



44" Grass Collection System

**for
GM & PL 117, 118, & 120
Model No. 30751 – 690001 & Up**

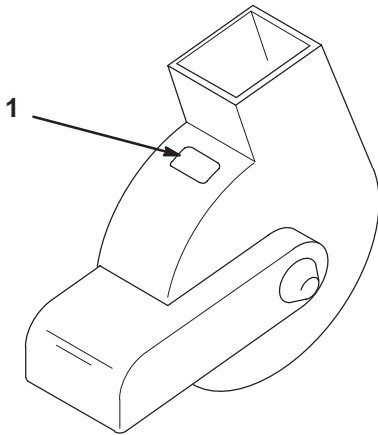
Operator's Manual

IMPORTANT: Read this manual carefully. It contains information about your safety and the safety of others. Also become familiar with the controls and their proper use before you operate the product.

Introduction

We 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 located in a unique place on the product as shown below.



1815

1. Model and Serial Number Plate

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

Model No: _____
Serial No. _____

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.

The left and right side of the machine is determined by sitting on the seat in the normal operator’s position.

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Safety and Instruction Decals



The following safety and instruction decals are affixed to the unit. If any decal becomes illegible or damaged, install a new decal. Part numbers are listed below and in your Parts Catalog. Replacement decal can be ordered from your local Authorized Toro, Proline Service Dealer.

See Traction Unit Operator's Manual for
Glossary of Safety Symbols



ON FRONT OF BLOWER
HOUSING
(Part No. 82-5510)



ON BLOWER HOUSING
AND DEFLECTOR
(Part No. 54-9220)

Installation

Loose Parts

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

DESCRIPTION	QTY.	USE
Valve Stem Extension	1	Install Wheel Weight
Wheel Weight	1	
Capscrew–5/16-18 x 4" (102 mm)	2	
Flat Washer–5/16 (8 mm)	2	
Carriage Bolt–5/16-18 x 5/8" (16 mm)	2	Install Front Blower Mounting Bracket
Lock Nut–5/16-18	5	
Carriage Bolt–5/16-18 x 7/8" (22 mm)	3	
Carriage Bolt–5/16-18 x 5/8 (16 mm)	2	Install Rear Baffle
Keps Lock Nut–5/16-18	2	
Self-Tapping Screw–1/4-20 x 7/8" (22 mm)	2	Install Center Ring Baffle
Washer–1/4" (6 mm)	2	
Capscrew–1/4-20 x 3/4" (19 mm)	4	
Lock Nut–1/4-20	4	
Carriage Bolt–5/16-18 x 5/8 (16 mm)	2	Install Right Ring Baffle
Lock Nut–5/16-18	2	
Capscrew–1/4-20 x 3/4" (19 mm)	2	
Lock Nut–1/4-20	2	
Capscrew–1/4-20 x 3/4 (19 mm)	3	Install Left Ring Baffle
Lock Nut–1/4-20	3	
Carriage Bolt–1/4-20 x 5/8" (16 mm)	1	Install Front Baffle
"Keps Lock Nut–1/4-20	1	
Carriage Bolt–5/16-18 x 5/8" (16 mm)	1	
Lock Nut–5/16-18	1	
Carriage Bolt–5/16-18 x 5/8" (16 mm)	2	Install Idler Assembly
Flat Washer–5/16" (8 mm)	2	
Lock Nut–5/16-18	2	
Capscrew–5/16-18 x 1" (25 mm)	6	Install Hopper Brackets
Lock Nut–5/16-18	6	
Reinforcing Plate	1	

DESCRIPTION	QTY.	USE
Capscrew–5/16-18 x 2" (51 mm)	5	Install Hopper Frame
Lock Nut–5/16-18	5	
Knob	2	Mount Grass Deflector
Washer–5/16" (8 mm)	2	

Install Wheel Weight (Left Front Wheel Only)

Note: If unit is equipped with Optional Brake Kit, refer to Brake Kit Instructions for additional information on mounting wheel weight.

