Form No. 3329-318

TORO®

48in Snow/Dozer Blade

XT Series Garden Tractors

Model No. 79481—Serial No. 230000001 and Up

Operator’s Manual

Original Instructions (EN)

Contents

Introduction

Read this manual carefully to learn how to operate and maintain your product properly. The information in this manual can help you and others avoid injury and product damage. Although Toro designs and produces safe products, you are responsible for operating the product properly and safely.

You may contact Toro directly at www.Toro.com for product and accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 illustrates the location of the model and serial numbers on the product.

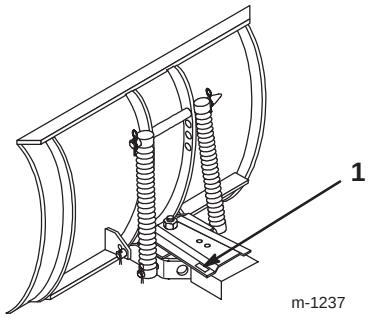

Figure 1

1. Model and serial number plate

Write the product model and serial numbers in the space below:

Model No. _____

Serial No. _____

This manual identifies potential hazards and has special safety messages that help you and others avoid personal injury and 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 you do not follow the recommended precautions.

Warning signals a hazard that **may** cause serious injury or death if you do not follow the recommended precautions.

Caution signals a hazard that may cause minor or moderate injury if you do not follow the recommended precautions.

This manual uses 2 other words to highlight information. **Important** calls attention to special mechanical information and **Note:** emphasizes general information worthy of special attention.

8111 Lyndale Avenue South
Bloomington, MN 55420-1196

Setup

Loose Parts

Note: Use the chart below to identify parts used for assembly.

Description	Qty.	Use
Blade assembly	1	Assembling the blade
Rod	1	
Control rod	1	
Cotter pins, 1/8 x 1 inch	3	
Frame	1	
Bolt, 3/4 x 3-3/4 inch	1	
Locknut, 3/4 inch	1	
Catch assembly	1	Modifying the front Attach-A-Matic hitch
Stop rod, 5/16 inch	1	
Push nut	1	
Hairpin cotter	1	
Locknuts, 5/16 inch	2	
Dozer extension	1	Installing the dozer extension onto the frame
Shaft	1	
Hairpin cotters	2	
Anti-sway bar assembly	1	Installing the anti-sway bar
Lift channel and channel plate	1	Installing the blade assembly
Lift link	1	
Hairpin cotters	2	
Locknut, 3/8 inch	1	
Bolt, 3/8 x 1 inch	1	
Clevis pins, 3/8 x 7/8 inch	2	
Control handle assembly	1	Installing the control handle
Pivot bolt, 1/2 x 1 inch	1	
Jam nut, 1/2 inch	1	
Hairpin cotter, large	1	
Cable clips	3	
Bolts, 1/4 x 1 inch	3	
Locknuts, 1/4	3	
Cable	1	
Cable bracket	1	
Cotter pin, 1-1/4 in	1	

Assembling the Blade

1. Lift and rotate the channel and trip spring assembly so that the holes align with the lower blade mounts (Fig. 2).

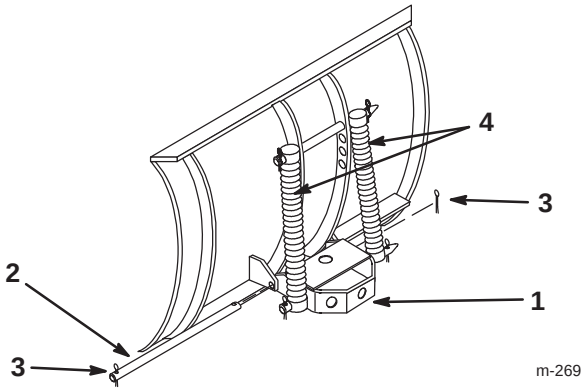

Figure 2

1. Channel
2. Rod
3. Cotter pin, 1/8 x 1 inch
4. Trip spring assembly

2. Slide the rod through the holes and secure it with 2 cotter pins (1 inch) as shown in Figure 2.

Note: If you have difficulty sliding the rod through the holes, partially remove the upper rod and use a hammer to drive the rod through. Then install the upper rod.

