Form No. 3325-791

TORO®

48″ Blade

Wheel Horse® Classic Garden Tractor Attachment

Model No. 79350—210000001 and Up

Operator's Manual

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Introduction

Thank you for purchasing a Toro product.

All of us at Toro 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 at the location shown in Figure 1.

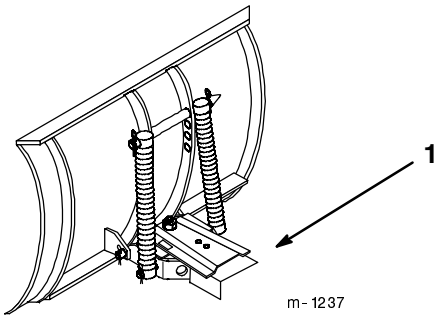


Figure 1

1. Model and serial number plate

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

Model No: _____

Serial No. _____

Read this manual carefully to learn how to operate and maintain your product correctly. Reading this manual will help you and others avoid personal injury and damage to the product. Although we design, produce and market safe, state-of-the-art products, you are responsible for using the product properly and safely. You are also responsible for training persons, who you allow to use the product, about safe operation.

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.

Determine the left and right side of the machine from the normal operating position.

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Assembly

Loose Parts

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

DESCRIPTION	QTY.	USE
Blade assembly	1	Assemble the blade
Rod	1	
Control rod	1	
Cotter pin, 1/8 x 1 in. (26 mm)	3	
Frame assembly	1	
Bolt, 3/4-16 x 3-3/4 in. (95 mm)	1	
Locknut, 3/4-16 in.	1	
Hairpin cotter, large	1	
Bolt, 1/2-13 x 1 in	1	
Jam nut, 1/2-13 in.	1	
Cable	1	
Bolt, 1/4 x 1 in. (25 mm)	3	
Locknut, 1/4-20 in.	3	
Cable clip	3	
Cable bracket	1	
Cotter pin, 1-1/4 in. (32 mm)	1	
Rear hitch assembly	1	Mount the rear hitch to the tractor
Strap	2	
Angle bracket (if required)	2	
Carriage bolt, 3/8-16 x 3-1/2 in. (89 mm)	4	
Locknut, 3/8-16 in.	4	
Lift link	1	Assemble the lift link to the tractor lift
Clevis pin, 3/8 x 7/8 in. (22 mm)	2	
Hairpin cotter, medium	2	

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.

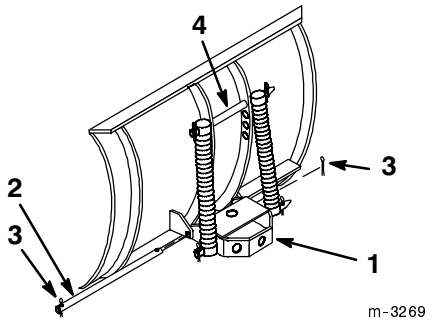


Figure 2

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

4. Insert the end of the control rod through the 1/2 in. (13 mm) hole in the bottom plate of the channel (Fig. 3).

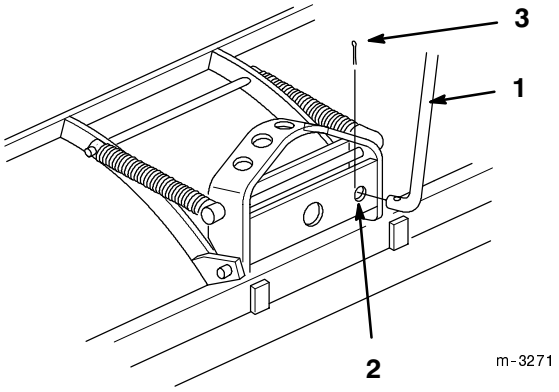


Figure 3

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.

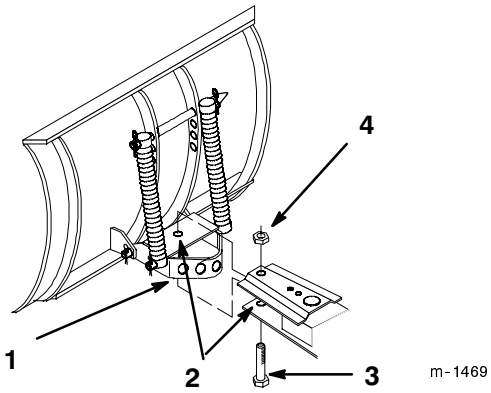


Figure 4

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

Mounting the Rear Hitch on the Tractor

Center the hitch on the axle housing and secure it using four 3/8 x 3-1/2 in. (89 mm) carriage bolts, two straps, and four 3/8-16 in. locknuts as illustrated in Figure 5.