1. Remove cap from valve stem and install valve stem extension.
2. Slide wheel weight into mounting position over valve stem, aligning weight with (2) mounting holes in wheel.
3. Secure weight to wheel with (2) 5/16 x 4" (102 mm) capscrews and 5/16" (8 mm) flat washers.

Install New Spindle Pulley

1. Remove right belt cover from deck.
2. Remove nut securing spring anchor to capscrew on deck. Lift anchor off capscrew and allow belt to relax (Fig. 1).



Figure 1

1. Spring anchor
2. Nut

3. Remove belt from right spindle pulley.
4. Remove nut retaining pulley on spindle shaft. Pull pulley off shaft.

Note: Hold spindle assembly together or support it from bottom of deck before removing nut and pulley. Spindle shaft may slide through spindle housing.

5. Two double-groove pulleys are supplied with the kit. Install the Double "D", double-groove pulley and original mounting nut on cutting units with serial numbers below 90001. On cutting units with serial numbers 90001 and above, install the splined, double-grooved pulley and a new nut. Torque nut to 55 ft. lb. (75 N·m) (Fig. 2).
6. Install deck belt around large pulley (Fig. 2).
7. Adjust belt tension by pulling spring anchor until 30–40 lb. of force is applied to spring.
8. Install spring anchor on capscrew in appropriate mounting hole and install nut.

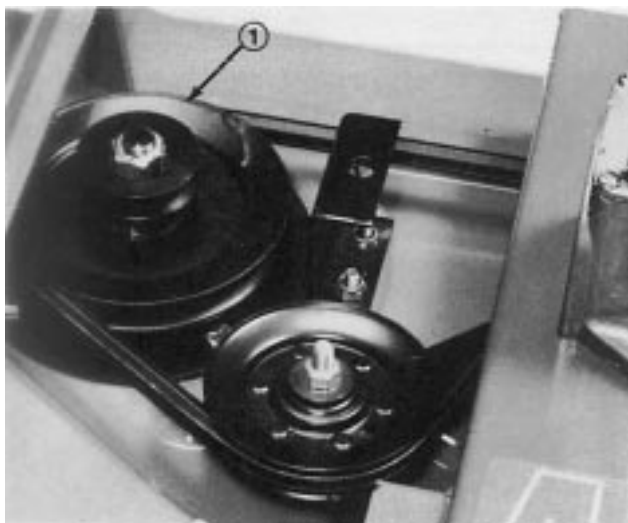


Figure 2

1. Double spindle pulley

Mount Blower And Deck Baffles

1. Remove capscrews, lock nuts and springs securing deflector mounts to pivot bracket. Remove deflector (Fig. 3).
2. Remove carriage bolts, lock washers and nuts securing pivot bracket to housing (Fig. 3).

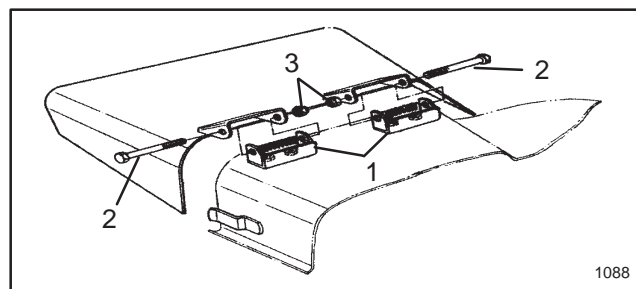


Figure 3

1. Pivot bracket
2. Capscrew
3. Lock nut

3. Position front baffle on underside of cutting unit, align (2) outside mounting holes with front deflector mounting holes (Fig. 4).
4. Using baffle as a template, mark and drill (2) 3/8" (9 mm) diameter holes and a 5/16" (8 mm) diameter hole in deck (Fig. 4).
5. Using appropriate mounting holes and fasteners, secure baffle to front wall of deck with a 1/4 x 5/8" (16 mm) carriage bolt and nut, and 5/16 x 5/8" (16 mm) carriage bolt and nut. Leave (3) remaining mounting holes open at this time.

