Form No. 3325-380

TORO®

42″ Snowthrower

Wheel Horse® for Classic Garden Tractors

79360—210000001 & Up

Operator's Manual

Domestic English (EN)

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Introduction

Thank you for purchasing a Toro product.

All of us at Toro 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 at the location shown in Figure 1.

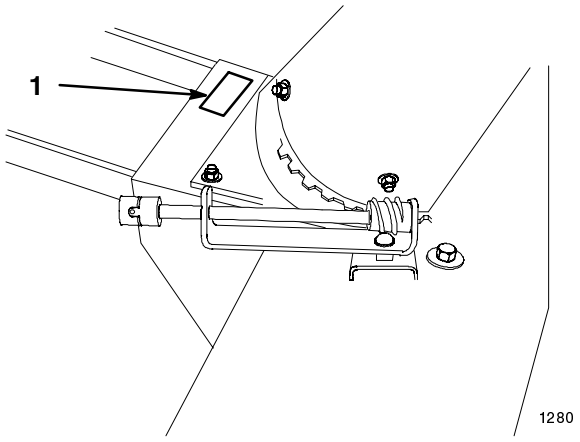


Figure 1

1. Model and serial number plate

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

Model No: _____

Serial No. _____

Read this manual carefully to learn how to operate and maintain your product correctly. Reading this manual will help you and others avoid personal injury and damage to the product. Although we design, produce and market safe, state-of-the-art products, you are responsible for using the product properly and safely. You are also responsible for training persons, who you allow to use the product, about safe operation.

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.

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

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Safety

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with the safety instructions in the traction unit operator's manual and always pay attention to the safety alert ⚠ symbol, which means CAUTION, WARNING, or DANGER—"personal safety instruction." Failure to comply with the instruction may result in personal injury or death.

⚠ Danger ⚠

Contact with the rotating impeller/auger can cause severe injury or death.

- **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, stop the engine and wait for all moving parts to stop. Remove the key.**

⚠ Warning ⚠

Stones and other foreign objects can be picked up and thrown. This can cause serious personal injury to operator or bystanders.

- **Keep the work area free of all objects that could be thrown by the rotor blades.**
- **Keep all children and pets away from area of operation.**

General Snowthrower Safety

The following instructions have been adapted from the ANSI/OPEI and ISO standards.

Preparation

- Thoroughly inspect the area where the equipment is to be used and remove all doormats, sleds, boards, wires, and other foreign objects.
- Do not operate the equipment without wearing adequate winter outer garments. Wear footwear that will improve footing on slippery surfaces.
- Adjust the auger housing height to clear gravel or crushed rock surface.
- Never attempt to make any adjustments while the engine is running, except when specifically recommended by Toro.
- Let engine and machine adjust to outdoor temperatures before starting to clear snow.
- The operation of any powered machine can result in foreign objects being thrown into the eyes. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair.

Operation

- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
- After striking a foreign object, stop the engine, remove the wire(s) from the spark plug(s), thoroughly inspect the snowthrower for any damage, and repair the damage before restarting and operating the snowthrower.
- If the unit should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the engine whenever you leave the operating position, before unclogging the auger/impeller housing or discharge chute, and when making any repairs, adjustments, or inspections.
- When cleaning, repairing, or inspecting, make certain the auger/impeller and all moving parts have stopped. Disconnect the spark plug wire(s) and keep the wire away from the plug to prevent someone from accidentally starting the engine.
- Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
- Never operate the snowthrower without proper guards, plates, or other safety protective devices in place.
- Never operate the snow thrower near glass enclosures, automobiles, window wells, drop-offs, and the like without proper adjustment of the snow discharge angle. Keep children and pets away.
- Do not overload the machine capacity by attempting to clear snow at too fast a rate.
- Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when moving in reverse.

- Never direct discharge at bystanders or allow anyone in front of the unit.
- Disengage power to the auger/impeller when the snowthrower is transported or not in use.
- Never operate the snowthrower without good visibility or light.

Maintenance and Storage

- Check fasteners at frequent intervals for proper tightness to be sure the equipment is in safe working condition.
- Always refer to the operator's manual for important details if the snowthrower is to be stored for an extended period.
- Maintain or replace safety and instruction labels, as necessary.
- Run the machine a few minutes after throwing snow to prevent freeze-up of the auger/impeller.

Toro Snowthrower Safety

The following list contains safety information specific to Toro products or other safety information that you must know that is not included in the ANSI or ISO standards.