3. Bend the ends of the cotter pins to secure the rod.

4. Insert the end of the control rod without the welded washer through the 1/2-inch hole in the bottom plate of the channel (Fig. 3).

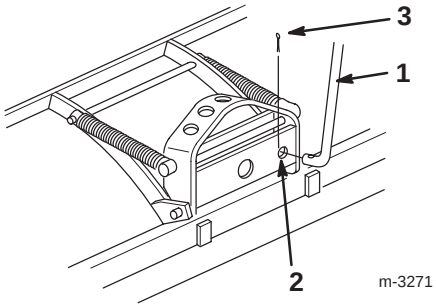

Figure 3

1. Control rod
2. 1/2-inch hole
3. Cotter pin, 1/8 x 1 inch

5. Insert a cotter pin (1/8 x 1 inch) through the hole in the rod and bend the ends of the pin (Fig. 3).

6. Apply general-purpose grease to the pivot area of the frame and channel (Fig. 4).

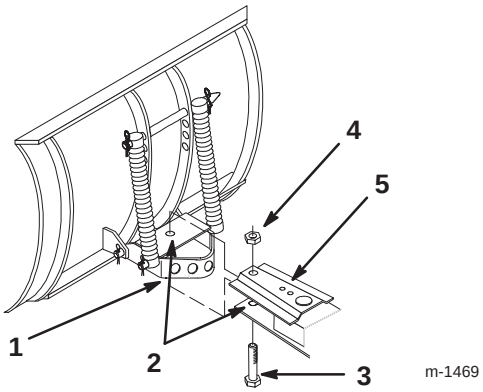

Figure 4

1. Channel
2. Grease here
3. Bolt, 3/4-16 x 3-3/4 inch
4. Locknut, 3/4 inch
5. Frame mount

7. Slide the channel into the frame mount and secure it with a bolt (3/4-16 x 3-3/4 inch) and a locknut (3/4 inch) as shown in Figure 4.

Note: Insert the bolt from the underside of the frame mount as shown in Figure 4.

Important Do not tighten the locknut and bolt excessively.

Removing the Pulley Box

If the pulley box is installed on the tractor, remove it.

1. Turn the knobs to loosen the belts on the idler pulleys (Fig. 5).

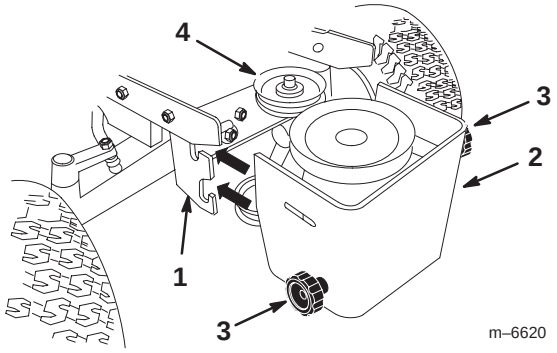

Figure 5

1. Front Attach-A-Matic
2. Pulley box
3. Knob
4. Idler pulley (2)

2. Remove the PTO belt from the upper pulley and the mower drive belt from the lower pulley.

3. Pull the release lever and remove the pulley box (Fig. 6).

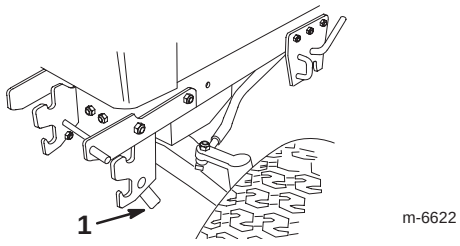

Figure 6

1. Release lever

Note: The pulley box is not shown in Figure 6 for the purpose of clarity.

