



## **48" Blade**

### **Wheel Horse<sup>®</sup> 5xi Garden Tractor Attachment**

**Model No. 79355—21000001 and Up**

**Operator's Manual**

# Contents

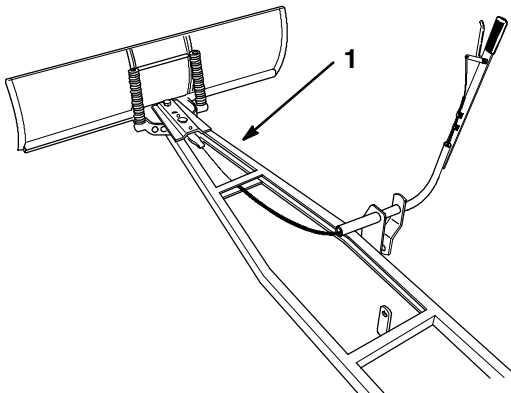
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## Introduction

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.

<b>Model No:</b> _____
<b>Serial No.</b> _____

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.

# Installation

## Loose Parts

**Note:** This blade requires a rear-mount, Attach-A-Matic™, which you must purchase separately. Use the chart below to identify other parts used for assembly.

**Note:** Your Authorized Toro Dealer can sell you skids for the blade. They can be useful on rough or broken surfaces to keep the blade above the ground.

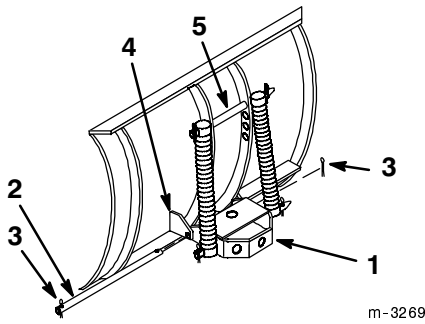
DESCRIPTION	QTY.	USE
Blade assembly	1	Assembling the blade
Rod	1	
Cotter pin, 1-1/4 in. (30 mm)	1	
Frame assembly	1	
Bolt, 3/4-16 x 3-3/4 in. (95 mm)	1	
Lock nut, 3/4 in.	1	
Control handle	1	
Cable	1	
Cable clip	2	
Bolt, 1/4 in. x 1 in.	2	
Locknut, 1/4-20 in.	2	
Angle control rod	1	
Cable bracket	1	
Hairpin cotter, large	1	
Cotter pin, 1 in. (25 mm)	3	
Lift link, slotted	1	Attaching the center of the blade frame to the tractor
Lift link, two hole	1	
Clevis pin, 3/8 x 1 in. (25 mm)	2	
Clevis pin, 3/8 x 3/4 in. (19 mm)	2	
Hairpin cotter, medium	2	
Stabilizer	1	Attaching the stabilizer
Bolt, 5/16 x 1-1/4 in. (32 mm)	1	
Locknut, 5/16 in.	1	
Clevis pin, 3/8 x 1 in. (25 mm)	2	Preparing the tractor attachment lift
Hairpin cotter, small	2	

## Assembling the Blade

1. Lift and rotate the channel assembly so the holes align with the lower blade mounts.
2. Slide the rod through the holes and secure it with two 1 in. (26 mm) cotter pins (Fig. 2).

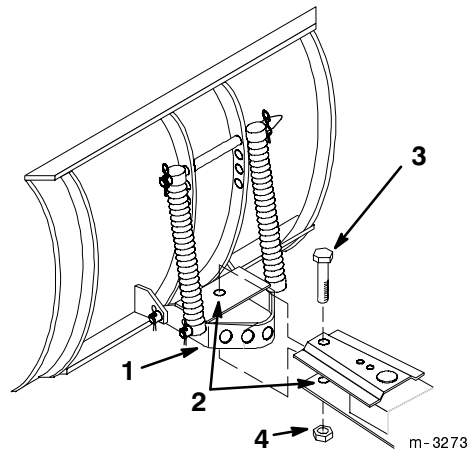
**Note:** If you have difficulty sliding the rod through the holes, partially remove the upper rod and use a hammer to drive the rod through. Then, install the upper rod.

