

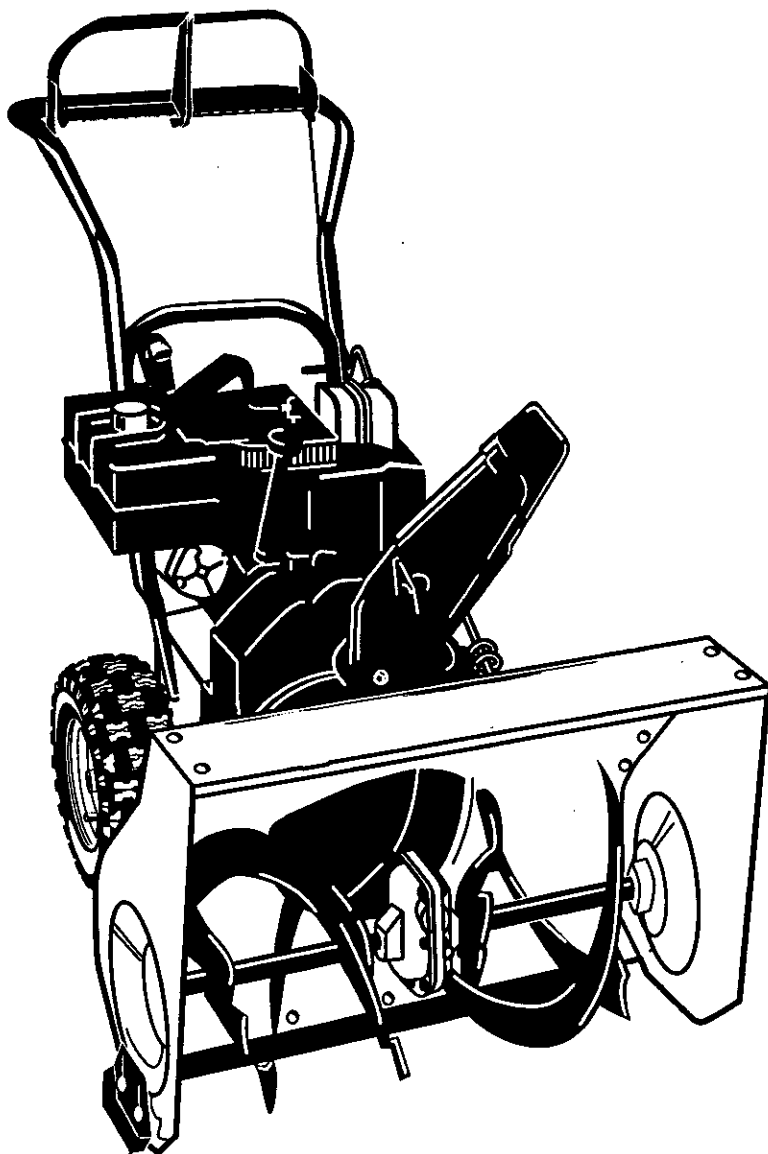
Instruction Book
Manuel d'instructions

Snow Thrower
chasse-neige

Model 624604x35
modèle 624604x35

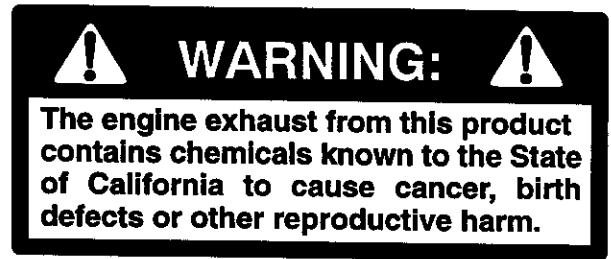
Read and keep this book for future reference. This book contains important information on SAFETY, ASSEMBLY, OPERATION, AND MAINTENANCE.

Lisez et conservez ce manuel pour référence. Ce manuel contient des informations importantes concernant la SECURITE, LE MONTAGE, L'UTILISATION ET L'ENTRETIEN.



