

# Wheel Horse® 44" Snowthrower

for 5xi Lawn and Garden Tractors Model No. 79366 - 8900001 & Up

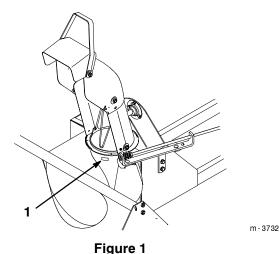
## **Operator's Manual**

**IMPORTANT:** Read this manual, and all related equipment manuals, carefully. They contain 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

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 UPPER DISCHARGE CHUTE (Part No. 94-8078)



- CONTACT WITH MOVING PARTS INSIDE CHUTE WILL CAUSE SERIOUS INJURY.
- SHUT OFF ENGINE BEFORE UN-CLOGGING DISCHARGE CHUTE. • NEVER PUT HAND IN CHUTE.

(2) ON TOP OF HOUSING (Part No. 63-2380)



ON TOP OF HOUSING (Part No. 92-8652)

### **AWARNING**







- ROTATING AUGER AND IMPELLER CAN CUT OR REMOVE BODY PARTS AND THROW OBJECTS.
- SHUT OFF ENGINE TO ADJUST, SERVICE, UNCLOG OR REMOVE DEBRIS.
- NEVER DISCHARGE AT OTHERS.
- READ OPERATOR'S MANUAL FOR OPERATING AND SAFETY INSTRUCTIONS.
- KEEP SAFETY DEVICES (SUCH AS GUARDS AND SWITCHES) IN PLACE AND WORKING.

## Installation

### **Loose Parts**

Note:

A rear-mount Attach-A-Matic<sup>™</sup> and rear wheel weights and chains, all of which must be purchased separately, are required to operate the tractor equipped with this snowthrower. Use the chart below to identify parts used for assembly.

DESCRIPTION	QTY.	USE	
Auger housing	1		
Frame assembly	1		
Crank support bracket	1		
Bolt 3/8-16 x 3/4" (19 mm)	6		
Bolt 3/8-16 x 1" (25 mm)	2		
Lock washer 3/8" (10 mm)	8		
Washer 3/8" (10 mm)	2		
Rotator assembly	1	Assemble frame	
Carriage bolt 5/16-18 x 1" (25 mm)	2		
Pyramidal washer 5/16" (8 mm)	1		
Washer 5/16" (8 mm)	1		
Locknut 5/16"	2		
Lift tube	1		
Clevis pin 1/2" x 2" (51 mm)	1		
Clevis clip	1		
Discharge chute assembly	1		
Washer 5/16" (8 mm)	3	Accomplic discharge objets	
Locknut 5/16"	3	Assemble discharge chute	
Carriage bolt 5/16-18 x 3/4" (19 mm)	3		
Clevis pin 3/8" x 1" (25 mm)	2	Drangra tractor attachment lift	
Hairpin cotter—small	2	Prepare tractor attachment lift	
Pulley box	1	lootell miller boy	
Belt	1	Install pulley box	

3

DESCRIPTION	QTY.	USE
Clevis pin 1/2" x 1" (25 mm)	1	
Clevis clip	1	
Spring tension link	1	
Support rod link	1	
Support brace	2	
Washer 13/16" (21 mm)	2	
Hairpin cotter—large	4	
Washer 15/16" (24 mm)	2	
Crank support	1	
Locking pin	1	Mount snowthrower to tractor
Chute control rod	1	
Hairpin cotter—small	1	
Pulley cover	1	
Screw #10 x 1/2" (13 mm)	4	
Rod Assembly	1	
Spacer washer 3/4" (8 mm)	2	
Clevis pin 5/16" x 1-3/8" (35 mm)	2	
Hairpin cotter	2	
Flat washer 5/16" (8 mm)	2	
Operator's Manual	1	Read before operating

### **Initial Snowthrower Assembly**

### **Assemble the Frame**

- 1. Attach the frame assembly and crank support bracket to the auger housings (Fig. 2).
  - A. Begin with the (2) 3/8 x 1" (25 mm) bolts, using (2) 3/8" (10 mm) flat washers as spacers between the crank support bracket and the housing, and (2) 3/8" (10 mm) lock washers.
  - B. Install the (6) 3/8" x 3/4" (19 mm) bolts with (6) 3/8" (10 mm) lock washers.
- 2. Install the worm gear into the teeth in the chute ring. Ensure the worm gear and teeth mesh fully but do not bind. Secure chute rotator assembly with (2) 5/16 x l" (25 mm) carriage bolts, a 5/16" (8 mm) pyramidal washer (concave side up), a 5/16" (8 mm) flat washer, and (2) 5/16" locknuts (Fig. 2). Ensure the chute ring rotates freely.

