

42" Snowthrower

for

Lawn & Garden Tractors

Model No. 79263 – 6900001 & Up

Model No. 99262 – 6900001 & Up

Model No. 9863222– T6R0001 & Up

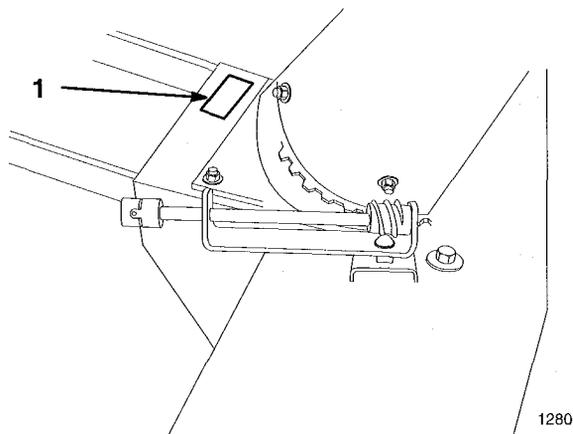
Operator's Manual

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 BACK OF HOUSING
LEFT SIDE
(Part No. 86-5100)
(Part No. TR86D5100)**

⚠ WARNING

LOSS OF TRACTION AND STABILITY MAY RESULT IN SERIOUS INJURY WHEN SNOWTHROWER IS IN A RAISED POSITION WITHOUT ADDITIONAL COUNTER WEIGHT.

 SEE OPERATOR'S MANUAL FOR COMPLETE INSTRUCTIONS.

TRACTORS MUST BE EQUIPPED WITH 100 LBS. REAR WHEEL WEIGHT WITH THIS ATTACHMENT INSTALLED. 86-5100

**ON BACK OF HOUSING
(Part No. 92-8652)
(Part No. TR92D8652)**

⚠ WARNING





- 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. 92-8652

**ON BACK OF CHUTE
LEFT AND RIGHT SIDE (2)
(Part No. 63-3740)
(Part No. TR63D3740)**

⚠ DANGER



AVOID INJURY!
SHUT OFF ENGINE AND BE SURE ALL PARTS HAVE STOPPED BEFORE UNCLOGGING DISCHARGE CHUTE. 63-3740

**ON LEFT AND RIGHT
LIFT ARMS (2)
(Part No. 85-7490)
(Part No. TR85D7490)**

⚠ WARNING

SPRING LOADED MECHANISM 85-7490
NEVER DISASSEMBLE BEFORE READING OPERATOR'S MANUAL.

**ON BACK OF HOUSING
LEFT AND RIGHT SIDE (2)
(Part No. 63-2380)
(Part No. TR63D2380)**

⚠ DANGER



AVOID INJURY FROM ROTATING AUGER. KEEP HANDS, FEET AND CLOTHING AWAY. 63-2380

Installation

Loose Parts

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

DESCRIPTION	QTY.	USE
Housing	1	Install frame and pulley
Frame	1	
Bolt 3/8-16 x 1"	4	
Locknut 3/8"	4	
Pulley	1	
Set Screw	1	
Key	1	
Top plate	1	Install top and side plates
Side plate	2	
Carriage bolt 3/8-16 x 1"	9	
Washer 3/8"	9	
Locknut 3/8"	9	
Discharge chute-Upper	1	Install discharge chute and rotator assembly
Discharge chute-Lower	1	
Deflector Shield	1	
Carriage bolt 5/16-18 x 3/4"	3	
Carriage bolt 5/16-18 x 5/8"	3	
Washer 5/16"	7	
Locknut 5/16"	7	
Rotator assembly	1	
Carriage bolt 5/16-18 x 1"	1	
Pyramidal washer 5/16"	1	
Front hitch	1	One time tractor preparation
Carriage bolt 3/8-16 x 1"	4	
Carriage bolt 3/8-16 x 1-1/4"	2	
Washer 3/8"	4	
Locknut 3/8"	4	
Handle bracket	1	
Spring bracket	1	
Decal	2	

DESCRIPTION	QTY.	USE
Snowthrower assembly	1	
Lift tube	1	
Lift rod	1	
Spacer washer 3/4"	2	
Retainer	1	
Washer 5/8"	1	
Hairpin cotter-large	2	
Rod handle	1	Mount snowthrower to tractor
Lift assist spring	1	
Belt	1	
Idler assembly	1	
Clevis pin	2	
Crank handle	1	
Handle support	1	
Hairpin cotter-small	5	

Assemble Housing

1. Tip housing onto front and insert frame into snowthrower with angle bend up (Fig. 1). Fasten frame with (4) 3/8 x 1" bolts (heads to the outside) and (4) 3/8" lock nuts.
2. Install pulley so hub is flush with end of drive shaft (Fig. 1) and secure with square key and square head set screw.

IMPORTANT: Key must be located under a set screw to be retained.

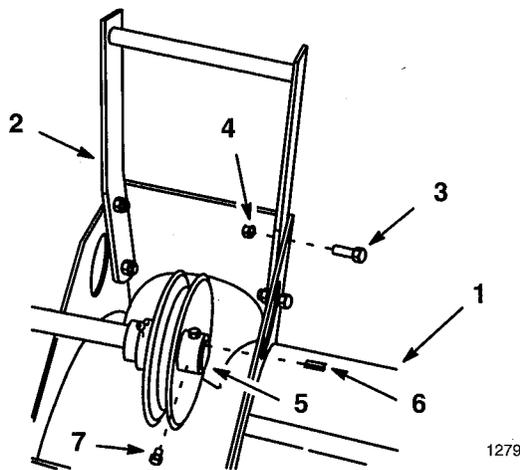


Figure 1

- | | |
|------------------|---------------|
| 1. Housing | 5. Pulley hub |
| 2. Frame | 6. Key |
| 3. Bolt 3/8 x 1" | 7. Set screw |
| 4. Lock nut 3/8" | |

3. Rotate the housing down and position top plate outside top flange of housing. Secure with (3) 3/8 x 1" carriage bolts (heads on inside) (3) 3/8" washers and (3) 3/8" lock nuts (Fig. 2).
4. Position side plates outside housing side flanges, with cutting edges parallel to side of housing, and secure with (6) 3/8 x 1" carriage bolts (heads on inside), (6) 3/8" washer and (6) 3/8" lock nuts (Fig. 2).