Modifying the Front Attach-A-Matic® Hitch

1. Remove the release lever from the front Attach-A-Matic hitch (Fig. 6).
2. Install the new release lever on the hitch using the hardware as shown in Figure 7.

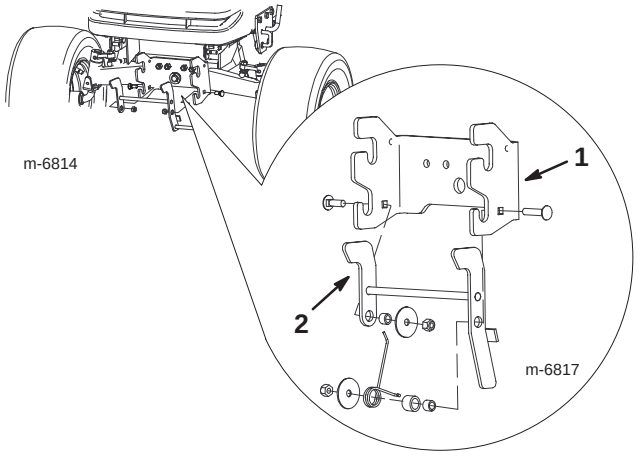

Figure 7

1. Front Attach-A-Matic
2. Release lever assembly

3. Use a screwdriver to hook the spring end around the side of the release lever as shown in Figure 12.

Installing the Rear Attach-A-Matic Hitch

Ensure that the rear Attach-A-Matic is installed on your tractor. Refer to your *Installation Instructions* for the rear Attach-A-Matic kit.

Installing the Dozer Extension onto the Frame

1. Insert the bar at the back end of the frame into the notches in the dozer extension (Fig. 8).

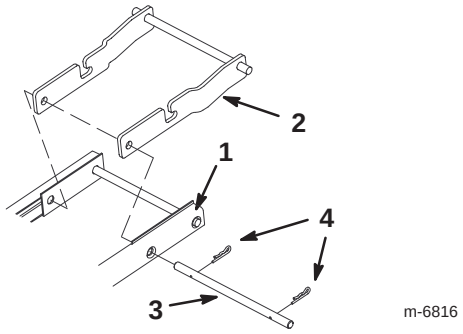

Figure 8

1. Back end of frame
2. Dozer extension
3. Shaft
4. Hairpin cotters

2. Align the holes in the dozer extension with the holes in the frame (Fig. 8).
3. Slide the shaft through the holes in the frame (Fig. 8).
4. Insert the 2 hairpin cotters as shown in Figure 8.

Installing the Blade Assembly

1. Position the blade on a level surface and allow space behind it for the tractor.
2. Park the tractor over the blade with the frame between the wheels.
3. Set the parking brake.
4. Stop the engine and wait for all moving parts to stop.
5. Remove the ignition key.

6. Push the end of the latch rod to open the latches on the rear Attach-A-Matic hitch (Fig. 9).

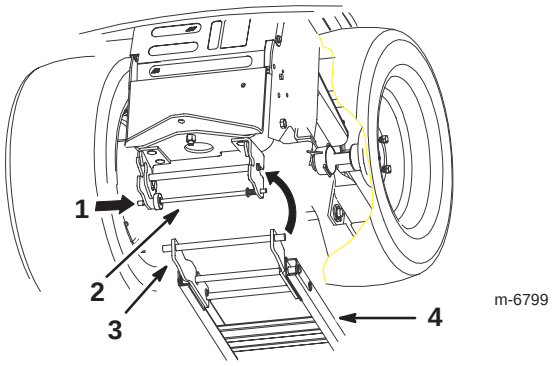

Figure 9

1. Push here to open the latches
2. Latch rod
3. Dozer extension end
4. Frame

7. Lift and insert the dozer extension end into the open slots in the hitch.
8. Close the latches (Fig. 9).
9. Insert the lift channel with channel plate into the frame (Fig. 10).