- **The rotating auger/impeller or rotor blades can cut off or injure fingers or hands.** Stay in the operator's position and away from the discharge opening while operating the snowthrower. **Keep your face hands, feet, and any other part of your body or clothing away from concealed, moving, or rotating parts.**
- Before adjusting, cleaning, repairing, and inspecting the snowthrower, and before unclogging the discharge chute, **stop the engine, remove the key, and wait for all moving parts to stop**. Also, pull the wire(s) off of the spark plug(s) and keep it away from the plug(s) to prevent someone from accidentally starting the engine.
- Use a stick, **not your hands** to remove obstructions from the discharge chute.
- **Before** leaving the operator's position, stop the engine, remove the key, and wait for all moving parts to stop.
- Do not wear loose fitting clothing that could possibly get caught in moving parts.
- If a shield, safely device, or decal is damaged, illegible, or lost, repair or replace it before beginning operation. Also, tighten any loose fasteners.
- **Do not** use the snowthrower on a roof.
- Perform only those maintenance instructions described in this manual. Before performing any maintenance, service, or adjustment, stop the engine, remove the key and pull the wire(s) from the spark plug(s), keeping it away from the plug(s) to prevent someone form accidentally starting the engine. If major repairs are ever needed, contact your Authorized Toro Service Dealer.
- To ensure the best performance and safety, purchase only genuine Toro replacement parts and accessories to keep the Toro all Toro. **Do not use "Will Fit" replacement parts and accessories as they could cause a safety hazard.**

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)



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



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



ON BACK OF HOUSING
LEFT AND RIGHT SIDE (2)
(Part No. 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 with idlers	1	
Bolt 3/8–16 x 1”	4	
Locknut 3/8”	4	
Pulley	1	
Set screw 5/16–18 x 1/2”	2	
Key	1	
Tension spring	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	

DESCRIPTION	QTY.	USE
Snowthrower assembly	1	
Lift tube	1	
Lift rod	1	
Spacer washer 13/16”	2	
Washer 5/8”	1	
Hairpin cotter-large	1	
Lift assist spring	1	Mount snowthrower to tractor
Eyebolt	1	
Locknut 3/8”	1	
Belt	1	
Crank handle	1	
Handle support	1	
Hairpin cotter-small	2	

Assemble Housing

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

Important Key must be located under a set screw to be retained.

3. Install tension spring between frame and idler arm (Fig. 2).

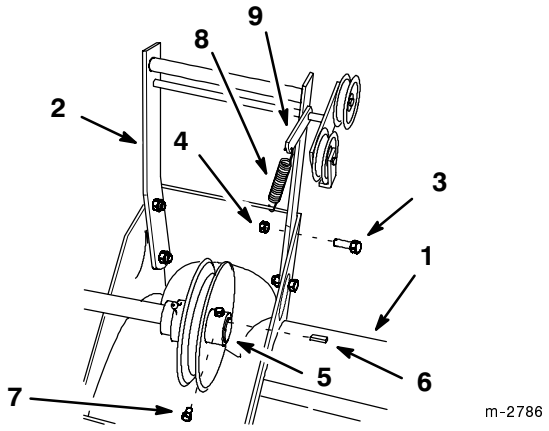


Figure 2

1. Housing
2. Frame
3. Bolt 3/8 x 1”
4. Locknut 3/8”
5. Pulley hub
6. Key
7. Set screw
8. Spring
9. Idler arm

4. 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” locknuts (Fig. 3).
5. 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” locknuts (Fig. 3).

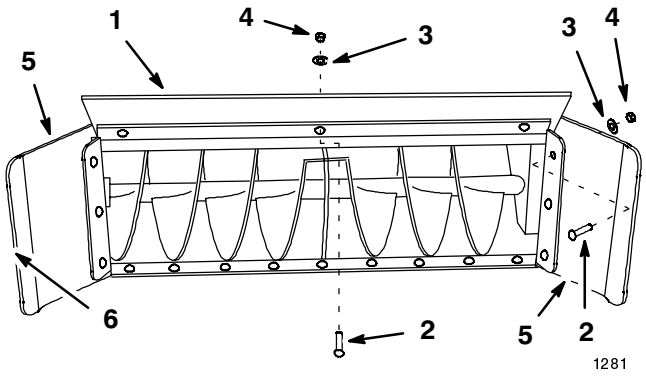


Figure 3

1. Top plate
2. Carriage bolt 3/8 x 1”
3. Washer 3/8”
4. Locknut 3/8”
5. Side plate
6. Cutting edge

6. 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” locknuts (Fig. 4).

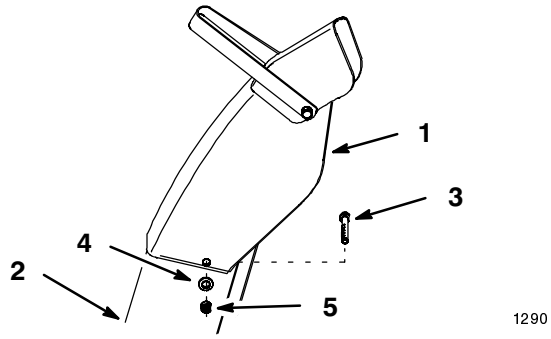


Figure 4

1. Upper section
2. Lower section
3. Carriage bolt 5/16 x 5/8”
4. Washer 5/16”
5. Locknut 5/16”

7. 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. 5).

