



Z – Master
Collection System

for
OUT FRONT Z – 48” MOWER
Model No. 79434– 890001 & Up

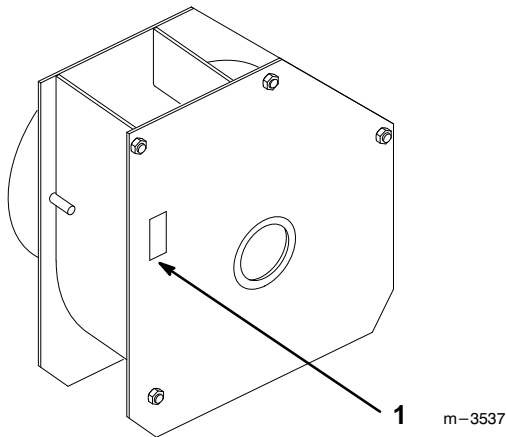
Operator's Manual

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.



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



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.

**ON BLOWER CHUTE
(Part No. 79-0360)**

**DANGER**



- ROTATING BLADES CAN CUT.
- KEEP HANDS AND BODY PARTS OUT OF OPENING.
- DO NOT OPERATE MOWER WITHOUT DISCHARGE CHUTE ATTACHED OR ENTIRE BAGGING SYSTEM IN PLACE.
- STOP ENGINE BEFORE CLEANING CHUTE.

79-0360

Installation

Loose Parts

Note: Use the chart below to identify parts used for assembly when unit is to be installed on traction unit.

DESCRIPTION	QTY.	USE
Bagger baffle–left	1	Install baffles and latch to mower
Bagger baffle–right	1	
Discharge baffle–left	1	
Discharge baffle–right	1	
Carriage bolt 5/16"–18 x 3/4" (19 mm)	10	
Locknut 5/16"–18	10	
Chute latch	1	
Screw 10–24 x 1/2" (13 mm)	2	
Locknut 10–24	2	
Clevis pin	1	
Hairpin cotter	1	
Spring	1	
Spring bracket	1	
PTO Pulley	1	Install PTO drive pulley to PTO gearbox
Key	1	
Square head set-screw 5/16–18 x 1/2" (13 mm)	2	
Blower belt	1	
Thread lock	1	
Blower assembly	1	Install blower, idler and switch assemblies to traction unit
Bolt 3/8–16 x 1" (26 mm)	1	
Bolt 3/8–16 x 2-3/4" (70 mm)	1	
Idler assembly	1	
Spacer	1	
Washer 3/8" x 7/8" (9 x 22 mm)	1	
Flange locknut 3/8–16	2	
Spring	1	
Bolt 5/16–18 x 1-1/4" (32 mm)	1	
Nut 5/16–18	1	
Flange locknut 5/16–18	1	
Interlock switch bracket assembly	1	
Bolt 3/8–16 x 3/4" (19 mm)	1	

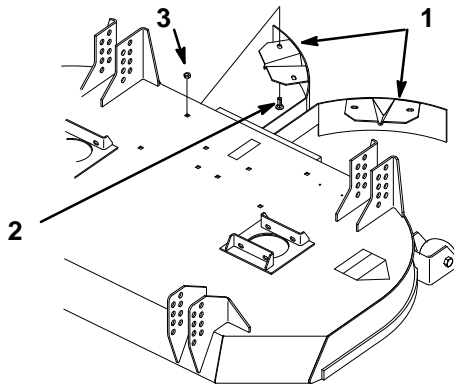
DESCRIPTION	QTY.	USE
Blower	1	Assemble blower and outlet chute
Blower outlet chute	1	
Bolt 5/16–18 x 5" (127 mm)	2	
Flange locknut 5/16–18	2	
Bumper	1	Install bumper and gas spring to traction unit
Tilt brackets	2	
Bolt 3/8–16 x 1" (26 mm)	4	
Flange locknut 3/8–16	4	
Bolt 1/2–13 x 2-3/4" (70 mm)	2	
Bolt 1/2–13 x 1-1/4" (32 mm)	2	
Locknut 1/2–13	5	
Gas spring	1	
Safety clip	2	
Ball stud	2	
Locknut 5/16–18	2	
Draw latch	1	
Washer 1/2" (13 mm)	1	
Bolt 1/2–13 x 1" (26 mm)	1	
Hopper assembly	1	
Clevis pin 3/8 x 1" (26 mm)	2	
Hairpin cotter–small	2	
Wire harness	1	Install wire harness and buzzer
Cable ties	4	
Buzzer	1	
Clevis pin 3/8 x 1" (26 mm)	1	Lockout for blower belt when Recycler® is installed
Hairpin cotter–small	1	
Operator's Manual	1	Read before operating
Parts Catalog	1	Ordering parts

Mower Preparation

Remove Recycler[®] Baffles

1. Tilt mower into the vertical position, refer to; Tilting the Mower, page 13.
2. Remove locknuts, carriage bolts and the Recycler[®] baffles from the mower (Fig. 1).

Note: Save all hardware for use when installing Recycler[®] baffles.

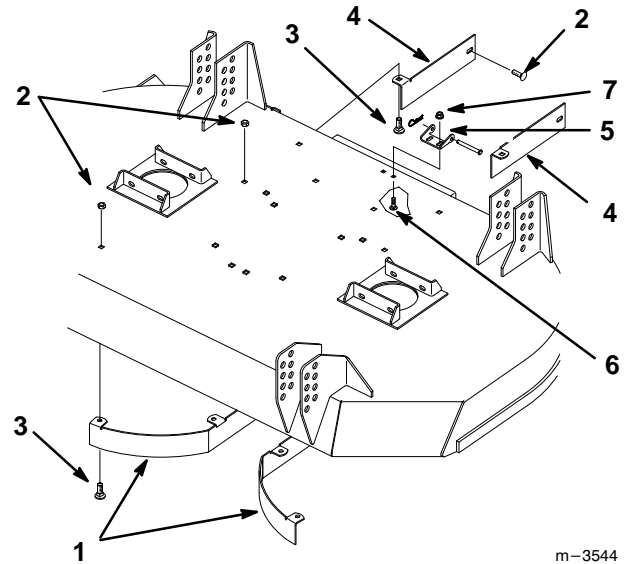


m-3562

Figure 1

- | | |
|---------------------------------|------------|
| 1. Recycler [®] baffle | 3. Locknut |
| 2. Carriage bolt | |

4. Locate the latch on top of the mower and secure with (2) 10-24 x 1/2" (13 mm) screws, through from the bottom of mower, and (2) 10-24 locknut (Fig. 2).



