# **TORO**<sub>®</sub>

# **107cm and 120cm Vac–Bagger** Wheel Horse<sup>®</sup> XT Series Garden Tractor Attachment

Model No. 79480-230000001 and Up

# **Operator's Manual**

This manual only applies when Decal Kit, 107–3698, is installed onto the machine. Order the Decal Kit from the Toro Parts Department.

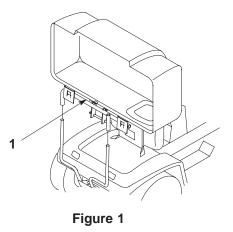
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# Introduction

Read this manual carefully to learn how to operate and maintain your product properly. The information in this manual can help you and others avoid injury and product damage. Although Toro designs and produces safe products, you are responsible for operating the product properly and safely.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 illustrates the location of the model and serial numbers on the product.



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

The following list contains safety information specific to Toro products and other safety information you must know.

- Become familiar with the safe operation of the equipment, with the operator controls, and safety signs.
- Use extra care with grass catchers or other attachments. These can change the operating characteristics and the stability of the machine.
- Follow the manufacturer's recommendations for adding or removing wheel weights or counterweights to improve stability.
- Do not use a grass catcher on steep slopes. A heavy grass catcher could cause loss of control or overturn the machine.
- Slow down and use extra care on hillsides. Be sure to travel in the recommended direction on hillsides. Turf conditions can affect the machine's stability. Use extreme caution while operating near drop–offs.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed, directions or turning.
- The grass catcher can obstruct the view to the rear. Use extra care when operating in reverse.
- Use care when loading or unloading the machine into a trailer or truck
- Never operate with the discharge deflector raised, removed or altered, unless using a grass catcher or mulching baffles.
- Keep hands and feet away from moving parts. Do not make adjustments with the engine running.
- Stop on level ground, disengage drives, set the parking brake, chock or block wheels, shut off engine before leaving the operator's position for any reason including emptying the grass catcher or unclogging the chute.
- If you remove the grass catcher, be sure to install any discharge deflector or guard that might have been removed to install the grass catcher. Do not operate the mower without either the entire grass catcher or the grass deflector in place.
- Stop the engine before removing the grass catcher or unclogging the chute.
- Do not leave grass in grass catcher for extended periods of time.

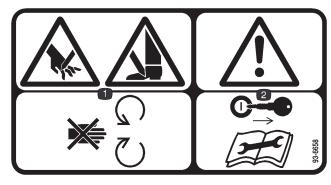
• Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.

# **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.

**Important** The Decal Kit, 107–3698 must be installed on your machine for the following decals to apply. If the kit has not been installed, order the Decal Kit from the Toro Parts Department and install it now.



93-6658

- 1. Cutting hazard of hand or foot-stay away from moving parts.
- 2. Warning—remove the ignition key and read the instructions before servicing or performing maintenance.



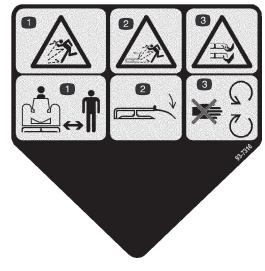
93-7317

- 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.



93-7814

1. Entanglement hazard, belt-stay away from moving parts.



93-7316

- 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.



#### 93-7320

1. Crushing hazard of hand—do not remove the whole bagger from the machine; open the bagger top and then remove the bagger (s) from the bagger. Do not remove the bagger top when it is closed; open the bagger top and then remove it.

# Setup

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

## **Loose Parts**

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

| Description  | Qty. | Use  |
|--|------|--|
| Bolt, 3/8 x 1-1/2 inch                                     | 2    |  |
| Locknut, 3/8 inch  | 2    | Installing the spacers for the quick–attach<br>bracket |
| Spacer   | 2    | Drachet  |
| Grass baffle—107 cm deck only                              | 1    |  |
| Carriage bolt, 3/8 x1 inch                                 | 1    | Installing the grass baffle for 107 cm mowers          |
| Locknut, 3/8 inch  | 1    | only   |
| Washer, 3/8 inch   | 1    |  |
| Double groove pulley—107 cm<br>Double groove pulley—120 cm | 1    | Installing the blower drive pulley                     |
| Pivot support  | 1    |  |
| Bolt, 5/16 x 3/4 inch                                      | 1    | Installing the blower pivot support                    |
| Flange nut, 5/16 inch                                      | 1    |  |
| Height–of–cut lever  | 1    | Installing the Height–of–cut Lever on 107 cm<br>Mowers |
| Blower assembly  | 1    |  |
| Spring   | 1    |  |
| Screw, #10 x 3/4 inch                                      | 1    |  |
| Washer, #10  | 2    |  |
| Nut, #10   | 2    | Assembling the blower                                  |
| Latch, long—120 cm deck only                               | 1    | Assembling the blower                                  |
| Latch, short—107 cm deck only                              | 1    |  |
| Bolt, 1/4 x 3/4 inch                                       | 1    |  |
| Washer, 1/4 inch   | 1    |  |
| Lock nut, 1/4 inch   | 1    |  |
| Bagger Cover   | 1    |  |
| Indicator rod  | 1    |  |
| Handle   | 1    |  |
| Jam nut, 1/4 inch  | 1    | Accompling the begger cover                            |
| Clips  | 2    | Assembling the bagger cover                            |
| Bolt, 1/4 x 3/4 inch                                       | 2    |  |
| Lock nut, 1/4 inch   | 4    |  |
| Frame hinge assembly                                       | 1    |  |