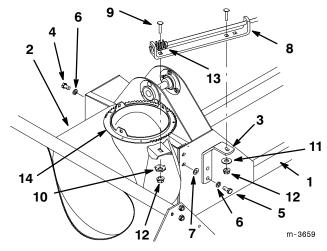


Figure 2

- 1. Frame assembly
- 2. Auger housing
- 3. Crank support bracket
- 4. Bolt 3/8 x 3/4" (19 mm)
- 5. Bolt 3/8 x 1" (25 mm)
- 6. Lock washer 3/8" (10 mm)
- 7. Flat washer 3/8" (10 mm)
- 8 Rotator assembly

- 9. Carriage bolt 5/16 x 1" (25 mm)
- 10. Pyramidal washer 5/16" (8 mm)
- 11. Flat washer 5/16" (8 mm)
- 12. Locknut 5/16"
- 13. Worm gear
- 14. Chute ring

**3.** Connect the lift tube to the snowthrower frame assembly with the 2" (51 mm) clevis pin and clip (Fig. 3)

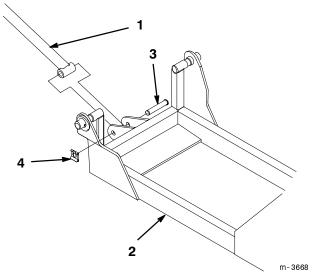
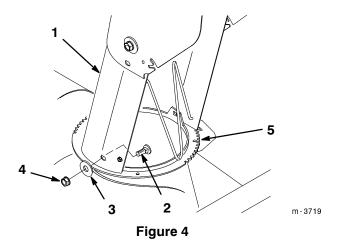


Figure 3

- 1. Lift tube
- 2. Snowthrower frame assembly
- 3. Clevis pin 2" (51 mm)
- 4. Clevis clip

### **Assemble the Discharge Chute**

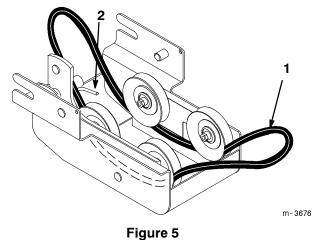
1. Install the discharge chute assembly onto the chute ring with (3) 5/16 x 3/4" (19 mm) carriage bolts (heads to the inside), (3) 5/16" (8 mm) washers and (3) 5/16" locknuts (Fig. 4).



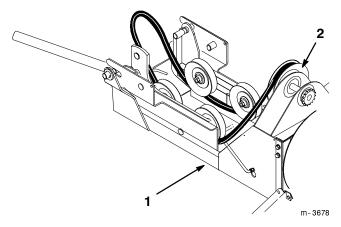
- 1. Discharge chute assembly
- Carriage bolt 5/16 x 3/4" (19 mm)
- 3. Washer 5/16" (8 mm)
- 4. Locknut 5/16"
- 5 Chute ring

### **Install the Snowthrower Belt**

1. Route the snowthrower belt under the pulleys and inside the belt guide (Fig. 5).



- ı ıgu
- 1. Snowthrower belt
- 2. Belt guide
- 2. Slide the pulley box into the snowthrower frame (Fig. 6).
- 3. Route the belt over the snowthrower pulley (Fig. 6).



- Figure 6
- 1. Snowthrower frame
- 2. Snowthrower pulley
- 4. Attach the pulley cover to the snowthrower frame assembly with (4) #10 x 1/2" (13 mm) screws (Fig. 7).

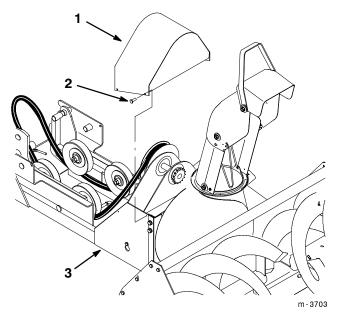


Figure 7

- 1. Pulley cover
- 2. Screw #10 x 1/2" (13 mm)
- Snowthrower frame assembly

### **Tractor Set-up**

### **Install Rear Wheel Weights and Chains**

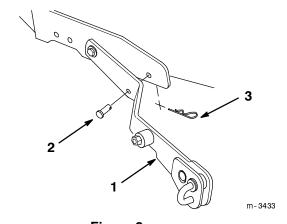
Install the rear wheel weights and chains. Refer to Attachment Operator's Manual for instructions.

### Install the Rear Attach-A-Matic™

Install the rear Attach-A-Matic<sup>™</sup> to the tractor; refer to the installation instructions that come with the rear Attach-A-Matic<sup>™</sup> mount.

### **Prepare the Tractor's Attachment Lift**

- 1. Start the engine
- 2. Raise the attachment lift.
- **3.** Set the parking brake and turn the ignition key to "STOP" to stop the engine. Remove the key.
- 4. The two lift arms are attached to the tractor frame, just ahead of the rear wheels. Secure the lift arms to the tractor frame with 3/8" x 1" (25 mm) clevis pins and small hairpin cotters (Fig. 8).



- Figure 8
- 1. Lift arm
- 2. Clevis pin 3/8" x 1" (25 mm)
- 3. Hairpin cotter-small

These pins must be installed when operating with a blade, snowthrower, or the tiller attachment.