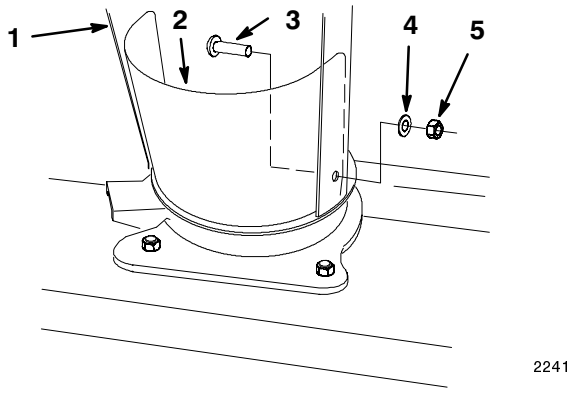


Figure 5

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

8. 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. 6).

9. 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.

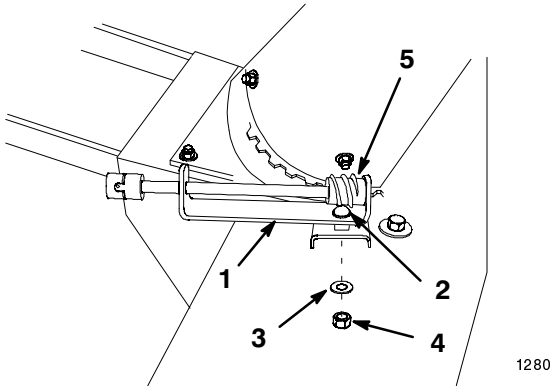


Figure 6

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

Installing Snowthrower to Tractor

Danger

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

- **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. 7).

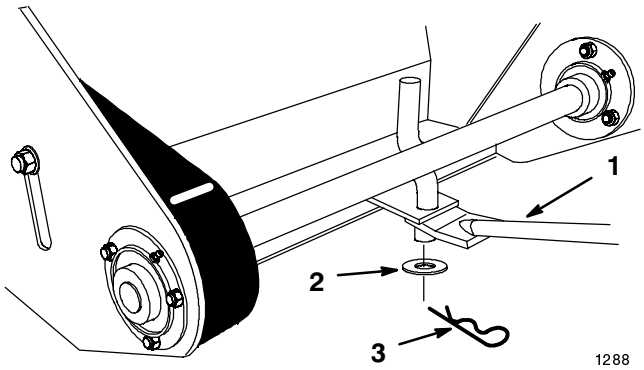


Figure 7

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

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. 8).

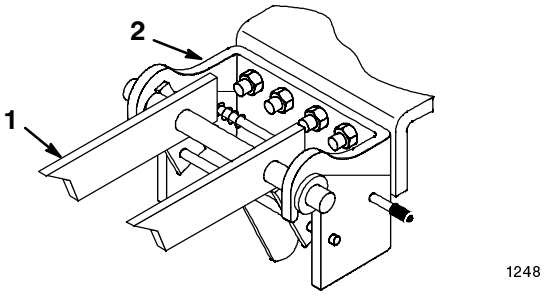


Figure 8

1. Mounting frame
2. Front hitch

5. Set Dial-A-Height to the Mounting Position, and lower attachment lift all the way; refer to; Adjusting Dial-A-Height.

6. Slide lift rod into lift tube (Fig. 9). Optional 3/4" spacer washer(s) placed onto shaft of lift rod will increase lift height (Fig. 9).

7. Connect lift rod to top hole in attachment lift with hairpin cotter (Fig. 9).

8. Raise attachment lift lever to the transport position and place a block under snowthrower housing.

Important Check that lift tube does not contact front axle. If contact is noted, remove one or both flat spacer washers from lift rod.

9. Hook lift assist spring between frame cross rod and eyebolt (Fig. 9). Insert eyebolt through bracket on lift rod and secure with 3/8" locknut. Tighten locknut until spring is under slight tension.

