



44" Side Discharge Mower

Wheel Horse® XL Series Tractor Attachment

Model No. 79107—Serial No. 7900600 and Up

Model No. 79109—Serial No. 220010001 and Up

Operator's Manual



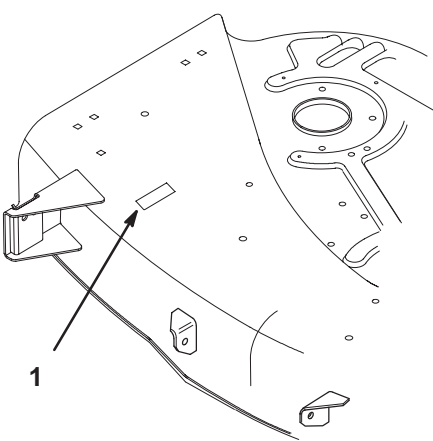
Contents

	Page
Introduction	2
Safety	3
Safety and Instruction Decals	3
Setup	4
Loose Parts	4
Preparing the Mower	4
Installing the Mower	5
Leveling the Mower from Side-to-Side	7
Front-to-Rear Blade Slope	8
Removing the Mower	9
Operation	11
Side Discharge or Mulch Grass	11
Using the Blade Control (PTO)	11
Setting the Height-of-Cut	11
Adjusting the Gage Wheels	12
Tips for Mowing Grass	12
Maintenance	13
Recommended Maintenance Schedule	13
Servicing the Cutting Blade	13
Servicing the Blade Drive Belt	14
Adjusting the Blade Brakes	15
Washing the Underside of the Mower	15
Storage	16
Troubleshooting	16

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.



m-1786

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.

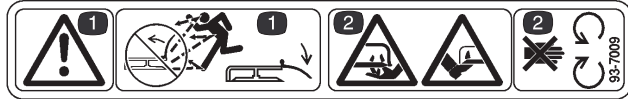
This manual uses two other words to highlight information. **Important** calls attention to special mechanical information and **Note:** emphasizes general information worthy of special attention.

Safety

Safety and Instruction Decals

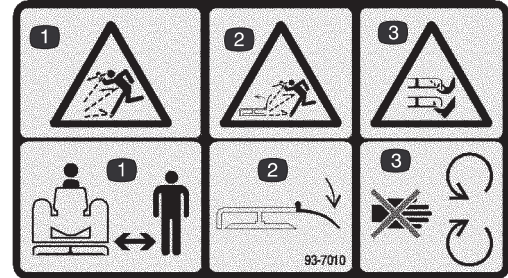


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



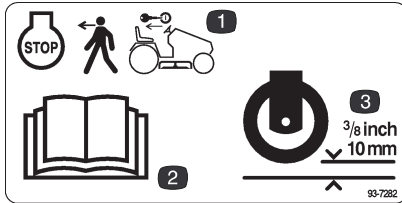
93-7009

1. Thrown object hazard from mower—keep the deflector in place.
2. Cutting/dismemberment hazard of hands and feet—stay away from rotating blades and moving parts.



93-7010

1. Thrown object hazard—stay a safe distance from the machine.
2. Thrown object hazard, mower—keep the deflector in place.
3. Cutting/dismemberment of hand or foot—stay away from moving parts.



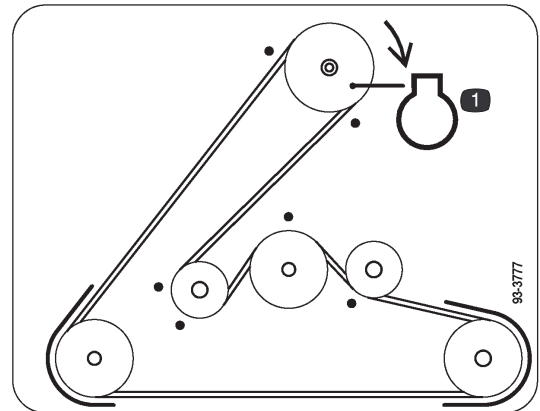
93-7282

1. Stop the engine and remove the ignition key before leaving the machine
2. Read the *Operator's Manual*.
3. Wheel height



93-6674

1. Crushing hazard, hand—read the instructions before servicing or performing maintenance.



93-3777

1. Engine



93-6677

1. Warning—thrown object hazard from mower. Keep the deflector in place.
2. Cutting/dismemberment hazard of hands and feet—stay away from rotating blades and moving parts.

Setup

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

Loose Parts

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

Description	Qty.	Use
Grass deflector	1	Installing the grass deflector
Spring	2	
Bolt, 3/8 x 3-1/2 in.	2	
Locknut, 3/8 in.	2	
Gage wheel	2	Installing the gage wheels
Pin	2	
Hairpin cotter	2	
Mower mounting plate	1	Installing the front mount to the mower
Shoulder bolt	2	
Locknut, 1/2 in.	2	
Bolt, 5/16 x 2-1/2 in.	2	Installing the mower to tractor
Locknut, 5/16 in.	2	
Hairpin cotter	4	
Thin washer	2	
Thick washer	2	
Operator's Manual	1	Read before operating the machine.

Preparing the Mower

1. Place the springs into the brackets on the mower with the hooked ends over the raised back (Fig. 2).
2. Align the grass deflector with the holes in the brackets and the straight ends of the spring in the space under the hinge and above the deflector (Fig. 2).
3. Secure the deflector to the bracket with bolts through the grass deflector, springs, and brackets. Secure them with the locknuts (Fig. 2).
4. Lift the grass deflector and check that it is spring loaded and pivots freely to the full down position.

Important The grass deflector must be spring loaded in the down position. Lift the deflector up to test that it snaps to the full down position.

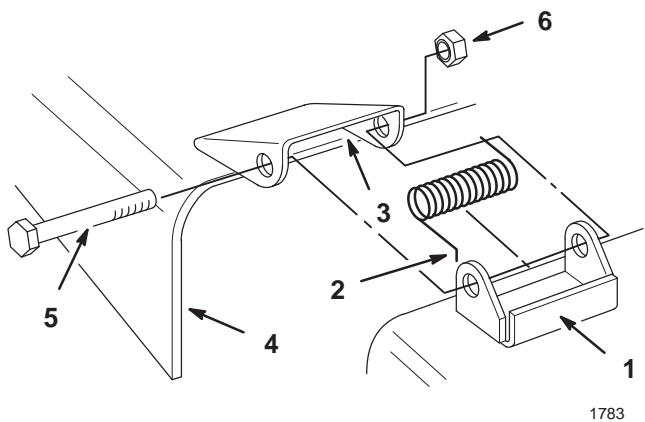


Figure 2

- | | |
|---------------------|--------------------|
| 1. Bracket | 4. Grass deflector |
| 2. Spring hook end | 5. Bolt |
| 3. Space for spring | 6. Locknut |

5. Deflect the anti-rattle spring, slide the adjusting plate of the gage wheel into the mower gage wheel bracket, and secure it with the pin and hairpin cotter (Fig. 3).

