Form No. 3324-747 Rev B

48″ Blade

Wheel Horse® Lawn and Garden Tractor Attachment

Model No. 79253—210000001 and Up

Operator’s Manual

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.

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.

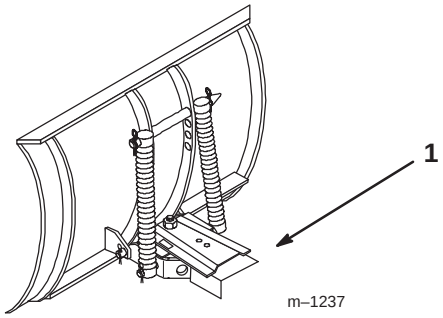

Figure 1

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 two 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
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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 pin, 1/8 x 1 in.	2	
Frame assembly	1	
Bolt, 3/4 x 3-3/4 in.	1	
Locknut, 3/4 in.	1	
Front hitch assembly	1	Installing the front hitch
Carriage bolt, 3/8 x 1 in.	4	
Locknut, 3/8 in.	4	
Rear hitch assembly	1	Installing the rear hitch
Bolt, 1/2 x 1-1/4 in.	3	
Locknut, 1/2 in.	3	
Lift plate	1	Installing the blade assembly
Trunnion	1	
Lift rod	1	
Washer, 9/16 in.	1	
Hairpin cotter, large	1	
Hairpin cotter, medium	1	
Locknut, 3/8 in.	4	
Bolt, 3/8 x 1 in.	4	
Cotter pin, 3/16 x 1–1/4 in.	1	
Washer	1	
Control handle assembly	1	Installing the control handle
Pivot bolt, 1/2 x 1 in.	1	
Jam nut, 1/2 in.	1	
Hairpin cotter, large	1	
Cable clip	3	
Bolt, 1/4 x 1 in.	3	
Locknut, 1/4	3	
Cable	1	
Cable bracket	1	
Cotter pin, 1-1/4 in	1	

Spindle stop Self tapping bolt, 5/16 x 3/4 in.	2 2	Installing the steering stops

Assembling the Blade

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

2. Slide the rod through the holes and secure with two 1 in. (25 mm) cotter pins (Fig. 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.

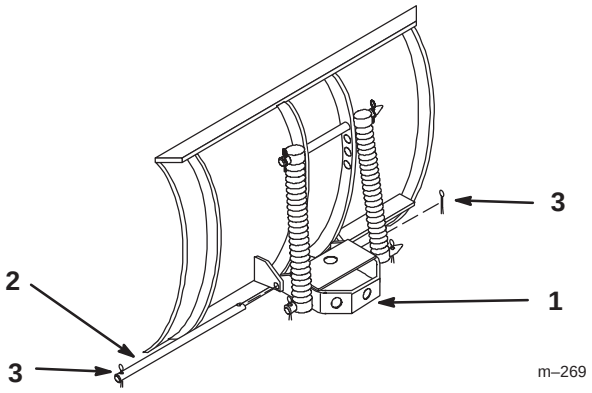

Figure 2

1. Channel
2. Rod
3. Cotter pin, 1/8 x 1 in. (25 mm)

4. Insert the end of the control rod without the welded washer through the 1/2 in. (13 mm) hole in the bottom plate of the channel (Fig. 3).

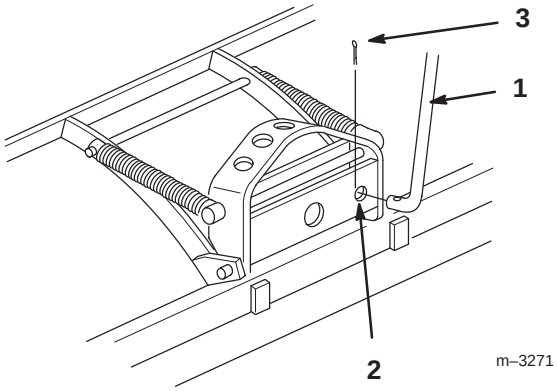

Figure 3

1. Control rod
2. 1/2 in. (13 mm) hole
3. Cotter pin, 1/8 x 1 in. (25 mm)

5. Insert a 1/8 x 1 in. (25 mm) cotter pin 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.

7. Slide the channel between the frame mount and secure it with a 3/4-16 x 3-3/4 in. (95 mm) bolt and a 3/4 in. locknut (Fig. 4).