**Note:** Remove the pins to attach a mower.

## Install the Snowthrower to the Tractor

- 1. Position the snowthrower frame assembly and its attachment parts on a level surface with enough space behind the them to accommodate the tractor (Fig. 6).
- 2. Park the tractor over the snowthrower lift rod between the tractor wheels (Fig. 9). Lower the attachment lift and turn the ignition key to "STOP" to stop the engine. Remove the key.

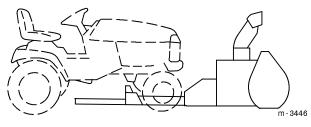


Figure 9

- 3. With the High-Low range selector in neutral "N," pull the tractor forward toward the snowthrower until the end of the snowthrower frame is just underneath the tractor's front Attach-A-Matic™.
- 4. Make sure the latches on the tractor's front Attach-A-Matic<sup>™</sup> are open. Then slide the pulley box completely into the Attach-A-Matic<sup>™</sup> latches. Close the latches by rotating them down (Fig. 10).

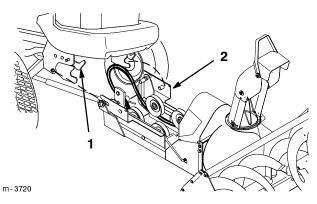


Figure 10

- 1. Attach-A-Matic™ latches
- 2. Pulley box

5. Install (2) 1-3/8" (35 mm) long clevis pins into the locking holes of the pulley box. Secure them with (2) 5/16" (8 mm) flat washers and (2) hairpin cotters on the inside (Fig. 11).

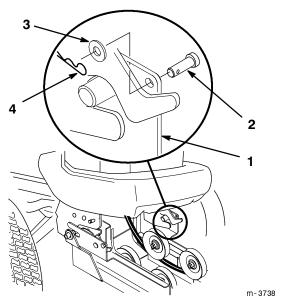


Figure 11

- 1. Pulley box
- 2. Clevis pin 1-3/8" (35 mm)
- 3. Flat washer 5/16" (8 mm)
- 4 Hairpin cotter

- 6. Now connect the snowthrower frame to the mid Attach-A-Matic<sup>™</sup>. You will need the crank support to help with this.
  - A. Continue pulling the tractor toward the snowthrower until the end of the snowthrower frame is directly below the mid Attach-A-Matic<sup>™</sup> hitch (Fig. 9).
  - B. Make sure the mid Attach-A-Matic<sup>™</sup> latches are open.
  - C. Slide the round end of the crank support under the notch in the snowthrower frame (Fig. 12).

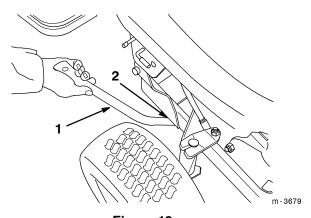


Figure 12

- 1. Crank Support
- Notch in snowthrower frame
- D. Use the crank support as a lever to lift the snowthrower frame until its connecting pins are completely inside the notches in the mid Attach-A-Matic<sup>™</sup> (Fig. 13).

### **A** CAUTION

### POTENTIAL HAZARD

• The snowthrower frame assembly is heavy.

#### WHAT CAN HAPPEN

 Hands and feet can be injured by the weight of the snowthrower coming down on them.

### HOW TO AVOID THE HAZARD

 Keep hands and feet away from the underside of the snowthrower frame.

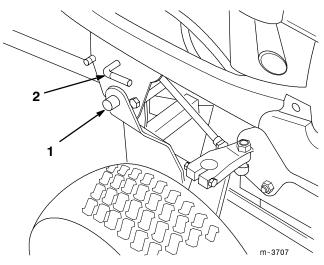


Figure 13

- 1. Snowthrower frame connecting pins
- 2. Mid Attach-A-Matic™ lever
- E. Turn the mid Attach-A-Matic<sup>™</sup> lever counterclockwise to lock the snowthrower in place (Fig. 13).

IMPORTANT: Make sure the snowthrower frame is locked in place. You should hear a distinct click if the snowthrower is correctly mounted.

- F. Set the parking brake.
- 7. Add (2) 3/4" (8 mm) washers onto the end of the rod assembly, then slide it into the lift tube.

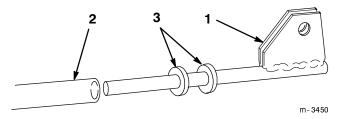


Figure 14

- 1. Rod assembly
- 3.
- 2. Lift tube

3 Washer 3/4" (8 mm)

**Note:** A washer may need to be removed from the rod assembly for the holes to line up with the attachment lift plate.

8. From beneath the tractor, connect the snowthrower rod assembly to the middle hole in the attachment lift plate with the 1" (25 mm) clevis pin and clip (Fig. 15).

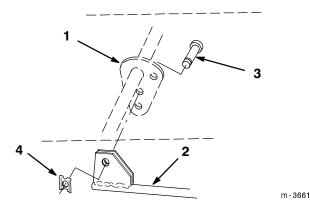


Figure 15

Right side of tractor shown

- 1. Attachment lift plate
- 2. Snowthrower rod assembly
- 3. Clevis pin 1/2" x 1" (25 mm)
- 4. Clevis clip
- 9. Start the tractor, raise the attachment lift, set the parking brake and turn the ignition key to "STOP" to stop the engine. Remove the key.