| Description                       | Qty. | Use                                       |
|-----------------------------------|------|---|
| No parts needed                   | -    | Sizing the discharge tube                 |
| Blower drive belt                 | 1    | Mounting the blower assembly              |
| Belt cover—107 cm deck            | 1    |   |
| Belt cover bracket—107 cm deck    | 1    | Installing the belt cover on 107 cm mower |
| Flange head screw, 1/4 x 1/2 inch | 6    |   |
| Belt cover—120 cm deck            | 1    |   |
| Belt cover bracket—120 cm deck    | 1    | Installing the belt cover on 120 cm mower |
| Flange head screw, 1/4 x 1/2 inch | 5    |   |
| Bolt, 1/4 x 5/8 inch              | 2    | Installing the blower belt sever          |
| Locknut, 1/4 inch                 | 2    | Installing the blower belt cover          |
| Quick-attach bracket              | 1    |   |
| Hairpin cotter                    | 1    | Installing the bagger assembly and bags   |
| Grass Bag                         | 2    |   |
| Discharge tube                    | 1    | Installing the discharge tube             |
| Bolt, 3/8 x 2–1/4 inch            | 2    |   |
| Locknut, 3/8 inch                 | 4    |   |
| Washer, 3/8 inch                  | 4    | Installing the mower counterweight        |
| Counterweight                     | 1    |   |
| Decal                             | 1    |   |
| Operator's Manual                 | 1    | Read before operating                     |

## **Preparing the Tractor**

#### **Preliminary Preparation**

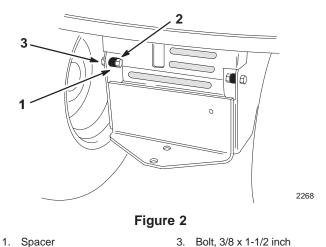
Park the tractor and mower on a level surface, disengage the blade control (PTO), set the parking brake, and turn the ignition key to off. Remove the ignition key.

Lower the mower to its lowest position and remove the mower from the tractor. Refer to Mower Operator's Manual for removal instructions.

Thoroughly clean the mower. All debris must be removed to ensure that parts will fit the mower properly.

#### Installing the Spacers for the Quick Attach Bracket

- 1. Install spacers on the inside of the tractor frame, using 2 bolts (3/8 x 1-1/2 inch) and 2 locknuts (3/8 inch) (Fig. 2).
- 2. Allow the spacers to remain installed, even when the bagger attachment is not being used.



2. Locknut, 3/8 inch

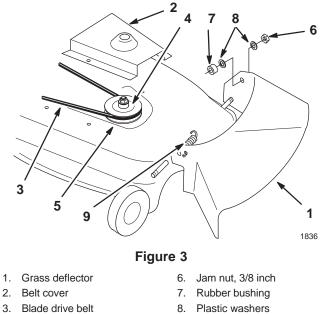
### **Preparing the Mower**

#### **Removing the Grass Deflector**

1. Remove the grass deflector from the mower (Fig. 3).

2. Remove the belt cover from the right side (Fig. 3).

**Note:** Save all parts and hardware for use when converting the mower to side discharge or mulching mode.



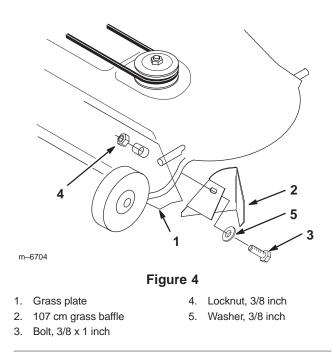
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Torsion spring

- 4. Nut and lock washer
- 5. Single pulley

#### Installing the Grass Baffle for 107 cm Mowers Only

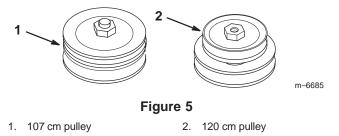
- **1.** Remove the bolt(s) and nut(s) at the end of the grass plate, located inside the mower, near the back edge of the discharge opening (Fig. 4). Discard this hardware.
- 2. Find the appropriate grass baffle (Fig. 4).
- **3.** Install the grass baffle tight against the grass plate with top edge up against inside of mower.
- **4.** For 107 cm mowers, secure the grass baffle with a carriage bolt (3/8 x 1 inch), washer (3/8 inch) and a locknut (3/8 inch) (Fig. 4).



**5.** Rotate the blade and check for clearance with the grass baffle. If necessary adjust the baffle so blade does not hit the grass deflector.

#### Installing the Blower Drive Pulley

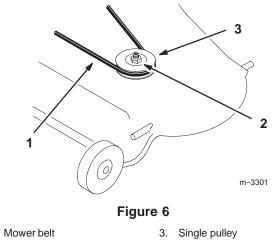
1. Select the correct pulley shown in figure 5.



- 2. Remove the belt from the right hand spindle pulley.
- **3.** Remove the nut and lock washer retaining the pulley (Fig. 6). Remove the single groove pulley.

**Note:** Block the blade with a piece of wood to stop it from turning while you remove the pulley nut. If the blade slips hold the hex portion of the spindle with a wrench.