Note: Insert the bolt up from the underside of the frame (Fig. 4).

Important Do not tighten the nut and bolt excessively, thereby causing binding on the channel as it pivots from side to side.

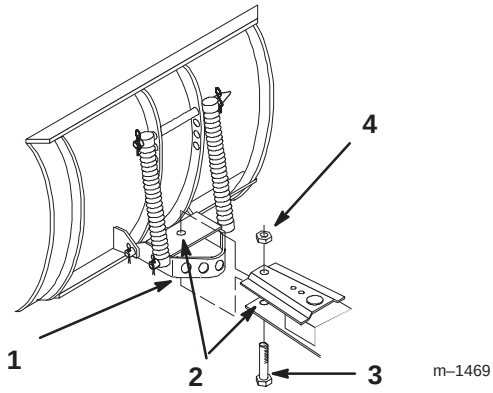

Figure 4

1. Channel
2. Grease here
3. Bolt, 3/4-16 x 3-3/4 in. (95 mm)
4. Locknut, 3/4 in.

Setting Up the Tractor

Installing the Front Hitch

1. Remove the E–ring and all washers except one thick washer from the front axle pivot pin of the tractor (Fig. 5).

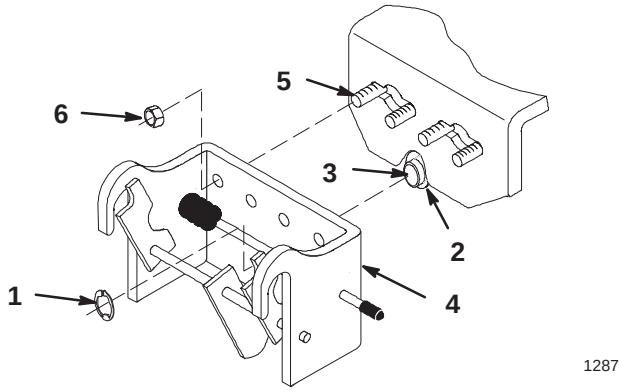

Figure 5

1. E-ring
2. Thick washer (existing)
3. Axle pivot
4. Front hitch
5. Carriage bolt, 3/8-16 x 1 in. (25 mm)
6. Locknut, 3/8 in.

2. Discard the unused washers.

3. Remove the muffler shield.

4. Install four 3/8-16 x 1 in. (25 mm) carriage bolts into keyhole slots in axle bracket (Fig. 5).

5. Install the muffler shield.

6. Place the front hitch onto the tractor, securing it with four 3/8 in. locknuts and the previously removed E-ring (Fig. 5).

Installing the Rear Hitch

1. Install the rear mounting plate\blade bracket assembly under and inside the rear frame member with the short tongue rearward (Fig. 6), securing it with three 1/2 x 1-1/4 in. bolts and 1/2 in. locknuts in the holes in frame side members and the tractor hitch forward hole (Fig. 6).

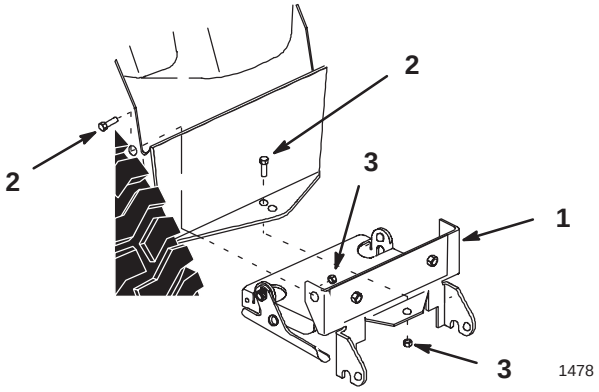

Figure 6

1. Plate\blade bracket assembly
2. Bolt, 1/2 x 1-1/4 in.
3. Lock nut, 1/2 in.

Installing the Blade

Installing the Blade Assembly

1. Position the blade on a level surface with space behind it for the tractor.

2. Park the tractor over the blade with the frame between wheels.

3. Set the parking brake, stop the engine, and remove the ignition key.

4. Open the latch levers on the rear attachment plate and lift the frame to position the frame mount into the open slots.