Note: After installing the mower onto the tractor and adjusting the height-of-cut, adjust the gage wheels; refer to Adjusting the Gage Wheels, page 12.

6. Repeat the adjustment on the other gage wheels.

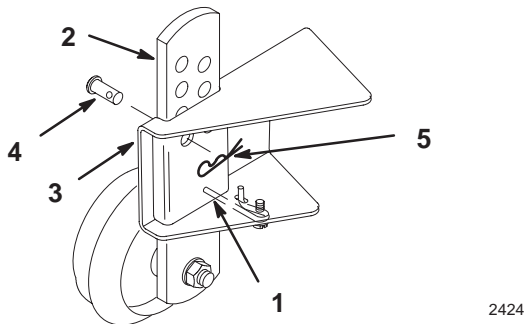


Figure 3

- | | |
|-----------------------|-------------------|
| 1. Anti-rattle spring | 4. Pin |
| 2. Plate | 5. Hairpin cotter |
| 3. Bracket | |

7. Position the mounting plate, with the tabs up, between the brackets on the front of the mower (Fig. 4).
8. Insert the shoulder bolts through the mounting plate into the mower brackets. Secure them with locknuts (Fig. 4).

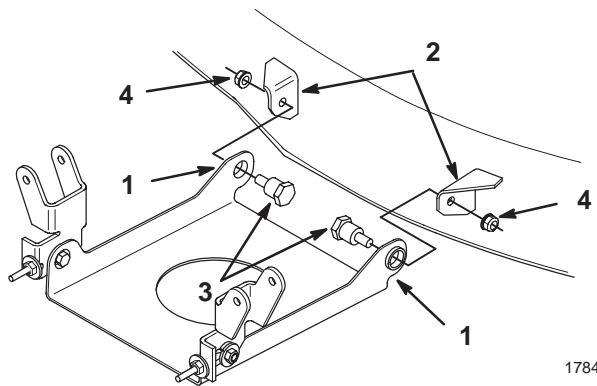


Figure 4

- | | |
|------------------|------------------|
| 1. Tab up | 3. Shoulder bolt |
| 2. Mower bracket | 4. Locknut |

Installing the Mower



Danger



Without the grass deflector, discharge cover, or complete grass catcher assembly mounted in place, you and others are exposed to blade contact and thrown debris. Contact with the rotating mower blade(s) and thrown debris will cause injury or death.

- Never remove the grass deflector from the mower because the grass deflector routes material down toward the turf. If the grass deflector is ever damaged, replace it immediately.
- Never put your hands or feet under the mower.
- Never try to clear the discharge area or mower blades unless you move the power take off (PTO) to Off and rotate the ignition key to Off. Also remove the key and pull the wire off of the spark plug(s).

1. Park the machine on a level surface, disengage the blade control (PTO), set the parking brake, and turn the ignition key to Off to stop the engine. Remove the key.
2. Turn the front wheels fully to the left. Slide the mower under the chassis from the right side.
3. Install the mower belt onto the lower engine pulley (Fig. 5). If you are careful, you can flex the belt guide(s) just far enough away from the pulley to install the belt. If it is too difficult to install the belt, loosen the bolts and nuts securing the belt guides.

Important Do not bend the belt guides away from the pulley. There must be a maximum 1/8 in. (3 mm) between the belt guide and the edge of the pulley to keep the belt on the pulley during operation. If the space is more than 1/8 in. (3 mm), adjust the belt guide(s) and tighten them securely. The belt guide must not contact the pulley.

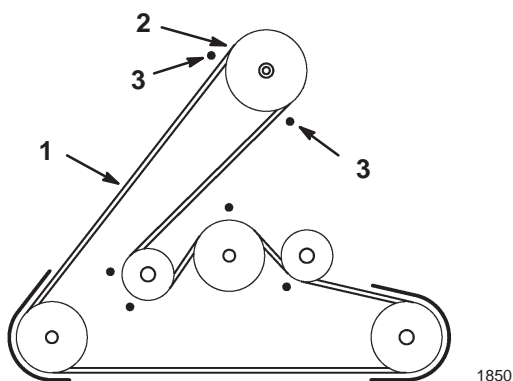


Figure 5
Top View

- 1. Mower belt
- 2. Engine pulley
- 3. Belt guide

4. Install the mower pivot mount brackets onto the front axle with the bolts and locknuts (Fig. 6). Tighten the fasteners.

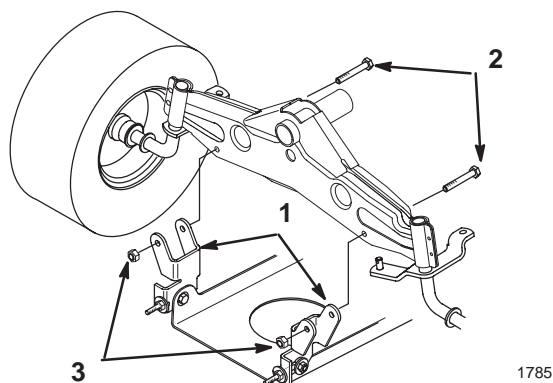


Figure 6

- 1. Pivot mount bracket
- 2. Bolt, 5/16 x 2-1/2 in.
- 3. Locknut

5. Move the height-of-cut lever into the "D" notch.
6. Remove the lift assist spring between the mower right side lift bracket and the retaining bolt (Fig. 7) Use the spring tool provided with the machine.
7. Move the height-of-cut lever into the "A" notch.