**Note:** When the nut is removed the shaft is free to drop out of the spindle. Make sure to support the spindle and blade from the bottom side.

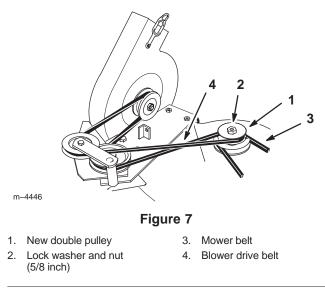


2. Nut and lock washer

1.

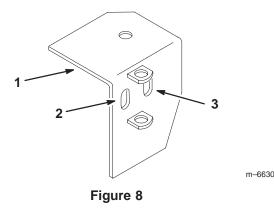
- 4. Slide the new double pulley onto the spindle shaft with the word **Top**, stamped into largest pulley, facing up. Secure with previously removed lock washer (5/8 inch) lock washer and nut (5/8 inch) (Fig. 7).
- 5. Tighten the nut to 50–75 ft–lb (68–101 N•m).
- 6. Install the existing mower belt onto the bottom pulley (Fig. 7).

Note: Check that the mower belt is properly located on the idler and pulleys.



#### Installing the Blower Pivot Support

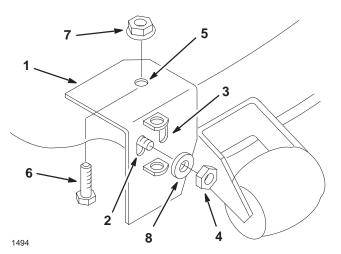
1. Select the proper hole in the pivot support. Refer to Figure 8 for the correct hole.



1. Pivot support

3. Mounting hole for a

- 2. Mounting hole for a 107 cm mower
- 120 cm mower
- 2. With the correct hole, slide the pivot support over the threaded stud welded to front of mower near the discharge opening (Fig. 9).
- 3. Align the pivot support parallel with front curved edge and tight against top of mower (Fig. 9). Clamp in this position.
- 4. Drill a 11/32 inch diameter hole into the top of the mower using the pivot support as a template.
- 5. Secure the pivot support to the mower with a bolt  $(5/16 \times 3/4 \text{ inch})$ , through from the underside of the mower, and a flange nut (5/16 inch) (Fig. 9).
- 6. Install the jam nut (3/8 inch) (removed from the grass deflector) snug onto the stud. Do not overtighten the jam nut.



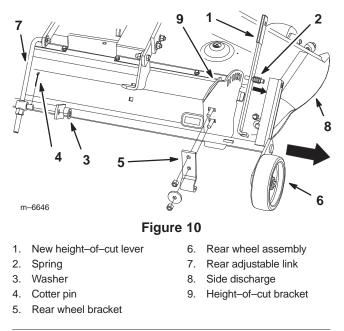
#### Figure 9

- 1. Pivot support
- Mounting hole-107 cm 2.
- 3. Mounting hole-120 cm
- 4. Jam nut, 3/8 inch (removed from grass deflector)
- Drill 11/32 inch diameter 5. hole
- Bolt, 5/16 x 3/4 inch 6.
- 7. Flange nut, 5/16 inch
- Plastic washer (removed 8. from grass deflector)

#### Installing the Height–of–cut Lever on 107 cm Mowers Only

Install a new height-of-cut lever on 107 cm mowers only.

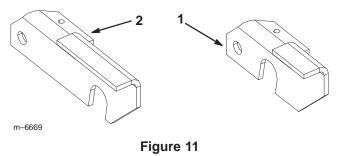
- 1. Remove the cotter pin and washer from the rear adjustable link (Fig. 10).
- 2. Remove the rear wheel bracket from the mower (Fig. 10).
- 3. Slide the rear wheel assembly to the right, towards the side discharge side (Fig. 10).
- 4. Remove the existing height-of-cut lever and spring from the mower (Fig. 10).
- 5. Install the new height-of-cut lever and existing spring to the wheel assembly (Fig. 10).
- 6. Slide the rear wheel assembly to the left, installing the height-of-cut lever into the height-of-cut bracket (Fig. 10).
- 7. Install the cotter pin and washer to the rear adjustable link (Fig. 10).
- 8. Install the rear wheel bracket to the mower (Fig. 10).



#### Assembling the Blower

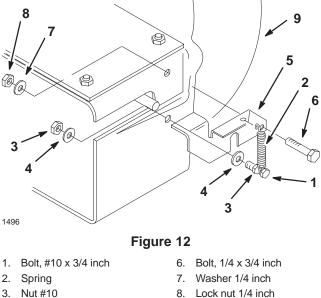
- 1. Install the long hook end of the tension spring and a nut (#10) onto a bolt (#10 x 3/4 inch). Thread the nut within an 1/8 inch (3 mm) from the head of the screw to allow space for the spring to rotate freely (Fig. 12).
- 2. Slide a washer (#10) onto the screw and insert it through the blower housing. Install a second washer (#10) and nut (#10) onto the bolt (Fig. 12).

- 3. While holding the first nut, tighten the second nut so that the assembly is tight against the plastic housing.
- 4. Select the appropriate latch. Refer to Figure 11 for the correct latch.