5. Close the latch levers and secure them with 3/4 in. (19 mm) clevis pins and small hairpin cotters (Fig. 7).

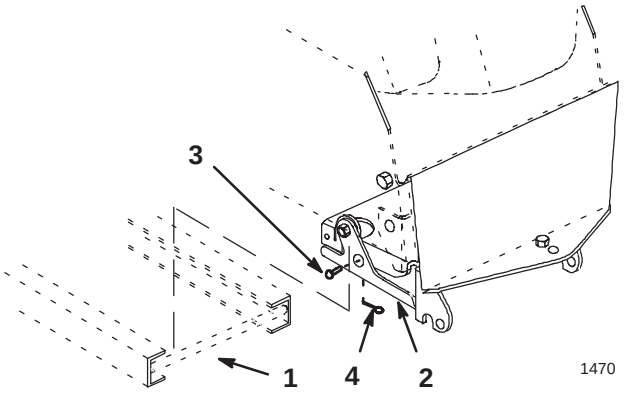

Figure 7

1. Frame mount
2. Latch lever
3. Clevis pin
4. Hairpin cotter, small

6. Install the front attachment assembly to the frame of the blade with 2 bolts (3/8 x 1 in.) and 2 lock nuts (3/8 in.) (Fig. 8).

7. Install the lift plate to the frame of the blade and front attachment assembly with 2 bolts (3/8 x 1 in.), 2 lock nuts (3/8 in.), a flat washer and a cotter pin (Fig. 8).

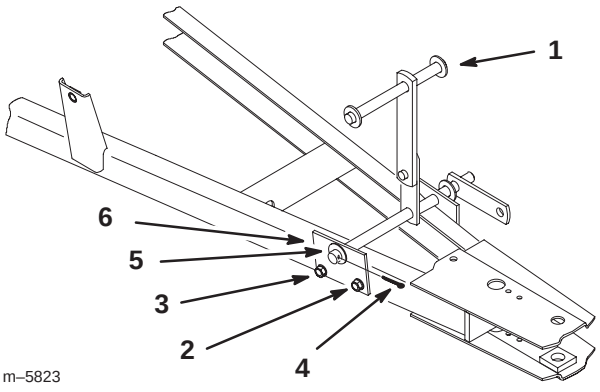

Figure 8

1. Front attachment assembly
2. Bolt, 3/8 x 1 in.
3. Locknut, 3/8 in.
4. Cotter pin
5. Washer
6. Lift plate

8. Push in on the front hitch release button and open the latch by rotating the latch arm (Fig. 9).

9. Slide the front attachment arm into the tractor hitch (Fig. 9).

10. Close the latch by rotating it back until the release button pops out to lock it in place (Fig. 9).

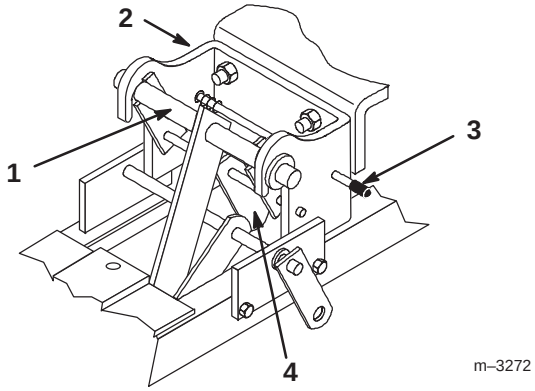

Figure 9

1. Front attachment arm
2. Front hitch
3. Release button
4. Latch arm

11. Place the lift rod into the lift arm and secure it with a large hairpin cotter (Fig. 10).

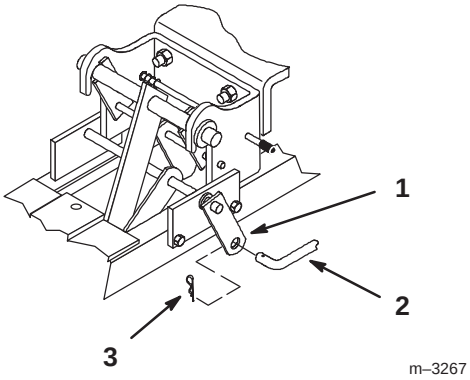

Figure 10

1. Lift arm
2. Lift rod
3. Hairpin cotter, large

12. Set the Dial-A-Height indicator to the Mounting Position, and lower the attachment lift all the way.

13. Position the notch in the lift plate around the left side tractor lift arm and slide the lift plate onto the attachment lift arm (Fig. 11).