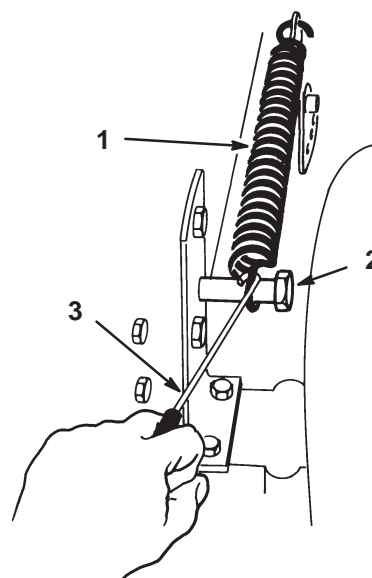


Figure 7

- 1. Spring
- 2. Bolt
- 3. Spring tool

8. Check that both rods extend 5/8 in. (16 mm) beyond the adjustment block (Fig. 8).
9. Slide the end of the long rod through the hole in the mower mount (Fig. 8). Install the thin washer and hairpin cotter to secure the rod in place. Repeat this step on the opposite side of the mower.
10. Mount the slotted mower leveling bracket onto the pin on the mower mount (Fig. 8). Install the thick washer and hairpin cotter to secure the mower. Repeat this step on the opposite side of the mower.

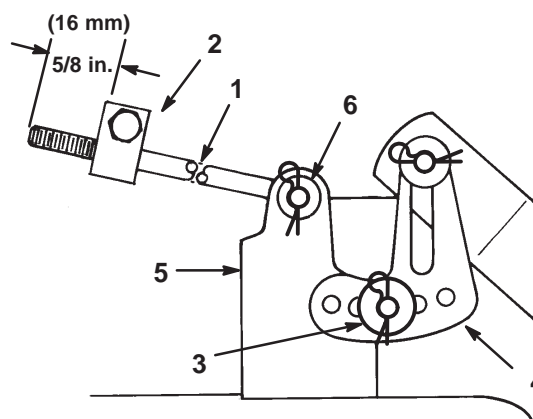
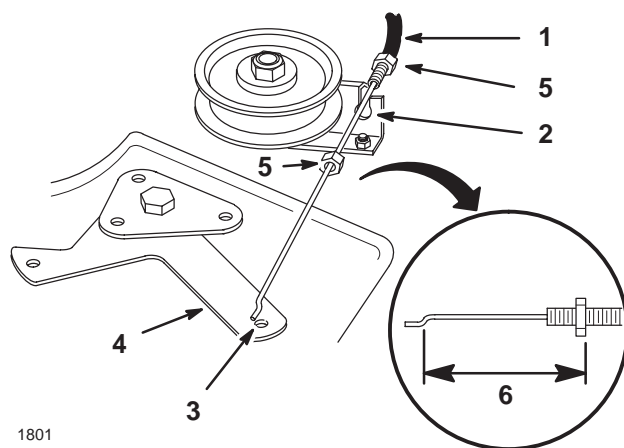


Figure 8

- 1. Rod
- 2. Adjusting block
- 3. Hairpin cotter and thick washer
- 4. Leveling bracket
- 5. Mower mount
- 6. Hairpin cotter and thin washer

11. Look under tractor and take down the PTO cable nested inside the frame rail.
12. Loosen the jam nut near the end of the cable. Route the cable through the slot in the deck bracket (Fig. 9).
13. Hook the Z end of the PTO cable into the bellcrank arm (Fig. 9).
14. Engage the PTO lever on the dash. Measure the distance between the Z end of the cable and the mounting bracket (Fig. 9). Adjust the jam nuts so that a 3-1/2 in. (89 mm) dimension is obtained (Fig. 9).
15. Tighten the jam nuts securely and disengage the PTO.
16. Check that the blade brake pads contact the pulleys, the actuating rods are loose when the PTO is disengaged, and the brake pads are away from the pulleys when the PTO is engaged.

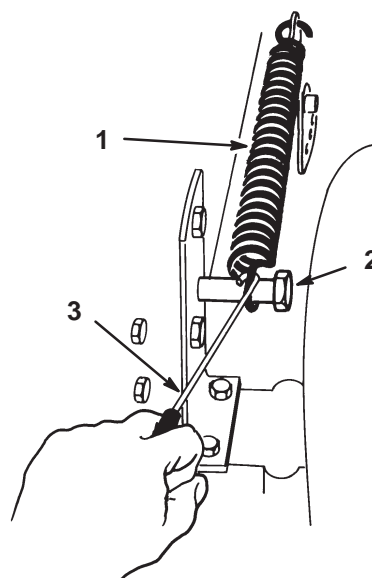


1801

Figure 9

- | | |
|--------------------------|------------------------------|
| 1. Blade control cable | 5. Jam nut |
| 2. Mounting bracket slot | 6. 3-1/2 in. (89 mm) engaged |
| 3. Cable Z end | |
| 4. Idler arm | |

17. Move the height-of-cut lever into the "D" notch to make it easier to install the height-of-cut lift assist spring.
18. Hook the lift assist spring between the mower right side lift bracket and the retaining bolt (Fig. 10) Use the spring tool provided with the machine.



1851

Figure 10

- | | |
|-----------|----------------|
| 1. Spring | 3. Spring tool |
| 2. Bolt | |

19. Check the mower level; refer to Leveling the Mower from Side-to-Side, page 7, and Front-to-Rear Blade Slope, page 8.

Leveling the Mower from Side-to-Side

The mower blades must be level from side to side. Check the side-to-side level any time you install the mower or when you see an uneven cut on your lawn. Before you level the mower, set the air pressure in the front and rear tires; refer to the tractor *Operator's Manual* for the correct tire pressure.

1. Park the machine on a level surface, disengage the PTO, set the parking brake, stop the engine, and remove the ignition key.
2. Move the height-of-cut lever into the "C" notch.

- Carefully rotate the blade(s) side to side (Fig. 11). Measure between the outside cutting edges and the flat surface (Fig. 11). If both measurements are not within $\frac{3}{16}$ in. (5 mm), an adjustment is required; refer to steps 4 and 5.

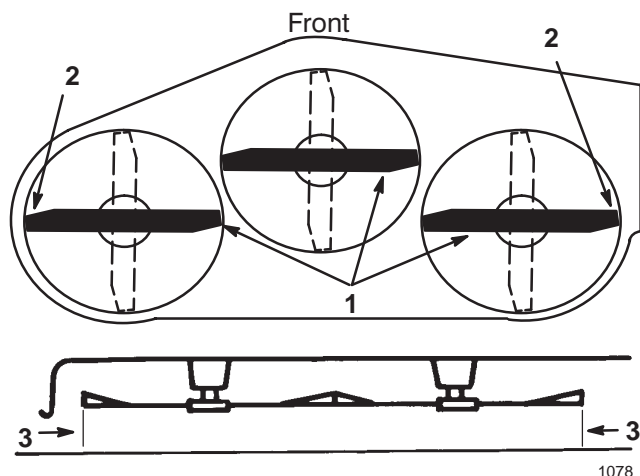


Figure 11

- Blades side to side
- Outside cutting edges
- Measure here

- Remove the hairpin cotter and washer from the leveling bracket (Fig. 12). To level the blade(s), reposition the leveling bracket in a different hole and install the washer and hairpin cotter. (Fig. 12). A front hole lowers the blade height and a rear hole raises its height. Adjust both sides as required.