### **WARNING**

#### POTENTIAL HAZARD

• When the engine is off, attachments in the raised position can gradually lower.

### WHAT CAN HAPPEN

• Someone nearby may be pinned or injured by the attachment as it lowers.

### HOW TO AVOID THE HAZARD

- Always lower the attachment lift each time you shut off the tractor.
- **10.** Now install the snowthrower belt to the engine PTO pulley:
  - A. Open the hood of the tractor
  - B. Remove the right-hand side panel.

### **A** CAUTION

### POTENTIAL HAZARD

• Components under the hood will be hot if the tractor has been running.

### WHAT CAN HAPPEN

• Touching hot components can cause burns.

#### HOW TO AVOID THE HAZARD

- Allow the tractor to cool before performing maintenance or touching components under the hood.
  - C. Route the snowthrower belt around the engine PTO pulley (Fig. 16).

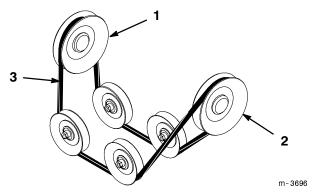


Figure 16

- Engine PTO pulley
   Snowthrower pulley
- ley 3. Belt
  - D. Replace the right side panel and close the hood.

11. On the right side of the tractor, pull forward on the spring tension link lever and connect the spring tension link from the spring tension link lever on the pulley housing to the snowthrower frame (Fig. 17).

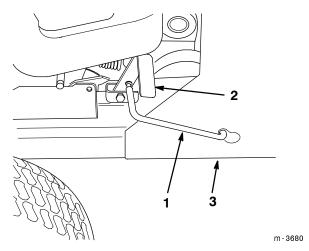
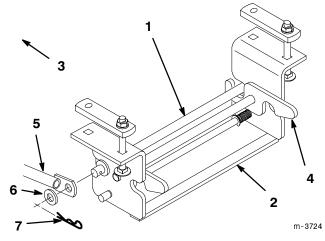


Figure 17

- 1. Spring tension link
- 3. Snowthrower frame
- 2. Spring tension link lever
- 12. Open the latches on the rear Attach-A-Matic<sup>™</sup>. Put the support rod link into the front notches on the rear Attach-A-Matic<sup>™</sup> and close the latches to secure it in place (Fig. 18).
- 13. Slide the non adjusting ends of the two support braces onto the support rod link that is now in the rear Attach-A-Matic<sup>™</sup> mount.
  - Make sure the rod of each brace faces outward.
  - Secure the braces to the rod with a 13/16"
     (21 mm) washer and a large hairpin cotter
     (Fig. 18).



- Figure 18
- Support rod link
- 2. Rear Attach-A-Matic™
- 3. Front of tractor
- Rear Attach-A-Matic™ latch
- 5 Support brace
- 6. Washer 13/16" (21 mm)
- 7. Hairpin cotter-large
- 14. Secure the other ends of the support braces to the frame rods protruding from the mid Attach-A-Matic™ with a 15/16" (24 mm) washer and a large hairpin cotter (Fig. 19). You may need to turn the adjuster of each brace before the holes in the adjuster align with the frame rod.

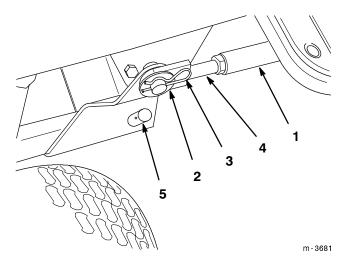


Figure 19

Left side of tractor shown

- 1 Support brace
- 2. Flat washer
- 3. Hairpin cotter
- 4. Adjuster
- 5. Mounting post for crank support
- 15. Slide the crank support onto the mounting post on the left-hand side of the tractor (Fig. 19). Secure it in position with the locking pin (Fig. 20).

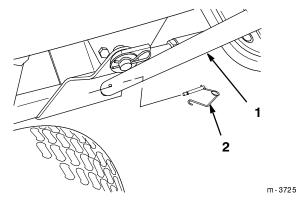


Figure 20

- 1. Crank support
- 2. Locking pin
- **16.** Slide the chute control rod through the hole in the end of the crank support and connect the end of the chute control rod to the universal joint on the snowthrower with a hairpin cotter (Fig. 21).

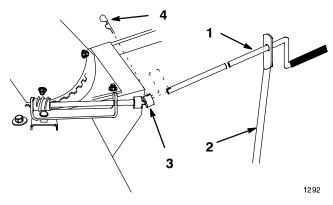


Figure 21

- 1. Chute control rod
- 3. Universal joint
- Crank support
- 4. Hairpin cotter-small

### Removing the Snowthrower

1. Park the tractor on a level surface, raise the attachment lift, disengage the power take off (PTO), set the parking brake and turn the ignition key to "STOP" to stop the engine. Remove the key.