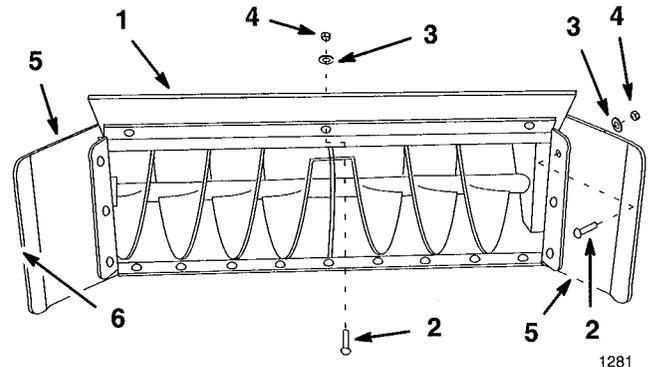


Figure 2

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|---------------------------|------------------|
| 1. Top plate | 4. Lock nut 3/8" |
| 2. Carriage bolt 3/8 x 1" | 5. Side plate |
| 3. Washer 3/8" | 6. Cutting edge |

5. Assemble upper discharge chute section outside and on top of lower section (2) 5/16 x 5/8" with bolts (heads on inside), (2) 5/16" washers and (2) 5/16" lock nuts (Fig. 3).

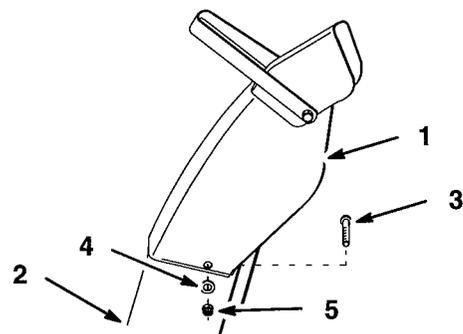
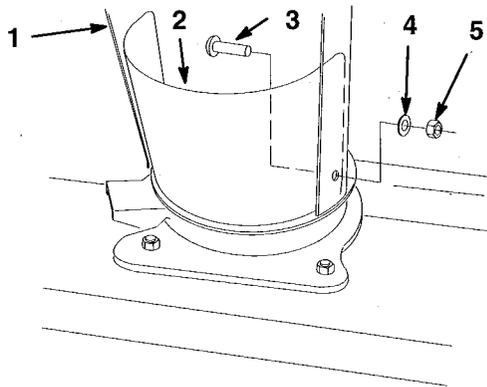


Figure 3

- | | |
|------------------------------|-------------------|
| 1. Upper section | 4. Washer 5/16" |
| 2. Lower section | 5. Lock nut 5/16" |
| 3. Carriage bolt 5/16 x 5/8" | |

6. Install discharge chute and deflector shield onto housing with (3) 5/16 x 3/4" carriage bolts (heads to inside), (3) 5/16" washers and (3) 5/16" locknuts (Fig. 4).

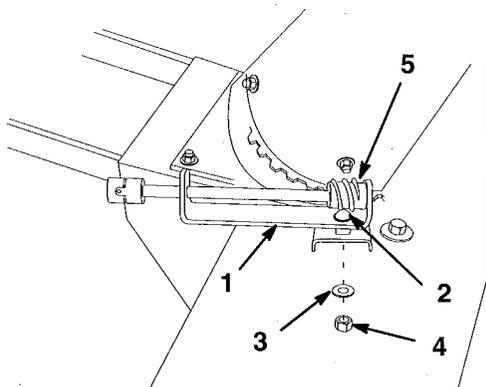


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Figure 4

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|------------------------------|------------------|
| 1. Discharge chute | 4. Washer 5/16" |
| 2. Deflector shield | 5. Locknut 5/16" |
| 3. Carriage bolt 5/16 x 3/4" | |

7. Install discharge chute rotator assembly into slot in housing with (3) 5/16 x 1" carriage bolt (head to top), (3) 5/16" pyramidal washer and (3) 5/16" locknut (Fig. 5).
8. Adjust rotator assembly so that worm gear is at right angle with chute, the teeth mesh fully and the chute turns freely. Tighten locknut securely.



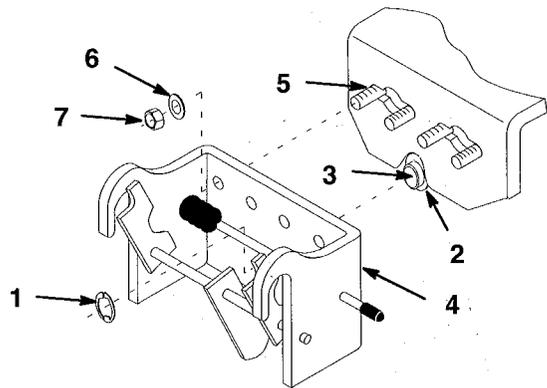
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Figure 5

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|----------------------------|------------------|
| 1. Rotator assembly | 4. Locknut 5/16" |
| 2. Carriage bolt 5/16 x 1" | 5. Worm gear |
| 3. Pyramidal washer 5/16" | |

Tractor Set-Up

1. Remove E-ring and all except one thick washer from tractor front axle pivot pin. Discard unused washers. (Fig. 6). Remove muffler shield.
2. Install (4) 3/8 x 1" carriage bolts into keyhole slots in axle bracket. Install muffler shield and place front hitch onto the tractor securing with (3) 3/8" washers, (3) 3/8" locknuts and previously removed E-ring (Fig. 6).