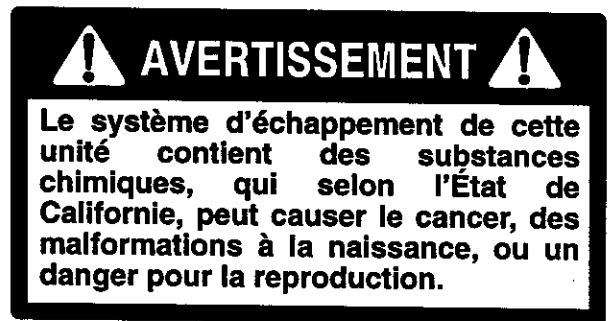
NOTE: This unit is equipped with an internal combustion engine and must not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it must be maintained in effective working order by the operator.

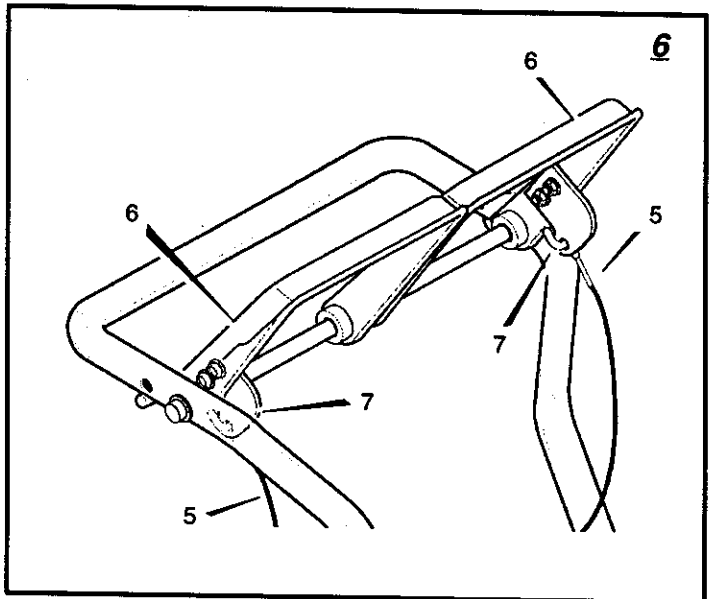
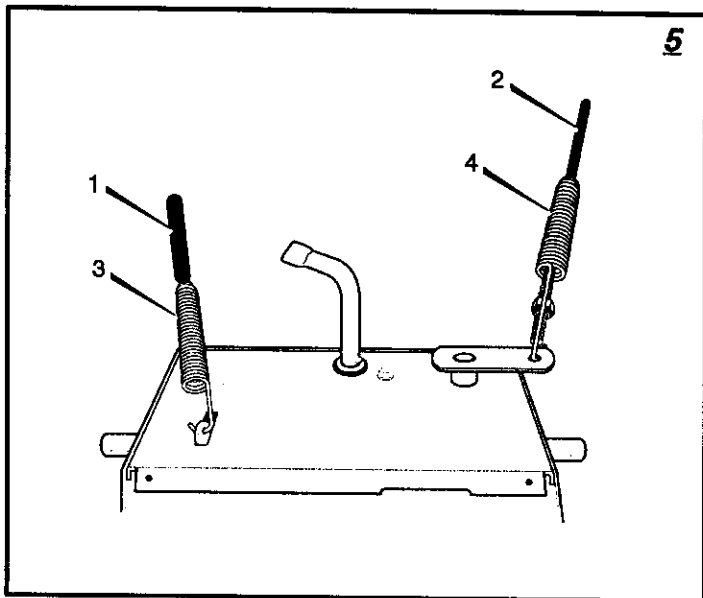