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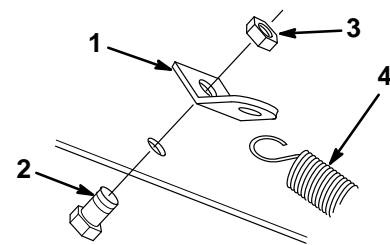
Figure 2

- | | |
|---|-------------------------------|
| 1. Bagger baffle | 5. Latch |
| 2. Locknut 3/8" | 6. Screw 10-24 x 1/2" (13 mm) |
| 3. Carriage bolt 5/16-18 x 3/4" (19 mm) | 7. Locknut 10-24 |
| 4. Discharge baffle | |

Install Bagger and Discharge Baffles, Chute Latch and Spring

1. Locate the left and right bagger baffles inside the mower and secure with (6) 5/16-18 x 3/4" (19 mm) carriage bolts, through from the bottom of mower, and (6) 5/16" locknuts (Fig. 2).
2. Locate the left and right discharge baffles inside the mower and secure with (4) 5/16-18 x 3/4" (19 mm) carriage bolts, through from the bottom and inside of mower, and (4) 5/16" locknut.(Fig. 2).
3. Mount latch on chute and hold against rear of mower. If holes are not drilled, mark, center punch and drill two 17/64" (7mm) holes in mower for latch.

5. Attach spring bracket below traction unit control plate with existing rear center bolt, down from the top, and locknut (Fig. 3). Hook chute spring into bracket



m-3563

Figure 3

- | | |
|-------------------|---------------------|
| 1. Spring bracket | 3. Existing locknut |
| 2. Existing bolt | 4. Spring |

Install Blower

For ease in performing the following steps, block the right drive wheel, raise the rear of the traction unit, minimum 16" (406 mm) under rear of engine carrier frame, and block with jack stands, and remove the left drive wheel.

Install PTO (Power Take Off) Pulley

Note: On 25 hp models only, remove the oil filter for clearance.

1. Apply thread lock to (2) pulley setscrews (Fig. 4).

Note: Before installing drive pulley, bend R-clamp holding fuel line on engine up, to provide pulley clearance.

2. Slide key and pulley, with setscrews toward gearbox, onto PTO gearbox rear output shaft (Fig. 4). Do not tighten (2) setscrews at this time.
3. Place blower drive belt around PTO pulley.

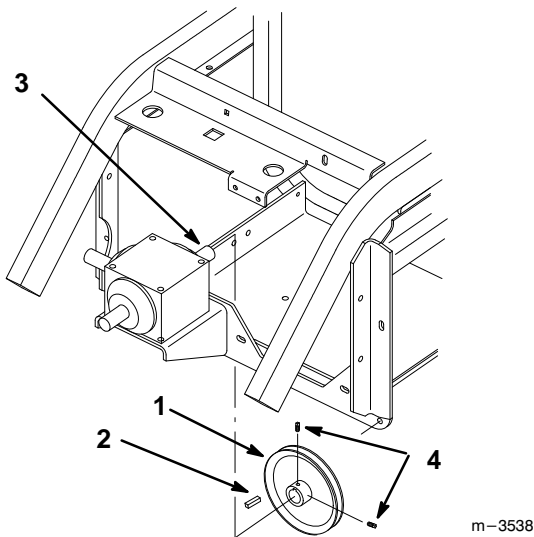


Figure 4

- | | |
|-----------|-----------------------|
| 1. Pulley | 3. Gearbox rear shaft |
| 2. Key | 4. Setscrew |

Assemble Blower

4. Place impeller chute above blower opening with flanges outside blower housing. Secure to blower with (2) 5/16-18 x 5" (127 mm) bolts and 5/16-18 flange locknuts (not shown) (Fig. 5).

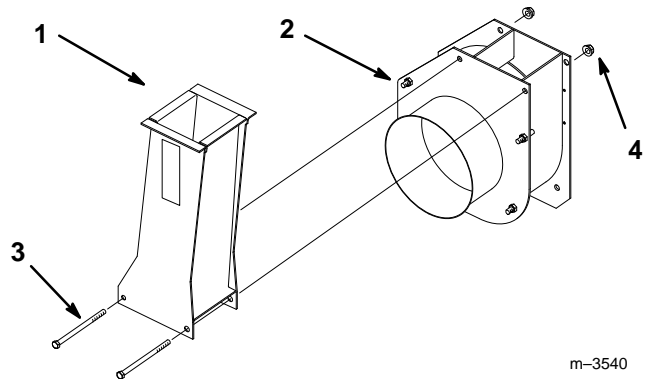


Figure 5

- | | |
|-------------------|----------------------------------|
| 1. Chute | 3. Bolt 5/16-18 x 5"
(127 mm) |
| 2. Blower housing | 4. Flange locknut 5/16-18 |

Mount Blower and Idler Assemblies

Note: It may be convenient to loosen, not remove, parking brake switch and hydraulic oil filter brackets to ease installation.

