



56" Snow Blade

TimeCutter™ Z Riding Mower Attachment

Model No. 79165—Serial No. 220000001 and Up

Operator's Manual

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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.

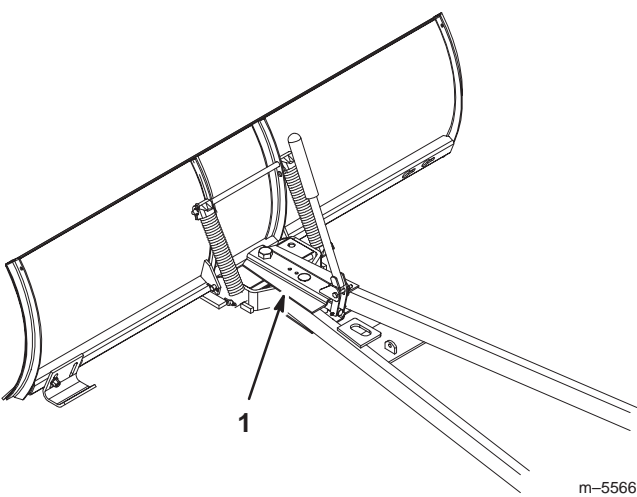


Figure 1

1. Location of the model and serial numbers

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.

Installation

Note: Determine the left and right sides of the machine from the normal operating position.

Loose Parts

Description	Qty.	Use
Blade assembly	1	Assembling the blade
Rod	1	
Cotter pin, 1 in.	2	
Carriage bolt, 3/8 x 1 in.	4	
Locknut, 3/8 in.	4	
Skid	2	
Frame assembly	1	
Bolt, 3/4 x 3-3/4 in.	1	
Locknut, 3/4 in.	1	
Index lever	1	
Bolt, 1/4 x 2 in.	1	
Locknut, 1/4 in.	1	
Cotter pin, 1/8 x 1-1/2 in.	1	
Support plate	2	Preparing the traction unit
Bolt, 3/8 x 1-1/2 in.	6	
Lift arm	2	
Flat washer, 1/2 in.	2	
Hairpin cotter, large	2	
Socket head screw, 3/8 x 1-1/4 in.	2	
Flat washer, 3/8 in.	2	
Locknut, 3/8 in.	2	
Lift shaft	1	
Large flat washer	2	
Cotter pin, 5/32 x 1-1/2 in.	2	
Retainer plate	2	Installing the blade
Screw, 1/4 x 5/8 in.	2	
Lock washer, 1/4 in.	2	
Pulley plate assembly	1	
Bolt, 1/2 x 5/8 in.	2	
Locknut, 1/2 in.	2	
Cotter pin	2	
Hairpin cotter, 1-3/16 in.	2	
Operator's Manual	1	Read before operating the snow blade.
Registration card	1	Fill out and return to Toro.

Assembling the Blade

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

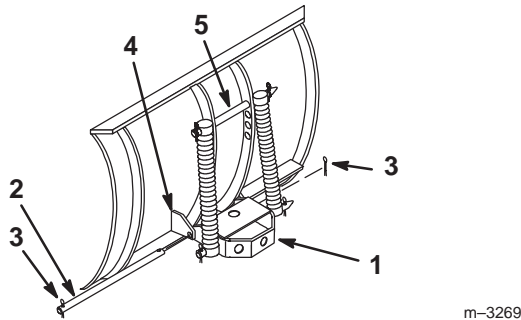


Figure 2

- | | |
|----------------------|-----------------------|
| 1. Channel assembly | 4. Lower blade mounts |
| 2. Rod | 5. Upper rod |
| 3. Cotter pin, 1 in. | |

4. Attach the skids to the blade with 4 carriage bolts (3/8 x 1 in.), flat washers (3/8 in.), and locknuts (3/8 in.) (Fig. 3). Position the skids according to what type of surface you will be plowing. Position the skids lower for plowing rough surfaces or higher for plowing smoother surfaces.