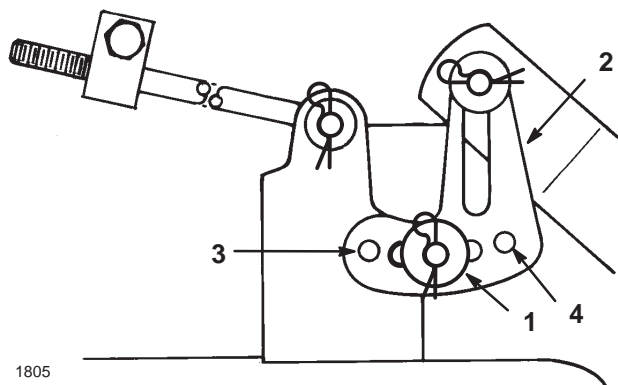


Figure 12

- hairpin cotter and washer
- Leveling bracket
- Front hole
- Rear hole

- Check the front-to-rear blade slope; refer to Front-to-Rear Blade Slope, page 8.

Front-to-Rear Blade Slope

Check the front-to-rear blade slope any time you install the mower. Before you check the slope, set the air pressure in the front and rear tires; refer to the tractor *Operator's Manual* for the correct tire pressure. If the front of the mower is more than $\frac{3}{16}$ in. (5 mm) lower than the rear of the mower, adjust the blade slope using the following instructions:

- Park the machine on a level surface, disengage the PTO, set the parking brake, stop the engine, and remove the ignition key.
- Check and adjust the side-to-side blade level if you have not checked the setting; refer to Leveling the Mower from Side-to-Side, page 7.
- Measure the length of the rod extending out of the front of the adjusting block on the sides of the chassis (Fig. 13). If the rod length is not $\frac{5}{8}$ in. (16 mm), remove the hairpin cotter and washer from the end of the rod (Fig. 13) and turn the rod until the $\frac{5}{8}$ in. (16 mm) dimension is obtained. Then install the end of the rod into the hole in the mower mount and secure it in place with the washer and hairpin cotter. Repeat this procedure on the opposite side of the mower.

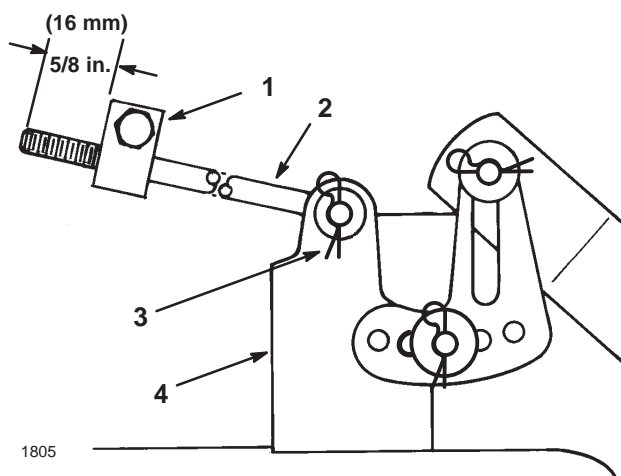


Figure 13

- Adjusting block
- Rod
- Hairpin cotter and washer
- Mower mount

- Move the height-of-cut lever into the "C" notch and carefully rotate the blades so that they are facing front to rear (Fig. 14).
- Measure between the tip of the front blade (Fig. 14) and the tip of the rear blade to the flat surface. If the front blade tip is not 0– $\frac{5}{16}$ in. (0–8 mm) lower than the rear blade tip, adjust the front mower mounting plate at the axle (Fig. 15).

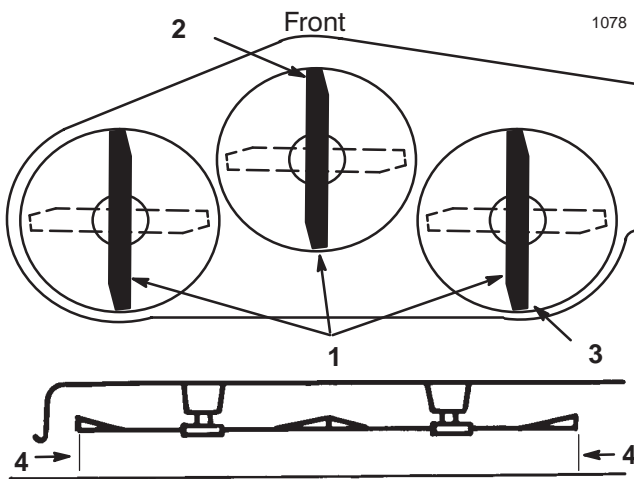


Figure 14

- | | |
|----------------------------|---------------------------|
| 1. Blade front to rear | 3. Measure rear blade tip |
| 2. Measure front blade tip | 4. Measure here |

6. To adjust the front-to-rear blade slope, loosen the front pivot plate mounting bolts slightly (Fig. 15).
7. Rotate the locknuts on the eyebolts to change the adjustment (Fig. 15). To raise the front of the mower, tighten the eyebolt locknuts. To lower the front of the mower, loosen the eyebolt locknuts.
8. After adjusting both eyebolt locknuts evenly, check the front-to-rear slope again. Continue adjusting the eyebolts until the front blade tip is 0-5/16 in. (0-8 mm) lower than the rear blade tip (Fig. 15).
9. When the front-to-rear slope is correct, tighten the pivot plate mounting bolts (Fig. 15).
10. When the front-to-rear blade slope is correct, recheck the side-to-side level of the mower; refer to Leveling the Mower from Side-to-Side, page 7.