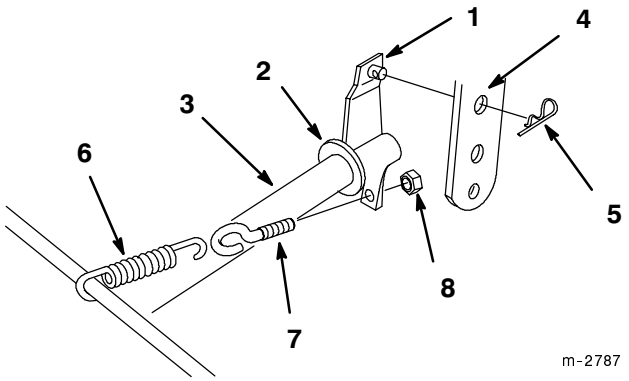


Figure 9

1. Lift rod
2. Spacer washer(s) 3/4"
3. Lift tube
4. Attachment lift
5. Hairpin cotter-small
6. Spring
7. Eyebolt
8. Locknut

10. Remove the belt cover; refer to tractor Operator's Manual.

11. Remove hairpin cotters from trunnion and bottom of yoke (Fig. 10).

12. Unlatch and remove clevis pin that secures yoke assembly to clutch shaft. Pivot yoke out and forward to remove from clutch shaft and engagement plate (Fig. 10).

13. Place belt in outer pulley groove (Fig. 10).

14. Assemble yoke and engagement plate and attach clevis pin, trunnion and hairpin cotters to secure (Fig. 10).

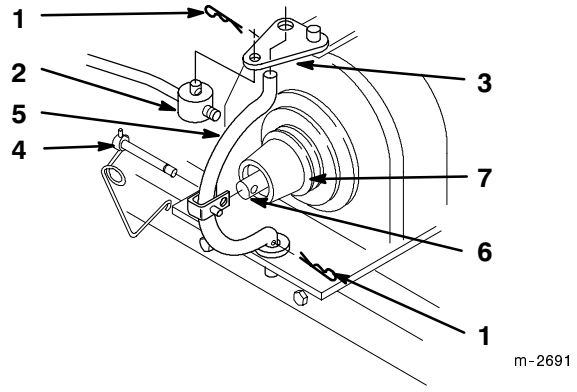


Figure 10

1. Hairpin cotter
2. Trunnion
3. Engagement plate
4. Clevis pin
5. Yoke
6. Clutch shaft
7. Outer groove

15. Route belt between belt guide and around idler pulleys (Fig. 11).

16. Rotate idler bracket to stretch spring and slip belt over snowthrower pulley (Fig. 11),

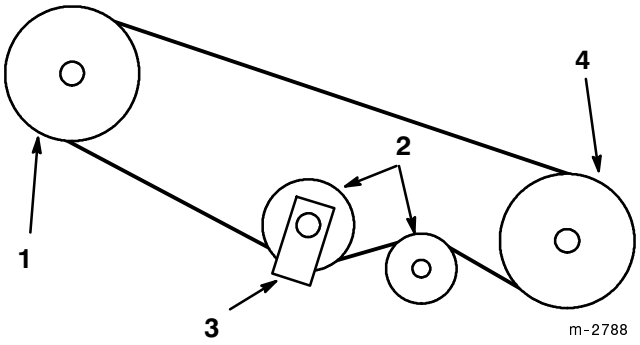


Figure 11

1. Outer groove of (PTO) power take off
2. Idler pulley
3. Belt guide
4. Snowthrower pulley

17. Open mid hitch and install handle support (Fig. 12). Align notch on handle with hitch rod so it does not rotate.

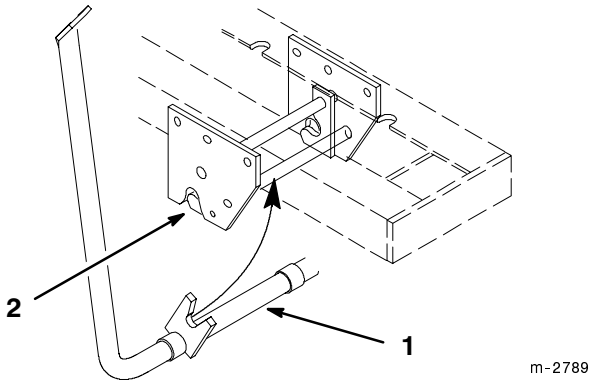


Figure 12

1. Handle support
2. Mid hitch

18. Slide crank handle through hole in support and secure handle to U-Joint with hairpin cotter (Fig. 13).

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

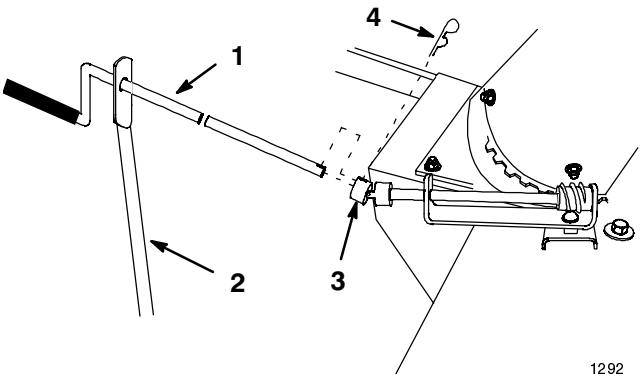


Figure 13

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

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. 14).