### **WARNING**

#### POTENTIAL HAZARD

• When the engine is off, attachments in the raised position can gradually lower.

#### WHAT CAN HAPPEN

• Someone nearby may be pinned or injured by the attachment as it lowers.

#### HOW TO AVOID THE HAZARD

- Always lower the attachment lift each time you shut off the tractor.
- 2. Disconnect the pulley housing from the snowthrower frame by pulling the spring tension link lever forward until you have enough slack to disconnect the link (Fig. 22).

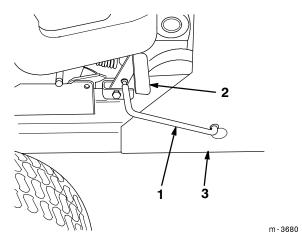


Figure 22

- 1. Spring tension link
- 3 Snowthrower frame
- Spring tension link lever

- **3.** Remove the snowthrower belt from the engine PTO pulley:
  - A. Open the hood of the tractor
  - B. Remove the right-hand side panel.

### **A** CAUTION

#### POTENTIAL HAZARD

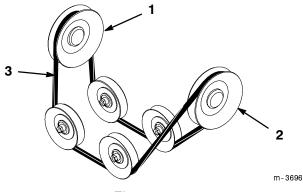
• Components under the hood will be hot if the tractor has been running.

#### WHAT CAN HAPPEN

• Touching hot components can cause burns.

### HOW TO AVOID THE HAZARD

- Allow the tractor to cool before performing maintenance or touching components under the hood.
  - C. Remove the snowthrower belt from around the engine PTO pulley (Fig. 23).



- Figure 23
- 1. Engine PTO pulley
- 3. Belt
- Snowthrower pulley
  - D. Replace the right side panel and close the hood.
- **4.** Start the tractor and lower the attachment lift. Turn the ignition key to "STOP" to stop the engine. Remove the key.

5. Remove the chute control rod by removing the hairpin cotter connecting it to the universal joint (Fig. 24). Slide the chute control rod out of the end of the crank support.

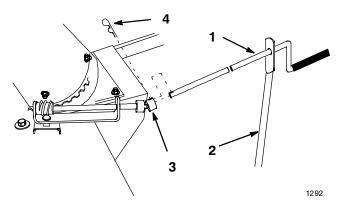


Figure 24

- 1. Chute control rod
- 2. Crank support
- 3. Universal joint
- 4. Hairpin cotter
- **6.** Remove the crank support by removing the locking pin at its base (Fig. 25), then lifting the support from its mounting post.

7. Remove the support braces from the frame rods protruding from the mid Attach-A-Matic<sup>™</sup> by removing the hairpin cotters and washers (Fig. 25).

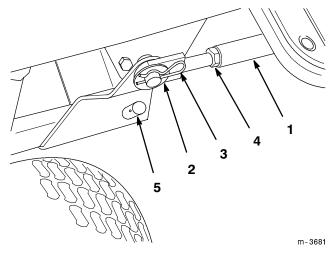


Figure 25

### Left side of tractor shown

- Support brace
- 2. Flat washer
- 3. Hairpin cotter
- 4. Adjustment nut for brace
- 5. Mounting post for crank support

- 8. Remove the other ends of the two support braces from the rear Attach-A-Matic<sup>™</sup> mount by removing the hairpin cotters and washers (Fig. 26).
- Release the latches on the rear Attach-A-Matic<sup>™</sup> and remove the support rod link (Fig. 26).

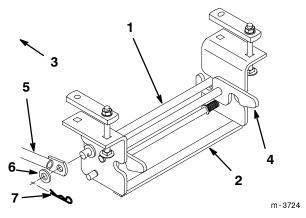


Figure 26

- 1 Support rod link
- 2. Rear Attach-A-Matic™
- 3. Front of tractor
- Rear Attach-A-Matic™ latch
- 5. Support brace
- 6. Washer 13/16" (21 mm)
- 7. Hairpin cotter-large
- **10.** Disconnect the snowthrower lift rod from the attachment lift plate by removing the clip from the clevis pin (Fig. 27).

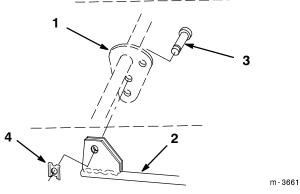


Figure 27

Right side of tractor shown

- 1. Attachment lift plate
- 2. Snowthrower lift rod
- 3. Clevis pin 1/2" x 1" (25 mm)
- 4. Clevis clip

### 11. Please use **CAUTION** during this step!

### **WARNING**

#### POTENTIAL HAZARD

• The snowthrower frame assembly is heavy.

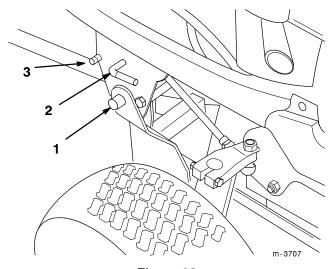
### WHAT CAN HAPPEN

 Hands and feet can be injured by the weight of the snowthrower coming down on them.