5. Slide blower\chute assembly up from bottom of the machine and place against traction unit frame (Fig. 6).
6. Place blower drive belt around PTO and blower pulleys before bolting blower assembly to traction unit frame (Fig. 7).
7. Install 3/8–16 x 1” (25 mm) carriage bolt in lower right hole of rear blower flange. Secure with a 3/8–16 flange locknut (Fig. 6).
8. Install 3/8–16 x 2-3/4” (70 mm) bolt through lower left hole of blower rear flange (Fig. 6).
9. Slide spacer, idler assembly and 3/8” (9.5 mm) washer onto bolt and secure with 3/8–16 flange locknut (Fig. 6).
10. Thread 5/16–18 nut onto 5/16–18 x 1-1/4” (32 mm) spring mount bolt and place into lower frame hole. Secure with 5/16–18 locknut (Fig. 6).
11. Hook spring over bolt and stretch to hook on arm of idler assembly (Fig. 6).
12. Hold switch bracket assembly to back side of frame cross member. Insert 3/8–16 x 3/4” (19 mm) bolt, from inside impeller chute, through chute, frame and switch bracket. Secure with 3/8–16 locknut (Fig. 6).
13. Tighten all mounting hardware securely.

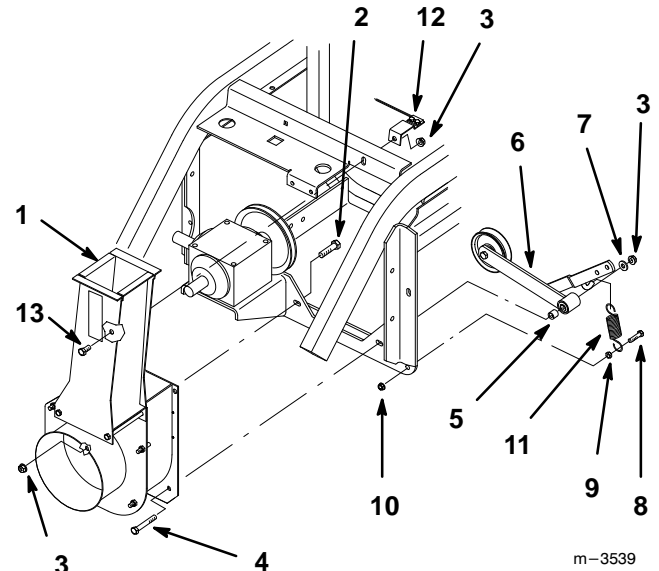


Figure 6

- | | |
|--------------------------------------|----------------------------------|
| 1. Blower assembly | 7. Washer 3/8” (9.5 mm) |
| 2. Carriage bolt 3/8–16 x 1” (25 mm) | 8. Bolt 5/16–18 x 1-1/4” (32 mm) |
| 3. Flange locknut 3/8–16 | 9. Nut 5/16–18 |
| 4. Bolt 3/8–16 x 2-3/4” (70 mm) | 10. Locknut 5/16–18 |
| 5. Spacer | 11. Spring |
| 6. Idler assembly | 12. Switch assembly |
| | 13. Bolt 3/8–16 x 3/4” (19 mm) |

14. Using blower belt as a guide slide the PTO pulley, in or out on gearbox shaft, to align with blower pulley.
15. Torque setscrews to 15–18 ft.-lbs. (20–24 N•m)
16. Pull down on idler assembly, place belt above idler pulley and release tension Use a straight edge to check for belt alignment.

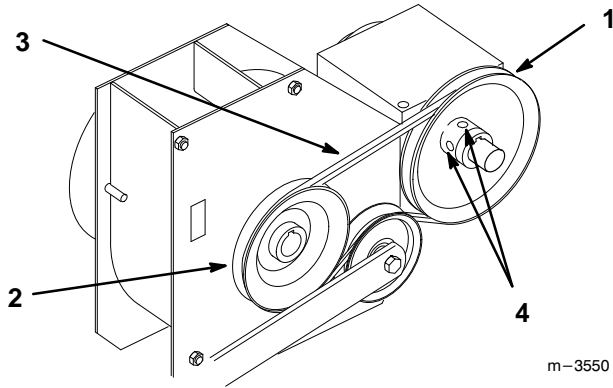


Figure 7

- | | |
|------------------|-------------|
| 1. PTO pulley | 3. Belt |
| 2. Blower pulley | 4. Setscrew |

17. Push up and hold the spring loaded idler arm, behind blower, to relax pressure on blower belt (Fig. 8).
18. If holes do not align, mark the idler arm hole location onto the frame member. Center punch and drill a 13/32" (11 mm) hole for the clevis pin (Fig. 8).

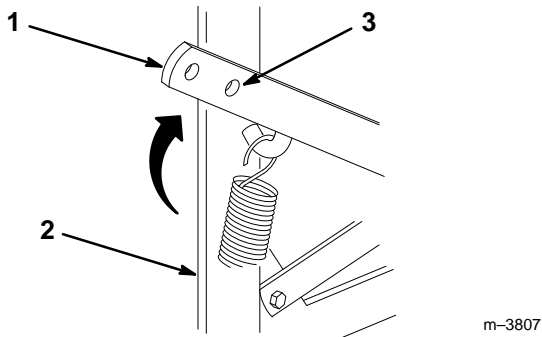


Figure 8

- | | |
|--------------|---------------------------------------|
| 1. Idler arm | 3. Mark and drill hole 13/32" (11 mm) |
| 2. Frame | |

Install Chute

19. Raise mower and slide chute into blower inlet (Fig. 9).
20. Lower mower and slide chute forward against rear of mower. Secure chute to rear of mower latch with clevis and hairpin cotter (Fig. 9).