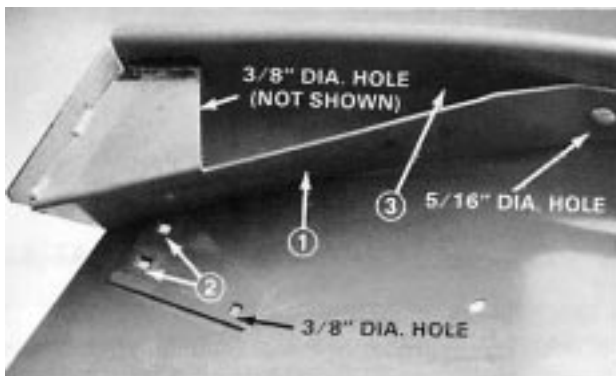


Figure 4

- | | |
|---------------------------|-----------------------|
| 1. Front bracket | 3. Front wall of deck |
| 2. Outside mounting holes | |
-

6. Position blower assembly onto cutting unit. Align front bracket with (3) mounting holes in deck and rear bracket with rear most deflector hole (Fig. 5 and 6.) Make sure blower is flush with deck opening.

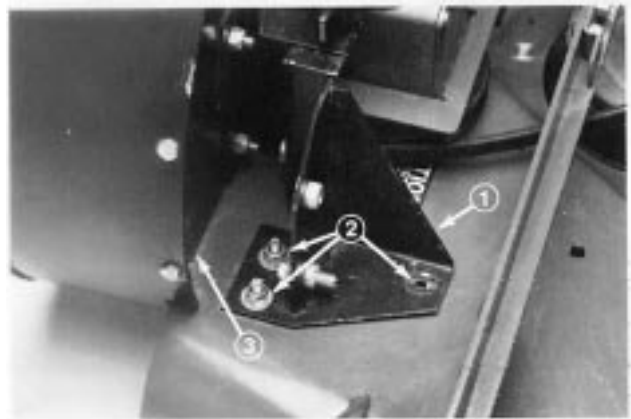


Figure 5

- | | |
|-------------------|-----------------------------------|
| 1. Front bracket | 3. Blower flush with deck opening |
| 2. Mounting holes | |
-

7. Using rear blower bracket as a template, mark and drill remaining 3/8" (9 mm) diameter mounting hole in deck (Fig. 6). Secure with 5/16 x 5/8" (16 mm) bolt through the rear bracket from the top, remove blower from the brackets (Fig. 6).

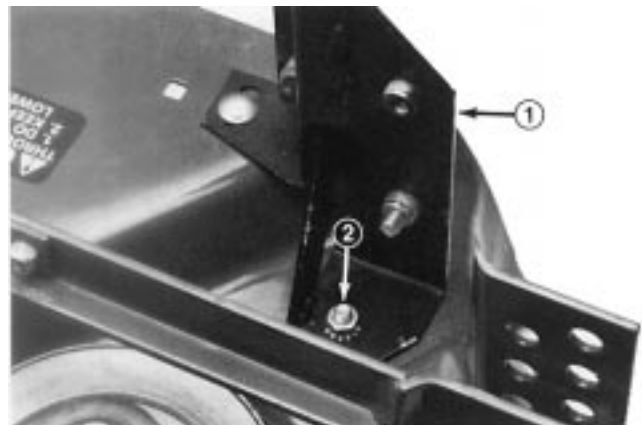


Figure 6

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|-----------------|----------------------------|
| 1. Rear bracket | 2. Remaining mounting hole |
|-----------------|----------------------------|
-

8. Using rear most deflector mounting hole in deck, loosely mount outside end of rear baffle to deck. Secure with a 5/16 x 5/8" (16 mm) carriage bolt and 5/16" lock nut. (Fig. 7).
9. Align edge of baffle with formed edge on deck. Using baffle as a template, mark and drill a 3/8" (9 mm) diameter hole in deck. Secure baffle to deck with a 5/16 x 5/8" (16 mm) carriage bolt and 5/16" lock nut.