Note: On hydrostatic models with the oil filter facing the rear, install the hitch 3-1/4 in. (8.3 cm) from the right side of the center housing.

Note: On 8-speed gear drive models, install angle spacers, positioned along top and rear of axle (Fig. 5).

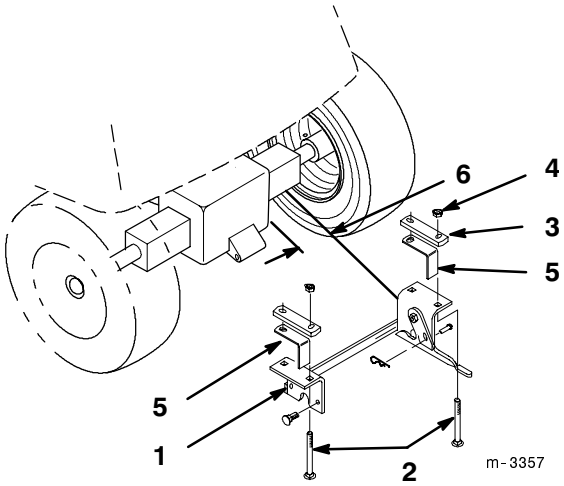


Figure 5

1. Rear hitch
2. Carriage bolt, 3/8 x 3-1/2 in. (89 mm)
3. Strap
4. Locknut, 3/8 in.
5. Angle spacer (if required)
6. 3-1/4 in. (8.3 cm) location

Installing Blade to Tractor

1. Remove PTO cover from the side of tractor, if so equipped, and store it in a safe location so you can install it when you remove the blade.
2. Install the PTO cover knobs back on the studs on the tractor.
3. Position the blade on a level surface with space behind it for the tractor.
4. Rotate the control handle rearward next to frame.
5. Park the tractor over the blade, with the frame between the wheels.
6. Set the parking brake, stop the engine, and remove the key.
7. Slide the frame toward the right rear tire and rotate the control handle to a vertical position.
8. Continue sliding the frame to the rear hitch.
9. Open the latch levers and lift the frame into the rear hitch.
10. Close the latch levers and secure them with 1/4 x 3/4 in. (19 mm) clevis pins and small hairpin cotters (Fig. 6).

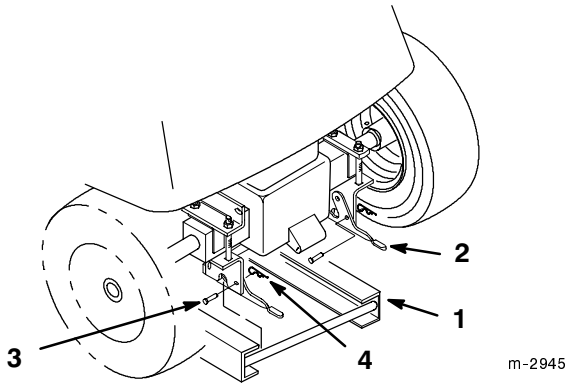


Figure 6

1. Frame mount
2. Latch lever
3. Clevis pin, 1/4 x 3/4 in. (19 mm)
4. Hairpin cotter-small

11. 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. 7).
12. Secure the bolt with a jam nut (Fig. 7).
13. Rotate the control handle to align the hole at the bottom of the handle with the control rod.