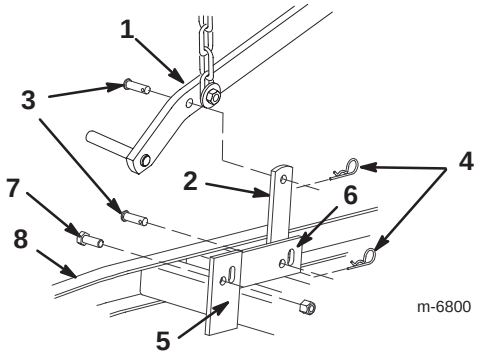

Figure 10

1. Attachment lift arm
2. Lift link
3. Clevis pin, 3/8 x 7/8 inch
4. Hairpin cotter
5. Frame plate
6. Channel plate
7. Bolt
8. Frame

10. Secure the channel plate to the frame plate with a bolt and a locknut.
11. Install the lower end of the lift link to the channel plate with a clevis pin and a hairpin cotter.
12. Secure the attachment lift arm to the upper end of the lift link with a clevis pin and a hairpin cotter.

Installing the Anti-sway Bar

1. Insert the anti-sway bar into the front Attach-A-Matic until it locks into place (Fig. 11).

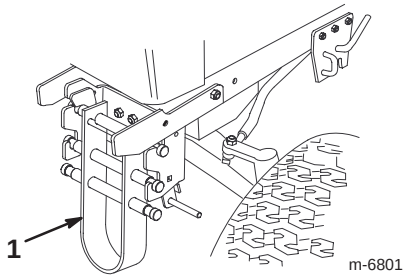

Figure 11

1. Anti-sway bar

2. Insert a push nut onto the end of the stop rod (Fig. 12) that does not have the hole.

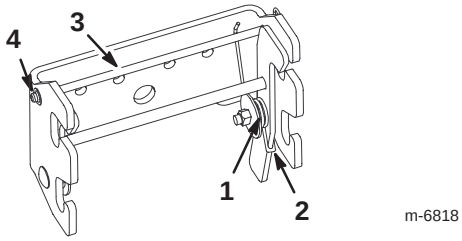

Figure 12

1. Spring
2. Hook the spring end here
3. Stop rod
4. Push nut

3. Insert the stop rod in the front Attach-A-Matic as shown in Figure 12.
4. Insert a hairpin cotter through the hole in the stop rod and bend the ends of the hairpin cotter to secure it.

Installing the Control Handle

1. Attach the control handle to the pivot support using the pivot bolt (1/2 x 1 inch) as shown in Figure 13.

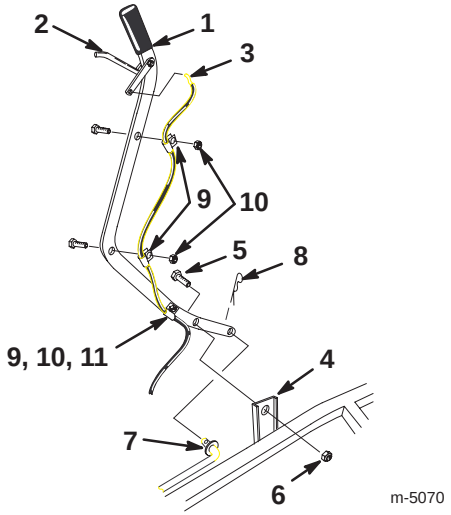

Figure 13

1. Control handle
2. Release lever
3. Z-fitting on the cable
4. Pivot support
5. Pivot bolt
6. Jam nut, 1/2 inch
7. Control rod
8. Large hairpin cotter
9. Cable clips
10. Locknut, 1/4-20 inch
11. Bolt, 1/4 x 1 inch

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2. Screw the bolt into the pivot support until the handle is snug and then back it off slightly to let the handle pivot freely (Fig. 13).

3. Install the jam nut (1/2 inch) on the pivot bolt to lock it in place (Fig. 13).

4. Rotate the control handle to align the hole at the bottom of the handle with the control rod (Fig. 13).

5. Insert the control rod end through the handle end and secure it with a large hairpin cotter (Fig. 13).

6. Connect the Z-fitting on the end of the cable to the release lever (Fig. 13).

7. Thread the balled end of the cable through the keyhole slot in the frame up to the fitting on the cable jacket (Fig. 14).