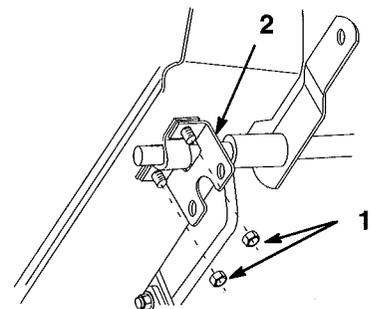


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Figure 6

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|-----------------|---------------------------|
| 1. E-ring | 5. Carriage bolt 3/8 x 1" |
| 2. Thick Washer | 6. Washer 3/8" |
| 3. Axle pivot | 7. Locknut 3/8" |
| 4. Front hitch | |

3. Remove nuts from right side foot rest cross shaft (Fig. 7). Do not remove cross shaft bracket.
4. Locate crank handle bracket under right side foot rest with 90 degree bend to inside (Fig. 7). Secure with previously removed locknuts.



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Figure 7

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|------------|-------------------|
| 1. Locknut | 2. Handle bracket |
|------------|-------------------|

5. Remove nuts from left seat bracket (Fig. 8). Remove bolts and replace with (2) 5/16 x 1-1/4" carriage bolts.
6. Install lift assist spring bracket on under side of left rear fender with long angle of bracket forward (Fig. 8). Secure with previously removed washers and nuts.

IMPORTANT: Long angle of lift assist bracket must be forward or lift assist spring may contact tire.

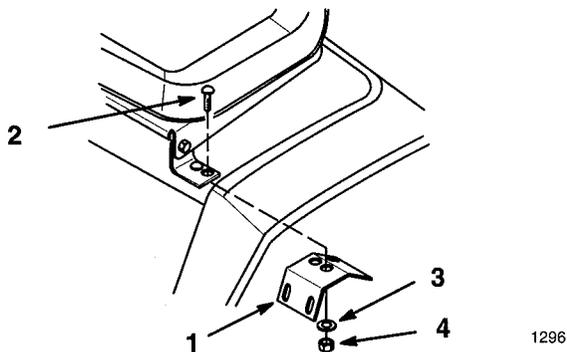


Figure 8

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|--|-----------|
| 1. Spring bracket (Long angle forward) | 3. Washer |
| 2. Carriage bolt 5/16 x 1-1/4" | 4. Nut |

7. Install warning decals to left and right side of lift arms (Fig. 9).

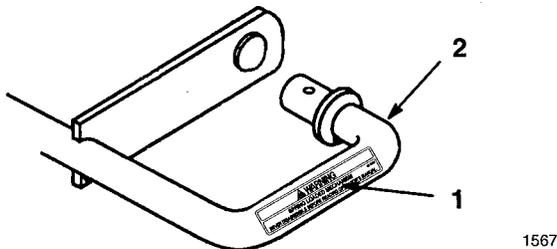


Figure 9

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|----------|-------------|
| 1. Decal | 2. Lift arm |
|----------|-------------|

Installing Snowthrower to Tractor

! DANGER

POTENTIAL HAZARD

- When 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 tractor, equipped with snowthrower, unless 100lb rear wheel weights are installed.

1. Install lift tube to housing with 5/8" flat washer and hairpin cotter (Fig. 10).

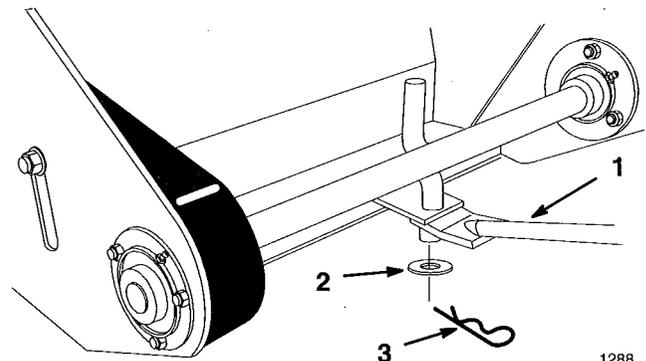
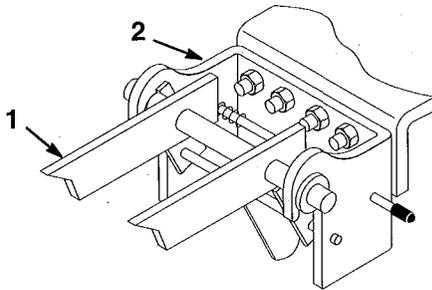


Figure 10

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|----------------|-------------------|
| 1. Lift tube | 3. Hairpin cotter |
| 2. Washer 5/8" | |

2. Position snowthrower on a level surface with lift tube extending rearward.
3. Open front hitch on tractor and park the tractor behind snowthrower, with lift tube between the front wheels. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
4. Slide snowthrower mounting frame into front hitch. Close and lock front hitch (Fig. 11).

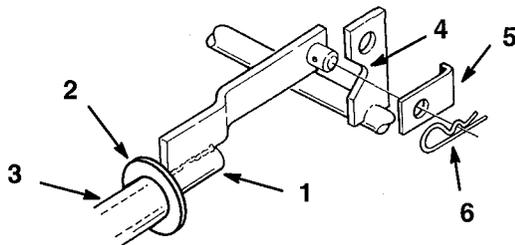


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Figure 11

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|-------------------|----------------|
| 1. Mounting frame | 2. Front hitch |
|-------------------|----------------|

5. Set Dial-a-Height to the Mounting Position, and lower attachment lift all the way; refer to Setting Height-of-Cut.
6. Slide lift rod into lift tube (Fig. 12). Optional 3/4" spacer washer(s) placed onto shaft of lift rod will increase lift height (Fig. 12).
7. Connect lift rod to "V" notch in attachment lift with retainer and hairpin cotter (Fig. 12).