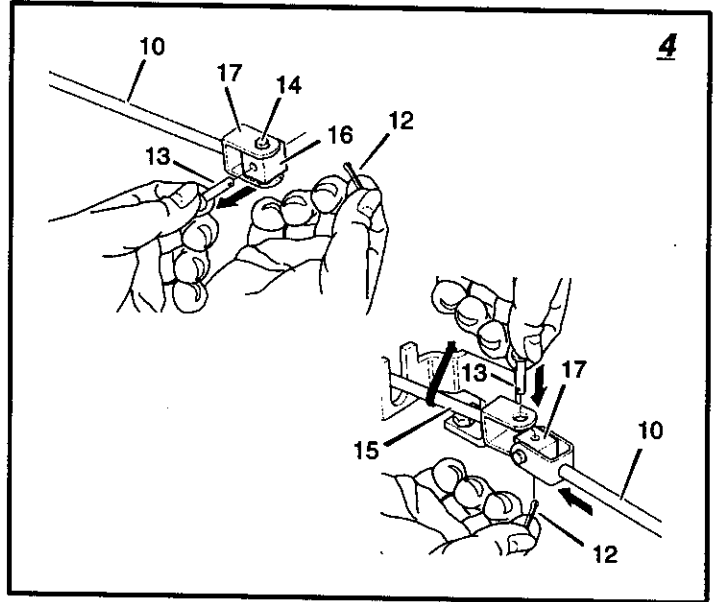
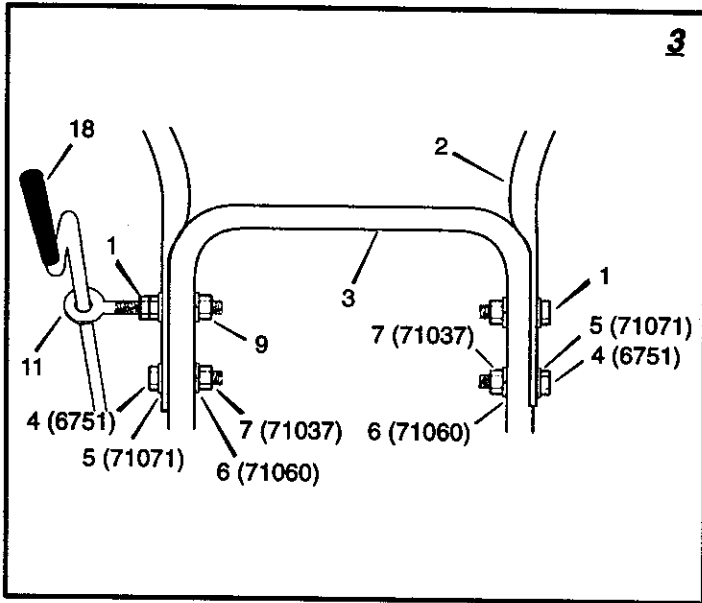
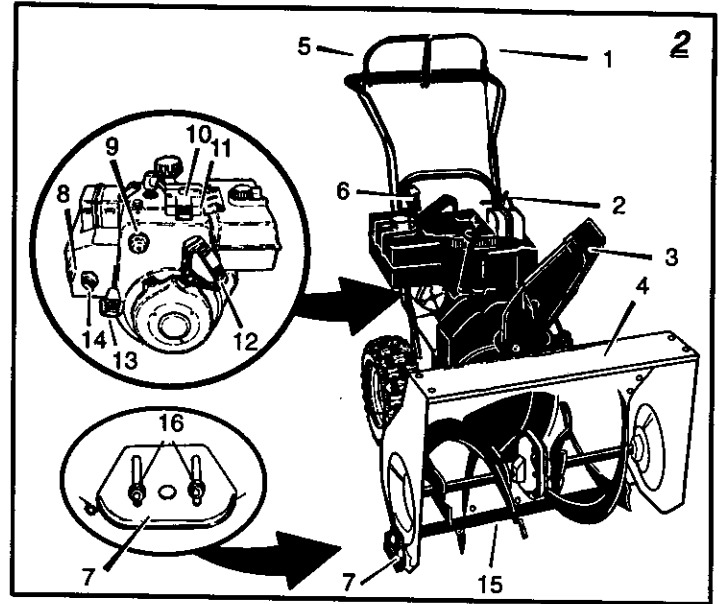
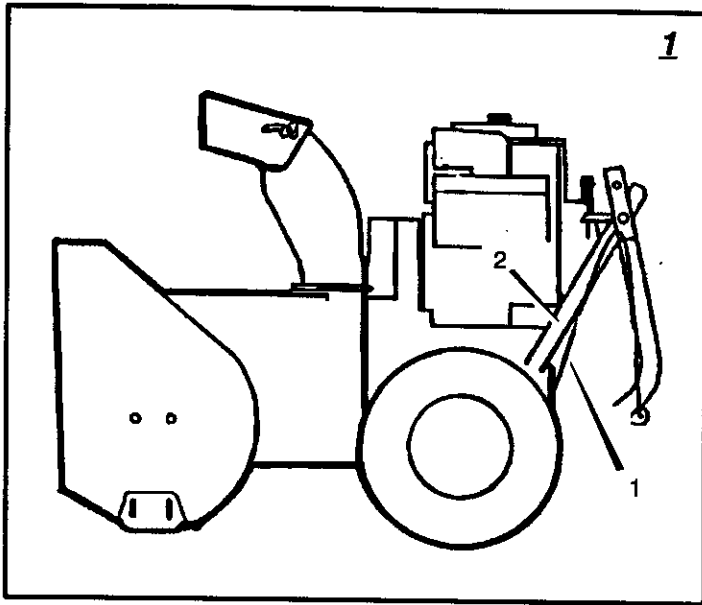
In the State of California, the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. See an Authorized Service Center for a spark arrester for the muffler.