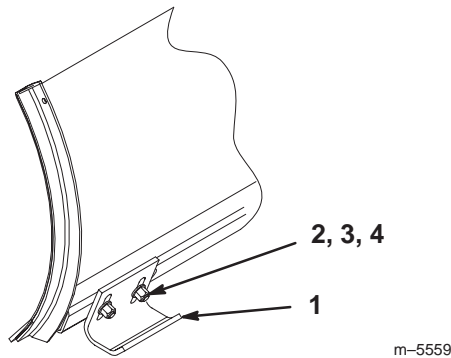


Figure 3

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|-------------------------------|-------------------------|
| 1. Skid | 3. Flat washer, 3/8 in. |
| 2. Carriage bolt, 3/8 x 1 in. | 4. Locknut, 3/8 in. |

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

6. Slide the blade channel assembly between the frame mount and secure it with a bolt (3/4 x 3-3/4 in.) and locknut (3/4 in.) (Fig. 4).

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

7. Connect the index lever to the angle pin with a cotter pin (1/8 x 1-1/2 in.) (Fig. 4).
8. Attach the index lever to the frame assembly with a bolt (1/4 x 2 in.) and locknut (1/4 in.) (Fig. 4).

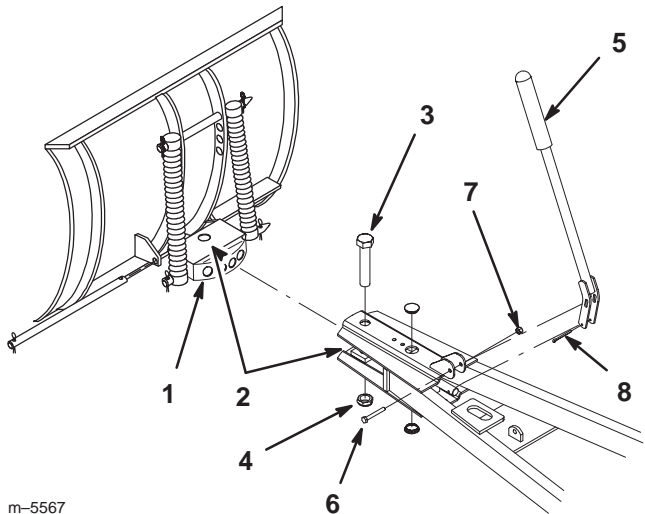


Figure 4

- | | |
|--------------------------|---------------------------------|
| 1. Channel assembly | 5. Index lever |
| 2. Grease here | 6. Bolt, 1/4 x 2 in. |
| 3. Bolt, 3/4 x 3-3/4 in. | 7. Locknut, 1/4 in. |
| 4. Nut, 3/4 in. | 8. Cotter pin (1/8 x 1-1/2 in.) |

Preparing the Traction Unit

1. Remove the mower from the traction unit; refer to your traction unit Operator's Manual for the correct procedure.
2. Remove the 3 existing bolts, locknuts, and 6 washers on each side of the traction unit frame.
3. Attach a support plate to each side of the traction unit frame using 3 bolts (3/8 x 1-1/2 in.) and the washers and locknuts that were removed in step 2 (Fig. 5). Torque the bolts to 30 ft.-lb. (41 N·m).