### HOW TO AVOID THE HAZARD

• Keep hands and feet away from the underside of the snowthrower frame.

Press the button of the mid Attach-A-Matic<sup>™</sup> and carefully turn the lever clockwise to release the snowthrower (Fig. 28).



### Figure 28

- Snowthrower frame connecting pin
- 2. Mid Attach-A-Matic™ lever
- Mid Attach-A-Matic<sup>™</sup> button
- **12.** Put the tractor's High-Low range lever in neutral "N" and release the parking brake.
- **13.** Push the tractor back, away from the snowthrower until there is sufficient space to remove the pulley box.

- **14.** Remove the clevis pins from the pulley box locking holes (Fig. 29). Open the latches of the front Attach-A-Matic<sup>™</sup>, remove the pulley box, and slide it into snowthrower frame.
- **15.** Install the clevis pins into the locking holes of the pulley box for storage.

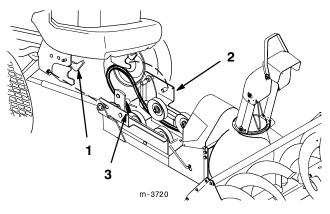


Figure 29

- Attach-A-Matic<sup>™</sup> latches
- 3. Locking holes

- 2. Pulley box
- **16.** Push the tractor back, away from the snowthrower frame. Set the parking brake.

## **Operation**

### **DANGER**

### POTENTIAL HAZARD

• When the snowthrower is attached to the tractor, without additional weight, the tractor may become unstable.

#### WHAT CAN HAPPEN

• Loss of traction and stability may cause loss of tractor control.

#### HOW TO AVOID THE HAZARD

 NEVER operate the tractor equipped with the snowthrower, unless rear weights are installed.

### **DANGER**

#### POTENTIAL HAZARD

 Rotating auger can cut off fingers, hands or other body parts and throw objects.

### WHAT CAN HAPPEN

• Contact with rotating auger and thrown debris can cause severe injury or death.

#### HOW TO AVOID THE HAZARD

- Stay away from the discharge and auger openings while operating the snowthrower.
- Keep your hands, feet, and any other part of your body or clothing away from concealed, moving or rotating parts.
- Use a stick, not your hand, to remove obstructions from the discharge chute or auger housing.
- Before adjusting, cleaning, repairing and inspecting the snowthrower and before unclogging the discharge chute, shut off the engine and wait for all moving parts to stop. Move the power take off (PTO) to "OFF" and rotate the ignition key to "OFF." Remove the key.

## Operating the Power Take Off (PTO)

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

If the ignition key is in the RUN or LIGHTS position and the power take off (PTO) is engaged, the PTO indicator light will be on. When this light is on, it is a reminder: the implement is being powered and the starter will not crank while the PTO is engaged. Always turn off the PTO before getting off the seat.

### **Engaging the Power Take Off (PTO)**

- **1.** Depress the brake pedal to stop the machine.
- **2.** Move the throttle lever to FAST.

IMPORTANT: For best performance, always use full throttle when the power take off (PTO) switch is ON.

**3.** Pull the power take off (PTO) switch to ON (Fig. 30).

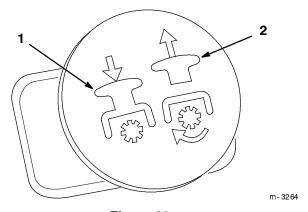


Figure 30

- Push (off-disengaged)
- 2. Pull (on-engaged)

### Disengaging the Power Take Off (PTO)

1. Push the power take off (PTO) switch to OFF.

### **Attachment Lift Lever**

The attachment lift lever (Fig. 31 & 32) is used to raise and lower various attachments.

### **Raising Attachments**

- 1. Start the tractor.
- 2. Pull the attachment lift lever upward until the latch locks. In this position, the lift will hold the attachment in the up, or raised position.

### **WARNING**

#### POTENTIAL HAZARD

• When the engine is off, attachments in the raised position can gradually lower.

#### WHAT CAN HAPPEN

• Someone nearby may be pinned or injured by the attachment as it lowers.

#### HOW TO AVOID THE HAZARD

• Always lower the attachment lift each time you shut off the tractor.

### **Lowering Attachments**

- 1. Start the tractor.
- **2.** Push the attachment lift lever downward to lower the attachment.

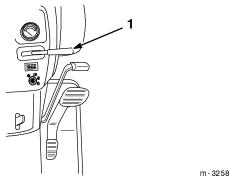


Figure 31

1. Attachment lift lever

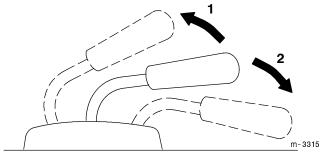


Figure 32

- 1 Raise attachment
- Lower attachment

### **Adjusting The Discharge Chute**

### **A** DANGER

#### POTENTIAL HAZARD

 The rotating auger can cut off fingers, hands or other body parts and throw objects.