14. Secure the lift plate with a hairpin cotter from a mower (Fig. 11).

15. Thread the trunnion onto the lift rod and insert it into one of the holes in the attachment lift plate.

16. Secure the trunnion with a 9/16 in. washer and medium hairpin cotter (Fig. 11).

Note: The low hole provides the maximum blade lift, but requires the greatest lift effort. The top hole requires less lift effort, but has a lower lift height.

Note: Blade height can be adjusted between hole positions by removing the trunnion from the lift plate hole, repositioning it up or down the lift rod, and attaching back to the lift plate.

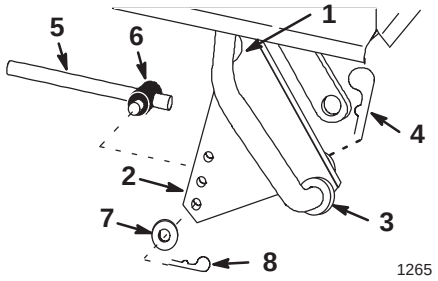

Figure 11

1. Notch
2. Lift plate
3. Lift arm
4. Hairpin cotter–from mower
5. Lift rod
6. Trunnion
7. Washer, 1/2 in.
8. Hairpin cotter–medium

Installing the Control Handle

1. Attach the control handle to the pivot support using the 1/2-13 x 1 in. (25 mm) pivot bolt. 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. 12).

2. Install the 1/2 in. jam nut on the pivot bolt to lock it in place (Fig. 12).

3. Rotate the control handle to align the hole at the bottom of the handle with the control rod (Fig. 12).

4. Insert the control rod through the handle end and secure it with a large hairpin cotter (Fig. 12).

5. Connect the Z-fitting on the end of the cable to the release lever (Fig. 12).

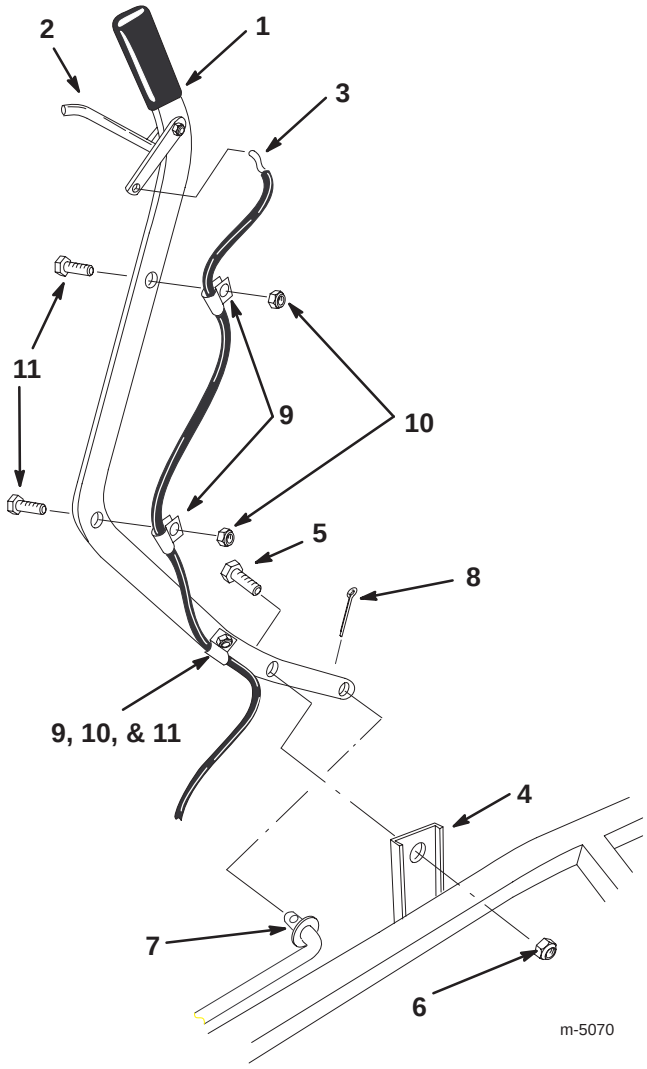

Figure 12

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

6. Thread the balled end of the cable through the keyhole slot in the frame up to the fitting on the cable jacket.

7. Slide the fitting through the slot and push it to the right, ensuring there is a jam nut on each side of the frame (Fig. 13).