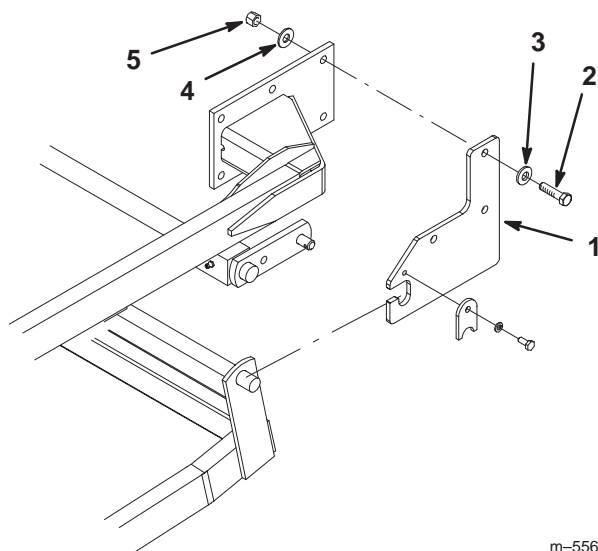


Figure 5

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|--------------------------|----------------|
| 1. Support plate | 4. Flat washer |
| 2. Bolt, 3/8 x 1-1/2 in. | 5. Locknut |
| 3. Curved washer | |

4. Attach a lift arm to the mower mount on one side of the traction unit using 2 flat washers (1/2 in.) and a large hairpin cotter on the pin and a socket head screw, flat washer (3/8 in.), and locknut (3/8 in.) in the second hole (Fig. 6).
5. Slide the lift shaft into the lower hole in the lift arm (Fig. 6). Slide the second lift arm onto the opposite end of the shaft and over the rod on the lift shaft. Secure the lift shaft in place with 2 large flat washers and cotter pins (5/32 x 1-1/2 in.) (Fig. 6).

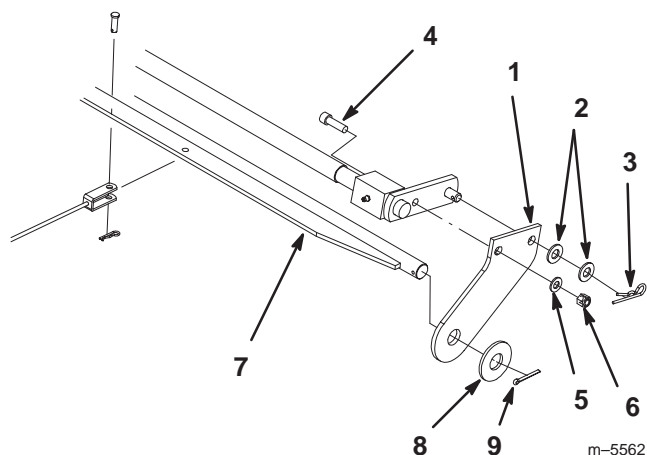


Figure 6

- | | |
|--------------------------|---------------------------------|
| 1. Lift arm | 6. Locknut, 3/8 in. |
| 2. Flat washer, 1/2 in. | 7. Lift shaft |
| 3. Hairpin cotter, large | 8. Large flat washer |
| 4. Socket head screw | 9. Cotter pin, 5/32 x 1-1/2 in. |
| 5. Flat washer, 3/8 in. | |

Installing the Blade

1. Slide the blade frame beneath the traction unit and hook the rear shaft of the blade frame into the slots in the support plates (Fig. 7).
2. To keep the blade assembly from moving around in the slots, attach a retainer plate to each side of the support plates with a screw (1/4 x 5/8 in.) and lock washer (Fig. 7).

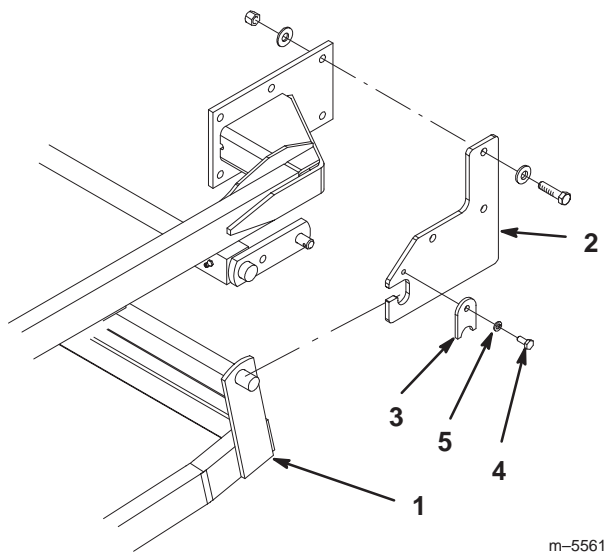


Figure 7

- | | |
|-------------------|-------------------------|
| 1. Blade frame | 4. Screw, 1/4 x 5/8 in. |
| 2. Support plate | 5. Lock washer |
| 3. Retainer plate | |

