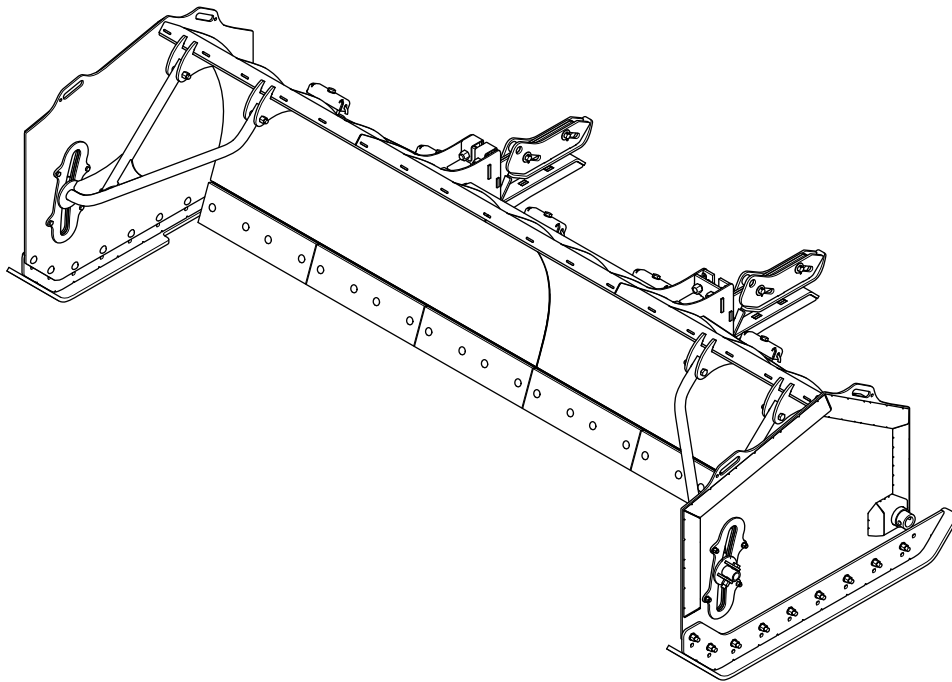




P.O. Box 787
Iron Mountain, MI 49801
United States

Owner's Manual

Box Plow for Loaders



This product complies with all relevant European directives; for details, please see the separate product specific Declaration of Conformity (DOC) sheet.

BOSS Products limited consumer warranty and BOSS Products commercial warranty policies are located at www.bossplov.com.

Patents Pending.

Introduction

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

Visit www.bossplov.com for product safety and operation training materials, accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine BOSS parts, or additional information, contact an Authorized BOSS Dealer or BOSS Technical Service (1-800-286-4155) and have the model and serial numbers of your product ready. identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.

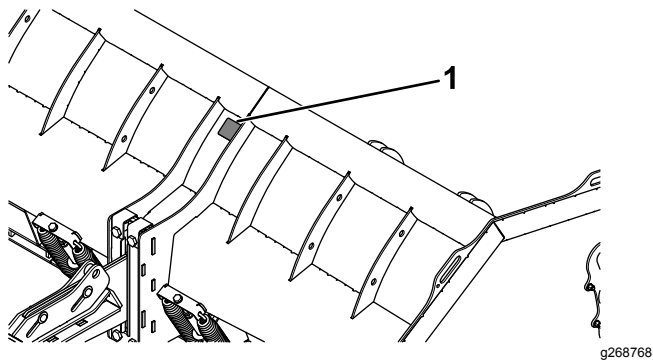


Figure 1

1. Serial number location

Date Purchased	_____
Model No.	_____
Serial No.	_____
Blade Crate Serial No.	_____

This manual identifies potential hazards and has safety messages identified by the safety-alert symbol

(**Figure 2**), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 2

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1. Safety-alert symbol

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

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Safety

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety-alert symbol , which means: **Caution, Warning, or Danger**—personal safety instruction. Failure to comply with the instruction may result in personal injury or death.

Preparation

- Read the *Owner's Manual* before operating or servicing the plow.
- Always follow the vehicle manufacturer's recommendations relating to system installation.
- Ensure that only trained personnel installs and performs maintenance on the equipment and hydraulic components.
- Always wear appropriate personal protective equipment when loading, unloading, and servicing the plow including hand and skin protection. Wear substantial, slip-resistant footwear, cold-weather clothing, hard hat, safety glasses, and respiratory protection.