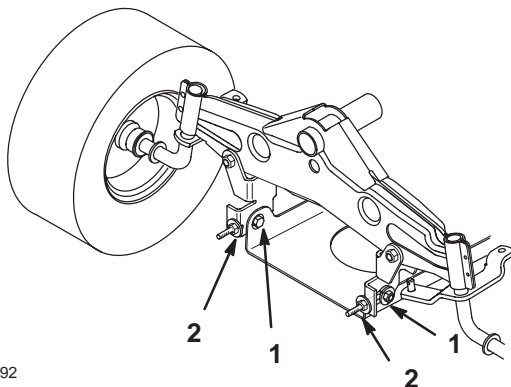


Figure 15

- | | |
|------------------------|--------------------|
| 1. Pivot mounting bolt | 2. Eyebolt locknut |
|------------------------|--------------------|

11. Check the gage wheel height; refer to Adjusting the Gage Wheels, page 12.

Removing the Mower

1. Park the machine on a level surface, disengage the PTO, set the parking brake, stop the engine, and remove the ignition key.
2. Move the height-of-cut lever into the "D" notch.
3. Remove the height-of-cut lift assist spring from the retaining bolt (Fig. 16), using the spring tool provided with the machine. The spring is between the frame and the right rear wheel.

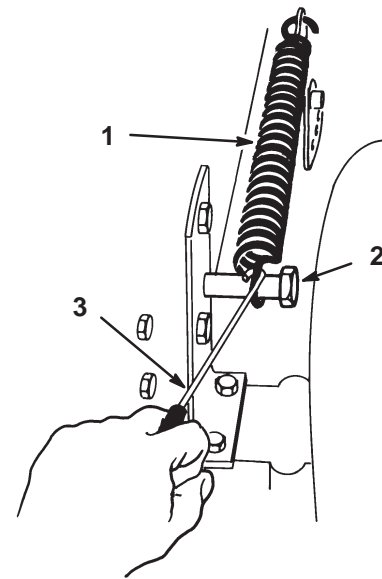


Figure 16

- | | |
|-----------|----------------|
| 1. Spring | 3. Spring tool |
| 2. Bolt | |

4. Move the height-of-cut lever into the "A" notch.
5. Unhook the PTO cable Z end from the idler arm on the mower (Fig. 17).
6. Remove the jam nut from the PTO at the mounting bracket. Slide the cable from the bracket and install the jam nut for safekeeping (Fig. 17).
7. Move the cable out of the way and lay it inside frame rail so that it cannot get caught in the drive belts or pulleys.

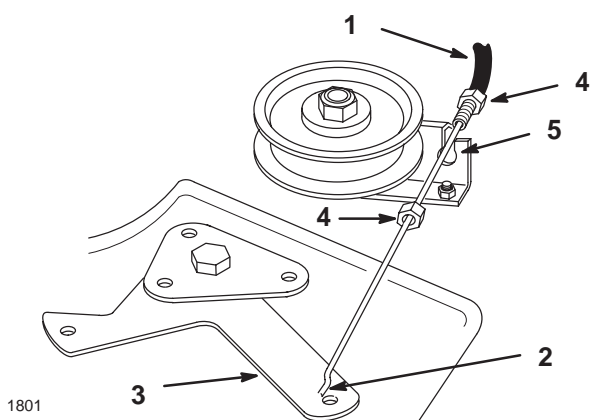


Figure 17

- | | |
|------------------------------|---------------------|
| 1. Blade control (PTO) cable | 4. Jam nut |
| 2. Z end | 5. Mounting bracket |
| 3. Idler arm | |

8. Remove the bolts and lock nuts and pull the two mower pivot mount brackets down from the front axle (Fig. 18).

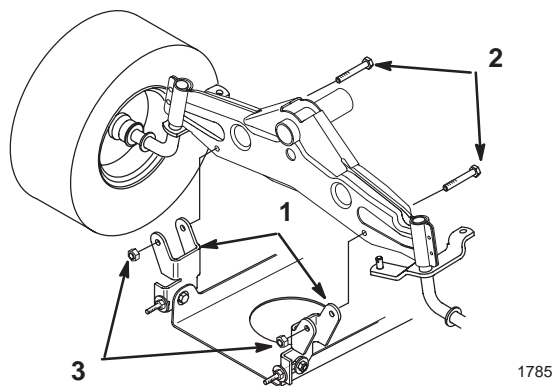


Figure 18

- | | |
|---------------------------|------------|
| 1. Pivot mount bracket | 3. Locknut |
| 2. Bolt, 5/16 x 2-1/2 in. | |

9. Remove the hairpin cotter and washer from the end of the long rod (Fig. 19). Slide the rod out of the mower mount.

10. Remove the hairpin cotter and washer at the mower leveling bracket (Fig. 19). Slide the bracket off of the mounting pin. Install the washer and hairpin cotter for storage.

11. Rotate the leveling bracket up toward the frame, and hook the long rod into one of the holes to store. Secure the long rod with the washer and hairpin cotter.

12. Repeat steps 9–11 on the opposite side of the mower.

13. Move the height-of-cut lever into the “D” notch. Hook the lift assist spring onto the retaining bolt for storage (Fig. 16).

Note: Do not install the lift assist spring if the rear tire chains are to be installed.

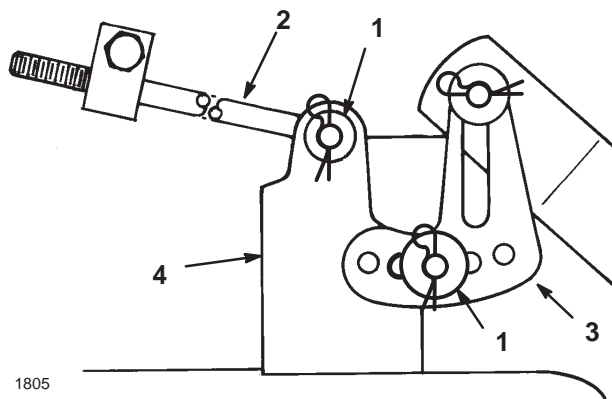


Figure 19

- | | |
|------------------------------|---------------------|
| 1. Hairpin cotter and washer | 3. Leveling bracket |
| 2. Long rod | 4. Mower mount |

14. Remove the mower belt from the engine pulley (Fig. 20). If you are careful, you can flex the belt guide(s) just far enough away from the pulley to remove the belt. If it is too difficult to remove the belt, loosen the bolts and nuts securing the belt guides. Tighten the bolts.

Important Do not bend the belt guide(s) away from the pulley because the belt will not operate properly when the mower is installed later.