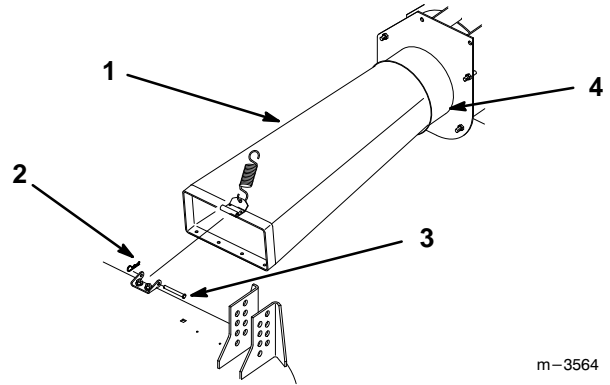


Figure 9

- | | |
|-------------------|-----------------|
| 1. Chute | 3. clevis pin |
| 2. Hairpin cotter | 4. Blower inlet |

Install Hopper

1. Place hopper tilt brackets inside bumper with tube weld away from the opening. Secure to bumper with (4) 3/8–16 x 1” (26 mm) bolts and (4) 3/8–16 flange locknuts (Fig. 10).

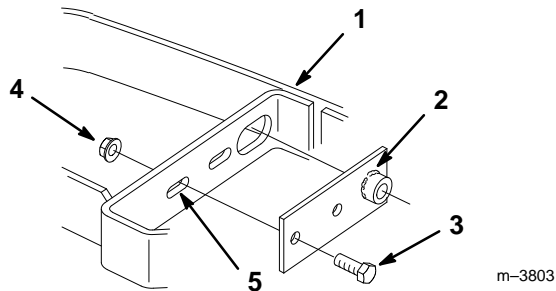


Figure 10

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|-----------------------------|--------------------------|
| 1. Bumper | 4. Flange locknut 3/8–16 |
| 2. Tilt bracket weld | 5. Adjustment slot |
| 3. Bolt 3/8–16 x 1” (26 mm) | |

2. Position bumper around top rear of frame and secure in the center with (2) 1/2–13 x 1-1/4” (32 mm) bolts and 1/2–13 locknuts (Fig. 11). Secure to outer holes with (2) 1/2–13 x 2-3/4” (57 mm) bolts and 1/2–13 locknuts.
3. Install ball stud to hopper frame and traction unit frame tab with 5/16–18 locknut (Fig. 11).

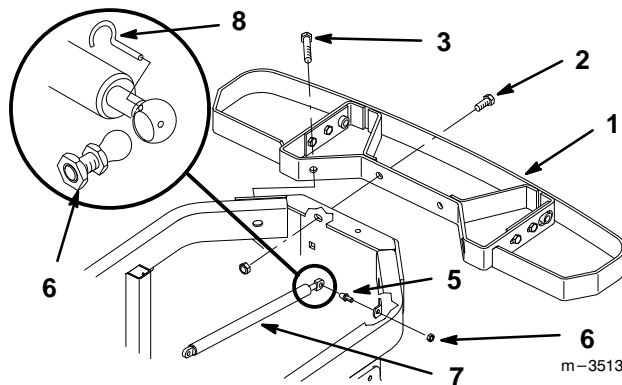


Figure 11

- | | |
|---------------------------------|--------------------|
| 1. Bumper | 4. Locknut 1/2–13 |
| 2. Bolt 1/2–13 x 1-1/4” (32 mm) | 5. Ball stud |
| 3. Bolt 1/2–13 x 2-3/4” (57 mm) | 6. Locknut 5/16–18 |
| | 7. Gas spring |
| | 8. Safety clip |

4. Secure hopper latch to the frame with 1/2”–13 x 1” (25 mm) bolts and 1/2”–13 locknut (Fig. 12).

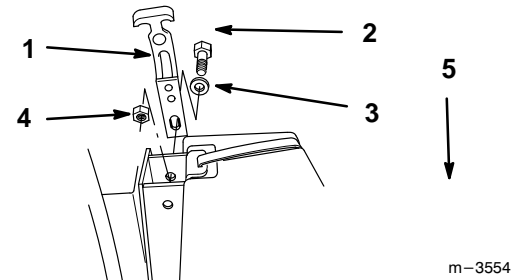


Figure 12

- | | |
|------------------------------|--------------------|
| 1. Hopper latch | 4. Locknut 1/2”–13 |
| 2. Bolt 1/2”–13 x 1” (25 MM) | 5. Front of unit |
| 3. Washer 1/2” (13 mm) | |

5. Place hopper assembly onto frame and align with holes in bumper mounts. Insert (2) clevis pins and secure with hairpin cottes (Fig. 13).
6. Adjust tilt brackets in slots (Fig. 10) so chute opening and hopper opening align at the front.
7. Snap gas spring rod ends over ball stud at frame and hopper. Secure with safety clips (Fig. 11).

Note: Rod end of gas spring must face the rear and attach to the traction unit frame.

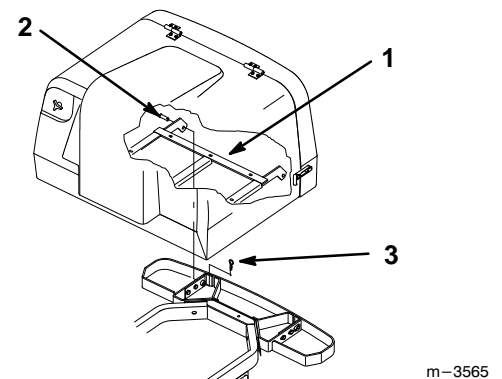


Figure 13

- | | |
|--------------------------|-------------------|
| 1. Hopper frame assembly | 3. Hairpin cotter |
| 2. Clevis pin | |

Install Wire Harness

8. Unplug clutch connector from existing main wire harness (Fig. 14). Located below and behind muffler.
9. Insert new jumper connectors of new wire harness between clutch connector and main wire harness. Align connectors and push together firmly so latches lock (Fig. 14).

