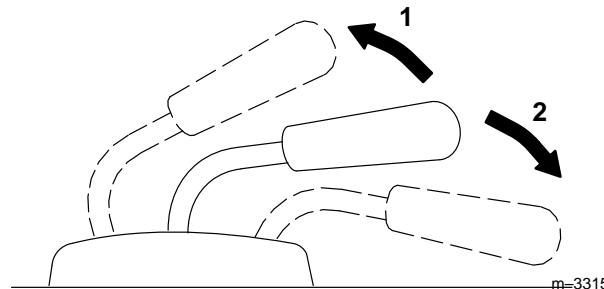


Figure 24

1. Lift lever—Up 2. Lift lever—Down

Tips for Tilling

Clean area of trash, branches and rocks before tilling to prevent equipment damage.

Always begin tilling with the slowest ground speed possible. Increase speed if conditions permit.

Always use full throttle (maximum engine speed) when tilling.

Always engage the power take off (PTO) with tiller in the raised position.

Till in long, straight passes. Do not make turns while the tiller is in the ground, as equipment damage may result.

A small center area will not be tilled due to the gear case. Overlapping with a second pass will eliminate this condition.

Avoid excessive tilling of the soil, as finely tilled soil will not absorb moisture easily and puddles of water or run-off may occur.

When tilling hard packed, very dry or virgin soil, raise the tiller so only the very top of the soil is penetrated. On succeeding passes the depth may be lowered. This reduces the tiller's tendency to push the tractor. If this happens, disengage the power take off (PTO) and reduce forward speed.

Use low range (on the high–low range lever) for best performance and smoothest operation.

⚠️ WARNING

POTENTIAL HAZARD

- There may be buried power, gas, and/or telephone lines in the area needing tilling.

WHAT CAN HAPPEN

- Shock or explosion may occur.

HOW TO AVOID THE HAZARD

- Have the property or area to be tilled marked for buried lines.

Maintenance

Service Interval Chart

Service Operation	Each Use	5 Hours	25 Hours	Storage Service	Fall Service	Notes
Oil—check level			X	X	X	
Belt tension—check		initial	X		X	
Belt—check for wear/cracks				X	X	
Chipped surfaces—paint				X		

CAUTION

POTENTIAL HAZARD

- If you leave the key in the ignition switch, someone could start the engine.

WHAT CAN HAPPEN

- Accidental starting of the engine could seriously injure you or other bystanders.

HOW TO AVOID THE HAZARD

- Remove the key from the ignition switch and pull the wire(s) off the spark plug(s) before you do any maintenance. Also push the wire(s) aside so it does not accidentally contact the spark plug(s).

Greasing and Lubrication

Service Interval/Specification

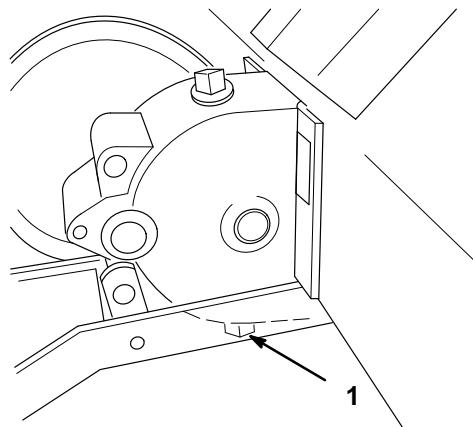
Check the gear lubrication level in the gear case after every 25 operating hours or once a year, whichever occurs first. Gear lubrication changes are not required.

Gear lube type: SAE 90-140 API service GL-4 or GL-5.

Refill capacity: 1 qt.

Checking Gear Lube

1. Position the tractor and tiller on a level surface and lower the attachment lift so that the tiller tines are on the ground. Set the parking brake and turn the ignition key to "STOP" to stop the engine. Remove the ignition key.
2. Clean the area around the lower pipe plug (Fig. 25).
3. Remove the pipe plug carefully because the oil level may be above the level of the pipe plug.
4. If gear lube runs from the case when the plug is removed, the lube in the case is sufficient. Oil may be added as necessary.
5. Apply pipe sealant to the plug and reinstall.



m-3497

Figure 25

Left side of tiller shown in operating position

1. Pipe plug (hidden)

Checking Tiller Drive Belt Tension

1. Disengage the power take off (PTO), set the parking brake, lower the attachment lift and turn the ignition key to "STOP" to stop the engine. Remove the ignition key.
2. As the drive belt wears and the tiller is raised and lowered, the spring-loaded idler arm moves (Fig. 26).
3. Lower the tiller and observe the spring-loaded idler arm movement as you push on the belt. The idler arm spring must be under tension. If it is not under tension, replace the drive belt.

Replacing the Tiller Drive Belt

1. Disengage the power take off (PTO), set the parking brake, lower the attachment lift and turn the ignition key to "STOP" to stop the engine. Remove the ignition key.
2. Remove the rear tiller belt (short belt) from the jack shaft pulley (Fig. 26).