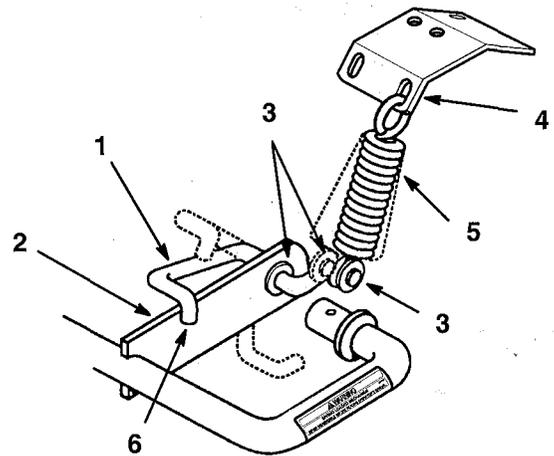


1568

Figure 12

- | | |
|--------------------------|-------------------|
| 1. Lift rod | 4. "V" notch |
| 2. Spacer washer(s) 3/4" | 5. Retainer |
| 3. Lift tube | 6. Hairpin cotter |

8. Raise attachment lift lever to the transport position and place a block under snowthrower housing.
9. Slide rod handle through hole in tractor lift arm and rotate so bend with welded washers angle up (Fig. 13).
10. Hook one end of lift assist spring into outer slot in forward angle of mounting bracket under left fender (Fig. 13).
11. Hook lift assist spring between welded washers on rod. Rotate rod handle up and hook over tractor lift arm (Fig. 13).



1567

Figure 13

- | | |
|-------------------|-------------------------|
| 1. Rod handle | 4. Bracket (outer slot) |
| 2. Lift arm | 5. Lift assist spring |
| 3. Welded washers | 6. Rod hook |

12. Raise attachment to the transport position, remove block under housing and lower snowthrower.
13. Hook idler pulley assembly rear hook onto tractor lift shaft. Rotate front latch hook up to engage cross shaft (Fig. 14).
14. Secure with clevis pins and hairpin cotters at rear hook and front latch hook (Fig. 14).

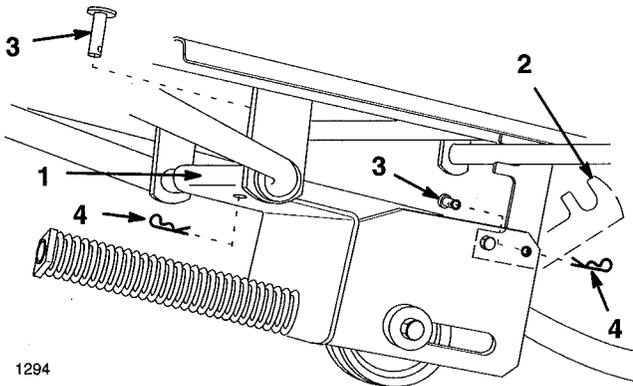


Figure 14

- | | |
|---------------|-------------------|
| 1. Rear hook | 3. Clevis pin |
| 2. Front hook | 4. Hairpin cotter |

15. Route belt around snowthrower pulley, idler pulleys and upper groove of electric clutch (Fig. 15).

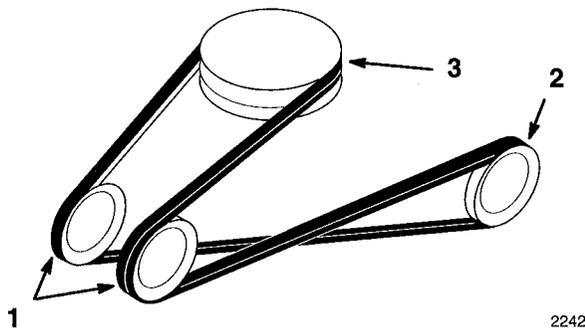


Figure 15

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|-----------------------|---|
| 1. Idler pulley | 3. Upper groove of (PTO) power take off |
| 2. Snowthrower pulley | |

16. Hook end of crank handle support over cross shaft (Fig. 16). Rotate to align pins with holes in handle bracket and secure with hairpin cotters (Fig. 16).

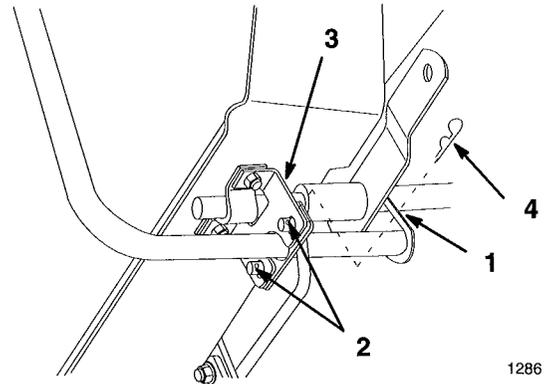


Figure 16

- | | |
|---------|--------------------|
| 1. Hook | 3. Bracket |
| 2. Pin | 4. Hairpin cotters |

17. Slide crank handle through hole in support and secure handle to U-Joint with hairpin cotter (Fig. 17).

Note: Adjust rotor assembly if necessary so handle clears tractor hood, teeth mesh fully and chute turns freely.

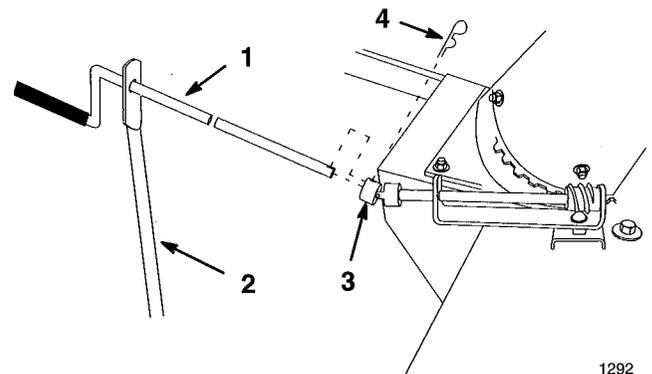


Figure 17

- | | |
|-----------------|-------------------|
| 1. Crank handle | 3. U-joint |
| 2. Support | 4. Hairpin cotter |

Removing the Snowthrower

Note: Save all hardware, washers and hairpin cotters for reuse when installing snowthrower.