3. Insert the shaft on the pulley plate assembly into the slot in the blade frame and secure the assembly to the front of the traction unit with 2 bolts (1/2 x 5/8 in.) and locknuts (1/2 in.) (Fig. 8).

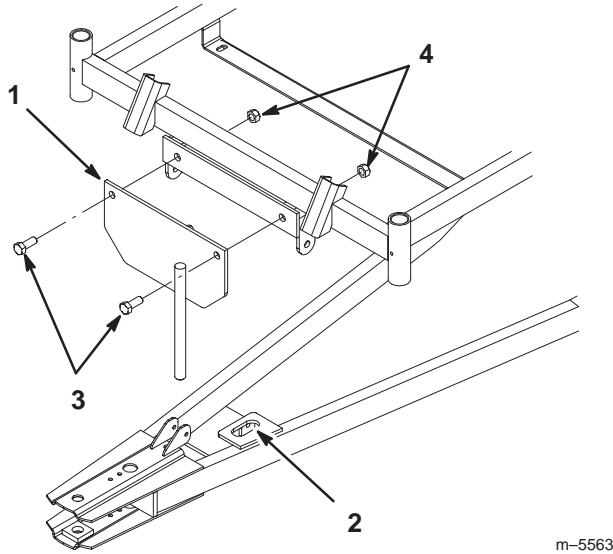


Figure 8

- | | |
|--------------------------|------------------------|
| 1. Pulley plate assembly | 3. Bolt, 1/2 x 5/8 in. |
| 2. Slot in blade frame | 4. Locknut, 1/2 in. |

4. Connect the cable clevis to the blade assembly frame with a cotter pin and hairpin cotter (1-3/16 in.) (Fig. 9).

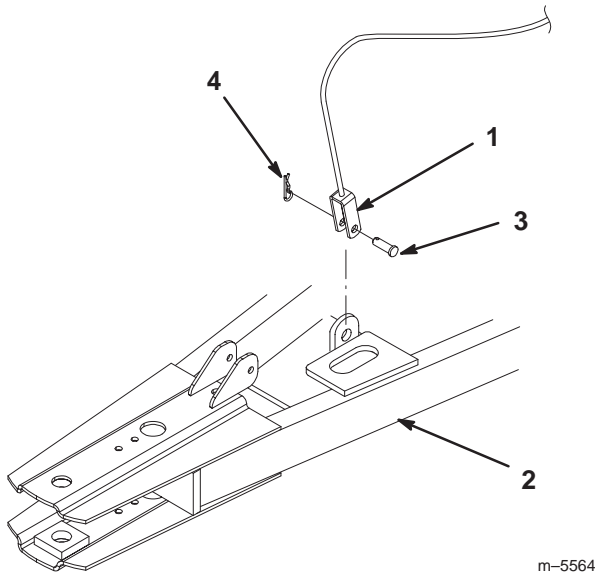


Figure 9

- | | |
|-------------------------|-------------------------------|
| 1. Cable clevis | 4. Hairpin cotter, 1-3/16 in. |
| 2. Blade assembly frame | 5. Lift shaft |
| 3. Cotter pin | |