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



**Figure 2**

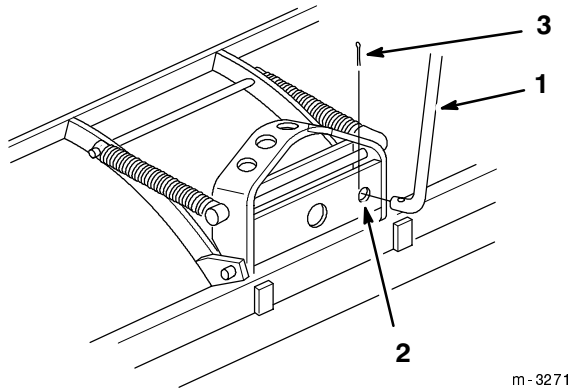
- |                             |                       |
|-----------------------------|-----------------------|
| 1. Channel assembly         | 4. Lower blade mounts |
| 2. Rod                      | 5. Upper rod          |
| 3. Cotter pin 1 in. (25 mm) |                       |



**Figure 4**

- |                     |                                    |
|---------------------|------------------------------------|
| 1. Channel assembly | 3. Bolt 3/4-16 x 3-3/4 in. (95 mm) |
| 2. Grease here      | 4. Lock nut 3/4 in.                |

4. Insert one end of the angle control rod through the hole in the bottom plate of the channel weldment (Fig. 3).



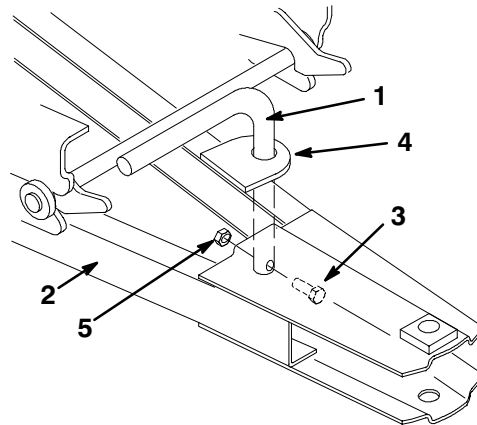
**Figure 3**

- |                      |                             |
|----------------------|-----------------------------|
| 1. Angle control rod | 3. Cotter pin 1 in. (25 mm) |
| 2. Channel weldment  |                             |

5. Insert a 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 (Fig. 4).
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 3/4 in. locknut (Fig. 4).

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

8. Install the stabilizer arm down through the guide on the frame (Fig. 5).
9. Insert a 5/16 x 1-1/4 in. (32 mm) bolt through the hole in the stabilizer arm and secure it with a 5/16 in. nut (Fig. 5).
10. Ensure that the stabilizer arm slides up and down freely in the hole in the frame (Fig. 5).



**Figure 5**

- |                                   |                  |
|-----------------------------------|------------------|
| 1. Stabilizer                     | 4. Guide         |
| 2. Frame                          | 5. Nut, 5/16 in. |
| 3. Bolt, 5/16 x 1-1/4 in. (32 mm) |                  |

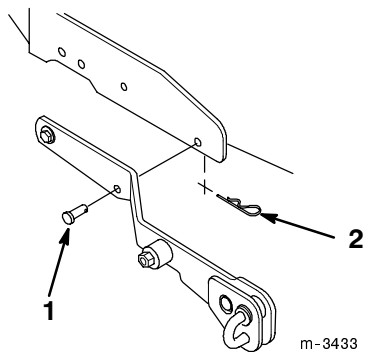
# Tractor Set-up

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

Install the rear Attach-A-Matic mount onto the tractor. For information on installing the mount, refer to the instructions provided with the mount.

## Preparing the Tractor Attachment Lift

1. Start the tractor.
2. Raise the attachment lift.
3. Set the parking brake, stop the engine, and remove the ignition key.
4. Install two 3/8 x 1 in. (25 mm) clevis pins into each side of the lift assembly in the positions shown in Figure 6. Secure them with two small hairpin cotters.