1. Park the machine on a level surface, disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
2. Raise attachment lift to the transport position and place a block under snowthrower housing. Turn the Dial-a-Height knob counterclockwise, all the way, and lower the attachment to the mounting position; refer to Operation, Lowering Attachments.
3. Remove hairpin cotter at U-joint and slide crank handle out of support (Fig. 18).

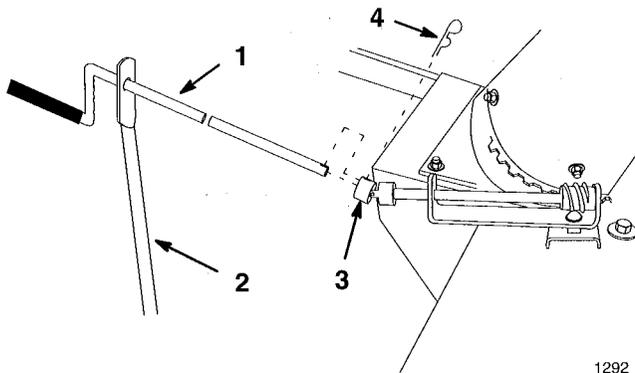


Figure 18

- | | |
|-----------------|-------------------|
| 1. Crank handle | 3. U-joint |
| 2. Support | 4. Hairpin cotter |

4. Remove hairpin cotters and unhook rod of crank handle support from cross shaft (Fig. 19).

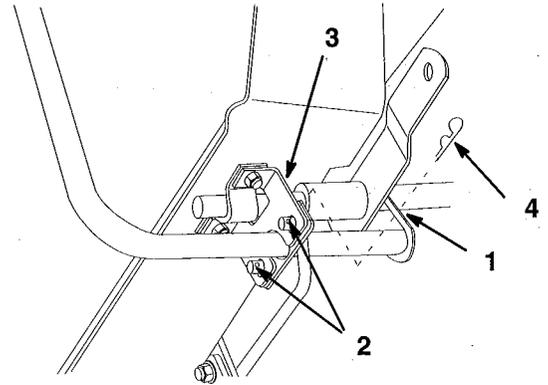


Figure 19

- | | |
|---------|-------------------|
| 1. Hook | 3. Bracket |
| 2. Pin | 4. Hairpin cotter |

5. Pull on idler pulley (Fig. 20) to relax belt tension and remove drive belt from snowthrower pulley. Remove drive belt.
6. Remove hairpin cotters and clevis pins from front latch lever and rear hook. Unhook idler pulley assembly and remove (Fig. 20).

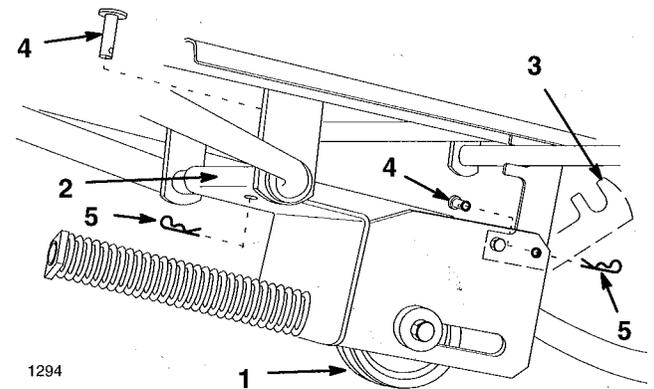


Figure 20

- | | |
|------------------------------|-------------------|
| 1. Idler pulley | 4. Clevis pin |
| 2. Drive belt idler assembly | 5. Hairpin cotter |
| 3. Front latch lever | |

7. Raise attachment to the transport position and place a block under snowthrower housing.
8. Unhook rod handle from lift arm and rotate down, to relieve spring tension (Fig. 21). Unhook lift assist spring from between welded washers on rod.
9. Slide rod handle out of hole in tractor lift arm (Fig. 21).
10. Unhook lift assist spring from slot in mounting bracket under left fender (Fig. 21).

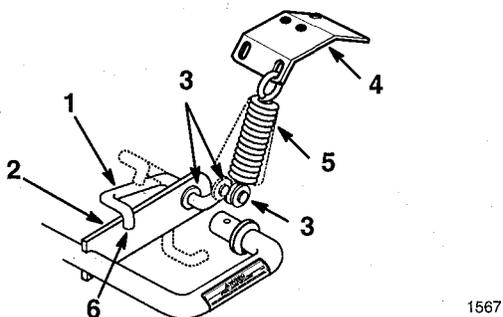


Figure 21

- | | |
|-------------------|-----------------------|
| 1. Rod handle | 4. Bracket |
| 2. Lift arm | 5. Lift assist spring |
| 3. Welded washers | 6. Rod hook |

11. Remove hairpin cotter, clevis pin and retainer to disconnect lift rod from "V" notch in attachment lift (Fig. 22).
12. Remove lift rod (and optional spacer washers) from lift tube (Fig. 22).

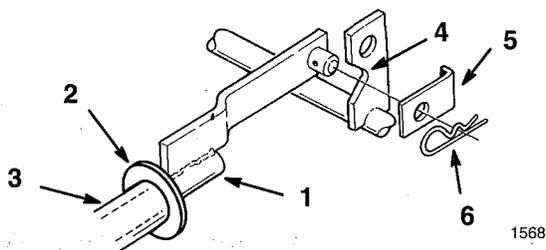


Figure 22

- | | |
|---------------------------|-------------------|
| 1. Lift rod | 4. "V" notch |
| 2. Optional spacer washer | 5. Retainer |
| 3. Lift tube | 6. Hairpin cotter |

13. Open front hitch lock (Fig. 23) and remove snowthrower mounting frame from front hitch.

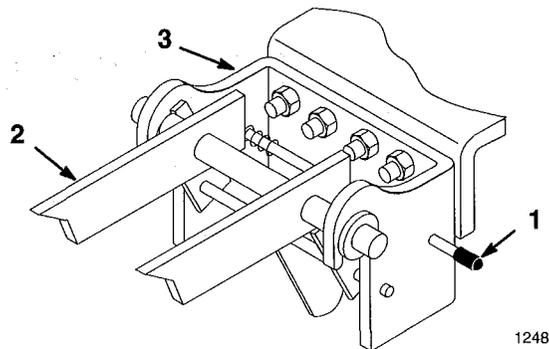


Figure 23

- | | |
|-------------------|----------------|
| 1. Lock | 3. Front hitch |
| 2. Mounting frame | |