Operation

- Use a 907 kg (1 ton) minimum lifting device to move heavy plow components.
- Never put any part of your body between the plow and the vehicle.
- When transporting the plow, ensure that it is properly secured. Instructions are available at www.bosspow.com.
- When transporting the vehicle, position the plow so as not to block your vision or headlights.
- Do not change the blade position when traveling.
- Do not exceed 16 km/h (10 mph) while plowing.
- Always lower the blade when the vehicle is not in use.
- Safety data sheets (SDS) are available at www.bosspow.com.
- Do not operate the machine while ill, tired, or under the influence of alcohol or drugs.
- Always follow the vehicle manufacturer's recommendations for proper parking procedures.
- Always wear your seatbelt and/or lap bar while operating the vehicle.
- Overloading the plow could result in an accident or damage. Never exceed the rated operating capacity for the vehicle.

- Do not exceed the gross-vehicle-weight rating (GVWR) of 13,600 kg (30,000 lb) at any time.
- Turn the vehicle and plow off before filling, servicing, or cleaning it.
- Do not operate the plow within 7.6 m (25 ft) of bystanders.
- Do not climb into or ride on the plow.
- Keep your hands, feet, and clothing away from moving parts and mounting points.
- Use your full attention while operating the machine. Do not engage in any activity that causes distractions; otherwise, injury or property damage may occur.

Safety and Instructional Decals



Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or missing.



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1. Warning—read the *Owner's Manual*.
2. Warning—all operators should be trained before operating the machine.
3. Warning—wear your seatbelt.
4. Crushing hazard—do not stand between the plow and vehicle during maintenance.
5. Falling hazard, plow blade—do not secure the plow to the top of the bucket; secure the plow horizontally to the bucket.
6. Warning—do not block your vision with the plow.
7. Warning—do not exceed 16 km/h (10 mph) while plowing.
8. Warning—lower the plow when the vehicle is not in use.

Setup

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

Important: Retain the crate hardware to use in the installation.

Attaching the Plow Wings

1. Using the lift points, stand the plow upright (Figure 3).

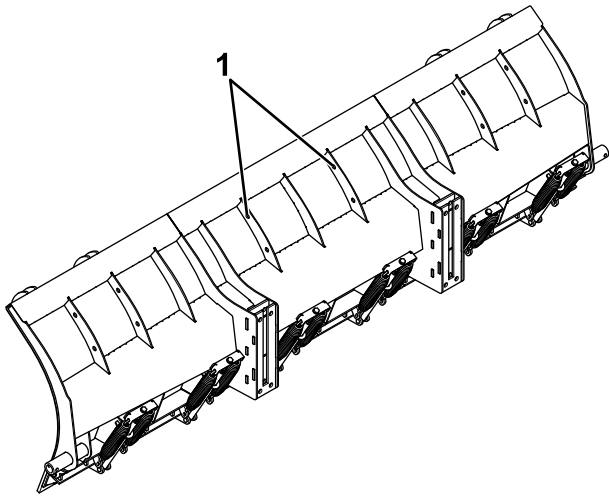


Figure 3

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1. Lift points

2. Apply grease to the pivot tubes on either side of the plow (Figure 4).

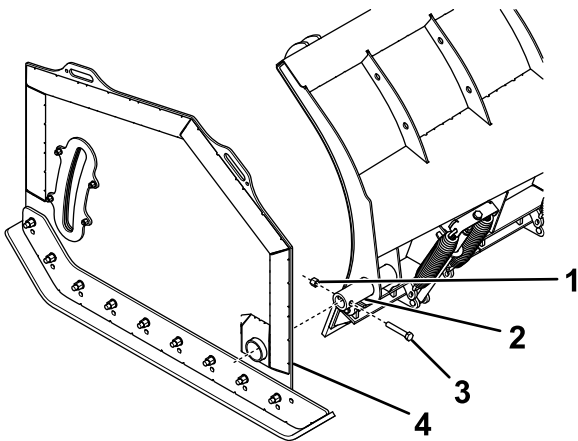


Figure 4

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1. Locknut (3/4 inch)
2. Pivot tube
3. Bolt (3/4 inch)
4. Plow wing