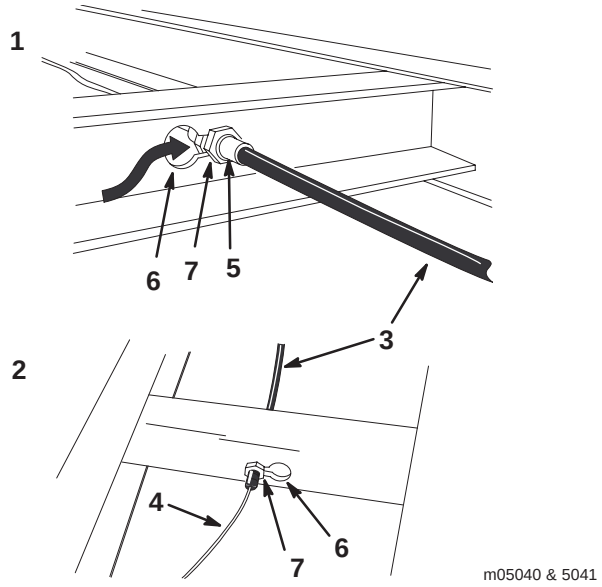

Figure 13

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

8. Tighten the jam nuts.

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

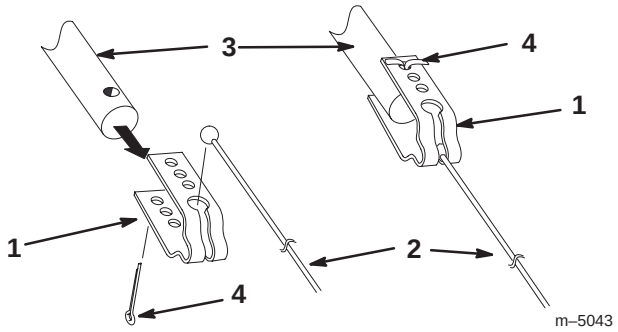

Figure 14

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

10. Attach the cable bracket to the angle pin at the blade assembly (Fig. 14) with a 1-1/4 in. cotter pin.

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

11. Bend the ends of the cotter pin.

12. Pull down on the cable jacket to remove slack and secure the cable to the handle using three cable clips, three 1/4 x 1 in. bolts, and three 1/4-20 in. locknuts (Fig. 12).

Installing the Steering Stops

1. Align a steering spindle stop in front of the rear tabs on each front wheel spindle so that the stops contact the axle during tight turns and prevent the wheels from contacting the blade frame (Fig. 15).