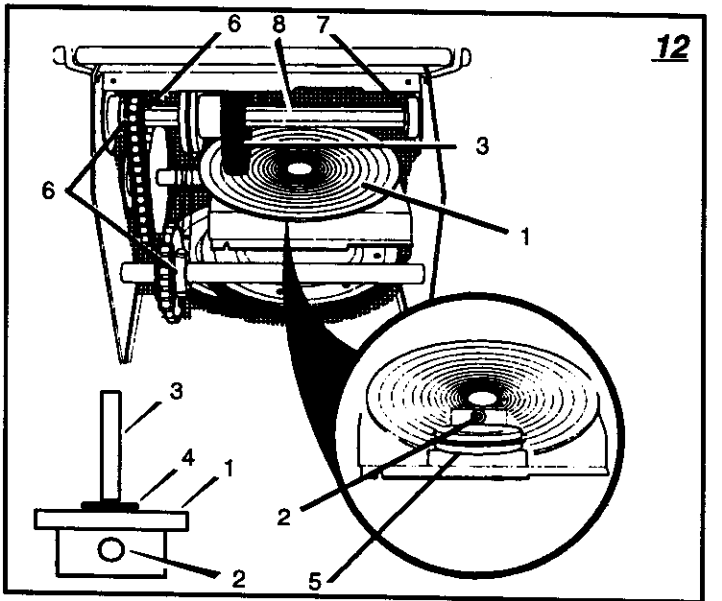
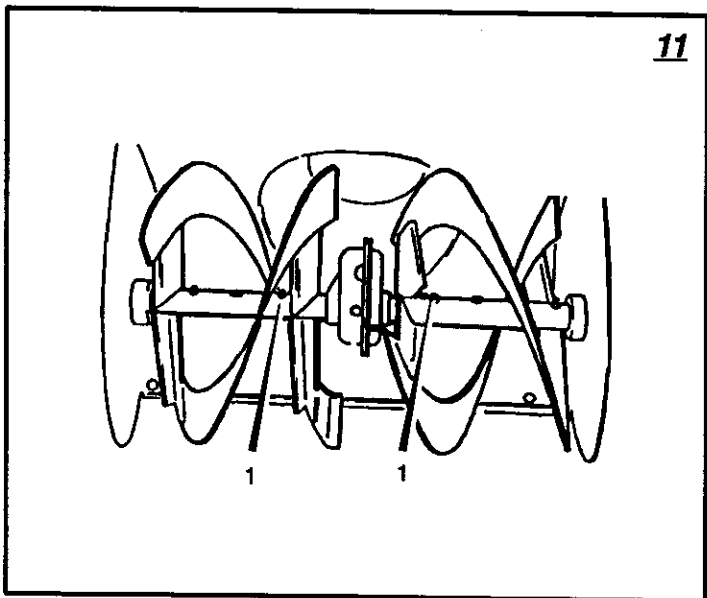
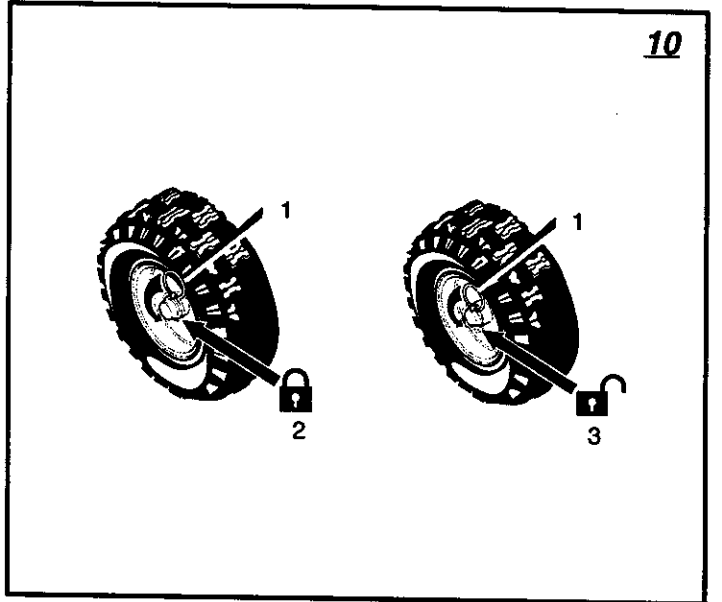
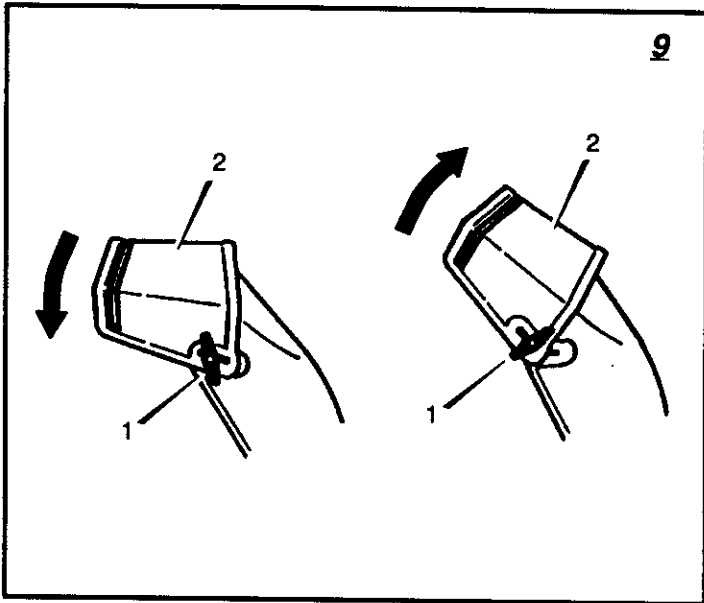
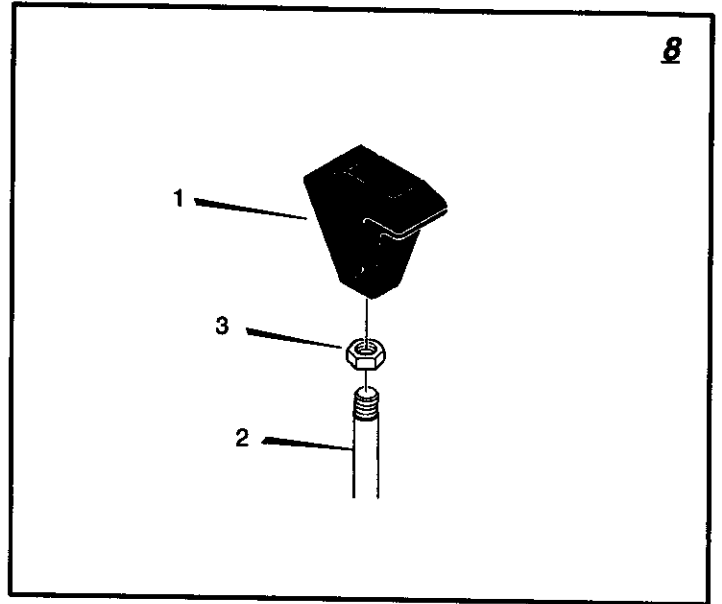
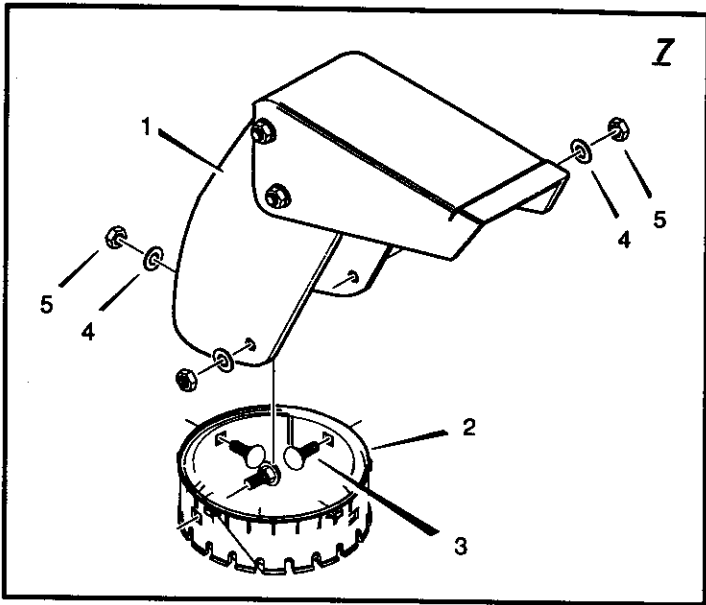


REMARQUE : cette machine est équipée d'un moteur à combustion interne et ne doit pas être utilisée sur un