14. Remove hairpin cotter and washer to disconnect lift tube from housing.

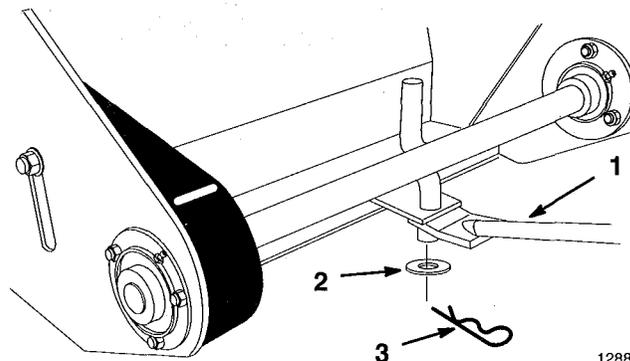


Figure 24

- | | |
|--------------|-------------------|
| 1. Lift tube | 3. Hairpin cotter |
| 2. Washer | |

Note: Save all hardware, washers and hairpin cotters for reuse when installing snowthrower.

Operation

DANGER

POTENTIAL HAZARD

- When 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 tractor, equipped with snowthrower, unless 100 lb rear wheel 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 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.

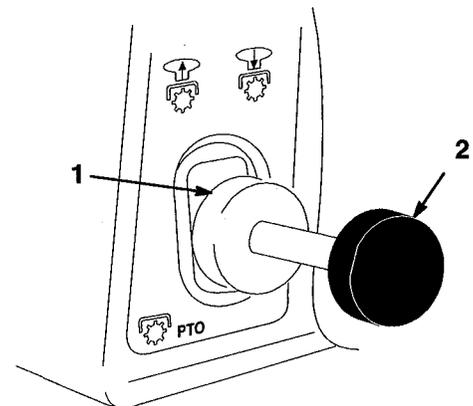
Operating the Power Take Off (PTO)

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

While the ignition key is in the "RUN" or "LIGHTS" positions and the power take off (PTO) is engaged "ON", the PTO light, in the Indicator Module, will be "ON". When this light is "ON" it is a reminder; the starter will not crank and to turn off the PTO before getting off.

Engaging the Power Take Off (PTO)

1. Depress the brake and/or clutch pedal(s) to stop the machine.
2. Pull the power take off (PTO) to "ON" (Fig. 25).



1206

Figure 25

1. Off-Disengaged
2. On-Engaged

Disengaging the Power Take Off (PTO)

1. Depress the brake and/or clutch pedal(s) to stop the machine.
2. Push the power take off (PTO) to "OFF" (Fig.25).

Attachment Lift Lever

The attachment lift lever (Fig. 26) is used to manually raise and lower attachments.

Raising Attachments

1. Depress the clutch and/or brake pedal(s) to stop the machine.
2. Pull attachment lift lever rearward until latch locks. In this position the lift will hold the attachment in the up, or raised position.

Lowering Attachments

1. Depress the clutch and/or brake pedal(s) to stop the machine.
2. Pull attachment lift lever rearward, to release lift pressure, and push the button on top to release the latch. Move lift lever forward to lower attachment.

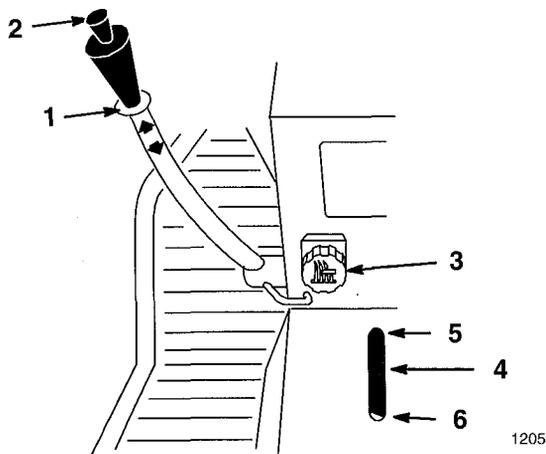


Figure 26

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|------------------|----------------------|
| 1. Lift lever | 4. Indicator |
| 2. Button | 5. High |
| 3. Dial-A-Height | 6. Mounting position |

Attachment Power Lift

The attachment power lift (optional on some models) (Fig. 27) is used to raise and lower attachments.

Raising Attachments

1. Turn key to the "ON" or "RUN" position (Fig. 27).
2. Push the lift switch in the "UP" direction to raise the attachment lift (Fig. 27). This will lift and hold the attachment in the up, or raised position.

Lowering Attachments

1. Turn key to the "ON" or "RUN" position (Fig. 27).
2. Push the lift switch in the "DOWN" direction to lower the attachment lift (Fig. 27). This will lower the attachment lift.

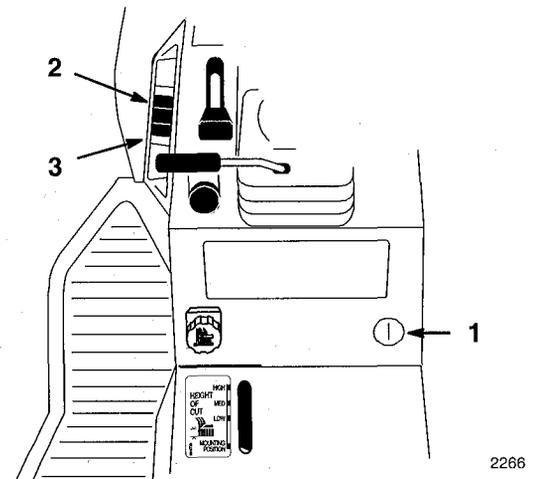


Figure 27

- | | |
|-------------------|---------------------|
| 1. Key | 3. Lift switch DOWN |
| 2. Lift switch UP | |

Adjusting Dial-A-Height

The Dial-A-Height control (Fig. 26) is used to limit the downward travel of the attachment. The Dial-A-Height knob is rotated to change the location of this stop, up or down.