1. 107 cm mower latch 2. 120 cm mower latch

5. Hook the spring into the hole in the latch and mount the latch to the blower housing with a bolt (1/4 x)3/4 inch), washer (1/4 inch), and locknut (1/4 inch) (Fig. 12). Leave the nut loose enough so that the latch pivots freely.



Blower assembly

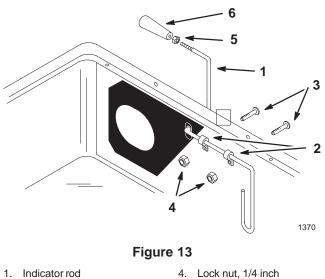
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- 4 Washer #10
- Latch 5.

#### Assembling the Bagger Cover

- 1. Slide the threaded end of the indicator rod through 2 clips, the rubber seal, and the slot in the cover (Fig. 13).
- 2. Secure the clips to the cover with 2 bolts (1/4 x)3/4 inch) and 2 locknuts (1/4 inch) (Fig. 13).
- 3. Thread the jam nut and handle completely onto the threaded end of the indicator rod.

4. Rotate the handle so that the decal can be read from the operators position, then tighten the jam nut (Fig. 13).

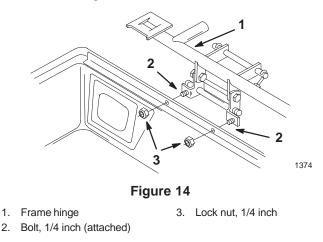


- Ø C Ø 2 m-7502 Figure 15 1. Discharge tube 2. Cut off 2-3/4 inches (70 mm)

2. Clips

3.

- 5. 6.
- Bolt, 1/4 x 3/4 inch
- Jam nut, 1/4 inch Handle
- 5. Mount the frame hinge to the cover with the 2 bolts (1/4 inch) attached to it. Secure it with 2 locknuts (1/4 inch) (Fig. 14).



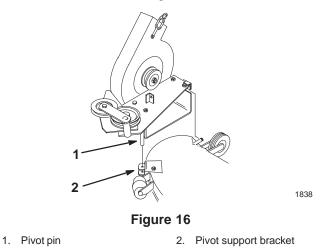
#### Sizing the Discharge Tube

1. Cut 2-3/4 inches (7 cm) off the bottom of the discharge tube (Fig. 15).

### Installing the Vac-Bagger

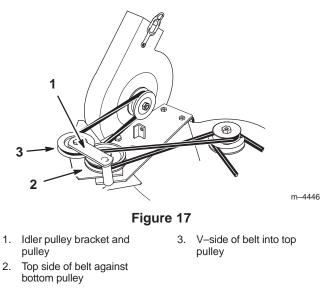
#### Mounting the Blower

1. Insert the pivot pin on blower into the pivot support bracket on the mower (Fig. 16).

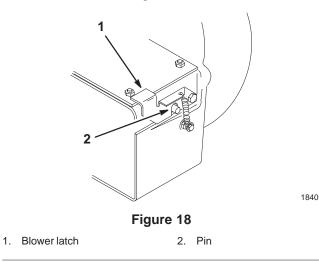


2. With the blower swung out in the open position, install the blower drive belt between the idler pulley bracket and pulleys. Then loop the belt around the blower pulley (Fig. 17).

**3.** Install the blower drive belt around the top pulley (Fig. 17).



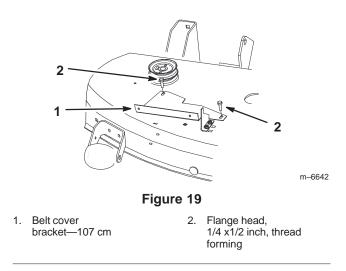
4. With the belt installed, swing the blower toward the mower until the blower latch locks over the pin at the back of the mower (Fig. 18).



#### Installing the Belt Cover on 107 cm Mowers

A belt cover and bracket are needed for a 107 cm mower.

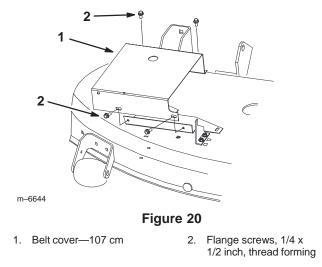
1. Mount the belt cover bracket into the holes used by the original cover with 2 thread forming flange screws (1/4 x 1/2 inch) (Fig. 19).



**Note:** Center the slots of cover bracket before tightening the flange screws.

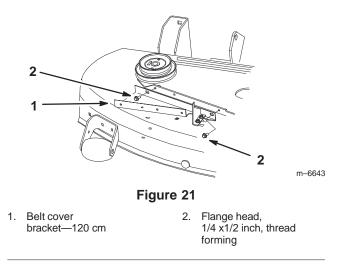
2. Mount the belt cover loosely to the outside of the belt cover bracket and the top of the mower using 3 flange screws  $(1/4 \times 1/2 \text{ inch})$  (Fig. 20).

**Note:** Do not tighten the screws as an adjustment must be made later.



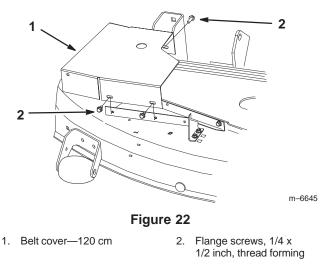
#### Installing the Belt Cover on 120 cm Mowers

1. Mount the belt cover bracket into the holes used by the original cover with 2 thread forming flange screws (1/4 x 1/2 inch) (Fig. 21).