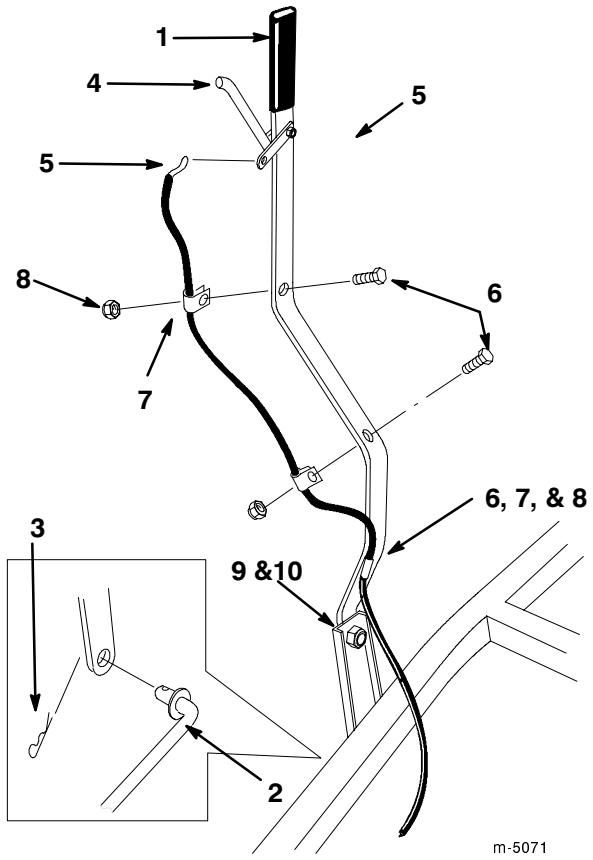


Figure 7

1. Control handle
2. Control rod
3. Large hairpin cotter
4. Release lever
5. Z-fitting
6. Bolt, 1/4 x 1 in. (25 mm)
7. Cable clip
8. Locknut, 1/4-20 in.
9. Bolt, 1/2-13 x 1 in.
10. Jam nut, 1/2-13 in.

14. Insert the control rod through the handle end and secure it with a large hairpin cotter (Fig. 7).
15. Connect the Z-fitting on the end of the cable to the release lever (Fig. 7).
16. Thread the balled end of the cable through the keyhole slot in the frame up to the fitting on the cable jacket.
17. 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. 8).

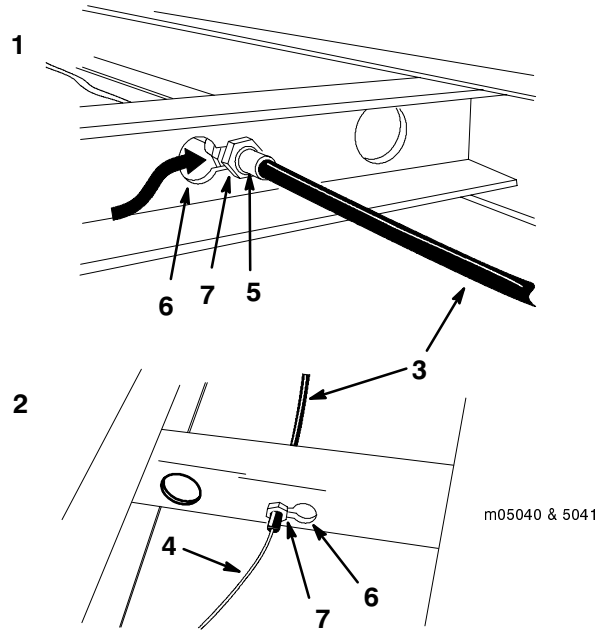


Figure 8

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

18. Tighten the jam nuts (Fig. 8).

19. Insert the balled end of the cable into the cable bracket (Fig. 9).

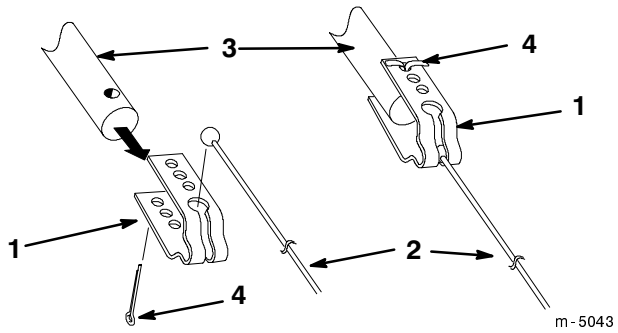


Figure 9

1. Cable bracket
2. Cable
3. Angle pin
4. Cotter pin, 1-1/4 in. (32 mm)

20. Attach the cable bracket to the angle pin at the blade assembly (Fig. 9) with a 1-1/4 in. (32 mm) cotter pin.

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

21. Bend the ends of the cotter pin.

22. 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. (25 mm) bolts, and three 1/4-20 in. locknuts (Fig. 7).

23. Set the Dial-a-Height to the Mounting Position (lowest setting), and lower the attachment lift all the way.

24. Attach the lift link between blade and tractor attachment lift hole, using two 3/8 x 7/8 in. (22 mm) clevis pins and medium hairpin cotters (Fig. 10).