Figure 7

- | | |
|---------------------------------|----------------------|
| 1. Rear deflector mounting hole | 3. Formed edge |
| 2. Rear baffle | 4. Right ring baffle |

10. Position and secure center ring baffle to deck bosses with (2) 1/4 x 3/4" (19 mm) self-tapping screws and 1/4" (6 mm) washers (Fig. 8).
11. Using center ring baffle as a template, mark and drill (4) 9/32" (7 mm) diameter holes thru center of curved edge of deck (Fig. 8).
12. Secure center ring baffle to deck with (4) 1/4 x 3/4" (19 mm) capscrews and 1/4" nuts.
13. Loosely mount right ring baffle to rear baffle with (2) 5/16 x 5/8" (16 mm) carriage bolts and 5/16" lock nuts (Fig. 8).
14. Align right ring baffle with end of center baffle and edge of deck. Mark and drill (2) 9/32" (7 mm) diameter holes in curved edge of deck (Fig. 8).

15. Secure right baffle to deck with (2) 1/4 x 3/4" (19 mm) capscrews and nuts. Remove carriage bolt securing right baffle to deflector mounting hole. Tighten all previously installed fasteners.
16. Align left ring baffle with end of center baffle and edge of deck. Mark and drill (3) 9/32 in. (7 mm) diameter holes thru center of curved edge of deck. Secure with (3) 1/4 x 3/4 (19 mm) capscrews and nuts (Fig. 8).
17. Carefully rotate blades by hand to make sure they clear baffles.

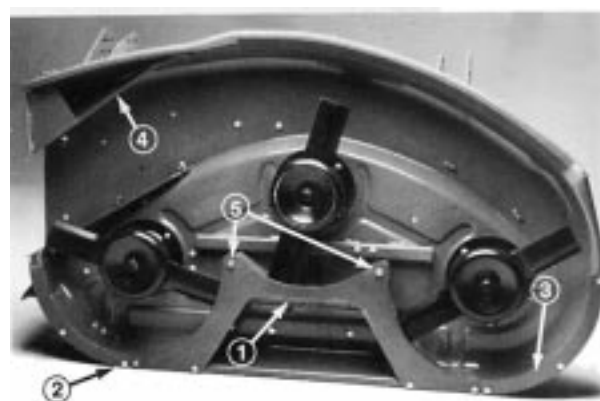


Figure 8

- | | |
|-----------------------|-----------------|
| 1. Center ring baffle | 4. Front baffle |
| 2. Right ring baffle | 5. Deck bosses |
| 3. Left ring baffle | |

- 18.** Reposition blower and mounting brackets onto deck alining mounting holes. Route belt around blower pulley before securing to deck. Secure rear bracket and rear baffle to deck with (2) 5/16 x 5/8" (16 mm) carriage bolts and 5/16" lock nuts (Fig. 9).

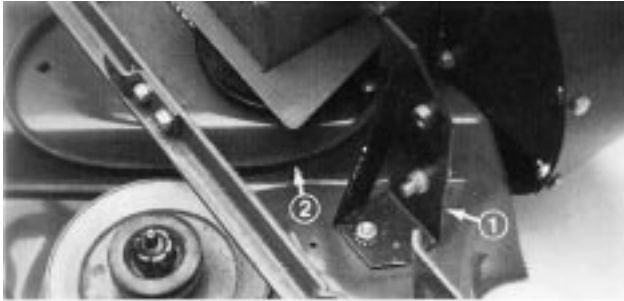


Figure 9

1. Rear mounting bracket 2. Blower belt around pulley
-

- 19.** Secure front bracket and front baffle to deck with (3) 5/16 x 7/8" (22 mm) carriage bolts and 5/16" lock nuts (Fig. 10)