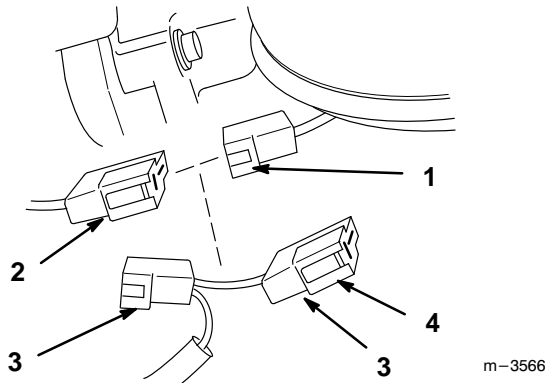


Figure 14

- | | |
|------------------------|-------------------------|
| 1. Clutch connector | 3. New jumper connector |
| 2. Main wire connector | 4. Latch |

10. Route remainder of new wire harness around back of engine to the left vertical frame member, following main wire harness. Attach wire ties to keep harness out of castor wheel (Fig. 15).

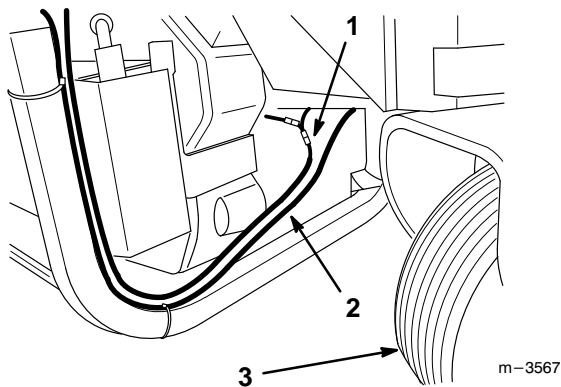


Figure 15

- | | |
|--------------------------|-----------------|
| 1. New wire harness | 3. Castor wheel |
| 2. Existing wire harness | |

11. Route new wire harness along left horizontal frame member and secure to existing wire harness with wire ties to keep harness away from engine.
12. Loosen left console clamp and two lower front mounting bolts. Pull console away from left frame member to gain access to holes in frame and console. Route new wire harness through holes in frame and into bottom of console (Fig. 16).
13. Remove instrument panel and remove plug in opening or drill a 1-1/8" (29 mm) hole for buzzer 1-1/2" (39 mm) below hour meter.
14. Insert buzzer, from the rear, and secure with retaining ring (Fig. 16).
15. Connect new wire harness pink lead to + terminal and green lead to - terminal (Fig. 16).
16. Coil excess wire harness behind panel

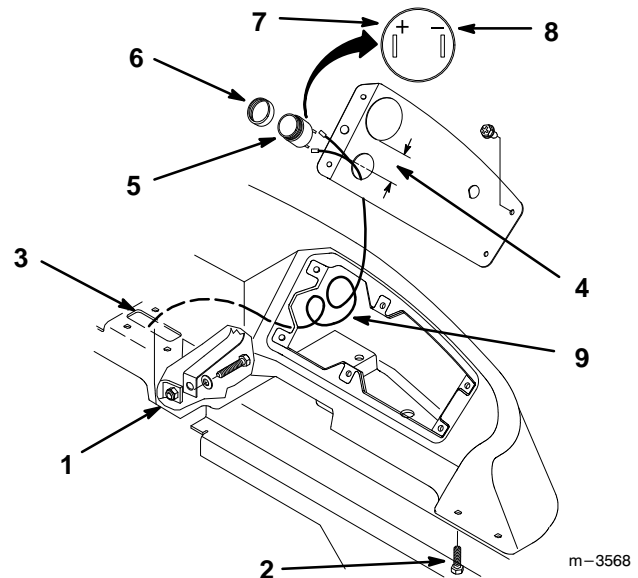


Figure 16

- | | |
|---|-------------------|
| 1. Console clamp | 5. Buzzer |
| 2. Front bolt | 6. Retaining ring |
| 3. Hole in console | 7. Pink + |
| 4. 1-1/8" (29 mm) Hole 1-1/2" (39 mm) below hourmeter | 8. Green - |
| | 9. Wire harness |

- Route hopper full sensor wire harness below bumper and frame. Connect hopper full sensor wire harness terminals to (3) round terminal of main wire harness (Fig. 17).

IMPORTANT: Color codes may not match at all (3) terminals and must be as follows or diode will be damaged.

Green – Green or Grey (on some models)

Pink – Pink

Black – Black

- Push terminals together firmly so latches lock (Fig. 17).
- Install wire tie around bumper to hold sensor wire harness (Fig. 17).

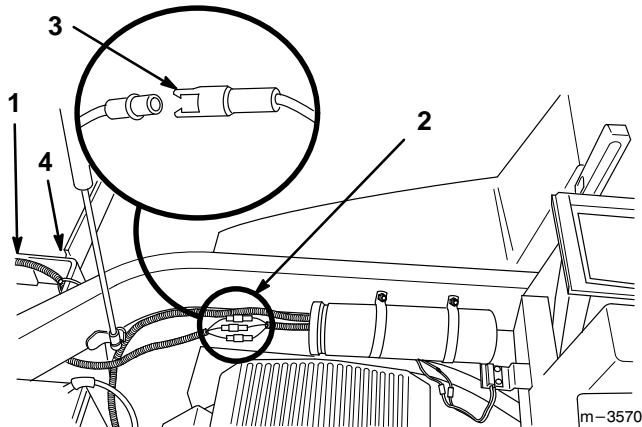


Figure 17

- | | |
|------------------------|-------------|
| 1. Sensor wire harness | 3. Latch |
| 2. Round terminals | 4. Wire tie |

- Remove jumper wire from main wire harness terminal and install interlock switch connector. Align connector tab and push together firmly so latch locks (Fig. 18).

Note: After assembly, adjustment of magnetic switch may be required. Bend mounting bracket, as required, to place switch close to magnet on bottom of hopper.