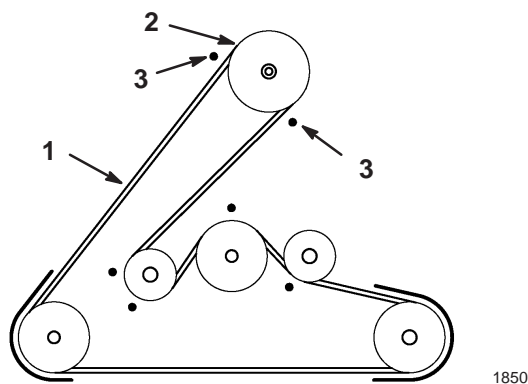


Figure 20

Top View

- | | |
|------------------|----------------|
| 1. Mower belt | 3. Belt guides |
| 2. Engine pulley | |

15. Turn the front wheels fully to the left. Slide the mower out to the right to complete removal.

Operation

Side Discharge or Mulch Grass



Danger



Without the grass deflector, discharge cover, or complete grass catcher assembly mounted in place, you and others are exposed to blade contact and thrown debris. Contact with the rotating mower blade(s) and thrown debris will cause injury or death.

- Never remove the grass deflector from the mower because the grass deflector routes material down toward the turf. If the grass deflector is ever damaged, replace it immediately.
- Never put your hands or feet under the mower.
- Never try to clear the discharge area or mower blades unless you move the power take off (PTO) to Off and rotate the ignition key to Off. Also remove the key and pull the wire off of the spark plug(s).

The mower has a hinged grass deflector that disperses clippings to the side and down toward the turf.

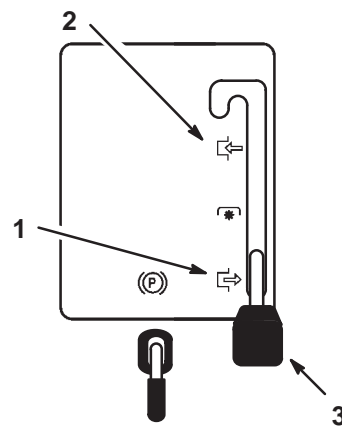
To mulch grass clippings you must install the Recycler[®] kit (optional on some models).

Using the Blade Control (PTO)

The blade control (PTO) engages and disengages power to the blade(s).

Engaging the Blade(s)

1. Depress the brake pedal to stop the machine.
2. Move the PTO to Engaged (Fig. 21).



1852

Figure 21

1. Disengaged
2. Engaged
3. Blade control (PTO)

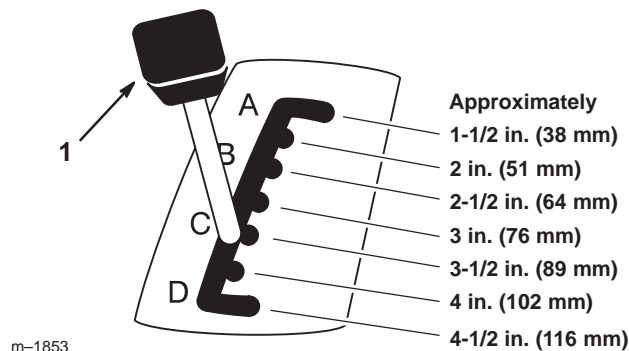
Disengaging the Blade(s)

1. Depress the brake pedal to stop the machine.
2. Move the PTO to Disengaged (Fig. 21).

Setting the Height-of-Cut

The height-of-cut lever is used to raise and lower the mower to the desired cutting height.

1. The cutting height may be set in one of seven positions from approximately 1-1/2 to 4-1/2 inches (38 to 116 mm).
2. Pull on the height-of-cut lever and move it to the desired position (Fig. 22).



m-1853

Figure 22

1. Height-of-cut lever

3. After adjusting height-of-cut adjust gage wheels; refer to Adjusting the Gage Wheels, page 12.

Adjusting the Gage Wheels

The gage wheels must be adjusted in the proper hole location for each height-of-cut position.

1. After adjusting the height-of-cut, raise the height-of-cut lever; refer to Setting the Height-of-Cut, page 11.
2. Remove the hairpin cotter and pin to change the hole location (Fig. 23).
3. Select a hole position so that the gage wheel is $\frac{3}{8}$ in. (10 mm) off of the ground for the height-of-cut to be used (Fig. 23).
4. Insert the pin and secure it with the hairpin cotter.
5. Repeat the adjustment on the other gage wheels.

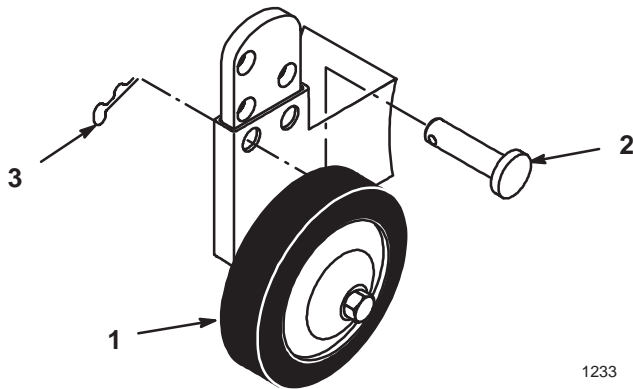


Figure 23

- | | |
|----------|-------------------|
| 1. Wheel | 3. Hairpin cotter |
| 2. Pin | |

Tips for Mowing Grass

Fast Throttle Setting

For best mowing and maximum air circulation, operate the engine at Fast. Air is required to thoroughly cut grass clippings, so do not set the height of cut too low or totally surround the mower by uncut grass. Always try to have one side of the mower free from uncut grass, which allows air to be drawn into the mower.

Cutting a Lawn for the First Time

Cut grass slightly longer than normal to ensure that the cutting height of the mower does not scalp any uneven ground. However, the cutting height used in the past is generally the best one to use. When cutting grass longer than 6 in. (15 cm) tall, you may want to cut the lawn twice to assure an acceptable quality-of-cut.

Cut 1/3 of the Grass Blade

It is best to cut only about 1/3 of the grass blade. Cutting more than that is not recommended, unless grass is sparse or it is late fall when grass grows more slowly.

Mowing Direction

Alternate mowing direction to keep the grass standing straight. This also helps disperse clippings which enhances decomposition and fertilization.

Mow at Correct Intervals

Normally, mow every 4 days. But remember, grass grows at different rates at different times. So to maintain the same cutting height, which is a good practice, mow more often in early spring. As the grass growth rate slows in mid summer, mow less frequently. If you cannot mow for an extended period, first mow at a high cutting height; then mow again 2 days later at a lower height setting.