2. Secure the stops with two 5/16 x 3/4 in. (19 mm) self tapping bolts (Fig. 15).

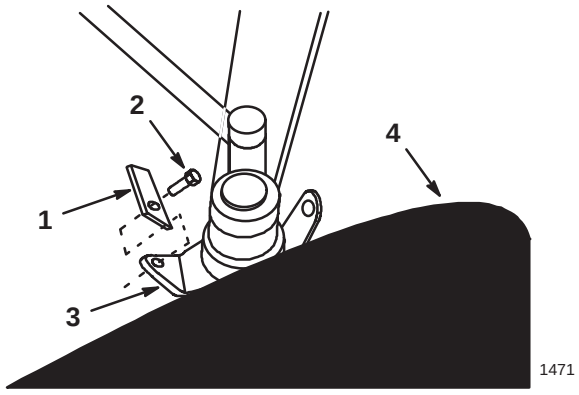

Figure 15

1. Steering spindle stop
2. Self tapping bolt, 5/16 x 3/4 in. (19 mm)
3. Rear tab
4. Tire

Removing the Blade

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

1. Park the machine on a level surface, set the parking brake, stop the engine, and remove the ignition key.

2. Raise the attachment lift to the transport position.

3. Turn the Dial-A-Height knob counterclockwise, all the way.

4. Lower the attachment lift lever to the mounting position; refer to Lowering Attachments.

5. Remove the hairpin cotter and washer from the trunnion at the lift plate (Fig. 16).

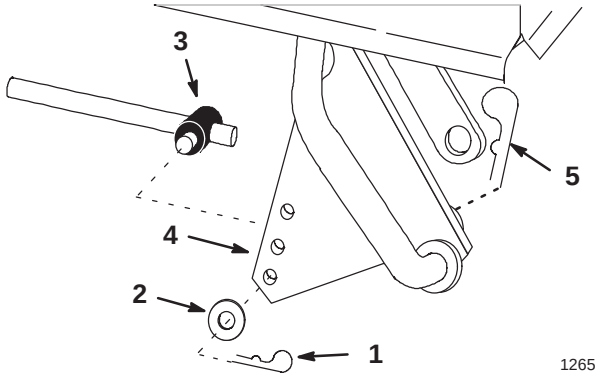

Figure 16

1. Hairpin cotter
2. Washer
3. Trunnion
4. Lift plate
5. Hairpin cotter–from mower

6. Remove the hairpin cotter and slide lift plate off of the attachment lift (Fig. 16).

7. Remove the hairpin cotters and clevis pins from the latch levers (Fig. 17).

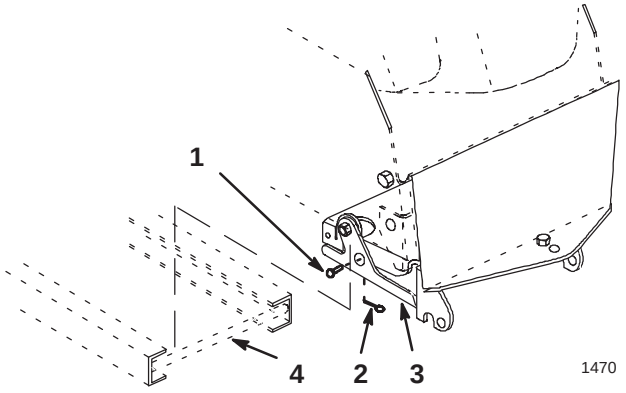

Figure 17

1. Clevis pin
2. Hairpin cotter
3. Latch lever
4. Frame

8. Open the latch levers and lower the frame (Fig. 17).

9. Push in on the front hitch release button to open the hitch and remove the blade lift arm (Fig. 18).

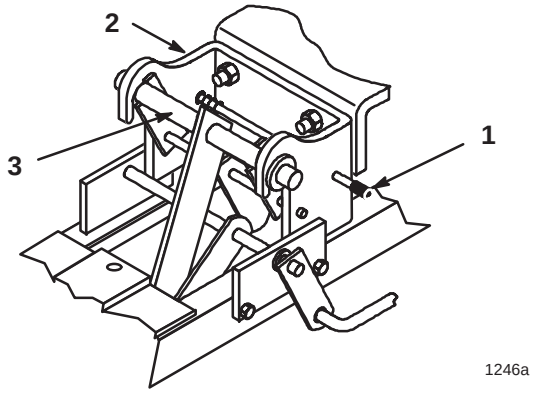

Figure 18

1. Release button
2. Front hitch
3. Lift arm

10. Remove the hairpin cotter and control rod from the control handle (Fig. 12).

11. Pull the release lever and swing the blade so that the angle pin is partway between two holes and does not seat. This creates slack in the cable.

12. Remove the end of the cable from the cable bracket on the angle pin (Fig. 14).

13. Loosen the jam nuts and remove the cable from the keyhole slot in the blade frame (Fig. 13).

14. Remove the control handle pivot bolt and locking nut.

15. Slide the blade out between front wheels of the tractor.

16. Remove the steering spindle stops, from tabs on front wheel spindles, to allow for tighter turning radius (Fig. 19).

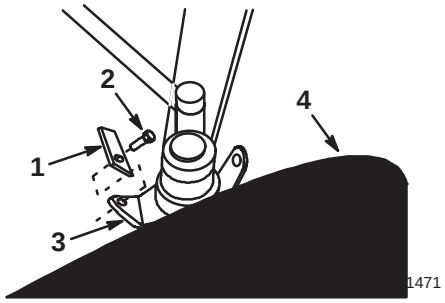

Figure 19

1. Steering wheel stop
2. Self tapping bolt, 5/16 x 3/4 in.
3. Spindle stop
4. Tire

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

Operation

Caution

If you hit fixed objects with the blade, the tractor could stop abruptly, causing you to lose control, personal injury, and equipment damage.