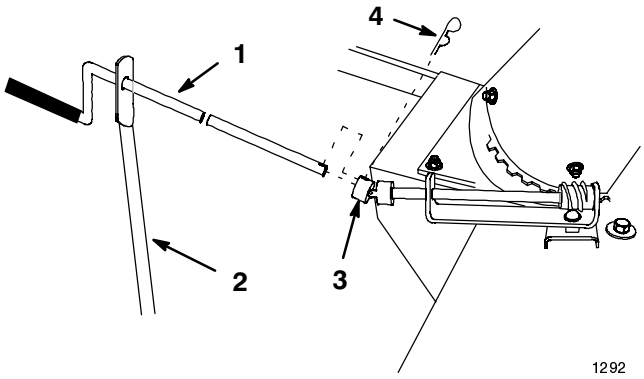


Figure 14

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

4. Open mid hitch and remove handle support (Fig. 15).

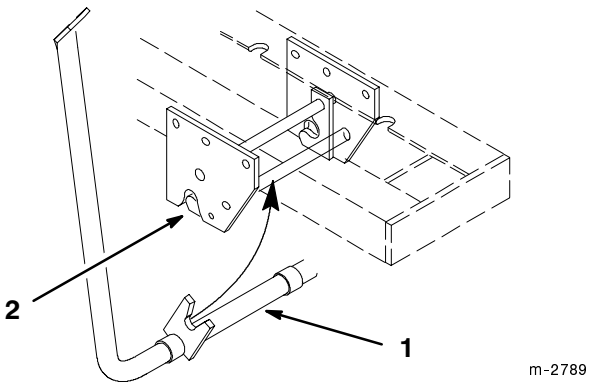


Figure 15

1. Handle support
2. Mid hitch

5. Rotate idler bracket to relax belt tension and slip belt off snowthrower pulley (Fig. 16),

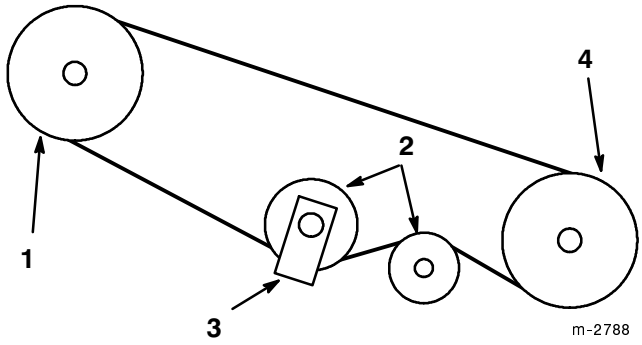


Figure 16

1. Outer groove of (PTO) power take off
2. Idler pulley
3. Belt guide
4. Snowthrower pulley

6. Remove hairpin cotters from trunnion and bottom of yoke (Fig. 17).
7. Unlatch and remove clevis pin that secures yoke assembly to clutch shaft. Pivot yoke out and forward to remove from clutch shaft and engagement plate (Fig. 17).
8. Remove belt from pulley (Fig. 17).
9. Assemble yoke and engagement plate and attach clevis pin, trunnion and hairpin cotters to secure (Fig. 17).
10. Install the belt cover; refer to tractor Operator's Manual.