2. Mount the belt cover loosely on top of the mower with 3 flange screws  $(1/4 \times 1/2 \text{ inch})$  (Fig. 22).

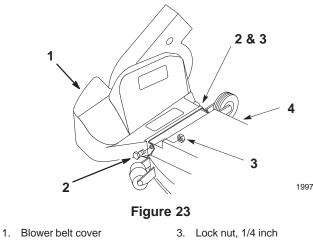
**Note:** Do not tighten the screws as an adjustment must be made later.



#### Installing the Blower Belt Cover

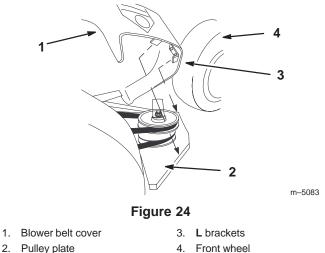
**1.** Mount the blower belt cover using 2 bolts (1/4 x 5/8 inch) and 2 locknuts (1/4 inch) (Fig. 23).

**Note:** Tighten the locknuts slightly so light drag is felt on the belt cover when tilted upward. The cover must close freely when assembled.



2. Bolt, 1/4 x 5/8 inch

- 4. Mower belt cover
- **2.** Adjust the blower belt cover so that the **L** brackets rest on pulley plate. Tighten the blower belt cover mounting screws (Fig. 24).

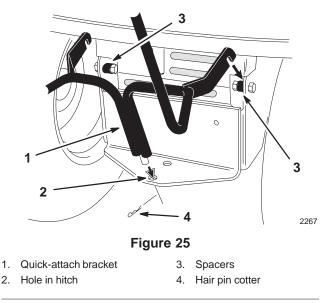


- 2. Pulley plate 4. Front wheel
- **3.** Tighten the mower belt cover mounting screws (Fig. 20 and 22).
- **4.** Install the mower to the tractor. Refer to Installing the Mower in the mower *Operator's Manual*.

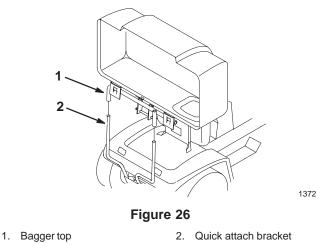
#### Installing the Bagger Assembly and Bags

**1.** Slide the bottom of the quick-attach bracket down into the hole in the hitch and hook the notches onto the spacers located inside the tractor frame (Fig. 25).

**2.** Slide the cotter pin through the hole at the bottom of the quick-attach bracket (Fig. 25).



- 3. Tip the tractor seat forward.
- **4.** With the lid in the open position carefully lift the bagger top and slide it onto the quick attach bracket (Fig. 26).

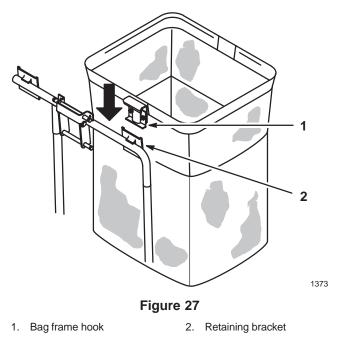


# Caution

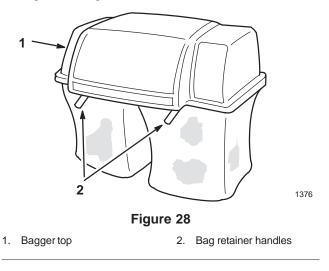
If you remove the bagger top when it is closed (in the down position), the top may suddenly fly open and you or someone may be bruised, pinched, or injured.

Always open (raise) the bagger top before you remove or install it on the quick-attach bracket.

**5.** Install the bags by sliding the bag frame hooks onto the retaining brackets (Fig. 27).

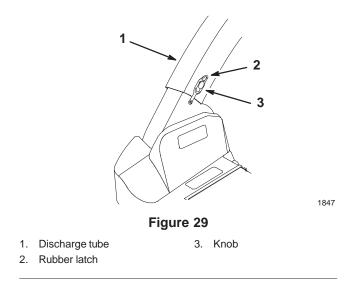


6. Lower the bagger top onto the bags. Then push down on both bag retainer handles until they lock onto the bag frame (Fig. 28).



#### Installing the Discharge Tube

- 1. Move the tractor seat to its normal position.
- **2.** Insert the upper end of the discharge tube into the bagger top. Slide the lower end of the discharge tube over the blower opening (Fig. 29).
- 3. Hook the rubber latch over knob (Fig. 29).



#### Installing the Mower Counterweight

- 1. Position the mower counterweight on the left-hand side of the mower so that the it fits snuggly against the side of the mower (Fig. 30).
- **2.** Using a punch in the holes of the counterweight, mark the location for drilling 2 holes (13/32 inch dia.). Remove the counterweight and drill the holes.
- **3.** Secure the counterweight to the top of the mower with 2 bolts (3/8 x 2–1/4 inch), 4 flat washers (3/8 inch), and 2 locknuts (3/8 inch).