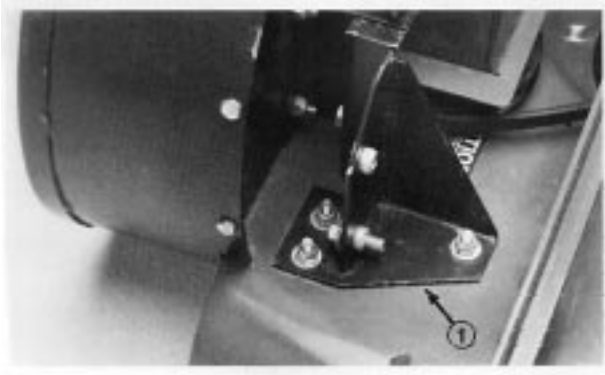


Figure 10

1. Front bracket
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- 20.** Route blower belt around small spindle pulley (Fig. 11).



Figure 11

- 21.** Install new belt cover (Fig. 12).

Note: For older cutting units with knob type cover fasteners, the 1/4 turn fastener holes on the new deck cover must be punched out (Fig. 12).

Install Idler Assembly

1. Adjust idler slide so there is 1/4" (6 mm) from end of slide to end of mounting bracket. Clamp slide to retain this position while mounting to deck (Fig. 12).
2. Position idler assembly on deck so edge is parallel with belt cover and there is a 3/16"-1/4" (5–6 mm) gap (Fig. 12).
3. With idler assembly clamped, slide idler pulley firmly into blower belt (Fig. 12).

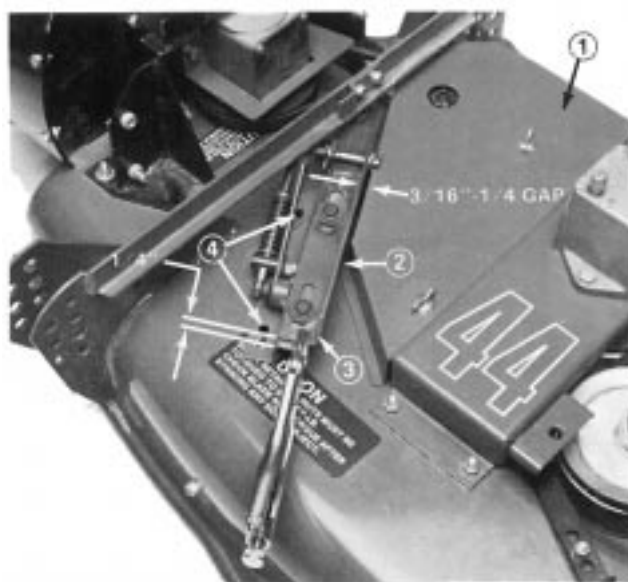


Figure 12

- | | |
|-------------------|-----------------------------|
| 1. New belt cover | 4. Mounting slots |
| 2. Idler assembly | 5. 1/4 turn wing head studs |
| 3. Idler slide | |

4. With idler assembly pushed into belt, mark slot location on deck. Drill a 11/32" (9 mm) diameter hole near pulley end of each slot. File holes square to accommodate carriage bolts (Fig. 13).

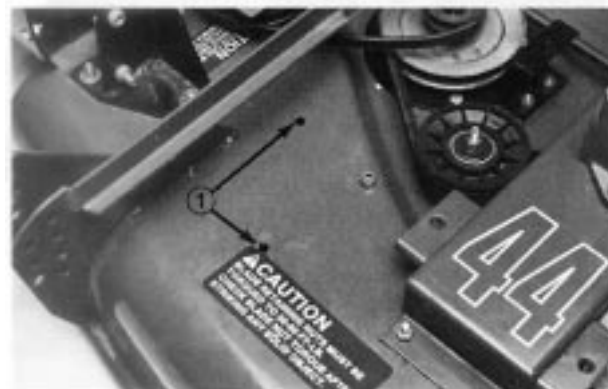


Figure 13

1. Square holes
5. Remove clamp and mount idler assembly to deck with (2) 5/16 x 5/8" (16 mm) carriage bolts, 5/16" flat washers and 5/16" nuts. Position washer between nut and idler assembly (Fig. 14).
 6. Engage idler lever and check belt tension. Adjust if necessary.