**Figure 6**

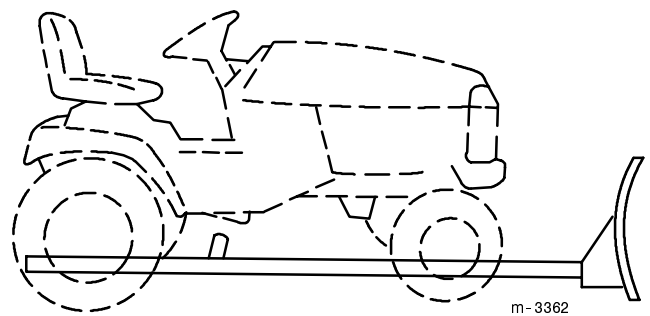
1. Clevis pin 3/8 x 1 in. (25 mm)
2. Hairpin cotter—small

**Note:** Install these pins before operating with a blade, snowthrower, or tiller attachment. Remove them before attaching a mower.

## Installing the Blade

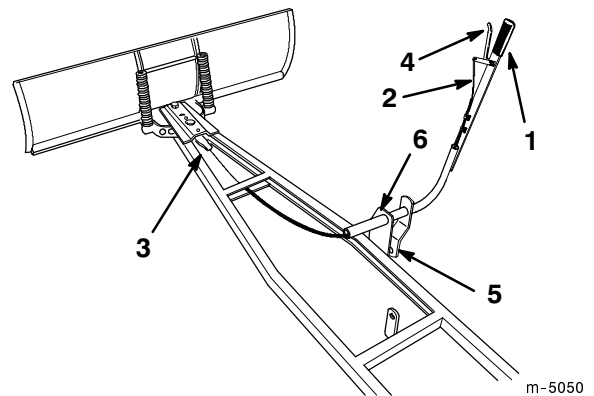
### Installing the Control Handle

1. Position the blade assembly on a level surface with space behind it to accommodate the tractor.
2. Park the tractor over the blade assembly, with the frame between the tractor wheels (Fig. 7).



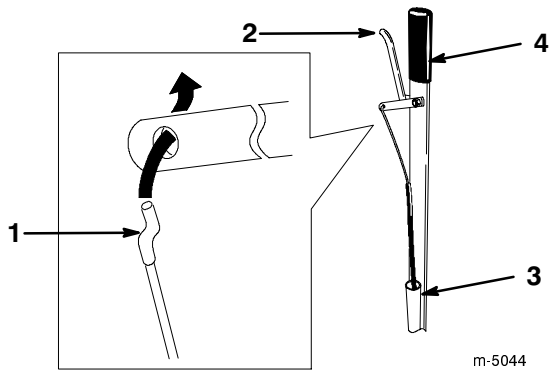
**Figure 7**

3. Set the parking brake, lower the attachment lift, stop the engine, and remove the ignition key.
4. Insert the handle into the handle mount and rotate it to the 12:00 o'clock position (Fig. 8).



**Figure 8**

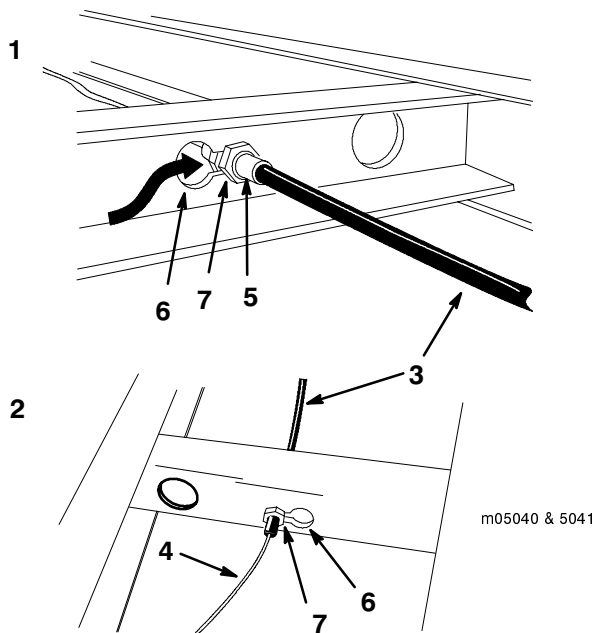
1. Control handle
  2. Cable
  3. Cable bracket
  4. Release lever
  5. Connect the angle control rod here
  6. Handle mount
5. Insert the rear end of the angle control rod into the bottom of the control handle and secure it with a large hairpin cotter (Fig. 8).
  6. Thread the balled end of the cable through the tube on the handle (Fig. 8).
  7. Connect the Z-fitting on the end of the cable to the release lever (Fig. 9).