3. Slide the plow wings onto the pivot tubes and secure them with a bolt (3/4 inch) and locknut (Figure 4).

4. Slide a wing brace into the slot on the plow wing (Figure 5).

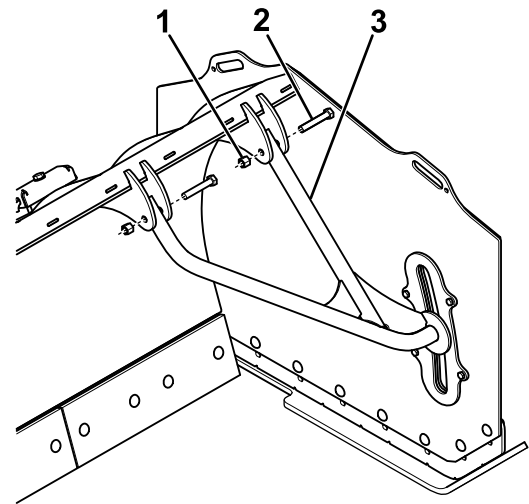


Figure 5

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1. Locknut (3/4 inch)
2. Bolt (3/4 inch)
3. Wing brace

5. Secure the top of the wing brace to the tabs on the plow using 2 bolts (3/4 inch) and locknuts (Figure 5).
6. On the outside of the plow wing, secure the wing brace bushing to the wing brace using a bolt (3/4 inch) and locknut (Figure 6).

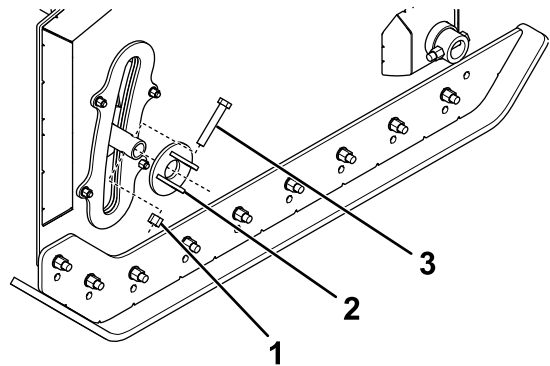


Figure 6

g268774

1. Locknut (3/4 inch)
2. Wing brace bushing
3. Bolt (3/4 inch)

7. Torque the fasteners to 384 N·m (283 ft-lb).

Installing the Attachment Forks

1. Loosely secure 2 bolts (1 inch) and locknuts to the bottom of the hitch plates ([Figure 7](#)).

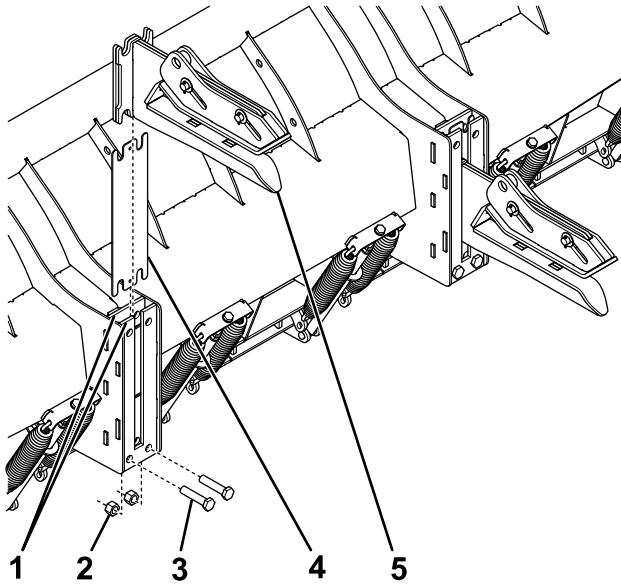


Figure 7

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1. Hitch plates
2. Locknut (1 inch)
3. Bolt (1 inch)
4. Back shim
5. Attachment fork

2. Slide the back shim between the hitch plates and slot it over the previously installed bolts ([Figure 7](#)).
3. With the back shim pushed to the back, slide the attachment fork between the back shim and the front hitch plate ([Figure 7](#)).
4. With the back shim and attachment fork pushed to the back, slide the side shims between the attachment fork and the front hitch plate ([Figure 8](#)).