Figure 14

1. Carriage bolts, flat washers and nuts

Install Hopper Assembly

IMPORTANT: Remove fuel tank mounting straps and raise right side of fuel tank for access to holes when installing rear bracket.

1. Align bracket with (4) drilled mounting holes. Secure rear bracket to machine with (4) 5/16 x 1" (26 mm) capscrews, 5/16" nuts and (1) reinforcing plate. Plate is to be positioned between nut and inside of frame channel on top capscrew (Fig. 15 & 16).
2. Secure front bracket to machine with (2) 5/16 x 1" (26 mm) capscrews, 5/16" nuts and (1) reinforcing plate. Plate is to be positioned between nut and inside of frame channel on top capscrew (Fig. 15).



Figure 15

- | | |
|------------------|---|
| 1. Rear bracket | 3. Reinforcing plate on this screw (inside frame) |
| 2. Front bracket | |

3. Slide hopper frame into mounting brackets, align mounting holes and secure with (5) 5/16 x 2" (51 mm) capscrews and 5/16" nuts (Fig. 16).



Figure 16

- | | |
|------------------------|-----------------|
| 1. Rear mounting holes | 2. Hopper frame |
|------------------------|-----------------|

Note: When lowering hopper top, make sure bag link pivots upward and tip fits over chute (Fig. 17).

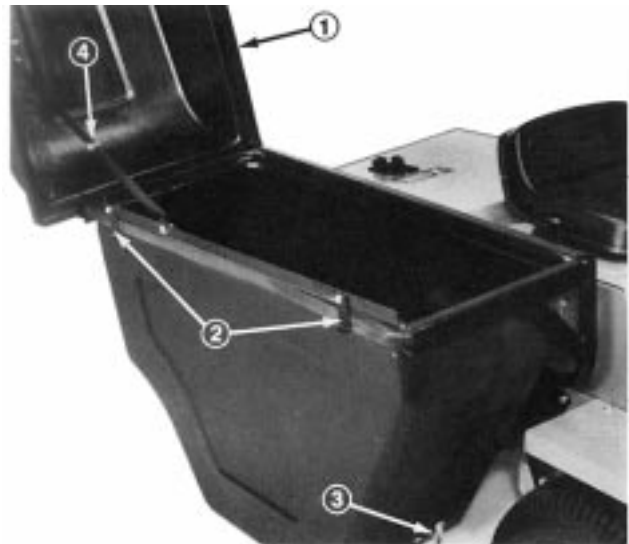


Figure 17

- | | |
|------------------|------------------|
| 1. Hopper top | 3. Hopper handle |
| 2. Locking clips | 4. Bag link |

4. Mount cutting unit grass deflector (included in kit) to front of hopper frame with (2) knobs and 5/16" washers when using grass catcher (Fig. 18).



Figure 18

- | | |
|--------------------|--------------------|
| 1. Grass deflector | 3. Knob and washer |
| 2. Hopper frame | |

Mount Blower Housing Chute

1. Set deck into desired height-of-cut.
2. Slide chute over blower opening and into mounting studs (Fig. 19).
3. Lower hopper hood and align chute with hood snout. Secure chute in position with lock nuts and brackets. Wide end of brackets to be positioned toward rear (Fig. 19).