**Figure 9**

- |                  |                   |
|------------------|-------------------|
| 1. Z-fitting     | 3. Tube           |
| 2. Release lever | 4. Control handle |

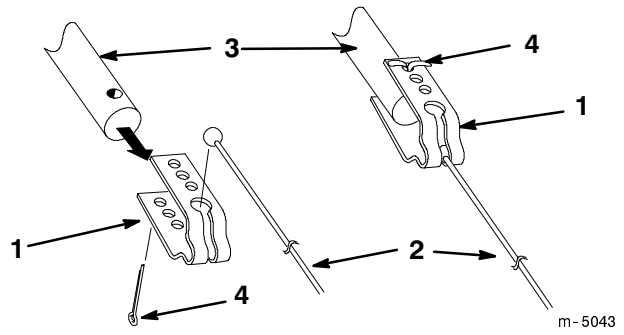
8. Thread the balled end of the cable through the keyhole slot in the frame up to the fitting on the cable jacket.
9. Slide the fitting through the slot and push it to the right, ensuring there is a jam nut on each side of the frame (Fig. 10).



**Figure 10**

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

10. Tighten the jam nuts.
11. Insert the balled end of the cable into the cable bracket.



**Figure 11**

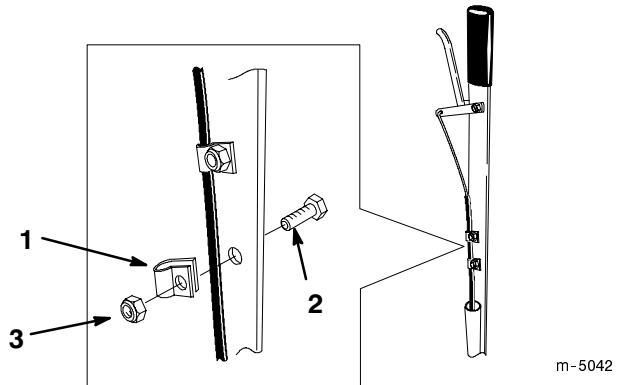
- |                  |                          |
|------------------|--------------------------|
| 1. Cable bracket | 3. Angle pin             |
| 2. Cable         | 4. Cotter pin, 1-1/4 in. |

12. Attach the cable bracket to the angle pin at the blade assembly (Fig. 8 & 11) with a 1-1/4 in. cotter pin.

**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 where it enters the tube in the handle to remove slack and secure it to the handle using two cable clips, two 1/4 x 1 in. bolts, and two 1/4-20 in. locknuts (Fig. 12).

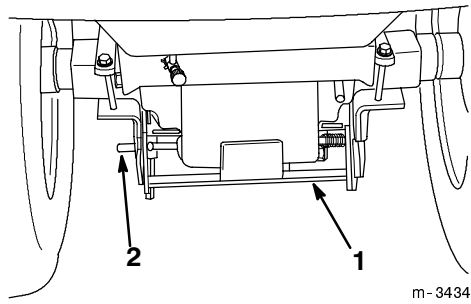


**Figure 12**

- |                          |                        |
|--------------------------|------------------------|
| 1. Cable clip            | 3. Locknut, 1/4-20 in. |
| 2. Bolt, 1/4 in. x 1 in. |                        |

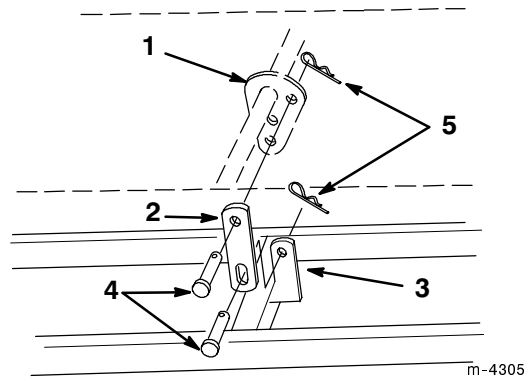
### Attaching the Frame to the Rear Attach-a-Matic Mount

1. Press the release button (Fig. 13) on the rear Attach-A-Matic to open the latches.
2. Place the rear cross-bar of the blade frame into the front two slots of the rear Attach-A-Matic.
3. Press on the latches at the rear until they lock the blade frame in place (Fig. 14).