5. Connect the other end of the cable to the lift shaft with a cotter pin and hairpin cotter (1-3/16 in.) (Fig. 10).

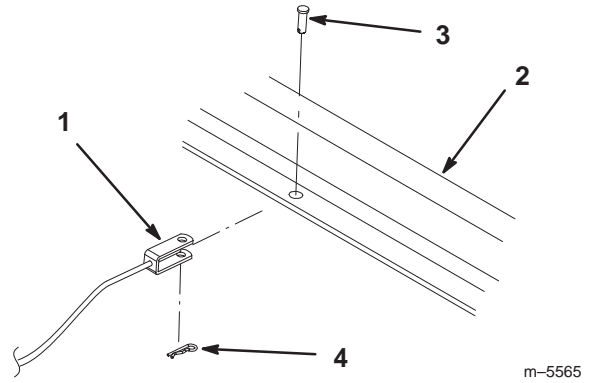


Figure 10

- | | |
|-----------------|-------------------------------|
| 1. Cable clevis | 3. Cotter pin |
| 2. Lift shaft | 4. Hairpin cotter, 1-3/16 in. |

Operation

Important This snow blade should be used for plowing snow only.



Caution



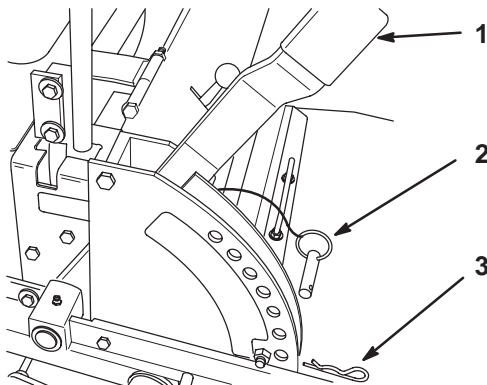
If you hit fixed objects with the blade, the traction unit could stop abruptly, causing you to lose control, sustain personal injury, and equipment damage.

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

Lowering and Raising the Blade

Lowering the Blade

1. Move the hairpin cotter and clevis pin to the lowest position in the height-of-cut bracket (Fig. 11).
2. Slowly lower the the height-of-cut lever.



m-3654

Figure 11

1. Height-of-cut lever
2. Clevis pin
3. Hairpin cotter

Raising the Blade

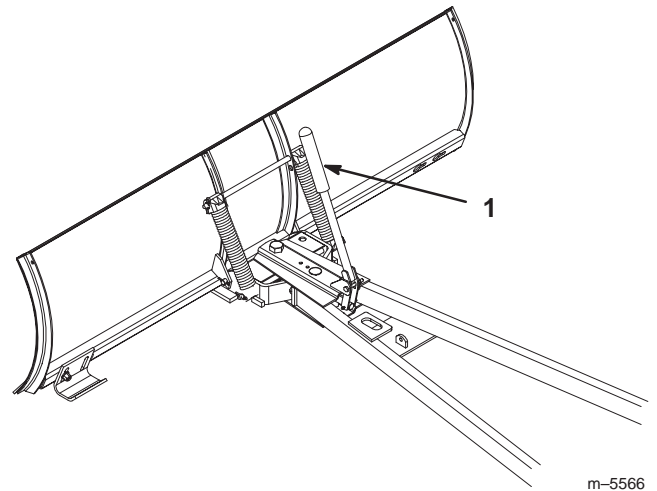
Raise the height-of-cut lever to the transport position (highest height of cut).

Adjusting the Blade Angle

There are five positions for the side to side angle of the blade. To change the blade angle, perform the following procedure:

1. Raise the blade.
2. Push the index lever forward with one hand (Fig. 12) while positioning the blade with the other hand until you have reached the desired blade angle.
3. Release the index lever.