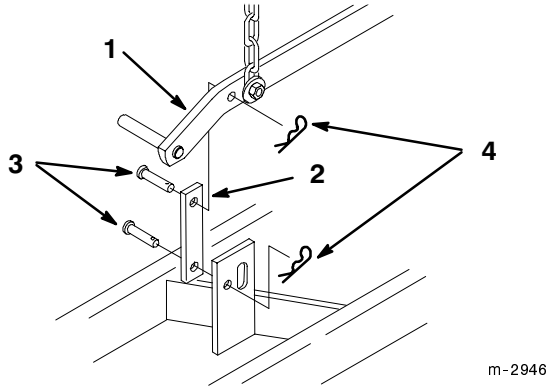


Figure 10

1. Attachment lift
2. Lift link
3. Clevis pin, 3/8 x 7/8 in. (22 mm)
4. Hairpin cotter, medium

Note: To use the blade with down pressure, purchase a long lift link kit and install it between tractor lift and blade.

Removing the Blade

Note: Save all hardware, rods, washers, and hairpin cotters for reuse when installing blade.

1. Park the machine on a level surface.

2. Raise attachment lift to the transport position.

3. Turn the Dial-a-Height knob counterclockwise, all the way, and lower the attachment lift lever to the mounting position.

4. Set the parking brake, stop the engine, and remove the key.

5. Remove the two clevis pins and hairpin cotters securing the lift link between the blade and the tractor attachment lift (Fig. 10).

6. Open the latch levers and lower the frame from the rear hitch.

7. Close the latch levers and secure them closed with the clevis pins and hairpin cotters (Fig. 11).

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

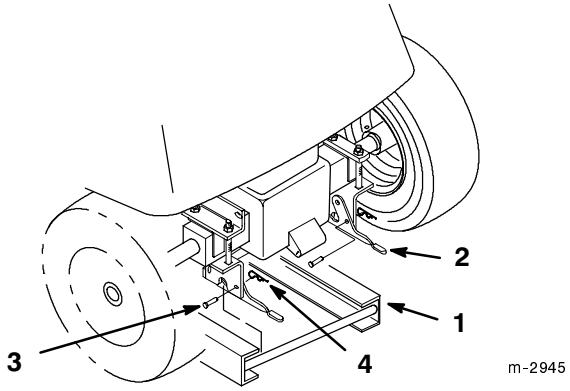


Figure 11

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

8. Remove the hairpin cotter and control rod from the control handle (Fig. 7).

9. Begin sliding the blade forward and toward the right side of the tractor.

10. After the frame clears the right rear tire, rotate the control handle, next to the frame.

11. Roll the tractor away from the frame.

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, it will have either a power or a manual lift lever (Fig. 12 and 13) to raise and lower attachments.

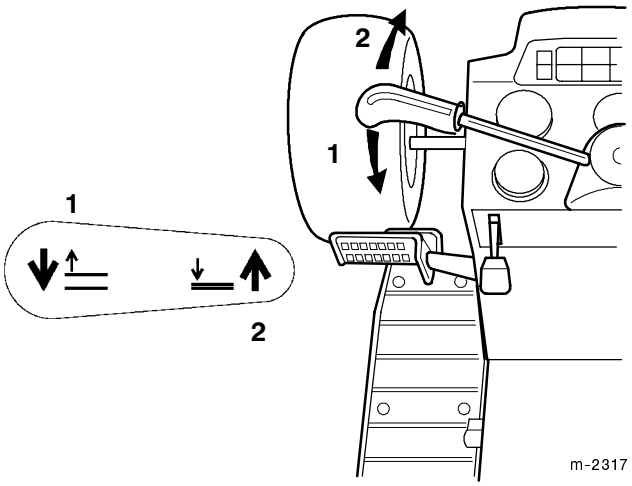


Figure 12

1. UP
2. DOWN

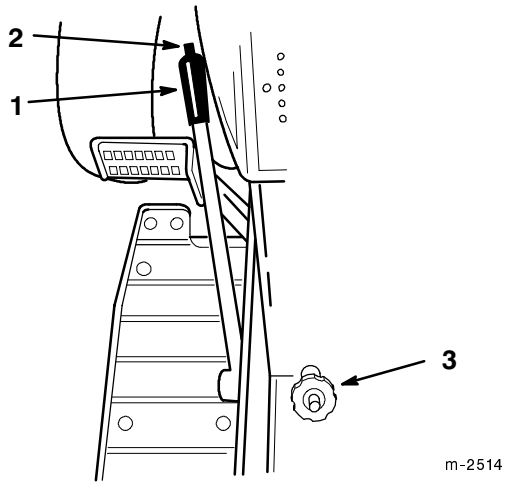


Figure 13

1. Lift lever
2. Button
3. Dial-A-Height

Raising the Blade Using a Power Lift Lever

1. Turn key to the On or Run position.

2. Push the lift lever up to raise the attachment lift (Fig. 12).

Lowering the Blade Using a Power Lift Lever

1. Turn key to the On or Run position.

2. Push the lift lever down to lower the attachment lift (Fig. 12).

Raising the Blade Using a Manual Lift Lever

1. Stop the machine.
2. Pull the attachment lift lever rearward until the blade raises and the latch locks (Fig. 13).

Lowering the Blade Using a Manual 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 (Fig. 13).
3. Move the lift lever forward to lower the blade (Fig.13).