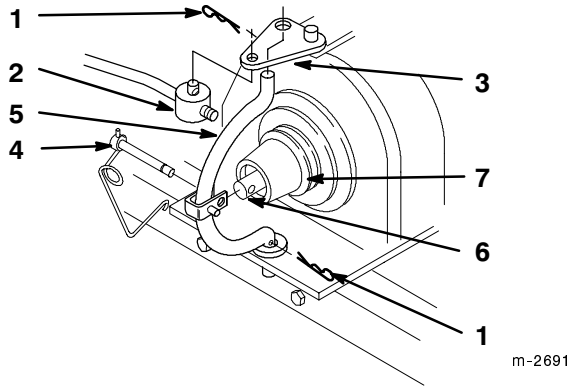


Figure 17

1. Hairpin cotter
2. Trunnion
3. Engagement plate
4. Clevis pin
5. Yoke
6. Clutch shaft
7. Pulley

11. Lower attachment lift all the way.

12. Loosen locknut on eyebolt to relax spring tension (Fig. 18). Unhook lift assist spring from frame cross rod.

13. Remove hairpin cotter to disconnect lift rod from attachment lift (Fig. 18).

14. Remove lift rod (and optional spacer washers) from lift tube (Fig. 18).

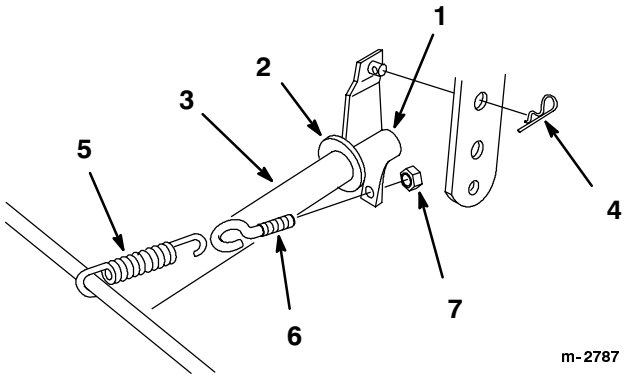


Figure 18

1. Lift rod
2. Optional spacer washer
3. Lift tube
4. Hairpin cotter–small
5. Spring
6. Eyebolt
7. Locknut

15. Open front hitch lock (Fig. 19) and remove snowthrower mounting frame from front hitch.

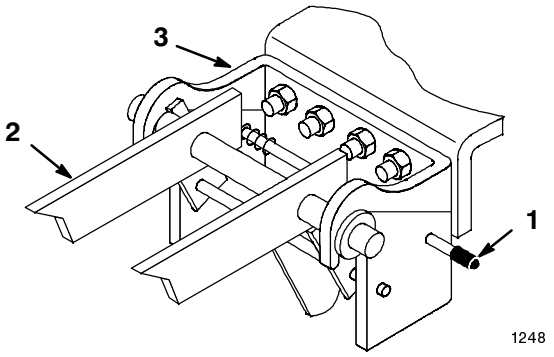


Figure 19

1. Lock
2. Mounting frame
3. Front hitch

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

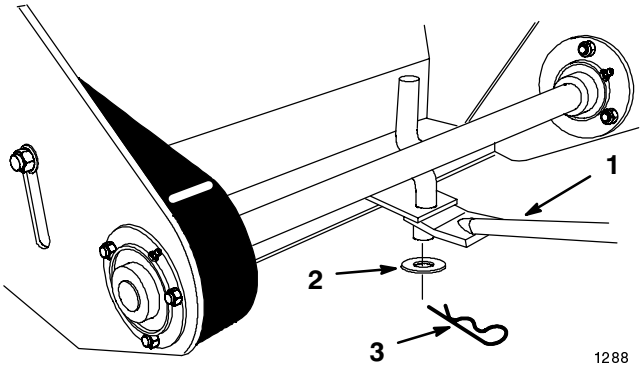


Figure 20

1. Lift tube
2. Washer
3. Hairpin cotter–large

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

Operation

Danger

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

- **NEVER operate tractor, equipped with snowthrower, unless 100lb rear wheel weights are installed.**

Danger

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

- **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 clutch.

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

Engaging the Power Take Off (PTO)

1. Depress the clutch and brake pedals to stop the machine.
2. Push the power take off (PTO) lever forward to engage (Fig. 21).

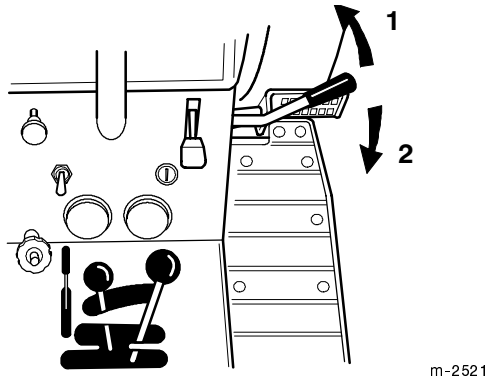


Figure 21

1. Engaged
2. Disengaged

Disengaging the Power Take Off (PTO)

1. Depress the clutch and brake pedals to stop the machine.
2. Pull the power take off (PTO) lever back to disengage (Fig. 21).

Attachment Lift Lever

The attachment lift lever (Fig. 22) is used to raise and lower various attachments.