- **Travel at a safe, slow speed.**
- **Check the area to be plowed and mark all fixed objects so you can avoid them.**

Raising and Lowering the Blade

Depending on your tractor model, the tractor will have either an automatic attachment lift switch (Fig. 20) or a manual attachment lift lever (Fig. 21) to raise and lower attachments.

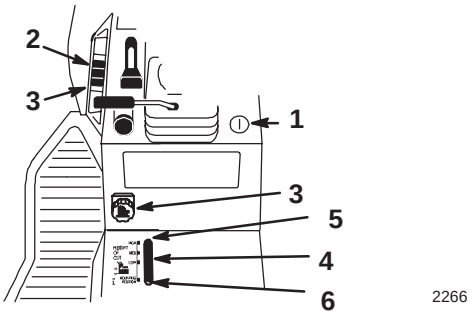

Figure 20

1. Key
2. Lift switch–up
3. Lift switch–down
4. Dial-A-Height control
5. Indicator
6. High
7. Mounting position

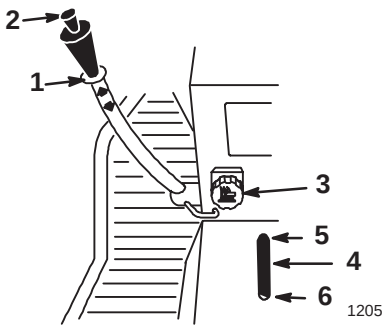

Figure 21

1. Lift lever
2. Button
3. Dial-A-Height control
4. Indicator
5. High
6. Mounting position

Raising the Blade Using the Attachment Lift Switch

1. Turn key to the On or Run position (Fig. 20).
2. Push the lift switch in the up direction to raise the attachment lift (Fig. 20).

Lowering the Blade Using the Attachment Lift Switch

1. Turn key to the On or Run position (Fig. 20).
2. Push the lift switch down to lower the attachment lift (Fig. 20).

Raising the Blade Using the Attachment Lift Lever

1. Stop the machine.
2. Pull the attachment lift lever rearward until the blade raises and the latch locks.

Lowering the Blade Using the Attachment Lift Lever

1. Stop the machine.
2. Pull attachment lift lever rearward, to release lift pressure and push the button on top to release the latch.
3. Move the lift lever forward to lower the blade.

Adjusting Dial-A-Height

The Dial-A-Height control (Fig. 21) is used to adjust the downward travel of the attachment.

1. Raise the attachment lift.
2. Rotate the Dial-a-Height knob to change the stop location.

   Turn the knob clockwise to raise and counterclockwise to lower the height of the attachment.

   The Dial-A-Height indicator (Fig. 21) will show the change, high to low, in attachment lift height as the adjustment is made.

Adjusting the Blade Angle

You can turn the blade from side to side, in 5 positions. You control the angle using the control handle on the right hand side of the frame (Fig. 22).

1. Squeeze the release lever toward the handle (Fig. 22).

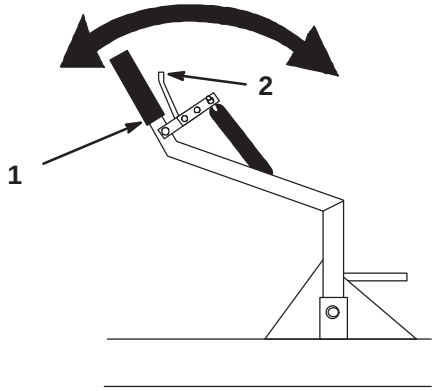

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Figure 22

1. Handle
2. Release lever

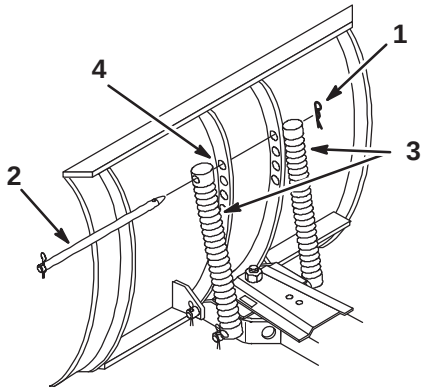

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Figure 23

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

2. Push or pull the lever 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 four positions. The top hole provides the greatest scraping pressure and the bottom hole provides the least scraping pressure (Fig. 23). Toro recommends using the second hole from the top for removing snow.