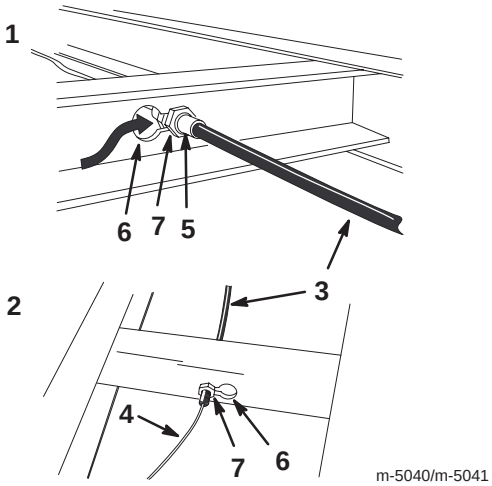

Figure 14

1. Rear view
2. Front view
3. Cable jacket
4. Cable
5. Fitting
6. Keyhole slot
7. Jam nuts

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8. Slide the fitting through the slot and push it to the right and ensure that there is a jam nut on each side of the frame (Fig. 14).

9. Tighten the jam nuts.

10. Thread the cable through the anti-sway bar (Fig. 15).

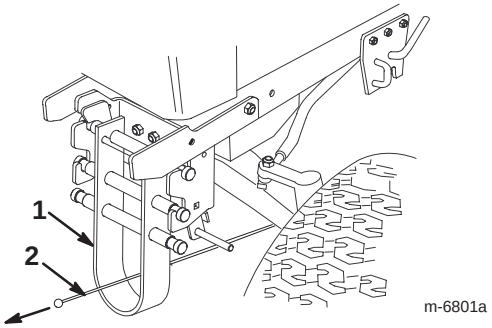

Figure 15

1. Anti-sway bar
2. Cable

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11. Insert the balled end of the cable into the cable bracket.

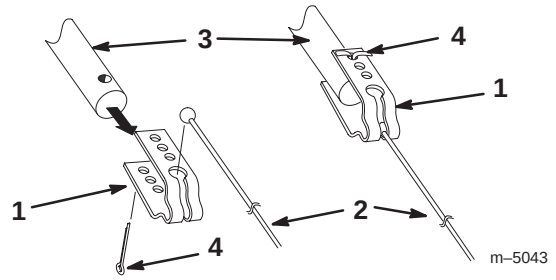

Figure 16

1. Cable bracket
2. Cable
3. Angle pin
4. Cotter pin, 1-1/4 inch

12. Attach the cable bracket to the angle pin at the blade assembly (Fig. 16) with a cotter pin (1-1/4 inch).

Note: Put the cotter pin through the hole that removes the most slack from the cable.

13. Bend the ends of the cotter pin.

14. Pull down on the cable jacket to remove the slack and secure the cable to the handle using 3 cable clips, 3 bolts (1/4 x 1 inch), and 3 locknuts (1/4-20 inch) as shown in Figure 13.

Removing the Blade

Note: Save all hardware, rods, washers and hairpin cotters for future use.

1. Park the tractor on a level surface.

2. Set the parking brake.

3. Stop the engine and wait for all moving parts to stop.

4. Remove the ignition key.

5. Lower the blade using the attachment power lift or the attachment lift lever; refer to Operating the Attachment Power Lift on page 8 or Operating the Attachment Lift Lever on page 9.

6. Remove the hairpin cotter and clevis pin that secures the attachment lift arm from the upper end of the lift link (Fig. 10).