1. Raise the attachment lift: Refer to Raising Attachments. In the raised position the Dial-A-Height knob (Fig. 26) can be rotated to change the stop location. Turn clockwise to raise and counterclockwise to lower the height of the attachment.
2. The Dial-A-Height indicator (Fig. 26) will show the change, high to low, in attachment lift height as adjustment is made.

Adjusting Discharge Chute

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 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. 28).

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. 28).

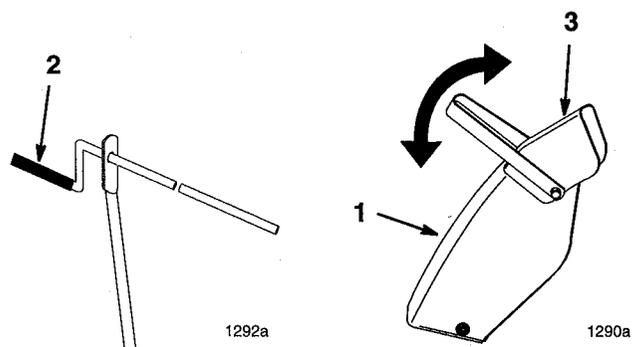


Figure 28

1. Discharge chute
2. Crank handle
3. Chute deflector

Tips for Throwing Snow

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

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

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 wheels slip, shift into a lower gear to reduce forward speed.

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

Do not overload snowthrower by clearing snow at too fast a rate. If 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.

Maintenance

Service Interval Chart

Service Operation	Each Use	5 Hours	25 Hours	Storage Service	Fall Service	Notes
Grease—drive shaft bearings			X	X	X	
Oil—drive chain			X	X	X	
Belt—check for wear/cracks				X	X	
Chipped Surfaces—paint				X		
Scraper—check for wear				X	X	

CAUTION

POTENTIAL HAZARD

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

WHAT CAN HAPPEN

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

HOW TO AVOID THE HAZARD

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

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, and turn the ignition key to "OFF" 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 fitting. Pump grease into the fittings.
4. Wipe up any excess grease.

Where to Add Grease

1. Lubricate the drive shaft bearings (Fig. 29).

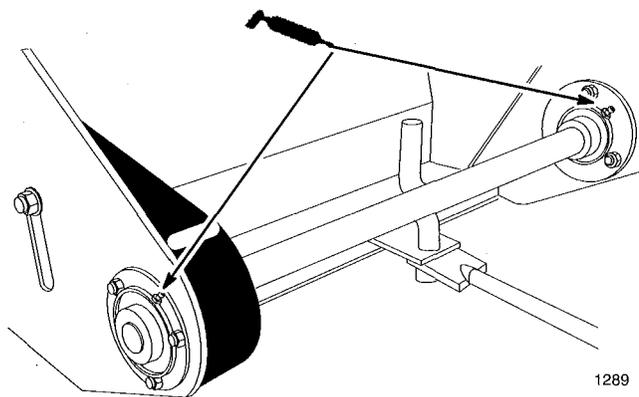


Figure 29

Oil Drive Chain

1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
2. Coat the entire chain with oil and allow to penetrate each roller (Fig. 30).
3. Place a few drops of oil on discharge chute rotator shaft and discharge chute mounting (Fig. 30).
4. Wipe off excess oil.

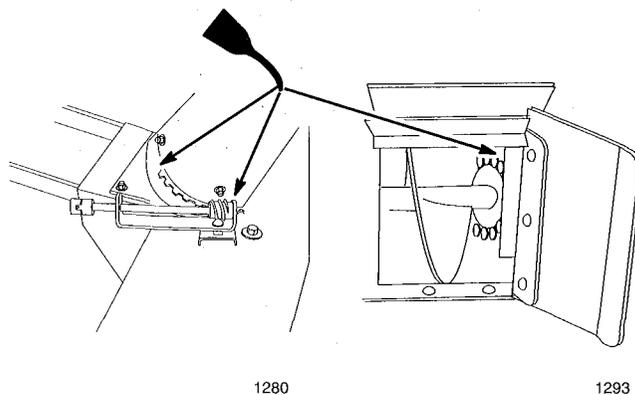


Figure 30

1. Drive chain
2. Rotator assembly
3. Discharge chute mounting

Adjusting Drive Belt Tension

The drive belt is spring loaded and needs only periodic adjustment, to maintain proper spring tension.

Checking Drive Belt Tension

1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
2. As the drive belt wears, and the snowthrower is raised and lowered, the spring loaded idler pulley moves in the slot (Fig. 31).
3. Raise and lower snowthrower and observe that the spring loaded idler is not hitting either end of the slot. If it contacts either end of the slot adjustment is required.

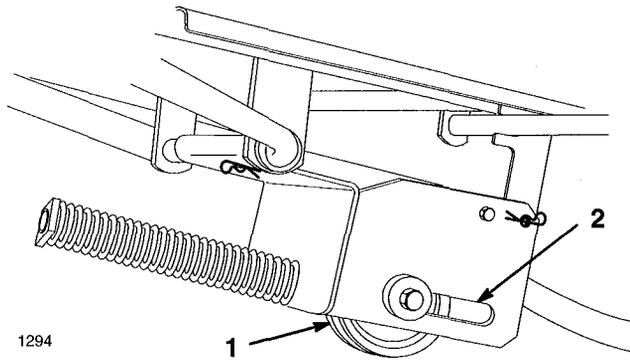


Figure 31

1. Spring loaded idler pulley
2. Slot

Adjusting Drive Belt Tension

1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
2. Pull on spring loaded idler pulley and remove belt from snowthrower pulley to release tension on belt (Fig. 31).
3. Remove nut, washer and fixed idler from idler assembly and relocate in next hole position to change belt tension as required. (Fig. 32).
4. Tighten nut securely and install belt onto snowthrower pulley.
5. Raise and lower snowthrower and observe that spring loaded idler is within the slot