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



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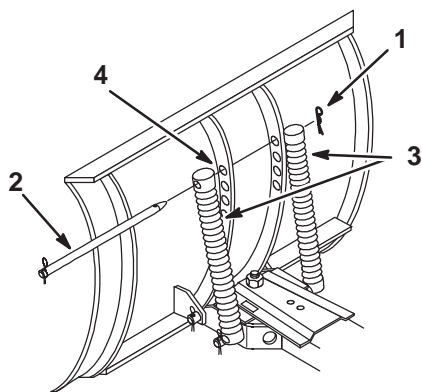
Figure 12

1. Index lever

Adjusting the Blade Trip Springs

The blade trip springs can be mounted in four positions. The top hole provides the greatest scraping pressure and the bottom hole provides the least scraping pressure (Fig. 13).

1. Remove the hairpin cotter and slide the rod from the blade and springs (Fig. 13).
2. Slide the rod through the springs and the new hole position in the blade (Fig. 13).



m-3395

Figure 13

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

Tips for Using the Blade



To obtain the best possible results with your blade, follow these tips:

- 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.

Maintenance

Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
25 hours	<ul style="list-style-type: none">• Grease the channel pivot.• Oil the linkages.
Yearly/Storage Service	<ul style="list-style-type: none">• Grease the channel pivot.• Oil the linkages.• Examine the scraper for wear and replace if necessary.• Paint any chipped surfaces.

**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 Lubricating the Blade

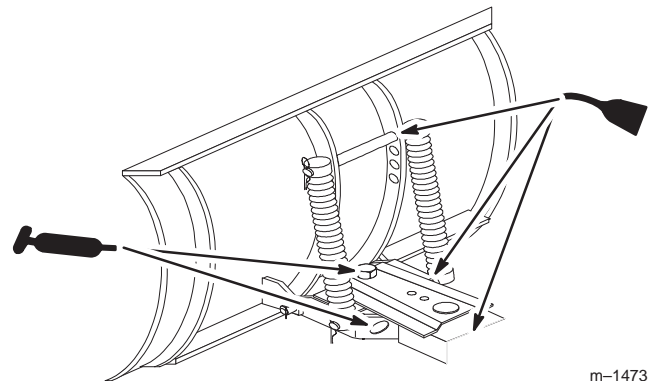
Grease and oil the blade after every 25 operating hours or once a year, whichever occurs first.

Grease type: general-purpose grease

Oil type: SAE 10W or 10W30

Greasing the Channel Pivot

1. Lower the blade.
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 channel indexing holes (Fig. 14).
4. Wipe off excess grease.



m-1473

Figure 14

Oiling the 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. 14).
3. Wipe off excess oil.

Reversing the Scraper

Periodically inspect the scraper blade for wear. Reverse the scraper blade when it becomes worn and before the working surface contacts the housing.

1. Raise the blade and support the housing off of the ground.
2. Remove the carriage bolts and locknuts securing the scraper (Fig. 15).
3. Reverse the scraper and install it with the previously removed hardware (Fig. 15).

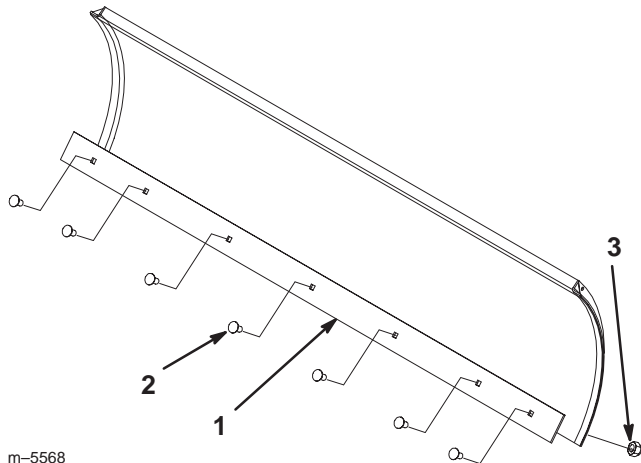


Figure 15

1. Scraper
2. Carriage bolt
3. Locknuts

Removing the Blade

1. Lower the blade to the ground.
2. Disconnect the cable from the lift shaft and blade assembly frame.
3. Remove the pulley plate assembly (Fig. 16).