7. Push the end of the latch rod to open the latches on the rear Attach-A-Matic hitch (Fig. 17).

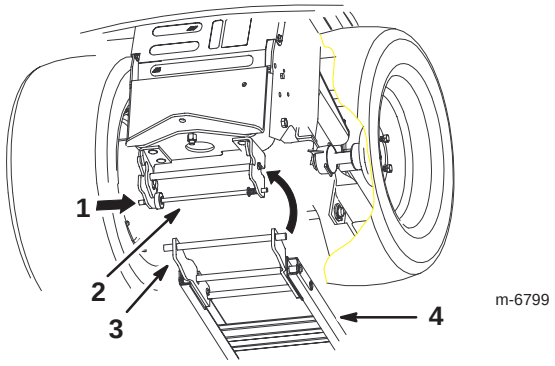

Figure 17

1. Push here to open the latches
2. Latch rod
3. Dozer extension end
4. Frame

8. Remove the dozer extension end and frame.

9. Slide the blade and frame out between front wheels of the tractor.

Operation

Operating the Attachment Power Lift

Use the attachment power lift (Fig. 18) to raise and lower the blade.

Raising the Blade

1. Turn key to the **On** or **Run** position (Fig. 18).

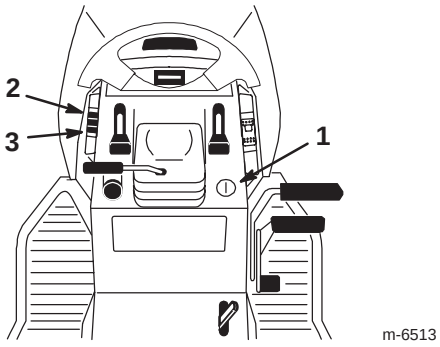

Figure 18

1. Key
2. Lift switch —up
3. Lift switch —down

2. Push the lift switch in the **Up** direction to raise the attachment lift (Fig. 18).

Note: This lifts and holds the attachment in the raised position.

Lowering the Blade

1. Turn key to the **On** or **Run** position (Fig. 18).
2. Push the lift switch in the down direction to lower the attachment lift (Fig. 18).

   Note: This lowers the attachment lift.

Operating the Attachment Lift Lever

Use the lift lever (Fig. 19) to raise and lower the blade.

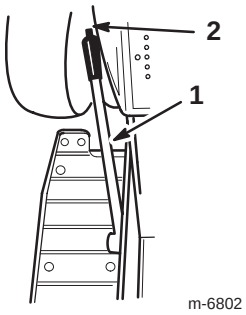

Figure 19

1. Lift lever
2. Button

Raising the Blade

1. Depress the brake pedal to stop the tractor.
2. Pull the attachment lift lever rearward until the latch locks it in place.

   Note: In this position, the lift will hold the attachment in the raised position.

Lowering the Blade

1. Depress the brake pedal to stop the tractor.
2. Push the button on top to release the latch.
3. Pull the attachment lift lever rearward to release the lift pressure.
4. Move the lift lever forward to lower the attachment.

Adjusting the Blade Angle

You can set the angle of the blade in 5 positions using the control handle on the right-hand side of the frame (Fig. 20).

1. Squeeze the release lever toward the handle (Fig. 20).

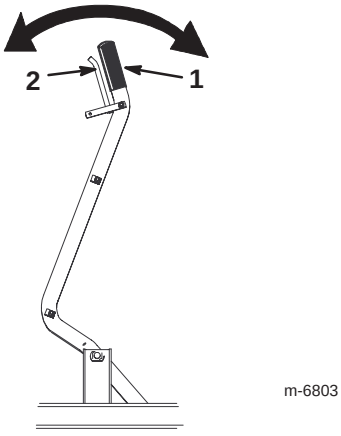

Figure 20

1. Handle
2. Release lever

2. Push or pull the handle to change the angle.
3. Release the lever and pull or push the handle until the locking pin on the blade snaps into place.

Adjusting the Blade Trip Springs

You can mount the blade trip springs in 4 positions. The top hole provides the greatest scraping pressure and the bottom hole provides the least scraping pressure (Fig. 21).