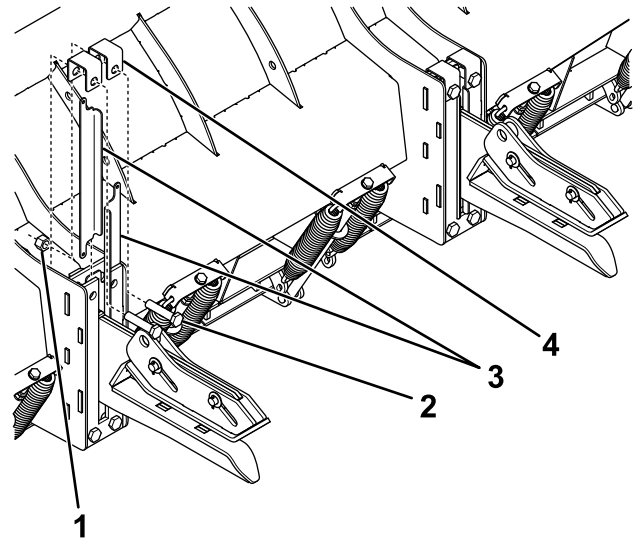


Figure 8

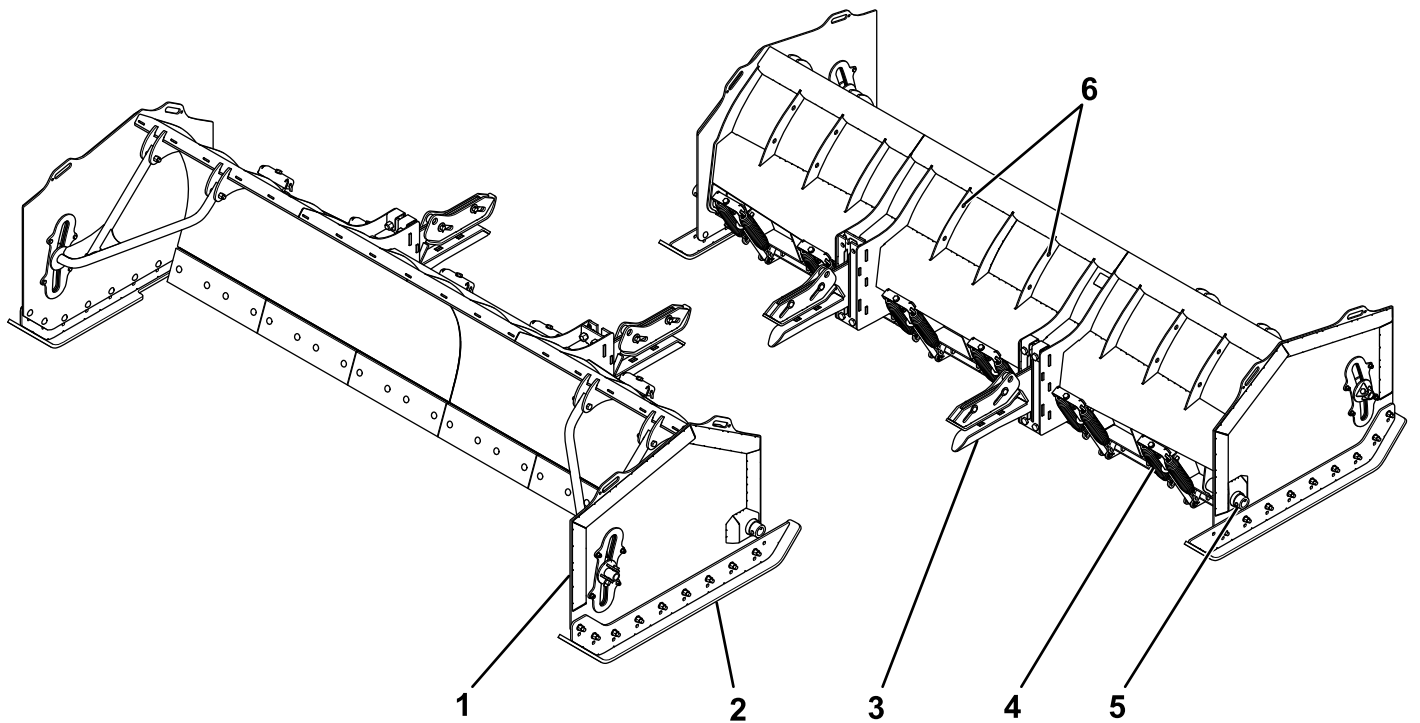
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1. Locknut (1 inch)
 2. Bolt (1 inch)
 3. Side shims
 4. Top cap
-
5. Apply grease between the back and side shims and the attachment fork.
 6. Secure the top caps to the hitch plates and shims using 2 bolts (1 inch) and locknuts ([Figure 8](#)).
 7. Torque the fasteners to 655 N·m (483 ft-lb).