**Figure 13**

- |                        |                   |
|------------------------|-------------------|
| 1. Rear Attach-A-Matic | 3. Mounting bolts |
| 2. Axle housing        | 4. Release button |



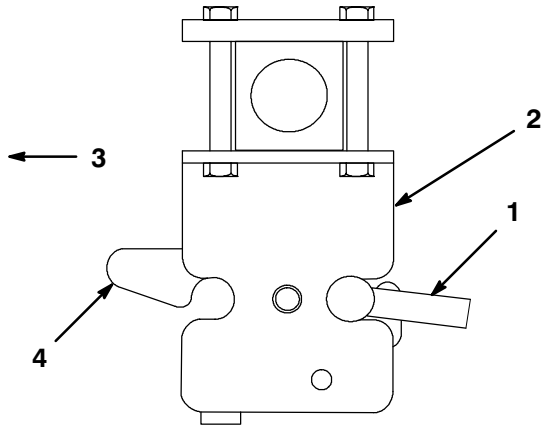
**Figure 15**

**Slotted Link Installation**

View from right side of tractor

- |                           |                                       |
|---------------------------|---------------------------------------|
| 1. Attachment lift plate  | 4. Clevis pins, 3/8 x 3/4 in. (19 mm) |
| 2. Slotted lift link      | 5. Hairpin cotter, medium plate       |
| 3. Blade frame connection |                                       |

- Use the two-hole lift link and two 3/8 x 1 in. (25 mm) clevis pins if you will be using the blade on smooth or loose surfaces (Fig. 16).



**Figure 14**

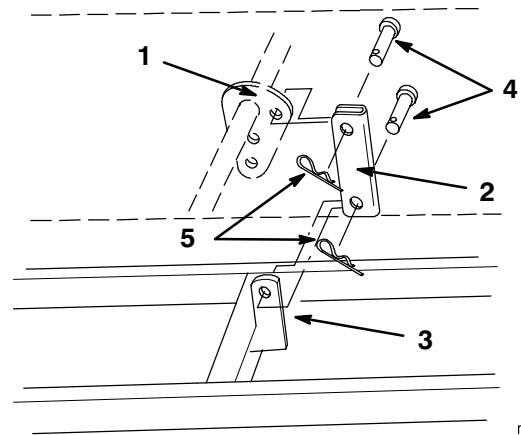
- |                               |                    |
|-------------------------------|--------------------|
| 1. Blade frame rear cross-bar | 3. Rear of tractor |
| 2. Rear Attach-A-Matic        | 4. Latch           |

**Attaching the Frame to the Front Attach-a-Matic Mount**

1. Open the latches on the front Attach-a-Matic mount and install the stabilizer.
2. Lock the stabilizer in place with the latches (Fig. 5).

**Attaching the Frame to the Attachment Lift**

1. Select the correct lift link for your application, as follows:
  - Use the slotted link and two 3/8 x 3/4 in. (19 mm) clevis pins if you will be using the blade over uneven or rough terrain (Fig. 15).



**Figure 16**

**Two-hole Link Installation**

View from right side of tractor

- |                           |                                    |
|---------------------------|------------------------------------|
| 1. Attachment lift plate  | 4. Clevis pins 3/8 x 1 in. (25 mm) |
| 2. Two-hole lift link     | 5. Hairpin cotter—medium plate     |
| 3. Blade frame connection |                                    |

2. Connect the upper front hole in the attachment lift plate to the top hole in the link you selected, securing it with one of the appropriate clevis pins and a medium hairpin cotter (Fig. 15 or 16).

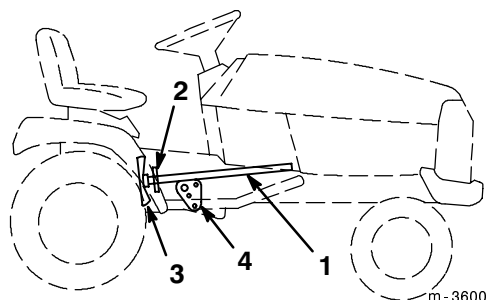
**Note:** Do not connect the bottom hole/slot in the link at this time.