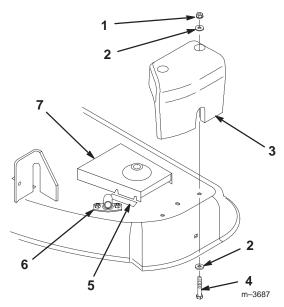


Figure 30

- 1. Locknut 3/8 inch
- Danger decal
   Washout port
- Flat washer, 3/8 inch
   Counterweight
- 7. Belt cover
- 4. Bolt, 3/8 x 2–1/4 inch

- **Note:** An extra decal is included with the bagger because the counterweight covers the original decal.
- 4. Clean the mower surface and place the decal on the mower deck, near the counterweight, between the washout port and the belt cover.
- **5.** Check the side to side level of the mower at the desired cutting height. Due to varying conditions, it may be necessary to level the mower after installing the vac bagger. If so, refer to Leveling the Mower Side to Side in mower *Operator's Manual*.

### **Removing the Vac Bagger**

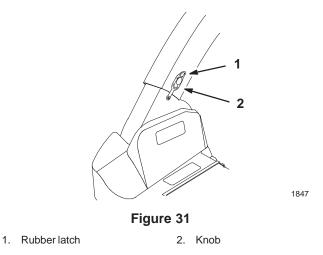


If you operate mower without both grass bags installed or with the discharge tube removed, you and others may be injured by thrown debris or cut by the blade.

- Always operate the mower with either the complete grass catcher mounted in place or use the mower to side discharge.
- Make sure that the spring-loaded grass deflector is in the down position.

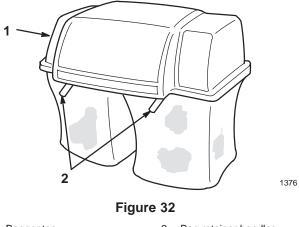
#### **Removing the Discharge Tube**

- 1. Unhook the rubber latch from the knob (Fig. 31).
- 2. Slide the lower end of the discharge tube off the blower discharge opening (Fig. 31). Pull the upper end of discharge tube out of bagger top.



#### **Removing the Bagger**

- 1. Tip the tractor seat forward.
- 2. Raise the bagger top and remove the grass bags from the bag frame (Fig. 32).



1. Bagger top

2. Bag retainer handles

1.

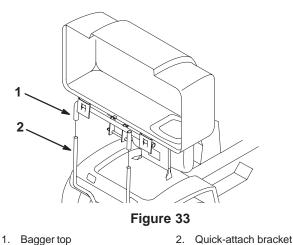
2.

Caution Ţ

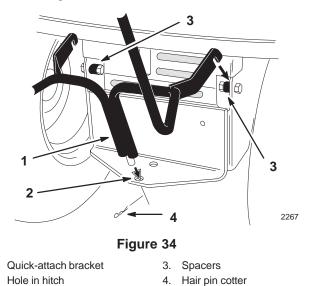
If you remove the bagger top when it is closed (in the down position), the top may suddenly fly open and you or someone may be bruised, pinched, or injured.

Always open (raise) the bagger top before you remove or install it on the quick-attach bracket.

3. With the lid in the open position, carefully lift the bagger top and slide off the quick-attach bracket (Fig. 33).



4. Remove the hairpin cotter and slide the bottom of the quick-attach bracket up out of the hole in the hitch and unhook it from the spacers located inside the tractor frame (Fig. 34).

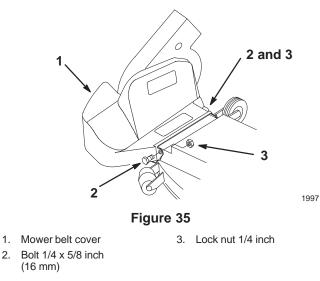


5. Move the tractor seat to its normal position.

#### **Removing the Blower Belt Cover**

**1.** Remove the blower belt cover by removing the 2 locknuts (1/4 inch) and 2 bolts (1/4 x 5/8 inch) (Fig. 35).

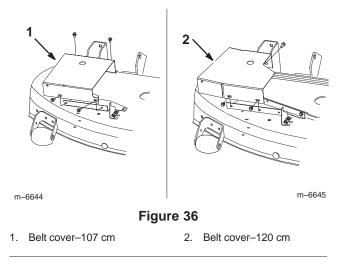
Note: Save all parts and hardware for use when installing the blower.



2

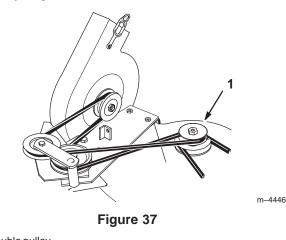
#### **Removing the Mower Belt Cover**

**1.** Remove the mower belt cover from the right side pulley (Fig. 36). Save the mounting hardware.

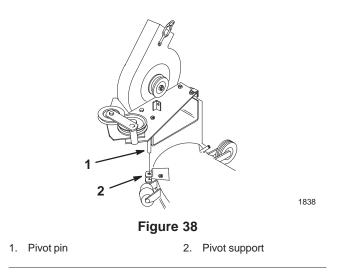


#### Removing the Blower from the Mower

**1.** Open the latch and swing the blower out away from the mower, remove the blower belt from the double pulley (Fig. 37).