Mounting the Plow

Mount the plow; refer to [Mounting the Plow \(page 8\)](#).

Product Overview



g268777

Figure 9

- 1. Plow wing
- 2. Plow shoe
- 3. Attachment fork
- 4. Trip spring
- 5. Pivot tube
- 6. Lift points

Specifications

Note: Specifications and design are subject to change without notice.

Plow	14 ft Plow	16 ft Plow
Blade width	4.27 m (14 ft)	4.66 m (16 ft)
Blade height	1.24 m (49 inches)	1.24 m (49 inches)
Weight	1,446 kg (3,190 lb)	1,505 kg (3,320 lb)

Operation

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

Mounting the Plow

1. Slowly drive the vehicle toward the plow, level the bucket, and adjust the bucket height (Figure 10).

Important: Refer to your vehicle *Operator's Manual* for safety and operating procedures.

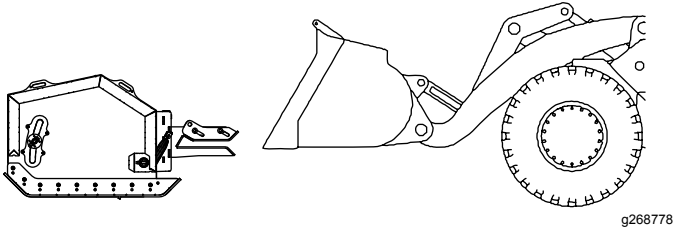


Figure 10

2. Slide the bucket between the attachment forks until it reaches the back of the forks (Figure 10).
3. Park the vehicle, shut off the engine, engage the parking brake, and remove the key, before leaving the vehicle.

Important: Refer to your vehicle *Operator's Manual* for safety and operating procedures.

4. Secure the plow to the bucket using a transport chain that is at least 3/8 inch and Grade 70 or higher, as shown in Figure 11. Positioning the chains horizontal and without crossing ensures optimal mounting; weld on tabs may be required to achieve this.

Note: Use ratcheting chain binders; lever-type binders can loosen with use.

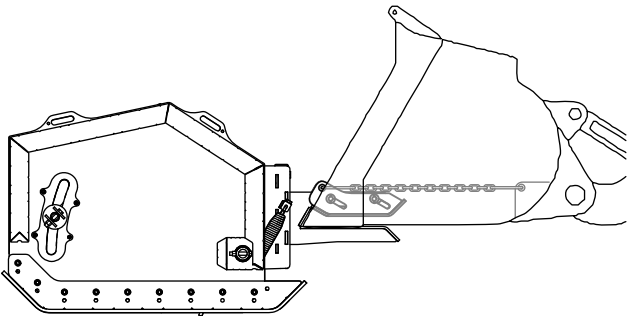


Figure 11

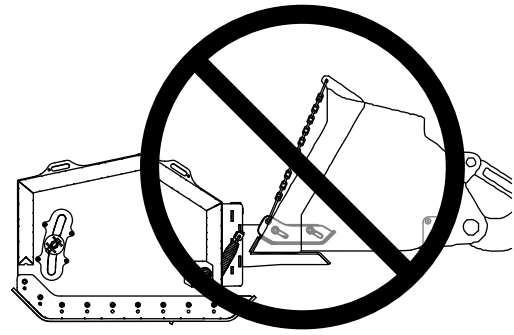


Figure 12

Removing the Plow

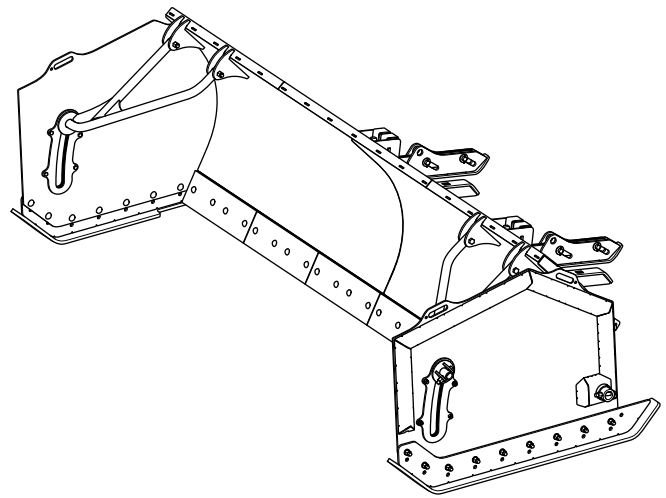
1. Park the vehicle on a level surface, lower the plow, shut off the engine, engage the parking brake, and remove the key.