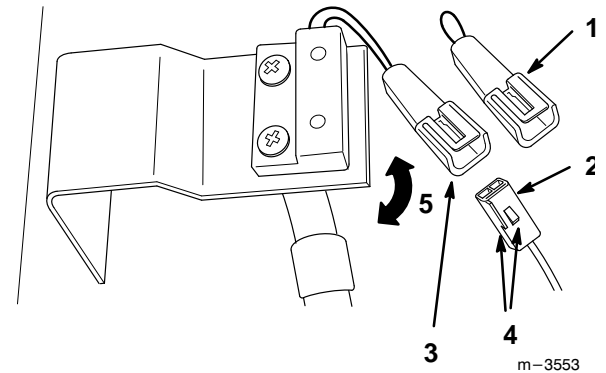


Figure 18

- | | |
|-------------------------------|---------------------|
| 1. Jumper wire connector | 3. Switch connector |
| 2. Main wire harness terminal | 4. Tab and latch |
| | 5. Bend bracket |

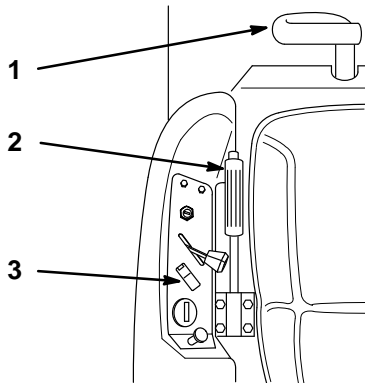
Operation

Operating the Power Take Off (PTO)

The power take off (PTO) switch engages and disengages power to the electric clutch.

Engaging the PTO

1. Release pressure on the traction control levers and place in neutral (Fig. 19).
2. Release the parking brake (Fig. 19).



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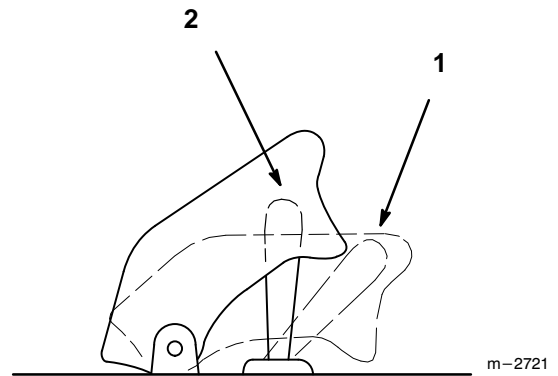
Figure 19

1. Traction control lever
2. Parking brake
3. PTO-Switch

3. To engage lift cover and move the PTO switch to the "ON" position (Fig. 20).

Disengaging the PTO

1. Closing the cover moves the PTO switch to the "OFF" position (Fig. 20).



m-2721

Figure 20

1. PTO-Off
2. PTO-On

Dumping the Hopper

The hopper is equipped with a hopper full sensor that checks for a full condition. When the alarm buzzer sounds the hopper needs to be emptied.

1. Locate the traction unit so the hopper door is where you want to dump the clippings.
2. Move the power take off (PTO) switch to off, move the traction controls to neutral and set the parking brake.

IMPORTANT: The hopper is interlocked with the engine ignition and the engine will stop if these steps are not followed before dumping the hopper or getting out of the seat.

3. Unhook the door latches on the rear sides and the hopper latch on the front left side of the hopper (Fig. 21).
4. Open the door and lift up on the hopper at the lower front and dump the clippings (Fig. 21).

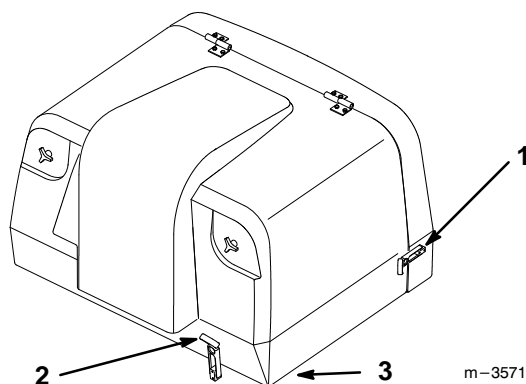


Figure 21

1. Door latch
2. Hopper latch
3. Lift here

5. Lower the hopper and secure the door latches on the rear sides and the hopper latch on the front left side of the hopper (Fig. 21).

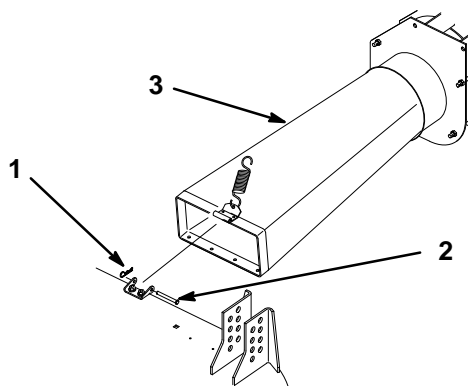
IMPORTANT: Front left latch must be secured to prevent hopper from accidentally tilting during transport.

Tilting the Mower

The mower can be tilted up for ease of service or to shorten unit length for transport and storage.

To Raise Mower

1. Turn engine off, set the parking brake and check that PTO cover is down against footrest (Fig. 23).
2. Remove the hairpin cotter and clevis pin from the latch, at the rear of the mower. Slide the chute rearward into blower inlet (Fig. 22). Spring holds chute in place.



m-3564

Figure 22

1. Hairpin cotter
2. Clevis pin
3. Chute

3. Lift on side of the mower to release weight on latch pin and pull out on latch pin to release (Fig. 23). Lower rear of mower onto anti-scalp rollers. Repeat on the other side.