terrain forestier, buissonnant ou herbeux non préparé, à moins que le dispositif d'échappement soit pourvu d'un pare-étincelles conforme à la législation locale ou de l'état (le cas échéant). Si un pare-étincelles est utilisé, celui-ci doit être maintenu en parfait état de fonctionnement par l'utilisateur.

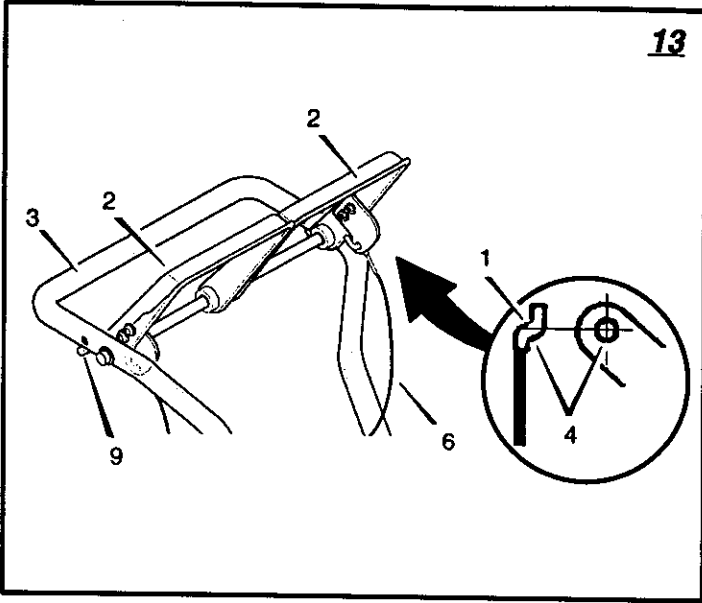
Au sein de l'état de Californie, la loi exige la prise en compte des précautions mentionnées ci-dessus (clause 4442 du California Public Resources Code). D'autres états peuvent présenter des lois similaires. Les lois fédérales s'appliquent sur les terres fédérales. S'adresser à un centre de maintenance agréé pour l'achat d'un pare-étincelles pour l'échappement.