Important: Refer to your vehicle *Operator's Manual* for safety and operating procedures.

2. Remove the transport chains securing the plow.
3. Slowly back the vehicle away from the plow.

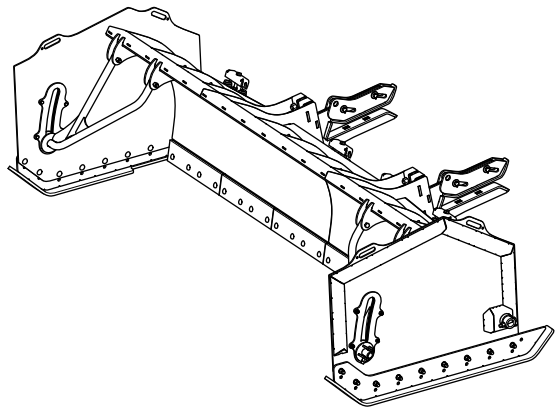
Operating Tips

- Become familiar with the area you are plowing; hidden obstructions such as curbs and pipes can damage your plow or machine.
- Do not let snow accumulate; always plow with the storm.
- Lower the plow when not in use to prevent possible injury.
- Always plow at a safe speed in case you hit hidden obstructions.
- When transporting the machine, do not block your vision with the plow.
- Do not change the plow position while plowing.
- To eliminate plow chatter, start by raising the plow and rotating it back ([Figure 13](#)). Lower the plow to the ground and rotate it forward until there is sufficient contact between the cutting edge and the ground. As the cutting edge wears, you will need to rotate the plow further forward. When you can no longer rotate the plow because of the plow wings ([Figure 14](#)), adjust the plow wing shoes upward to expose more of the plow cutting edge; refer to [Adjusting the Plow Wing Shoes](#) (page 10).



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Figure 13
Plow rotated back



g272749

Figure 14
Plow rotated forward

Maintenance

⚠ WARNING

Failure to properly maintain the machine could result in premature failure of machine systems causing possible harm to you or bystanders.

Keep the machine well maintained and in good working order as indicated in these instructions.

⚠ CAUTION

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

Remove the key from the switch before you perform any maintenance.

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

Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
Before each use or daily	<ul style="list-style-type: none">• Check the torque of all fasteners, pins, retainers, nuts, and bolts.• Check the cutting edge.• Check the plow wing shoes.• Apply grease to the slip hitch.

Adjusting the Plow Wing Shoes

3. Torque the fasteners to 272 N·m (201 ft-lb).

1. Remove the fasteners securing the shoe to the plow wing (Figure 15).

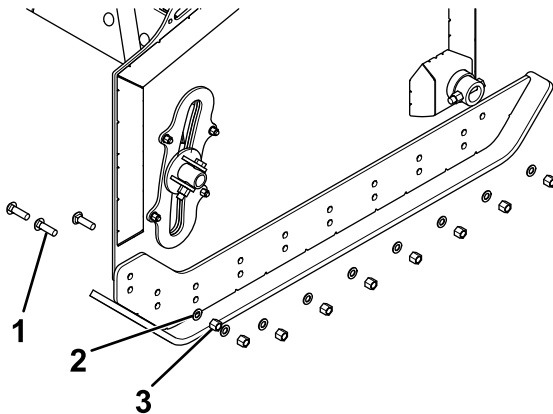


Figure 15

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1. Bolt
2. Washer
3. Locknut

2. Move the shoe up and secure it through the lower set of holes with the previously removed fasteners (Figure 15).

Storage

Storing the Plow

1. Drive the snowplow to your storage location and remove the plow; refer to [Removing the Plow \(page 8\)](#).
2. Lightly sand and use touch-up paint on painted areas that are scratched, chipped, or rusted.
3. Loosen the trip springs.
4. Grease the slip hitch and wing pivot tubes.

Removing the Plow from Storage

1. Check the plow for cracked welds.
2. Check the torque of all fasteners, pins, retainers, nuts, and bolts; tighten as necessary.
3. Check the cutting edge for wear.
4. Check the wing shoes for wear.
5. Lightly sand and use touch-up paint on painted areas that are scratched, chipped, or rusted.
6. Tighten the trip springs.
7. Grease the slip hitch and wing pivot tubes.
8. Attach the plow to the vehicle; refer to [Mounting the Plow \(page 8\)](#).

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