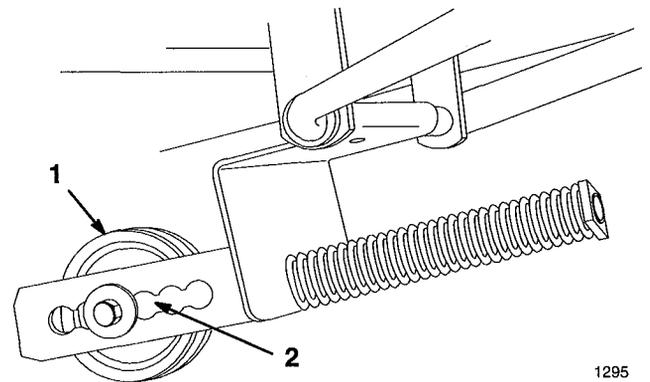


Figure 32

1. Fixed idler
2. Adjustment hole

Adjusting 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. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
2. Move snowthrower to a level surface.
3. Loosen nuts securing skids to the housing until the skids slide up and down easily (Fig. 33).
4. Raise or lower skids equally on both sides, to obtain level scraping action, and tighten nuts (Fig. 33).

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

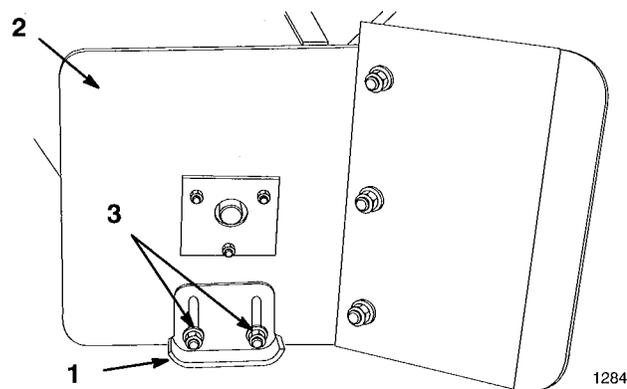


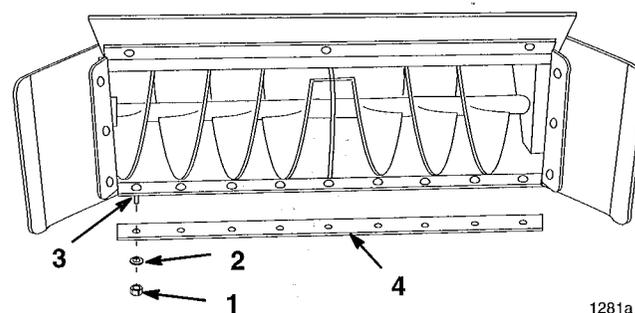
Figure 33

- | | |
|------------|--------|
| 1. Skid | 3. Nut |
| 2. Housing | |

Reversing 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, reverse the scraper blade.

1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
2. Raise the attachment lift lever: Refer to Raising Attachments, and support the housing off the ground.
3. Remove nuts, washers, carriage bolts and scraper blade (Fig. 34).
4. Reverse scraper blade and install with previously removed hardware (Fig. 34).



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Figure 34

- | | |
|-----------|------------------|
| 1. Nut | 3. Carriage bolt |
| 2. Washer | 4. Scraper blade |

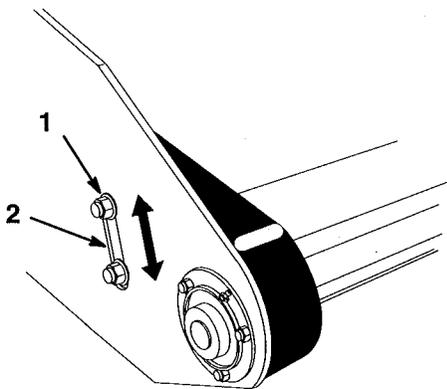
IMPORTANT: The scraper should be higher above the pavement if the pavement surfaces on which the snowthrower will be used are cracked, rough or uneven.

Adjusting Drive Chain Tension

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

1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
2. To adjust, loosen the bolt that secures idler sprocket to left side housing. (Fig. 35).
3. Slide idler sprocket in adjustment slot until chain is snug, but not tight (Fig. 35).
4. Tighten idler sprocket securely.

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



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Figure 35

1. Idler sprocket

2. Adjustment slot

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 Reversing Scraper Blade, page 19.
3. Check the condition of the drive belt and chain.
4. Grease and oil the snowthrower; refer to Greasing and Lubrication, page 17.
5. 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 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.

Troubleshooting

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Snow does not discharge	<ol style="list-style-type: none"> 1. Discharge chute plugged. 2. Auger does not rotate. 3. Auger speed too low. 4. Forward speed too slow. 	<ol style="list-style-type: none"> 1. Clean chute with a stick. 2. See auger does not rotate. 3. Move throttle to "FAST". 4. Increase ground speed.
Auger does not rotate.	<ol style="list-style-type: none"> 1. Snow frozen to auger or housing. 2. Drive belt tension low. 3. Drive belt is worn, loose or broken. 4. Drive belt is off pulley. 5. Drive chain broken. 	<ol style="list-style-type: none"> 1. Scrape snow off with a stick. 2. Adjust belt tension. 3. Install new drive belt. 4. Install blade drive belt and check idler pulley and belt guides for correct position. 5. Replace or repair chain.
Abnormal vibration.	<ol style="list-style-type: none"> 1. Snow frozen to auger. 2. Drive belt off pulley. 3. Engine mounting bolts are loose. 4. Loose engine pulley, idler or snowthrower pulley. 5. Engine pulley is damaged. 	<ol style="list-style-type: none"> 1. Scrape snow off with stick. 2. Install drive belt and check idler pulley for correct position. 3. Tighten engine mounting bolts. 4. Tighten the appropriate pulley. 5. Contact Authorized Service Dealer.