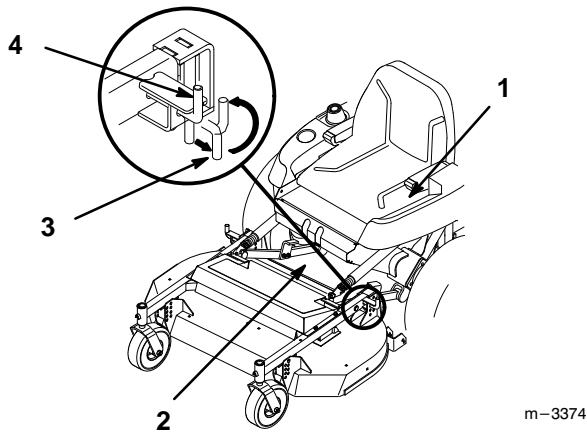


Figure 23

- | | |
|------------------|---------------|
| 1. Parking brake | 3. Latch pin |
| 2. PTO cover | 4. Notch—open |

To Lower Mower

1. Pull out latch pins and rotate into notch, holding in the open position (Fig. 23). Standing in front of the mower, pull forward on the front and lower mower (Fig. 24).
2. Rotate latch pins into released position and lift up on side of the mower until latch pin engages (Fig. 23). Repeat on the other side.
3. With rear of chute inside blower housing slide forward against rear of the mower and secure with clevis pin and hairpin cotter (Fig. 22).

4. Standing in front of the mower, lift up and push rearward on front to raise mower (Fig. 24). Raise mower until it contacts stops and latch pins snap into locked position.

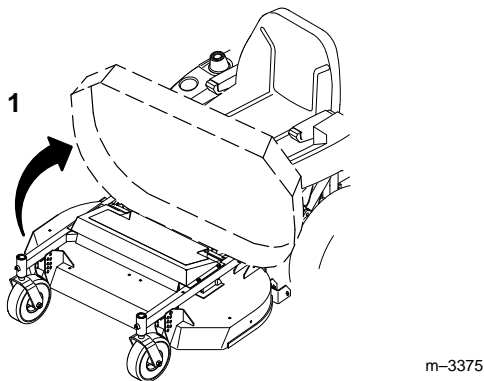


Figure 24

1. Mower up

Recycler® Operation

When operating the mower with Recycler® baffles installed you must disengage the blower drive belt.

1. Stop the engine, remove the key and disconnect the spark plug wire(s) from the spark plug(s).
2. Remove hairpin cotter and clevis pin from outer hole in idler arm (Fig. 25).
3. Push up on the spring loaded idler arm, behind PTO (power take off) gearbox, to relax pressure on blower belt (Fig. 25).
4. Align inner hole in idler arm with slot in frame and insert clevis pin. Secure with hairpin cotter to hold in position.

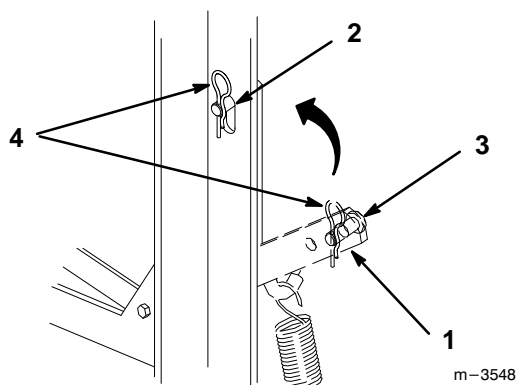


Figure 25

- | | |
|---------------|-------------------|
| 1. Idler arm | 3. Clevis pin |
| 2. Frame slot | 4. Hairpin cotter |

5. Remove the bagger and discharge baffles from the mower and install the Recycler® baffles (Fig. 26).

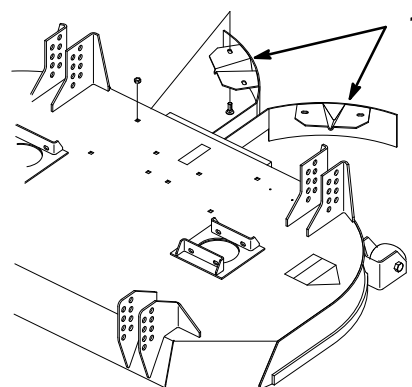


Figure 26

1. Recycler® baffle

Bagging Tips

For best performance, regulate traction speed 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. Do not collect extremely long grass as the bag will fill too quickly.
3. The grass collector hopper is designed to exhaust air through the rear cover. This allows the hopper to fill completely. Grass will fall through the chute when the hopper is full. When the hopper full buzzer sounds immediately disengage the power take off (PTO) and empty the hopper. Failure to empty the hopper will plug the chute and cause clumping on the lawn. After emptying hopper, check that grass clippings have not fallen into chute.
4. When bagging wet, heavy grass, some clippings may not be thrown completely through the chute. When this happens, reduce ground speed.
5. While operating, check frequently for excessive clippings left on turf or uncut grass. If those conditions occur, the blower or cutting unit may be plugged. Stop unit, disengage PTO, set parking brake and shut of ignition. Check for obstructions in the chute, blower or cutting unit. Clear any obstructions using a stick or similar tool. Check that screen in hopper is clear of obstructions. Check blower belt for slipping.
6. Cut grass often, especially when growth is rapid. If shorter grass is desired, cut the grass again. Overlap swaths to produce an even cutting pattern.

Maintenance

Service Interval Chart

Service Operation	Each Use	50 Hours	Storage Service	Notes
Belts – check for wear/cracks		X		
Hopper – clean	X		X	
Screens – clean (as required)			X	
Chipped Surfaces – paint			X	

Cleaning Hopper Screens

For best clipping collection, maximum air flow through the hopper is required. To provide maximum air flow, the hopper screens must be kept clean.

1. To clean the hopper screens dump the hopper to remove grass clippings.
2. With the door open, remove the knobs at the upper front of the hopper and slide the screens out the rear of the hopper (Fig. 27).
3. Clean the screen by brushing off with your hand, blowing with compressed air or spraying with a stream of water.
4. Replace the screens and secure with knobs (Fig. 27). Close and latch the hopper door.