1. Remove the hairpin cotter and slide the rod from the blade and springs (Fig. 23).

2. Slide the rod through the springs and the new hole position in the blade (Fig. 23).

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 looses traction when using the snow blade, install wheel weights and/or tire chains, which are available from your Authorized Service Dealer.
- Install the optional skid shoe kit is 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
Yearly/Storage Service	• Grease the channel pivot • Oil the linkages • Examine the scraper for wear and replace if damaged or worn • Paint chipped surfaces (Paint is available from your Authorized Toro 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 Lubrication

Service Interval Specification

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

Grease Type: General-purpose grease.

Oil Type: SAE 10W or l0W30.

Grease the Channel Pivot

1. Lower the attachment.
2. Set the parking brake, stop the engine, and remove the ignition key.
3. Clean the area around the channel pivot with a rag. Apply grease to the pivot bolt, frame and sector (Fig. 24).

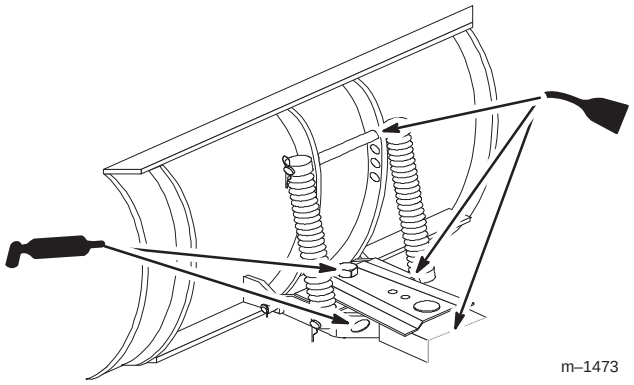

Figure 24

4. Wipe off excess grease.

Oil Linkages

1. Set the parking brake, stop the engine, and remove the ignition key.
2. Place a few drops of oil on all movable linkages (Fig. 24).
3. Wipe off excess oil.

Reversing the Scraper Blade

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

1. Start the tractor, raise the blade, and support the housing off the ground.
2. Set the parking brake, stop the engine, and remove the ignition key.
3. Remove the lock nuts and carriage bolts securing the scraper (Fig. 25).
4. Reverse the scraper blade to replace a worn edge and install it with the previously removed hardware (Fig. 25).

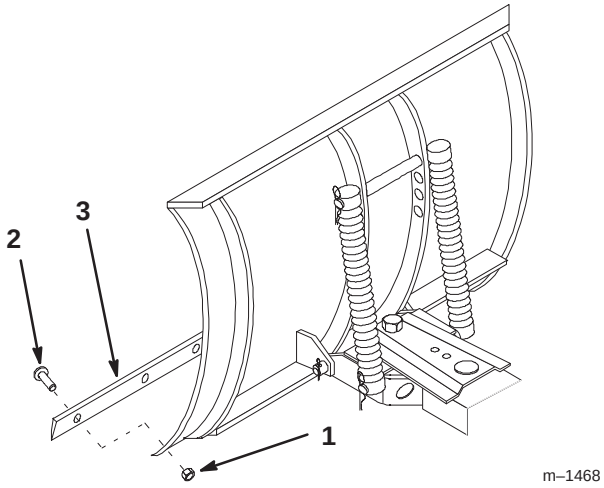

Figure 25

1. Lock nut
2. Carriage bolt
3. Scraper blade

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 scraper blade; refer to Reversing the Scraper Blade, page 12.

3. Grease and oil the blade; refer to Greasing and Lubrication, page 12.

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. Paint is available from your Authorized Toro Dealer.

6. Store the machine in a clean, dry garage or storage area.

7. Cover the machine to protect it and keep it clean.


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