**Important** Note the location of the fan and drive shaft on the tractor, because they will be rotating when the engine is started in the next step (Fig. 17).

**Danger**

**The rotating shaft and cooling fan can catch fingers, hands, feet, hair, clothing, etc., causing severe injury, amputation, or death.**

**Keep clear of the rotating shaft and fan.**



**Figure 17**

- |                         |                          |
|-------------------------|--------------------------|
| 1. Drive shaft          | 3. Fan                   |
| 2. Drive shaft coupling | 4. Attachment lift plate |

3. Ensure that the parking brake is set.
4. Start the tractor and rise from the seat.
5. Raise and lower the attachment lift until the hole/slot in the lift link aligns with the hole in the blade frame connection plate.
6. Stop the tractor and remove the key.
7. Secure the link with the appropriate clevis pin (step 1) and a medium hairpin cotter (Fig. 15 or 16).
8. Start the tractor.
9. Raise and lower the blade to check the operation.

**Warning**

**The scissor effect formed by moving parts of the tractor and the blade is can cut or amputate hands and fingers that get caught in the moving parts.**

- Keep your hands away from moving parts.
- Do not operate the attachment lift while working on the blade.

## Removing the Blade

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

1. Park the tractor on a level surface, set the parking brake, lower the attachment lift so the blade lightly touches the ground, stop the engine, and remove the ignition key.

**Danger**

**The rotating shaft and cooling fan can catch fingers, hands, feet, hair, clothing, etc., causing severe injury, amputation, or death.**

**Keep clear of the rotating shaft and fan.**

2. Remove the two clevis pins and hairpin cotters securing the lift link between the blade and tractor attachment lift (Fig. 15 & 16).
3. Release the latches on the front Attach-A-Matic, and remove the stabilizer.
4. Press the release button on the rear Attach-A-Matic, release the latch levers and lower the frame.
5. 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.
6. Remove the end of the cable from the cable bracket on the angle pin (Fig. 11).
7. Loosen the jam nuts and remove the cable from the keyhole slot in the blade frame (Fig. 10).
8. Remove the control handle (Fig. 8) by rotating it to the 9:00 o'clock position, then pulling it out of the frame.
9. Start the tractor and back it away from the blade assembly.

## Operation

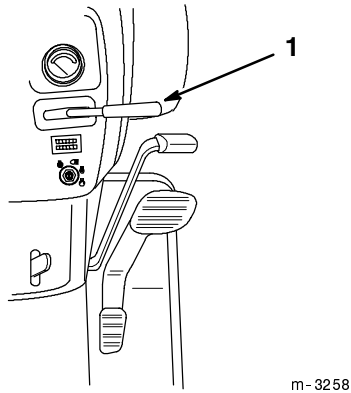
**Caution**

**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.

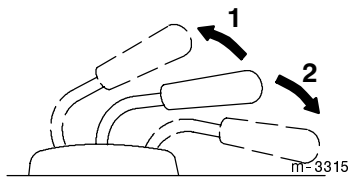
# Raising and Lowering the Blade

Raise and lower attachments using the attachment lift lever (Fig. 18 & 19).



**Figure 18**

1. Attachment lift lever



**Figure 19**

1. Raise attachment
2. Lower attachment

## Raising Attachments

1. Start the tractor.
2. Pull the attachment lift lever upward until the attachment raises to the desired height.
3. Release the lever.

**Caution**

**When the engine is off, attachments in the raised position can gradually lower, possible pinning or injuring someone nearby.**

**Lower the attachment lift before you turn off the engine.**

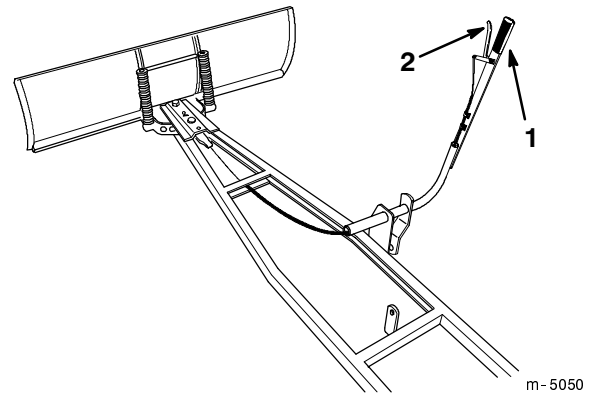
## Lowering Attachments

1. Start the tractor.
2. Push the attachment lift lever downward to lower the attachment.

## Adjusting the Blade Angle

You can change the side to side angle of the blade, in five positions. The following procedure explains how to change the angle:

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



**Figure 20**

1. Control handle
2. Release lever

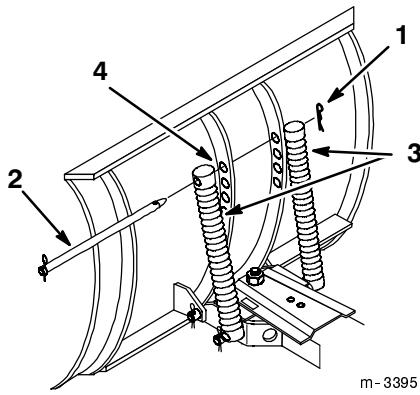
3. Push or pull the control handle to change blade-angle position and release the lever.

**Note:** The angle pin must snap into the hole in the channel to retain the blade position.

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



**Figure 21**

- |                   |             |
|-------------------|-------------|
| 1. Hairpin cotter | 3. Spring   |
| 2. Rod            | 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 loses traction when using the snow blade, install wheel weights and/or tire chains, which are available from your Authorized Service Dealer.

# Maintenance

## Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
25 hours	<ul style="list-style-type: none"> <li>• Grease the channel pivot</li> <li>• Oil the linkages</li> </ul>
Yearly/Storage Service	<ul style="list-style-type: none"> <li>• Grease the channel pivot</li> <li>• Oil the linkages</li> <li>• Examine the scraper for wear and replace if damaged or worn</li> <li>• Paint chipped surfaces (Paint is available from your Authorized Toro Dealer.)</li> </ul>



### Caution



**If you leave the key in the ignition switch, someone could accidentally 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

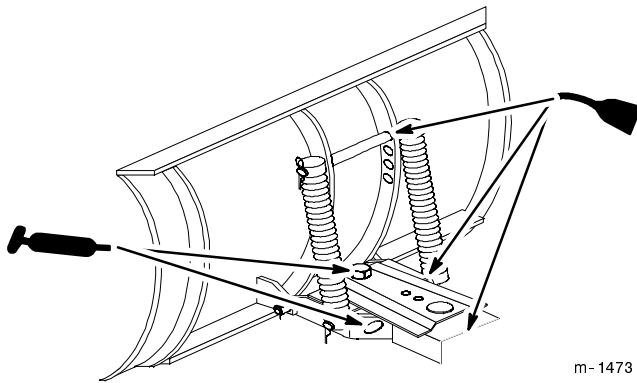
Grease and oil the machine after every 25 operating hours or once a year, whichever occurs first.

**Grease Type:** General-purpose grease.

**Oil Type:** SAE 10W or 10W30.

### 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. 22).



**Figure 22**

4. Wipe off excess grease.

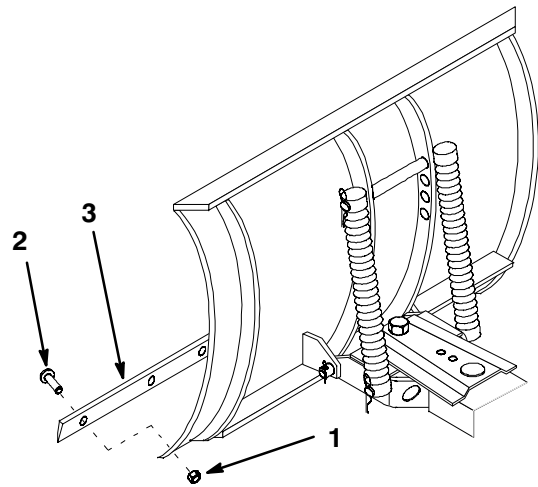
### Oil Linkages

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. 22).
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. 23).
4. Reverse the scraper blade to replace a worn edge and install it with the previously removed hardware (Fig. 23).



**Figure 23**

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

### 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 11.
3. Grease and oil the blade; refer to Greasing and Lubrication, 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. 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.