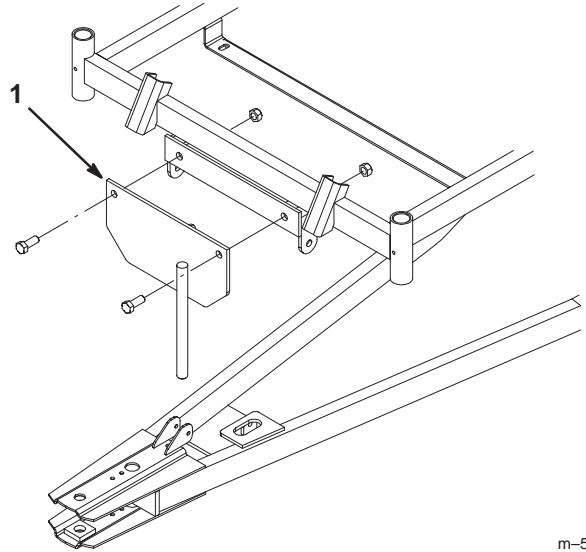


Figure 16

1. Pulley plate assembly

4. Remove the blade retainer plates from the support plates and unhook the blade assembly (Fig. 17). Do not remove the support plates.

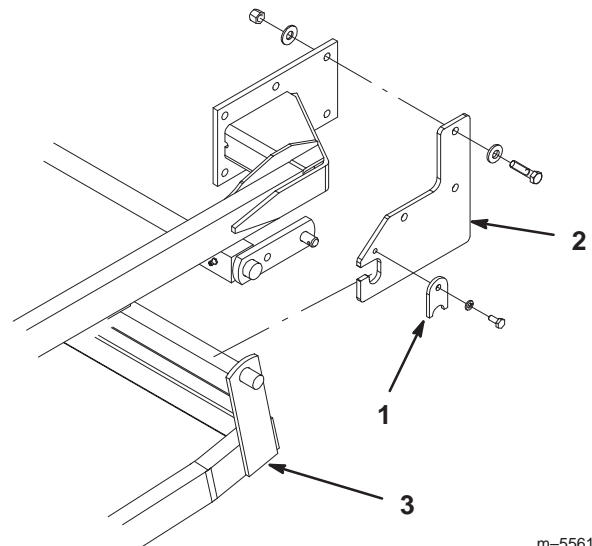


Figure 17

1. Retainer plate
2. Support plate
3. Blade assembly

5. Remove the lift arms and lift shaft (Fig. 18).

Note: Retain all parts for future installation.

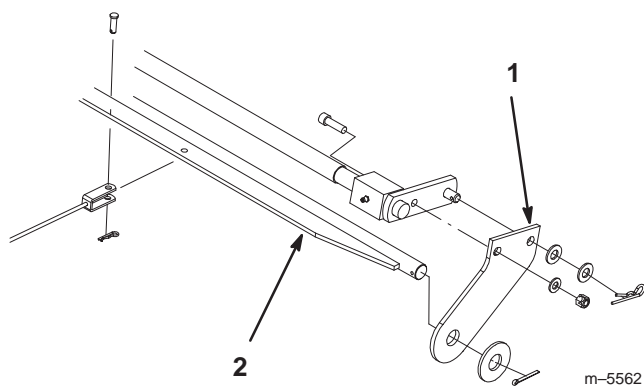


Figure 18

1. Lift arm

2. Lift shaft

Storing the Blade

1. Before long-term storage, wash the entire blade assembly with mild detergent and water to remove dirt and grime.
2. Check the condition of the scraper; refer to Reversing the Scraper Blade, page 10.
3. Grease and oil the blade; refer to Greasing and Lubricating the Blade, 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 blade in a clean, dry garage or storage area.
7. Cover the machine to protect it and keep it clean.