Adjusting Dial-A-Height

The Dial-A-Height control (Fig. 13) 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.

Adjusting the Blade Angle

You can turn the blade from side to side, in 5 positions. You control the angle using the control handle (Fig. 14).

1. Squeeze the release lever toward the handle (Fig. 14).

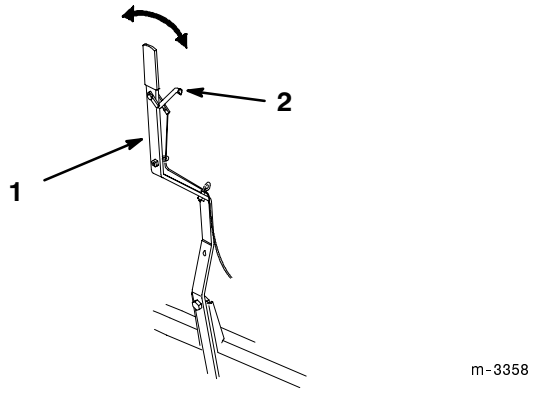


Figure 14

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 four positions. The top hole provides the greatest scraping pressure and the bottom hole provides the least scraping pressure (Fig. 15). 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. 15).
2. Slide the rod through the springs and the new hole position in the blade (Fig. 15).

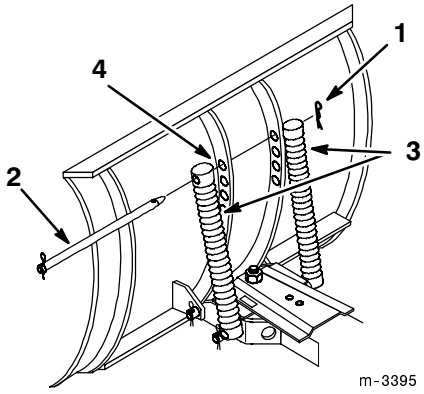


Figure 15

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

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 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 Lubrication

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. 16).

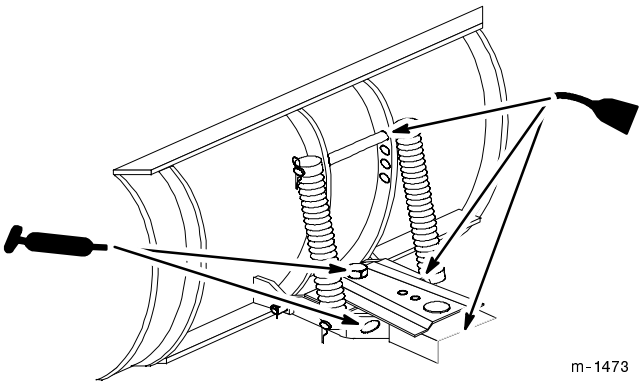


Figure 16

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. 16).
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 locknuts and carriage bolts securing the scraper (Fig. 17).
4. Reverse the scraper blade to replace a worn edge and install it with the previously removed hardware (Fig. 17).

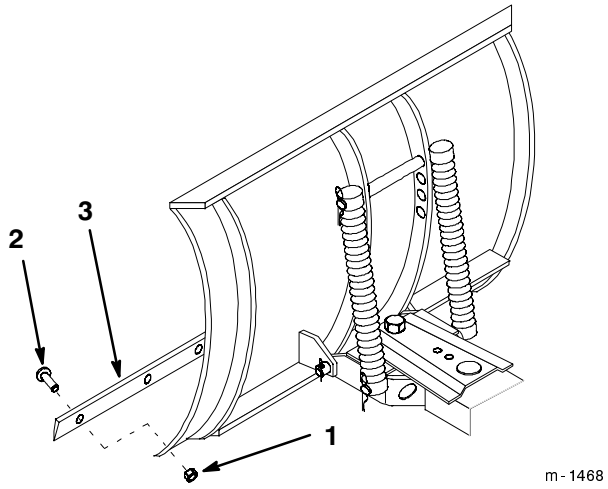


Figure 17

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 10.
3. Grease and oil the blade; refer to Greasing and Lubrication, page 9.
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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