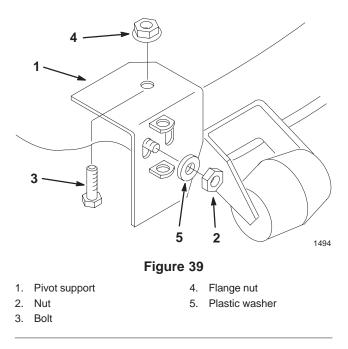
- 1. Double pulley
- **2.** Remove the blower by lifting the pivot pin out of the pivot support (Fig. 38).



#### **Removing the Blower Pivot Support**

1. Remove the pivot support from the mower (Fig. 39).

**Note:** Save all parts and hardware for use when installing the blower.



# Installing the Belt Cover and Grass Deflector

**Note:** Always install the grass deflector when changing to the side discharge mode.

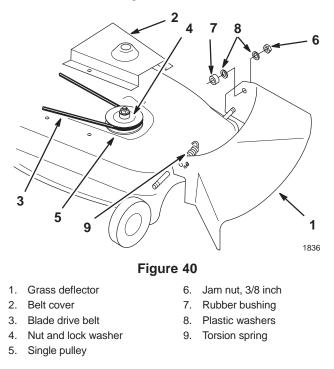
#### Danger

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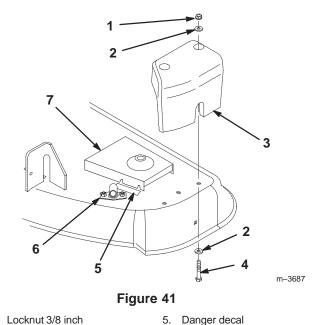
Without the grass deflector, discharge cover, or complete grass catcher assembly mounted in place, you and others are exposed to blade contact and thrown debris. Contact with rotating mower blade(s) and thrown debris will cause injury or death.

- Never put your hands or feet under the mower.
- Never try to clear discharge area or mower blades unless you move the PTO to Off and rotate the ignition key to Off. Also remove the key and pull the wire off the spark plug(s).
- 1. Install the grass deflector onto the mower with saved hardware (Fig. 40).
- 2. Install the original belt cover onto the mower with saved hardware (Fig. 40).



#### **Removing the Mower Counterweight**

- 1. Remove the bolts securing the counterweight to the top of the mower (Fig. 30).
- 2. Remove the counterweight and save for use when installing the bagger.



- 1. Locknut 3/8 inch
- 2. Flat washer, 3/8 inch Counterweight

3.

- 6. Washout port
- 7. Belt cover
- 4. Bolt, 3/8 x 2-1/4 inch
- Leveling the Mower

Level the mower when the blower and counterweight are removed. Refer the mower Operator's Manual.

# Operation

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

### Caution



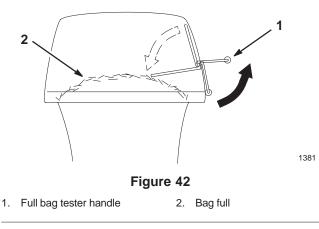
To avoid personal injury, read and follow the statements below.

- Become familiar with all operating and safety instructions in the operator's manual for your tractor and mower before using this attachment.
- Never remove the discharge tube, bags, bagger top, or the blower while the engine is running.
- Always shut the engine off before clearing an obstruction from the vac bagging system.
- Never do maintenance or repairs while the engine is running.

# Using the Full Bag Tester

As grass is cut and blown into the bags, the left bag fills first, then the right bag. If you overfill the bags, grass will eventually plug the discharge tube or elbow.

- 1. Stop the tractor and apply the brake.
- 2. To check if both bags are full, periodically raise the full bag tester handle (Fig. 42). If you feel resistance as you raise the handle, the bags must be emptied because they are full (Fig. 42).



# **Emptying the Grass Bags**

Grass bags can weigh up to 90 lb (41kg) when full. Be careful when lifting or handling a grass bag that is full. To empty the grass bags:

- 1. Stop the tractor, set the parking brake, and disengage the power take off (PTO) by pushing the PTO control to OFF (this stops the mower blades). Shut the engine off before you get off the tractor.
- 2. Tip the tractor seat forward.
- **3.** Pull up on both bag retainer handles until they unlock from the bag frame (Fig. 28). Now open (raise) the bagger top.
- **4.** Compress debris into the bags. With both hands, lift up on the bag and unhook it from the retaining bracket (Fig. 27). Empty the bag. Repeat for the other bag.
- **5.** Install the bags by sliding the bag frame hooks onto the retaining brackets (Fig. 27).
- **6.** Lower the bagger top onto the bags. Then push down on both bag retainer handles until they lock on the bag frame (Fig. 28).
- 7. Move the tractor seat to its normal position.

# Clearing Obstructions From Bagger

- 1. Stop the tractor, shift into neutral, set the parking brake, push the PTO control to OFF (this stops the mower blades), turn the ignition key to OFF to stop the engine, and remove the key from the switch.
- 2. Check the grass bags and empty them if they are full.
- **3.** Remove and separate the discharge tube and blower from the bagger top and mower. Using a stick or similar object, carefully remove and clear the obstruction from the mower, discharge tube, blower, and the bagger top.
- **4.** After you remove the obstruction, install the complete bagger system and resume operation.

# **Operating and Bagging Tips**

#### Size

Remember that the tractor is longer and wider with this attachment installed. By turning too sharply in confined places you may damage the attachment.