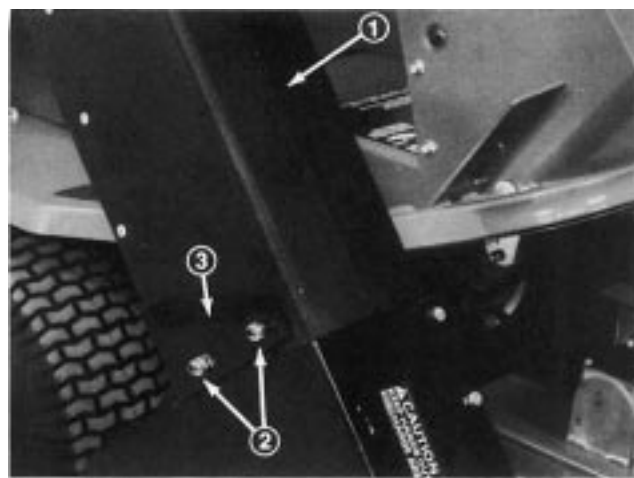


Figure 19

- | | |
|-------------------|---------------------|
| 1. Chute | 3. Mounting bracket |
| 2. Mounting studs | |

Removing Blower Assembly

To remove blower assembly:

1. Disengage idler assembly, remove belt cover and lift belt off spindle pulley.
2. Remove (2) knobs and washers securing blower to mounting brackets and remove blower and chute.
3. Slide cutting unit grass deflector onto alignment bolts and secure to mounting brackets with knobs and washers (Fig. 20).
4. Install belt cover (Fig. 20).

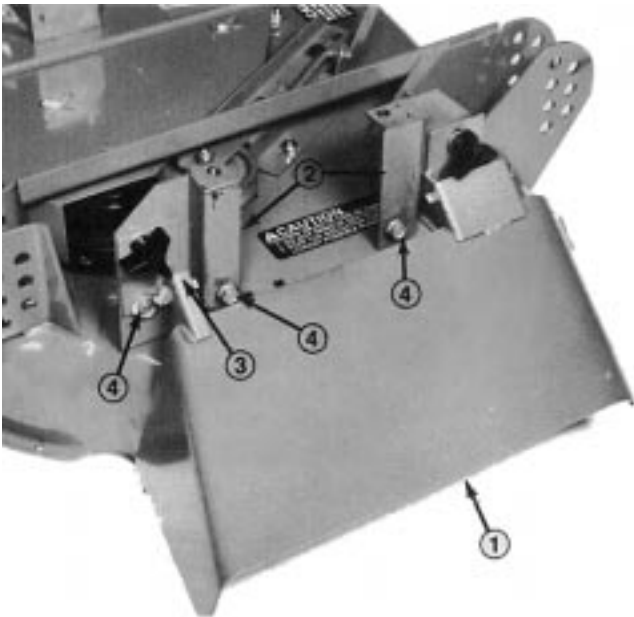


Figure 20

- | | |
|---------------------|--------------------|
| 1. Grass deflector | 3. Knob and washer |
| 2. Mounting bracket | 4. Alignment bolts |
-

Operation

CAUTION

POTENTIAL HAZARD

- Sometimes people are tempted to use the grass collection system without first becoming familiar with safety and operating instructions.

WHAT CAN HAPPEN

- Failure to use the grass collection system according to safety and operating instructions can result in death or injury of you and others.

HOW TO AVOID THE HAZARD

- Become familiar with all operating and safety instructions in the operator's manual before using the grass collection system.

DANGER

POTENTIAL HAZARD

- 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.

WHAT CAN HAPPEN

- Contact with rotating mower blade(s) and thrown debris will cause injury or death.

HOW TO AVOID THE HAZARD

- Never put your hands or feet under the mower.
- Never try to clear 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 the spark plug(s).

Operating Characteristics

For best performance, regulate traction pedal to keep engine rpm high and somewhat constant.

A good rule to follow is: decrease ground speed as the load on the cutting blade increases; and increase ground speed as load on the blade decreases. This allows the engine, working with the transmission, to sense the proper ground speed while maintaining high blade tip speed, necessary for good quality-of-cut, vacuuming action and to throw grass into the hopper.