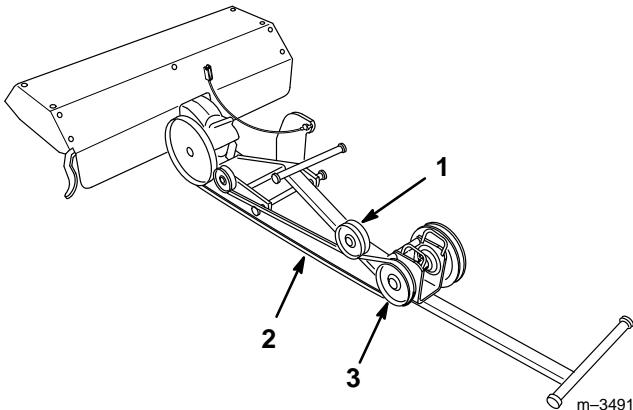


Figure 26

- 1. Spring loaded idler arm
- 2. Tiller drive belt (short belt)
- 3. Jack shaft pulley

3. Remove the belt guard from the gear box and idler mounting (Fig. 27).
4. Remove the belt and replace with a new one.
5. Reinstall the belt guard (Fig. 27) Refer to "Assembling the Tiller" under Installation. Be sure to torque the gear case bolt.

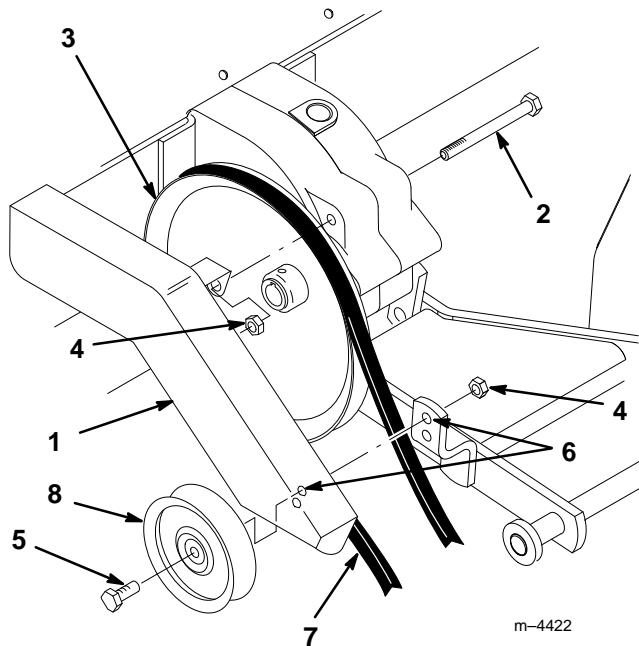
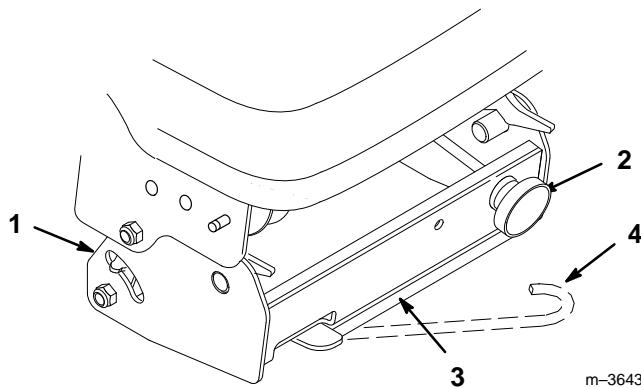


Figure 27

- 1. Belt cover
- 2. Gearcase bolt
- 3. Input pulley
- 4. Locknut, 3/8"
- 5. Bolt, 3/8-16 x 2" (51 mm)
- 6. Upper hole
- 7. Tiller Belt (short belt)
- 8. Idler pulley

Checking PTO Drive Belt Tension

1. Check the tension indicators on each side of the pulley box. If the tension indicators are not in the same position on both the left and right sides, release the belt tension and turn the adjustment knob. Push the belt tension release arm back toward the pulley box to tension the belt (Fig. 28).
2. Repeat step 1 until the indicators move to the same position.
3. Once the indicators are in the same position on both sides, swing the tension release arm into the pulley box by moving it into the position shown in Figure 28.

**Figure 28**

1. Belt tension indicator (2)	3. Seating position for belt tension release arm
2. Belt tension adjustment knob	4. Belt tension released

Storage

1. Before long term storage wash the machine with mild detergent and water to remove dirt and grime from the entire machine.
2. Check the condition of the drive belt.
3. Check gearcase lubrication level; refer to Greasing and Lubrication, page 17.
4. Check and tighten all bolts, nuts, and screws. Repair or replace any part that is damaged or defective.
5. Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
6. Store the tiller in a clean, dry garage or storage area. Cover the tiller to protect it and keep it clean.