#### Trimming

Always trim with the left side of the mower. Do not trim with the right side of the mower because you could damage the bagger's blower and discharge tube.

### **Cutting Height**

Do not set the mower cutting height too low because long grass surrounding the mower can prevent air from getting under the mower and entering the bagging system. If enough air doesn't get under the mower, the bagging system will plug.

#### **Cutting Frequency**

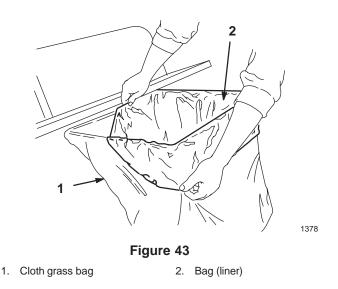
Cut the grass often, especially when it grows rapidly. You will have to cut your grass twice if it gets excessively long (refer to Bagging Long Grass, page 19).

#### **Cutting Technique**

For best lawn appearance, be sure to slightly overlap the mower into the previously cut area. This helps reduce the load on the engine and reduces the chance of plugging the blower and discharge tube.

#### **Using Bag Liners**

Although not required, bags may be inserted into each grass bag a liner to collect clippings and make disposal more convenient (Fig. 43). If you use a bag liner, remove the filled grass bag and close the top of the liner. Then pull the liner out the grass bag or turn the bag upside down while holding the handle on the bottom of the grass bag, allowing the liner to slide out.



#### **Bagging Speed**

Most often you will bag with the tractor throttle in the Fast position and drive at a normal ground speed. However, in extremely dry and dusty grass, you may want to slightly reduce the throttle speed and increase the ground speed of the tractor. The bagging system may plug if you drive too fast and the engine speed gets too slow. On hills it may be necessary to slow the tractor ground speed. This helps maintain the engine speed and bagging efficiency. Mow downhill whenever possible.

As the grass bags fill, extra weight is added to the back of the tractor. If you stop and start suddenly on hills, you may lose steering control or the tractor may tip.

Warning

- Do not start or stop suddenly when going uphill or downhill. Avoid uphill starts.
- If you do stop the tractor when going uphill, disengage the PTO. Then back down the hill slowly in Reverse.
- Do not change speeds or stop on slopes.

#### **Bagging Long Grass**

Excessively long grass is heavy and may not be propelled completely into the grass bags. If this happens, the discharge tube and blower may plug. To avoid plugging the bagging system, mow the grass at a high height of cut, then lower the mower to your normal cutting height and repeat the bagging process.

#### **Bagging Wet Grass**

Always try to cut grass when it is dry because your lawn will have a neat appearance. If you must cut wet grass, use the conventional side discharge feature of the mower. Several hours later, when the clippings are dry, install the complete bagger attachment and vacuum up the grass clippings.

#### Signs of Plugging

As you are bagging, a small amount of grass clippings normally blow out the front of the mower. An excessive amount of clippings blowing out indicates that the bags are full or the system is plugged.

# Maintenance

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

### **Recommended Maintenance Schedule**

| Maintenance Service<br>Interval                                  | Maintenance Procedure   |
|--|---|
| After each use   | Clean the bagger  |
| After the first<br>10 operating hours, and<br>monthly thereafter | Inspect the bagger  |
| Storage Service  | <ul> <li>Clean the bagger</li> <li>Inspect the bagger</li> <li>Belts—check for wear/cracks</li> <li>Paint chipped surfaces</li> </ul> |

## 

Caution

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

Remove the key from the ignition and disconnect the wire from the spark plug(s) before you do any maintenance. Set the wire aside so that it does not accidentally contact the spark plug.

# Inspecting the Vac Bagger Attachment

Inspect the blower and bagger attachment after the first ten hours of operation, and monthly thereafter.

- **1.** Check the discharge tube, elbow, and the bagger top. Replace these parts if they are cracked or broken.
- 2. Tighten all nuts bolts and screws.
- 3. Inspect the grass bags for deterioration.

Danger

You or bystanders could be severely injured by flying debris or thrown objects that may pass through worn or deteriorated grass bags.

- Frequently check the grass bags for holes, rips, wear, and other deterioration. Do not wash the grass bags.
- If the bag has deteriorated, install new grass bags supplied by the manufacturer of this bagger attachment.

# **Inspecting the Mower Blades**

- **1.** Inspect the mower blades regularly and whenever a blade strikes a foreign object.
- **2.** If blades are badly worn or damaged, install new blades. Refer to your tractor or mower operator's manual for complete blade maintenance.

# **Caring for the Grass Bags**

- 1. Washing the grass bags is not recommended.
- **2.** To prevent rapid deterioration of bag material, store the bags so they dry completely after each use.

### Cleaning the Vac Bagger Attachment

- 1. After each use, remove and wash the inside and outside of the bagger top, discharge tube, discharge elbow, blower and the underside of the mower, using water sprayed from a garden hose. Use a mild automotive detergent to remove stubborn dirt.
- 2. Make sure you remove matted grass from all parts.
- **3.** After washing let all parts dry thoroughly. Do not wash the grass bags.

## Storage

- 1. Clean the bagger attachment (refer to Cleaning the Vac Bagger Attachment, page 21).
- **2.** Inspect the bagger attachment for damage; refer to Inspecting the Vac Bagger Attachment, page 20.
- **3.** Make sure the grass 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.