If blower speed drops too low, plugging may result. Refer to Cutting Unit and Traction Unit Operator's Manual for operation of each.

1. Stop engine when emptying hopper to prevent engine air intake from being clogged with clippings.
2. This grass collector is designed for use in wet or dry conditions. Do not collect extremely long grass as the bag will fill too quickly.
3. The grass collector hood is designed to exhaust air. This allows the hopper to fill completely without decreasing performance.
4. Grass will fall through the opening in the front of the hood when the hopper is full.
 - A. Immediately disengage the power take off (PTO), set the parking brake and shut off the ignition.
 - B. Empty hopper. Failure to empty hopper will plug the chute.
 - C. After emptying hopper, check that grass clippings have not fallen into chute.
5. When bagging wet, heavy grass, some clippings may not be thrown completely through the chute.

The hole in the bottom of the chute allows these clippings to drop out without plugging the chute.

When this happens, reduce ground speed.

6. Optional hi-lift blades (Toro part no. 55-4940) will give improved performance in wet grass.
7. While operating, check frequently for excessive clippings left on turf or uncut grass. These conditions indicate that the blower or cutting unit may be plugged.
 - A. Stop unit, disengage PTO, set parking brake and shut off ignition.
 - B. Check for obstructions in the chute, blower or cutting unit. Clear any obstructions using a stick or similar tool.
 - C. Check that screen in hood is clear of obstructions.
 - D. Check blower belt. If slipping, readjust.
8. Cut grass often, especially when turf growth is rapid.
 - A. If shorter turf is desired, cut the grass again.
 - B. Overlap swaths to produce an even cutting pattern.

IMPORTANT: When transporting unit, tie down grass collector hood or back unit onto truck or trailer to avoid wind throwing hood open and damaging it.

Maintenance

Service Interval Chart

Service Operation	Each Use	5 Hours	25 Hours	Storage Service	Spring Service	Notes
Cutter Blade—check		X	X	X		
Grease—Mower deck			X	X		
Belts—check for wear/cracks				X		
Mower Housing—clean	X	X		X		
Chipped Surfaces—paint				X		

CAUTION

POTENTIAL HAZARD

- If you leave the key in the ignition switch, someone could start the engine.

WHAT CAN HAPPEN

- Accidental starting of the engine could seriously injure you or other bystanders.

HOW TO AVOID THE HAZARD

- Remove the key from the ignition switch and pull the wire off the spark plug before you do any maintenance. Also push the wire aside so it does not accidentally contact the spark plug.

Cleaning

1. Keep unit clean, checking that engine cooling fins are free of dirt and chaff. Make sure all fasteners are tight. Check baffles and shields for wear and replace as needed.
2. Check gearbox impeller for tightness every 50 hours. Torque impeller shaft bolt to 220–230 in.-lb. (25–26 N·m).
3. Clean grass clippings from hood chute, blower and cutting unit after each use. Wash underside of cutting unit daily with hose. An excessive build-up of clippings will impair bagging performance.
4. Check belt tension and wear every 50 hours. To adjust belt tension, loosen idler mounting screws, engage idler lever and push pulley firmly into blower belt. Tighten mounting screws.
5. The blower gear box should need little maintenance. Check for leakage every 50 hours. If leakage should occur, replace seals and refill with two ounces of No. 2 molybdenum base grease. Repack bearings with same before assembling.
6. Refer to Cutting Unit and Traction Unit Operator's Manuals for service requirements of each.

Inspecting the Blades

1. Inspect the blades regularly and whenever a blade strikes a foreign object.
2. If blades are badly worn or damaged, install new blades.

Storage

1. Clean the machine.
2. Inspect the machine for damage.
3. Make sure bags are empty and thoroughly dry.
4. Store the machine in a clean, dry place, out of direct sunlight. This protects the plastic parts and extends the life of the machine. If you must store the machine outside, cover it with a weatherproof cover.