Raising Snowthrower

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

Lowering Snowthrower

1. Depress the clutch and brake pedals 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 the snowthrower.

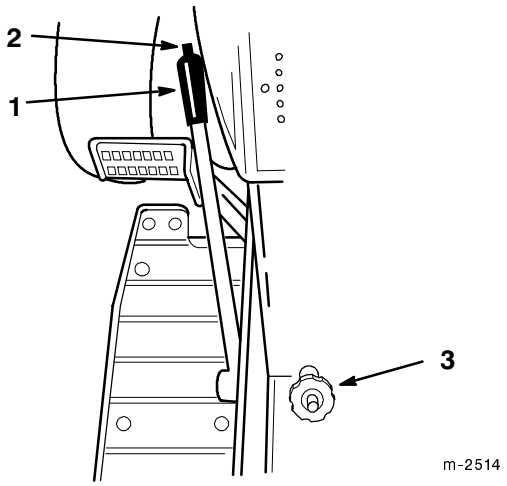


Figure 22

1. Lift lever
2. Button
3. Dial-A-Height

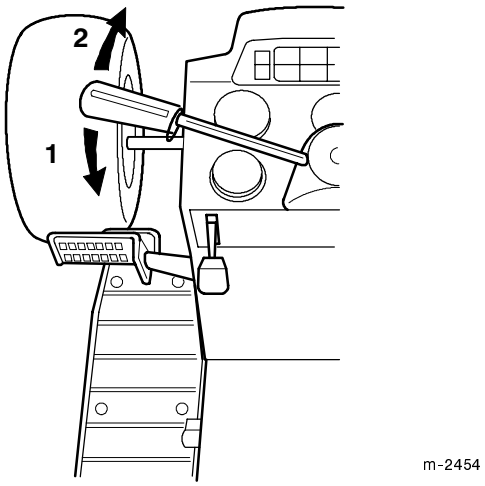


Figure 23

1. Lift lever UP
2. Lift lever DOWN

Attachment Power Lift

The attachment power lift (Fig. 23) is used to raise and lower attachments.

Raising Snowthrower

1. Start the engine, refer to; Starting and Stopping the Engine; in tractor Operator's Manual.
2. Pull the lift lever in the "UP" direction to raise the attachment lift (Fig. 23). This will lift and hold the snowthrower in the up, or raised position.

Lowering Snowthrower

1. Start the engine, refer to; Starting and Stopping the Engine; in tractor Operator's Manual.
2. Push the lift lever in the "DOWN" direction to lower the attachment lift (Fig. 23). This will lower the snowthrower.

Adjusting Dial-A-Height

The Dial-A-Height control (Fig. 22) 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. 22) 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. 22) will show the change, high to low, in attachment lift height as adjustment is made.

Adjusting Discharge Chute

Danger

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

- **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. 24).

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. 24).

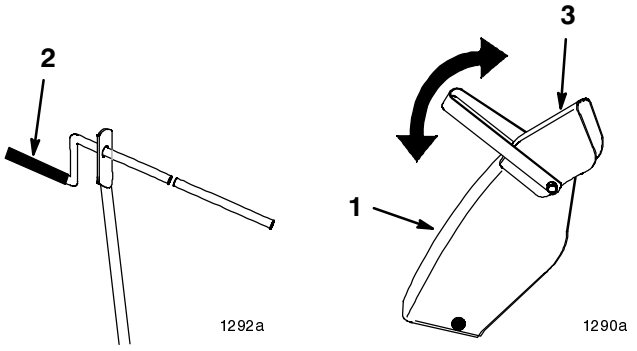


Figure 24

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

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

Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
25 Hours	• Grease-drive shaft bearings • Oil-drive chain
Storage	• Grease-drive shaft bearings • Oil-drive chain • Belt-check for wear/cracks • Chipped Surfaces-paint • Scraper-check for wear
Fall Service	• Grease-drive shaft bearings • Oil-drive chain • Belt-check for wear/cracks • Scraper-check for wear

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.

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. 25).

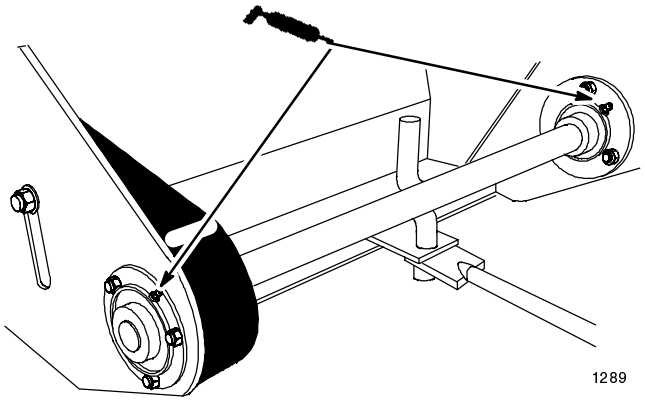


Figure 25

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. 26).
3. Place a few drops of oil on discharge chute rotator shaft and discharge chute mounting (Fig. 26).
4. Wipe off excess oil.