Avoid Cutting Too Low

If the cutting width of the mower is wider than the mower you previously used, raise the cutting height one notch to ensure that uneven turf is not cut too short.

Long Grass

If the grass is ever allowed to grow slightly longer than normal, or if it contains a high degree of moisture, raise the cutting height higher than usual and cut the grass at this setting. Then cut the grass again using the lower, normal setting.

When Stopping

If the machine must be stopped while mowing, a clump of grass clippings may drop onto your lawn. To avoid this:

1. With the blade(s) Engaged, move onto a previously cut area.
2. To disperse the clippings evenly, raise the mower one or two height-of-cut settings while driving forward with the blade(s) Engaged.

Keep the Underside of the Mower Clean

Clean clippings and dirt from the underside of the mower after each use. If grass and dirt build up inside the mower, cutting quality will eventually become unsatisfactory.

Blade Maintenance

Maintain a sharp blade throughout the cutting season because a sharp blade cuts cleanly without tearing or shredding the grass blades. Tearing and shredding turns

grass brown at the edges, which slows growth and increases the chance of disease. Every 30 days, check the cutter blade(s) for sharpness and file down any nicks.



Maintenance

Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
Each Use	<ul style="list-style-type: none">Wash the underside of the mower.
Every 5 Hours	<ul style="list-style-type: none">Check the cutting blade.
Before Storage	<ul style="list-style-type: none">Perform all of the maintenance procedures listed above.Check the belts for wear/cracks.Paint chipped surfaces.

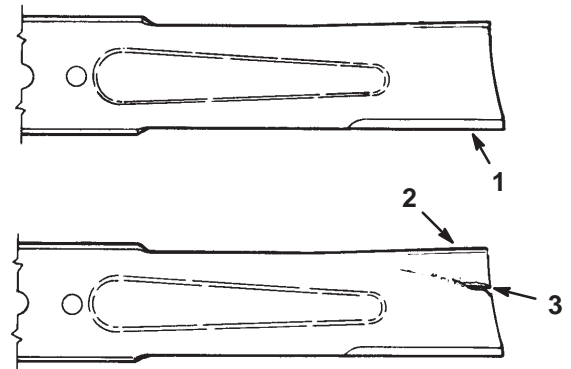
Servicing the Cutting Blade

To ensure a superior quality of cut, keep the blade(s) sharp. For convenient sharpening and replacement, you may want to have an extra blade(s).

**Danger**

A worn or damaged blade can break, and a piece of the blade could be thrown into the operator's or bystander's area, resulting in serious personal injury or death.

- Inspect the blade periodically for wear or damage.
- Replace a worn or damaged blade.



151

Figure 24

1. Cutting edge
2. Curved area
3. Wear/slot forming

Inspecting the Blade(s)

1. Remove the mower; refer to Removing the Mower, page 9.
2. Inspect the cutting edges (Fig. 24). If the edges are not sharp or have nicks, remove the blade(s) and sharpen them; refer to Sharpening the Blade(s), page 14.
3. Inspect the blade(s), especially the curved area (Fig. 24). If you notice any damage, wear, or a slot forming in this area (Fig. 24), immediately install a new blade.

Removing the Blade

1. Remove the mower; refer to Removing the Mower, page 9.
2. Carefully tip the mower over.
3. Remove the bolt, curved washer, and blade (Fig. 25). A block of wood may be wedged between the blade and the mower to lock the blade when you are removing the bolt.

4. Inspect all parts. If a defect or damage is noticed, install new parts.

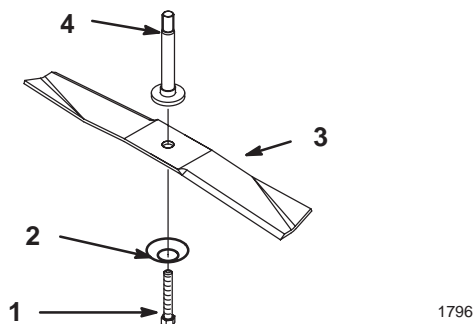


Figure 25

- | | |
|------------------|------------|
| 1. Nut | 3. Blade |
| 2. Curved washer | 4. Spindle |

Sharpening the Blade(s)

1. Use a file to sharpen the cutting edge at both ends of the blade (Fig. 26). Maintain the original angle. The blade retains its balance if the same amount of material is removed from both cutting edges.



Figure 26

1. Sharpen at original angle

2. Check the balance of the blade by putting it on a blade balancer (Fig. 27). If the blade stays in a horizontal position, the blade is balanced and can be used. If the blade is not balanced, file some metal off of the back side of the blade. Repeat this procedure until the blade is balanced.

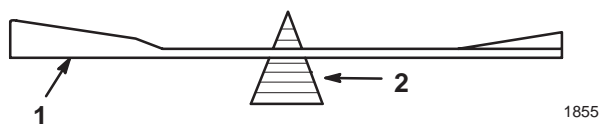


Figure 27

- | | |
|----------|-------------|
| 1. Blade | 2. Balancer |
|----------|-------------|

Installing the Blade(s)

1. Install the blade, curved washer, and blade bolt (Fig. 28).

Important The curved part of the blade must be pointing toward the inside of the mower to ensure proper cutting.

2. Tighten the blade nut to 40-60 ft.-lb. (54-81 N-m).

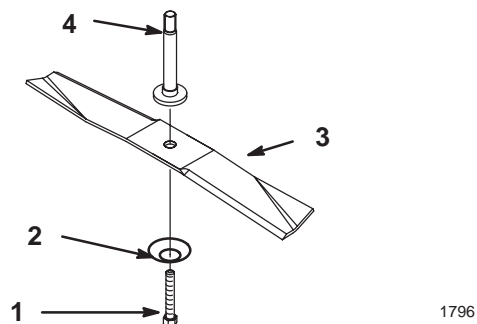


Figure 28

- | | |
|------------------|------------|
| 1. Nut | 3. Blade |
| 2. Curved washer | 4. Spindle |

Servicing the Blade Drive Belt

Removing the Blade Drive Belt

1. Remove the mower; refer to Removing the Mower, page 9.
2. Remove the pulley cover mounting screws and pulley covers from blade pulleys (Fig. 29).
3. Loosen the idler pulley mounting bolts to move the belt guides (Fig. 29).
4. Remove the belt from the pulleys (Fig. 29).