#### WHAT CAN HAPPEN

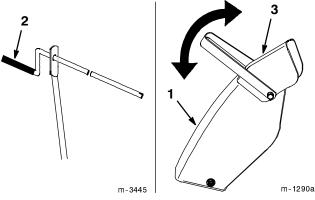
• Contact with the rotating auger and thrown debris can cause sever injury or even death.

#### HOW TO AVOID THE HAZARD

- Stay away from the discharge and auger openings while operating the snowthrower.
- Keep your hands, feet, and any other parts of your body or clothing away from concealed, moving or rotating parts.
- Use a stick, not you hand, to remove obstructions from the discharge chute or auger housing.
- Before adjusting, cleaning, repairing and inspecting the snowthrower and before unclogging the discharge chute, shut off the engine and wait for all moving parts to stop. Move the power take off (PTO) to "OFF" and rotate the ignition key to "OFF." Remove the key.

The discharge chute can be rotated 180° side to side. The direction is controlled by turning the crank handle (Fig. 33).

The chute deflector, on top of the discharge chute, can be moved up and down to control the height and distance snow is thrown (Fig. 33).



- Discharge chute
- Crank handle

Figure 33

Chute deflector

### **Tips for Throwing Snow**

Remove snow as soon as possible after it falls. This produces best snow removal results.

Adjust the skids to match the type of surface being cleaned; refer to Adjusting the Skids, page 22.

The snowthrower is designed to clean snow down to the contact surface, but there are times when the front of the snowthrower may tend to ride up. If this happens, reduce forward speed.

Discharge snow downwind whenever possible, and overlap each pass to ensure complete snow removal. If the wheels slip, shift into the High-Low range lever to Low "L" to reduce forward speed.

Run the snowthrower for a few minutes after clearing snow so moving parts do not freeze. Engage the power take off (PTO) to clear any remaining snow from the inside housing.

Do not overload the snowthrower by clearing snow at too fast a rate. If the engine slows down, reduce forward speed.

Always use full throttle (maximum engine speed) when throwing snow.

In wet or slushy conditions, clogging of the discharge chute will be reduced by maintaining maximum engine speed and by not overloading the engine.

In some snow and cold weather conditions, some controls and moving parts may freeze. Therefore, when any control becomes hard to operate, stop the machine and wait for all moving parts to stop; then check all parts for freeze up. DO NOT USE EXCESSIVE FORCE AND TRY TO OPERATE THE CONTROLS WHEN FROZEN. Free all controls and moving parts before operating.

Use low range (on the high-low range lever) for best performance and smoothest operation.

## Maintenance

### Service Interval Chart

Service Operation	Each Use	5 Hours	25 Hours	Storage Service	Fall Service	Notes
Drive shaft bearings—grease			Х	Х	Х	
Drive chain—oil			Х	Х	Х	
Gear box lubricant—check			Х	Х	Х	
Belt—check for wear/cracks				Х	Х	
Chipped Surfaces—paint				Х		
Scraper—check for wear				Х	Х	

### **A** 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(s) off the spark plug(s) before you do any maintenance. Also push the wire(s) aside so it does not accidentally contact the spark plug(s).

### **Greasing and Lubrication**

### **Service Interval Specification**

Grease and oil the machine after every 25 operating hours or once a year, whichever occurs first.

Grease Type: General-purpose grease.

Oil Type: SAE 10W or 10W30.

#### **How to Grease**

- 1. Disengage the power take off (PTO), set the parking brake, lower the attachment lift, and turn the ignition key to "STOP" to stop the engine. Remove the key.
- 2. Clean the grease fittings with a rag. Make sure to scrape any paint off the front of the fitting(s).
- **3.** Connect a grease gun to the fittings. Pump grease into the fittings. Wipe up any excess grease.

### Where to Add Grease

1. Lubricate the jack shaft bearings (Fig. 34) and auger bearings (Fig. 35).

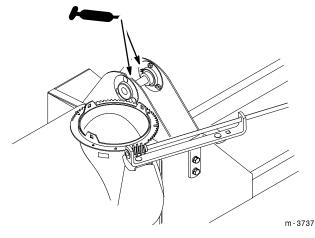


Figure 34

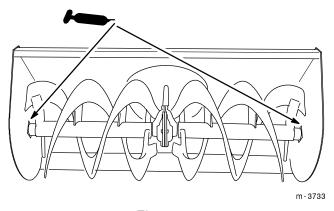


Figure 35

### Oil the Drive Chain

- 1. Disengage the power take off (PTO), set the parking brake, lower the attachment lift, and turn the ignition key to "STOP" to stop the engine. Remove the key.
- 2. Coat the entire chain with oil and allow it to penetrate each roller (Fig. 36).
- **3.** Place a few drops of oil on the discharge chute rotator shaft and discharge chute mounting (Fig. 37).
- 4. Wipe off excess oil.