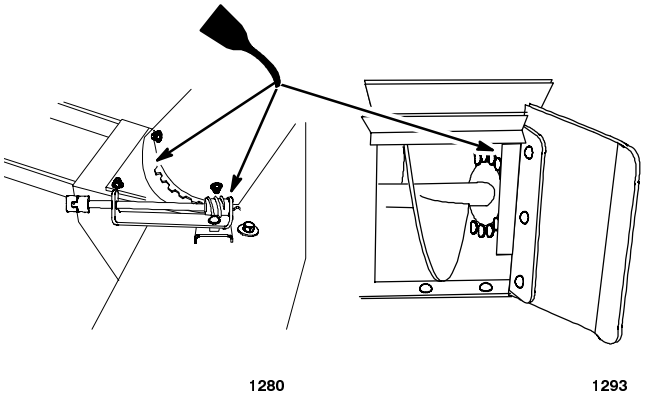


Figure 26

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

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. 27).
4. Raise or lower skids equally on both sides, to obtain level scraping action, and tighten nuts (Fig. 27).

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.

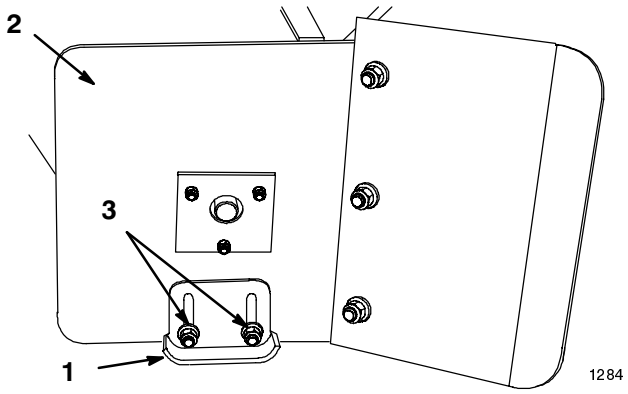


Figure 27

1. Skid
2. Housing
3. Nut

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.

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. 28).
4. Reverse scraper blade and install with previously removed hardware (Fig. 28).

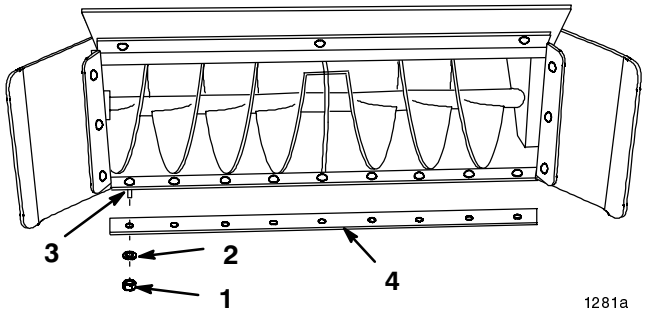


Figure 28

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

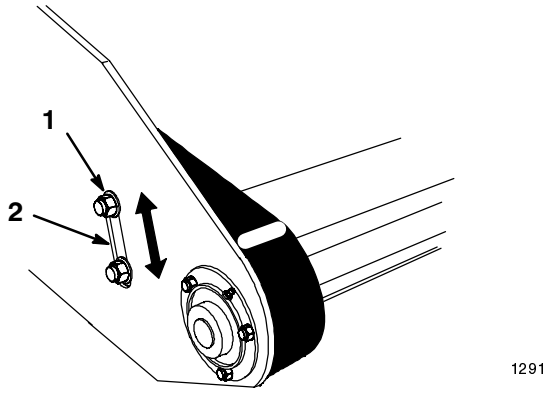


Figure 29

1. Idler sprocket
2. Adjustment slot

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. 29).
3. Slide idler sprocket in adjustment slot until chain is snug, but not tight (Fig. 29).
4. Tighten idler sprocket securely.

Important Do not overtighten chain or excessive wear will occur.

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 17.
3. Check the condition of the drive belt and chain.
4. Grease and oil the snowthrower; refer to Greasing and Lubrication, page 16.
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	1. Discharge chute plugged.	1. Clean chute with a stick.
	2. Auger does not rotate.	2. See auger does not rotate.
	3. Auger speed to low.	3. Move throttle to “FAST”.
	4. Forward speed to slow.	4. Increase ground speed.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Auger does not rotate.	1. Snow frozen to auger or housing.	1. Scrape snow off with a stick.
	2. Drive belt tension low.	2. Adjust belt tension.
	3. Drive belt is worn, loose or broken.	3. Install new drive belt.
	4. Drive belt is off pulley.	4. Install blade drive belt and check idler pulley and belt guides for correct position.
	5. Drive chain broken.	5. Replace or repair chain.
Abnormal vibration.	1. Snow frozen to auger.	1. Scrape snow off with stick.
	2. Drive belt off pulley.	2. Install drive belt and check idler pulley for correct position.
	3. Engine mounting bolts are loose.	3. Tighten engine mounting bolts.
	4. Loose engine pulley, idler or snowthrower pulley.	4. Tighten the appropriate pulley.
	5. Engine pulley is damaged.	5. Contact Authorized Service Dealer.


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