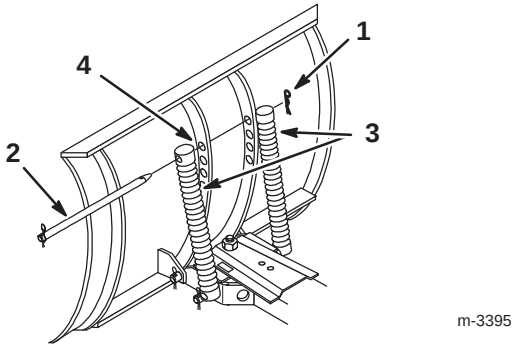

Figure 21

1. Hairpin cotter
2. Rod
3. Spring
4. Top hole

Note: Use the second hole from the top for removing snow.

1. Remove the hairpin cotter and slide the rod from the blade and springs (Fig. 21).

2. Slide the rod through the springs and the new hole position in the blade (Fig. 21).

Tips for Using the Blade

The following lists contains information that will help you obtain the best possible results with your blade:

- Remove snow as soon as possible after it falls.
- Remove snow from a driveway by making one pass down the center and then plowing snow to either side on successive passes.
- If the tractor loses traction when using the snow blade, install wheel weights and/or tire chains available from an Authorized Service Dealer.
- Install the optional skid shoe kit to control the height of blade from the ground for even scraping, if desired.

Maintenance

Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
25 hours	• Grease the channel pivot. • Oil the linkages.
Annually/Storage	• Grease the channel pivot. • Oil the linkages. • Examine the scraper for wear and replace if damaged or worn. • Paint chipped surfaces with paint available from an Authorized Service Dealer.

Caution

If you leave the key in the ignition switch, someone could accidently start the engine and seriously injure you or other bystanders.

Remove the key from the ignition and disconnect the wire from the spark plug before you do any maintenance. Set the wire aside so that it does not accidentally contact the spark plug.

Greasing and Lubricating the Blade

Service Interval Specification

Grease and oil the blade after every 25 operating hours or once a year, whichever occurs first.

Grease Type: General-purpose grease

Oil Type: SAE 10W or 10W30.

Greasing the Channel Pivot

1. Lower the attachment.
2. Set the parking brake.
3. Stop the engine and wait for for all moving parts to stop.
4. Remove the ignition key.
5. Clean the area around the channel pivot with a rag. Apply grease to the pivot bolt, frame and sector (Fig. 22).

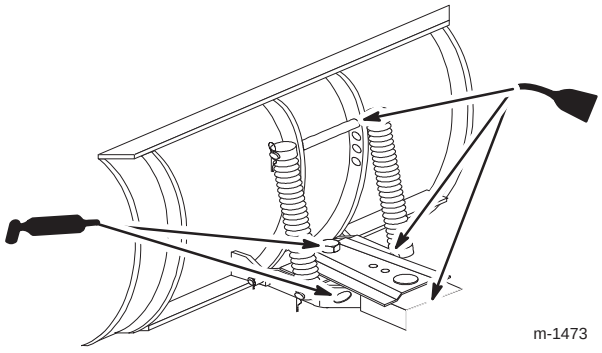

Figure 22

6. Wipe off the excess grease.

Oiling the Linkages

1. Set the parking brake.
2. Stop the engine and wait for for all moving parts to stop.
3. Remove the ignition key.
4. Place a few drops of oil on all movable linkages (Fig. 22).
5. Wipe off any excess oil.

Reversing the Scraper

The scraper contacts the ground, preventing damage to the snow blade. Periodically inspect the scraper for wear. When the scraper is worn and before the working surface contacts the housing, reverse the scraper.

1. Start the tractor.
2. Raise the blade.
3. Support the housing off the ground.
4. Set the parking brake.
5. Stop the engine and wait for for all moving parts to stop.
6. Remove the ignition key.
7. Remove the locknuts and carriage bolts that secure the scraper (Fig. 23).
8. Reverse the scraper to replace a worn edge and install it with the previously removed hardware (Fig. 23).