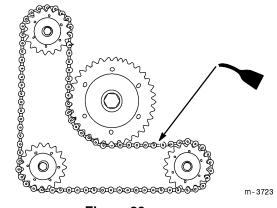
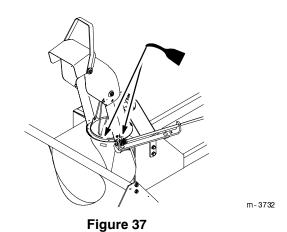


Figure 36



### **Check Gear Box Lubricant**

- 1. Move the snowthrower to a level surface.

  Disengage the power take off (PTO), set the parking brake, lower the attachment lift, and turn the ignition key to "OFF" to stop the engine.

  Remove the key.
- 2. Clean area around plug with a rag and remove plug (Fig. 38).
- **3.** Add SAE 90 gear oil until level with bottom of hole in housing (Fig. 38).

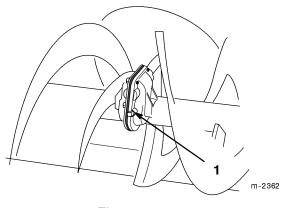


Figure 38

1. Plug

### **Adjusting the Skids**

The distance between the scraper blade and the ground is controlled by skids on each side of the housing. The height can be adjusted so the scraper blade will not catch on uneven surfaces

- 1. Move the snowthrower to a level surface.
- 2. Disengage the power take off (PTO) and set the parking brake. Raise the attachment lift enough for the skids to clear the ground. Support the snowthrower housing off the ground. Turn the ignition key to "STOP" to stop the engine. Remove the key.
- 3. Loosen the nuts securing the skids to the housing until the skids slide up and down easily (Fig. 39).

**4.** Raise or lower the skids equally on both sides to obtain level scraping action, and tighten nuts securely (Fig. 39).

Note: On smooth, paved surfaces, the scraper blade can be close to the surface. On uneven, gravel or crushed rock surfaces, adjust the skids to raise the scraper, thereby preventing catching or picking up rocks.

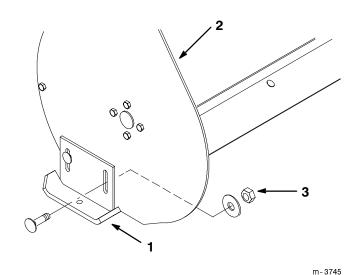


Figure 39

- 1 Skid
- 2. Housing

3. Nuts and washers

IMPORTANT: The scraper should be higher above the pavement if the pavement surfaces on which the snowthrower will be used are cracked, rough or uneven.

### Replacing the Scraper Blade

The scraper blade contacts the ground preventing damage to the snowthrower housing. Periodically inspect the scraper blade for wear. When scraper becomes worn, before working surface contacts the housing, replace the scraper blade.

- 1. Disengage the power take off (PTO), set the parking brake, raise the attachment lift, and turn the ignition key to "STOP" to stop the engine. Remove the key.
- **2.** Support the snowthrower housing off the ground.
- **3.** Remove nuts, washers, carriage bolts and scraper blade (Fig. 40).
- **4.** Replace scraper blade and install with previously removed hardware (Fig. 40).

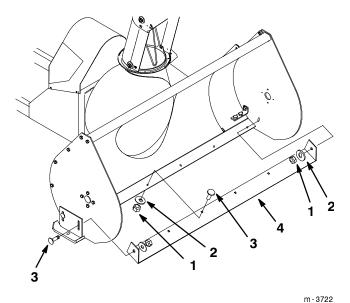


Figure 40

- 1. Nut
- 2 Washer

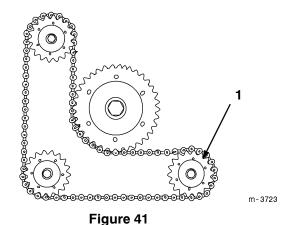
- 3. Carriage bolt
- 4. Scraper blade

### **Adjusting Drive Chain Tension**

Check the drive chain tension after every 25 operating hours or once a year, whichever occurs first. Adjust as necessary to maintain proper tension.

- 1. Disengage the power take off (PTO), set the parking brake, lower the attachment lift, and turn the ignition key to "STOP" to stop the engine. Remove the key.
- 2. To adjust, loosen the bolt that secures the idler sprocket. (Fig. 41).
- 3. Slide the idler sprocket in the adjustment slot until the chain is snug, but not tight (Fig. 41).
- **4.** Tighten the idler sprocket securely.

IMPORTANT: Do not overtighten the chain or excessive wear will occur.



1. Idler sprocket adjustment

### **Storage**

- 1. Before long-term storage, wash the machine with mild detergent and water to remove dirt and grime from the entire machine.
- 2. Check the condition of the scraper blade; refer to Replacing the Scraper Blade, page 23.
- 3. Check the condition of the drive belt and chain.
- **4.** Grease and oil the snowthrower; refer to Greasing and Lubrication, page 20.
- Check and tighten all bolts, nuts, and screws. Repair or replace any part that is damaged or defective.
- **6.** Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
- 7. Coat the inside auger housing and discharge chute with automotive wax to prevent rust and reduce the sticking of snow to these surfaces.
- **8.** Store the machine in a clean, dry garage or storage area. Cover the machine to protect it and keep it clean.