Installing the Blade Drive Belt

1. Install the new belt around the blade pulleys and the idler pulleys.
2. Adjust belt guide on the idler pulley as shown and tighten the mounting bolt (Fig. 29).
3. Install the left and right pulley covers with the mounting screws (Fig. 29).
4. Install the mower; refer to Installing the Mower, page 5.

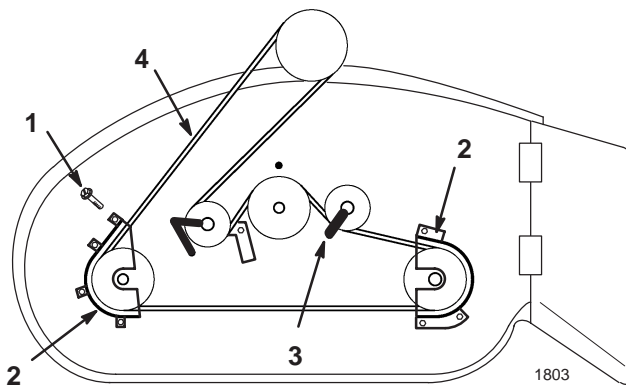


Figure 29

Top View

- | | |
|-----------------------|----------------|
| 1. Pulley cover screw | 3. Belt guides |
| 2. Pulley cover | 4. Mower belt |

Adjusting the Blade Brakes

1. Engage the PTO lever.
2. Adjust the PTO cable to the correct engaged dimension; refer to Installing the Mower, page 5.
3. Using a feeler gage, measure between the bottom flange of the (3) blade pulley and brake pad (Fig. 30). Adjust the locknut on the brake rods to obtain the proper clearance of 0.02–0.06 inch (0.5–1.5 mm) (Fig. 30).
4. Disengage the PTO lever, check that the blade brake pads contact the pulleys and the actuating rods are loose when the PTO is disengaged, and that the brake pads are away from the pulleys when the PTO is engaged.

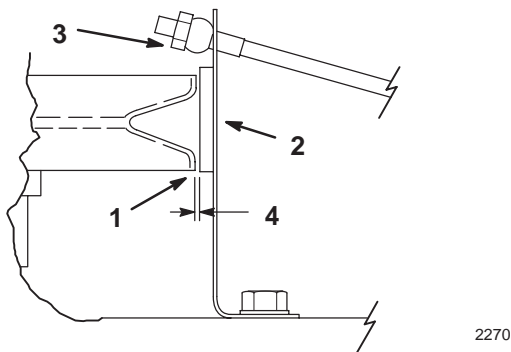


Figure 30

- | | |
|------------------|--|
| 1. Bottom flange | 4. Clearance 0.02–0.06 inch (0.5–1.5 mm) |
| 2. Brake pad | |
| 3. Locknut | |

Washing the Underside of the Mower

After each use, wash the underside of the mower to prevent grass buildup for improved mulch action and clipping dispersal.

1. Park the machine on a hard level surface, disengage the PTO, stop the engine, and remove the ignition key.
2. Attach a hose coupling to the end of the mower washout fitting and turn the water on high (Fig. 31).

Note: Spread petroleum jelly on the washout fitting o-ring to make the coupling slide on easier and protect the o-ring.

3. Lower the mower to the lowest height of cut.
4. Sit on the seat and start the engine. Engage the PTO and let the mower run for one to three minutes.
5. Disengage the PTO, stop the engine, and remove the ignition key. Wait for all moving parts to stop.
6. Turn the water off and remove the hose coupling from the washout fitting.

Note: If the mower is not clean after one washing, soak it and let it stand for 30 minutes. Then repeat the process.

7. Run the mower again for one to three minutes to remove excess water.

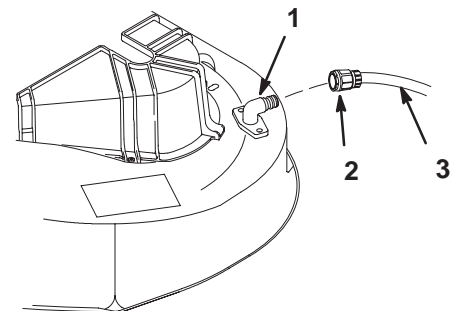


Figure 31

- | | |
|----------------------------|---------|
| 1. Washout fitting | 3. Hose |
| 2. Coupling (not supplied) | |



Warning



A broken or missing washout fitting could expose you and others to thrown objects or blade contact. Contact with blade or thrown debris contact will cause injury or death.

- **Replace broken or missing washout fitting immediately, before using mower again.**
- **Plug any hole(s) in mower with bolts and locknuts.**
- **Never put your hands or feet under the mower or through openings in the mower.**

Storage

1. Clean dirt and chaff from the top of the mower.
2. Scrape heavy buildup of grass and dirt from the underside of the mower. Then wash the mower with a garden hose.
3. Check the condition of the blade(s); refer to Servicing the Cutting Blade, page 13.
4. Check the condition of the blade drive belt.
5. Check and tighten all bolts, nuts, and screws. Repair or replace any part that is damaged.
6. Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
7. Store the machine in a clean, dry garage or storage area. Cover the machine to protect it and keep it clean.

Troubleshooting

Problem	Possible Causes	Corrective Action
There is an abnormal vibration.	<ol style="list-style-type: none"> 1. The cutting blade(s) is bent or unbalanced. 2. The blade mounting bolt is loose. 3. The engine mounting bolts are loose. 4. There is a loose engine pulley, idler pulley, or blade pulley. 5. The engine pulley is damaged. 	<ol style="list-style-type: none"> 1. Install a new cutting blade(s). 2. Tighten the blade mounting bolt. 3. Tighten the engine mounting bolts. 4. Tighten the appropriate pulley. 5. Contact an Authorized Service Dealer.
The blade(s) does not rotate.	<ol style="list-style-type: none"> 1. The blade drive belt is worn, loose, or broken. 2. The blade drive belt is off of pulley. 	<ol style="list-style-type: none"> 1. Install a new blade drive belt. 2. Install the blade drive belt and check the idler pulley and belt guides for the correct position.
The mower is cutting unevenly.	<ol style="list-style-type: none"> 1. The gage wheels are improperly adjusted. 2. The tractor tire pressure is incorrect. 3. The mower is not level. 4. The underside of the mower is dirty. 	<ol style="list-style-type: none"> 1. Adjust the gage wheels. 2. Set the tractor tire pressure. 3. Level the mower from side-to-side and front-to-rear. 4. Clean the underside of the mower.