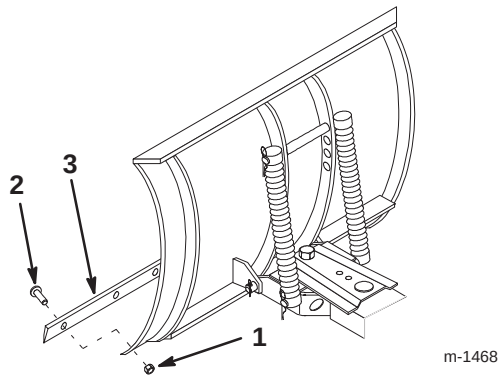

Figure 23

1. Locknut
2. Carriage bolt
3. Scraper

Cleaning and Storing the Blade

1. Before long-term storage, wash the blade with mild detergent and water to remove dirt and grime.
2. Check the condition of the scraper; refer to Reversing the Scraper on page 11.
3. Grease and oil the blade; refer to Greasing and Lubricating the Blade on page 10.
4. Check and tighten all bolts, nuts, and screws. Repair or replace any part that is damaged.
5. Paint all scratched or bare metal surfaces with paint available from an Authorized Service Dealer.
6. Store the blade in a clean, dry garage or storage area.
7. Cover the blade to protect it and keep it clean.

TORO. Consumer Riding Products

The Toro Total Coverage Guarantee

A Two-Year Full Warranty
(Limited Warranty for Commercial Use)

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly promise to repair any Toro Product used for normal residential purposes* if defective in materials or workmanship. The following time periods apply from the date of purchase:

Products	Warranty Period
• All Products and Attachments	2 year full warranty
• 300, 400, and 5xi Series Tractors:	
Frame	5 year full warranty
Front Axle	5 year full warranty
Drive Shaft (5xi Series Only)	5 year full warranty
• All Batteries	1 year full warranty

This warranty covers both the cost of parts and labor, and transportation within a fifteen mile radius of the servicing dealer.

This warranty applies to all consumer riding products and their attachments.

* Normal residential purposes means use of the product on the same lot as your home. Use at more than one location is considered commercial use, and the commercial use warranty would apply.

Limited Warranty for Commercial Use

Toro Consumer Products and attachments used for commercial, institutional, or rental use are warranted against defects in materials or workmanship for the following time periods from the date of purchase:

Products	Warranty Period
• 300, 400, and 5xi Series Tractors:	
Liquid Cooled Gas Engines	1 year limited warranty
Air Cooled Gas and Diesel Engines	2 year limited warranty
All other items	1 year limited warranty
• TimeCutter Models	30 day limited warranty
• All other Riding Products	90 day limited warranty

Instructions for Obtaining Warranty Service

If you think that your Toro Product contains a defect in materials or workmanship, follow this procedure:

1. Contact any Toro Authorized or Master Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, refer to the Yellow Pages of your telephone directory (look under “Lawn Mowers”) or access our website at www.Toro.com. U.S. Customers may also call 800-421-9684 to use our 24-hour Toro dealer locator system.
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer.

If for any reason you are dissatisfied with the Service Dealer’s analysis or with the assistance provided, contact us at:

Customer Care Department, Consumer Division
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
800-348-2424 (U.S. customers)
877-484-9255 (Canada customers)

Owner Responsibilities

You must maintain your Toro Product by following the maintenance procedures described in the operator’s manual. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

Items and Conditions Not Covered

There is no other express warranty except for special emission system coverage on some products. This express warranty does not cover:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune-up parts, blade sharpening, brake and clutch adjustments.
- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.
- Repairs necessary due to improper fuel, contaminants in the fuel system, or failure to properly prepare the fuel system prior to any period of non-use over three months.
- Pickup and delivery charges for distances beyond a fifteen mile radius from an Authorized Toro Service Dealer.

All repairs covered by this warranty must be performed by an Authorized Toro Service Dealer using Toro approved replacement parts.

General Conditions

Repair by an Authorized Toro Service Dealer is your sole remedy under this warranty.

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of the Toro Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty.

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

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Countries Other than the United States or Canada

Customers who have purchased Toro products exported from the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor’s service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.

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