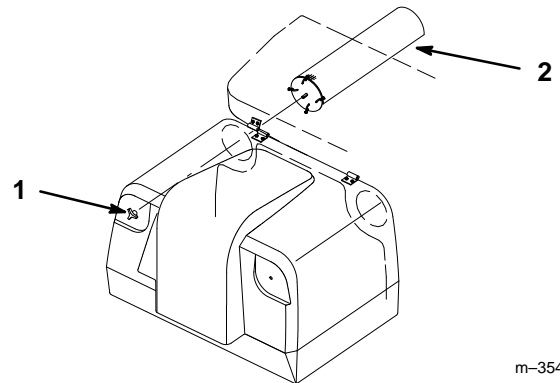


Figure 27

1. Knob

2. Screen

Replacing the Blower Belt

Squealing when the belt is rotating, blower slipping causing frequent clogging of chute and blower, frayed belt edges, burn marks and cracks are all signs of a worn blower belt. Replace the blower belt if any of these conditions are evident.

1. Stop the engine, remove the key and disconnect the spark plug wire(s) from the spark plug(s).
2. Push up on the spring loaded idler pulley behind PTO (power take off) gearbox to relax pressure on blower belt (Fig. 28). Lock into frame slot, refer to (Fig. 25).
3. Remove worn blower belt.

Note: On 25hp traction units: loosen, but do not remove, blower mounting bolts for clearance between engine oil cooler and blower shaft bolt so belt clears.

4. Install new blower belt around PTO gearbox and blower pulleys. Then push up on the idler and place belt above idler pulley (Fig. 28).
5. Check that belt aligns with PTO, blower and idler pulleys (Fig. 28).

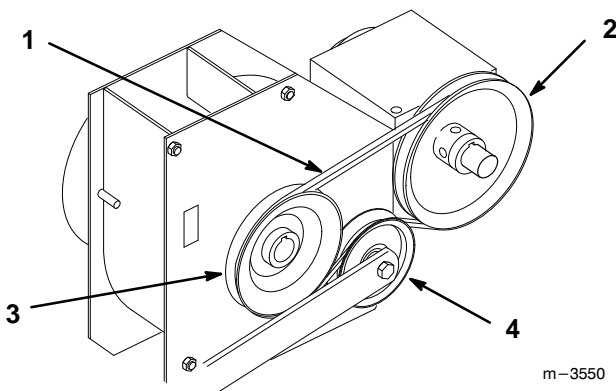


Figure 28

- | | |
|-----------------------|------------------|
| 1. Blower belt | 3. Blower pulley |
| 2. PTO Gearbox pulley | 4. Idler pulley |

Cleaning the Hopper Full Sensor

The hopper full sensor, inside the top right side of the hopper, detects a beam of light from the transmitter to the receiver. If the light beam is blocked the sensor buzzer sounds. If the lenses are covered with clippings or debris it may give false hopper full signals and needs to be cleaned.

1. To clean the hopper full sensor dump the hopper to remove grass clippings.
2. With the door open, wipe off the lenses of both the transmitter and receiver with a soft cloth or paper towel (Fig. 29).
3. To test the hopper full sensor for proper operation turn the ignition key and PTO switch to "ON", but do not start the engine. Place a piece of heavy cardboard in front of the transmitter to block the light beam (Fig. 29). The alarm buzzer should sound.

Note: Do not use your hand to test for proper sensor operation as the light beam may pass through or around your hand and not properly activate the sensor.

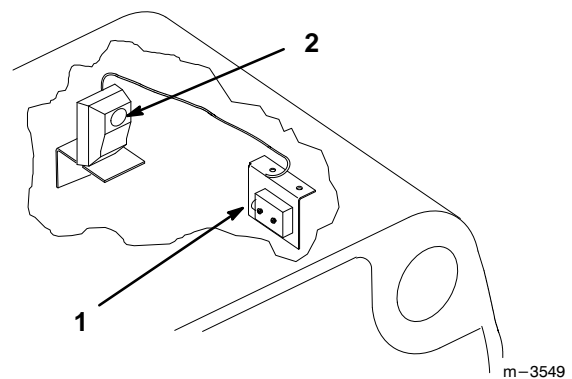


Figure 29

- | | |
|----------------|-------------|
| 1. Transmitter | 2. Receiver |
|----------------|-------------|

Greasing and Lubrication

All bearings of the blower drive system are permanently lubricated and do not need to be greased.

Storage

1. Clean any dirt and chaff from the chute, blower and hopper.
2. Scrape any heavy buildup of grass and dirt from the chute, blower and hopper, then wash with a garden hose.
3. Check the condition of the blower belt.
4. Check and tighten all bolts, nuts and screws. Repair or replace any part that is damaged or defective.
5. Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
6. 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
Blower does not rotate.	<ol style="list-style-type: none"> 1. PTO drive disengaged. 2. PTO drive belt is broken. 3. Blower drive belt is off pulley. 4. Blower drive belt is broken. 	<ol style="list-style-type: none"> 1. Remove pin and engage PTO. 2. Install new PTO drive belt. 3. Install blower drive belt and check the idler pulley, idler arm and spring for correct position and function. 4. Install new blower drive belt.
Abnormal vibration.	<ol style="list-style-type: none"> 1. Blower is plugged with clippings. 2. Loose gearbox pulley, idler pulley, or blade pulley. 3. Gearbox pulley is damaged. 	<ol style="list-style-type: none"> 1. Stop and clean out blower and chute. 2. Tighten the appropriate pulley. 3. Replace gearbox pulley.
Clippings not being collected.	<ol style="list-style-type: none"> 1. Chute plugged. 2. Blower plugged. 3. Hopper screens covered. 4. Underside of mower is dirty. 	<ol style="list-style-type: none"> 1. Stop and clean out chute. 2. Stop and clean out blower. 3. Stop and clean off screens. 4. Clean the underside of the mower.