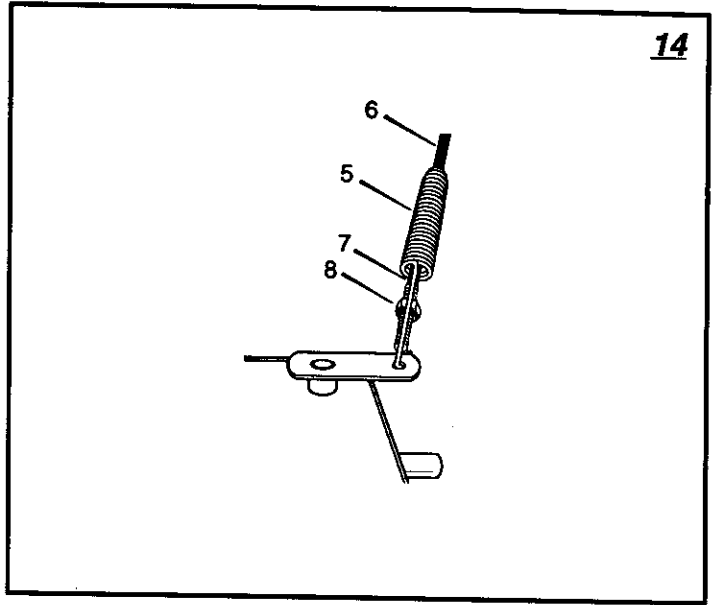




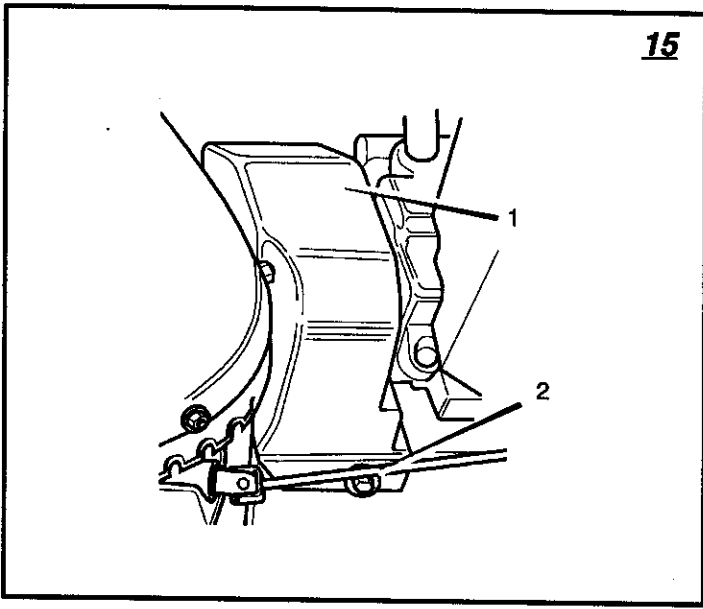
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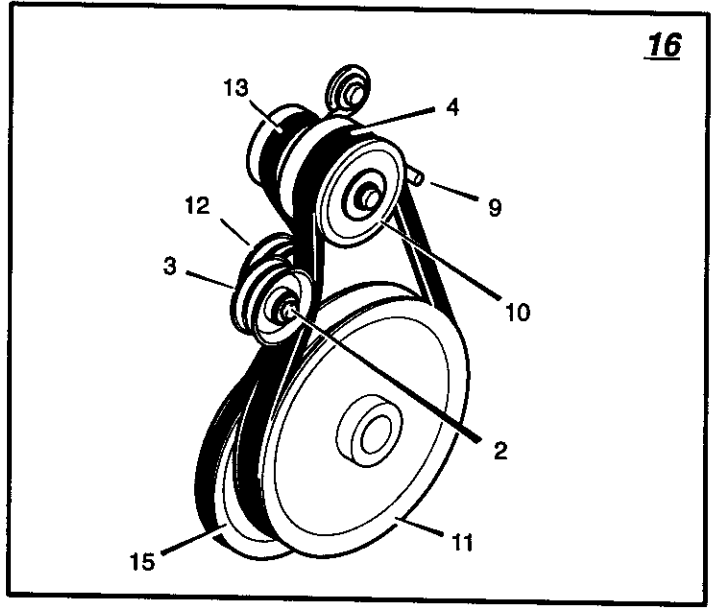
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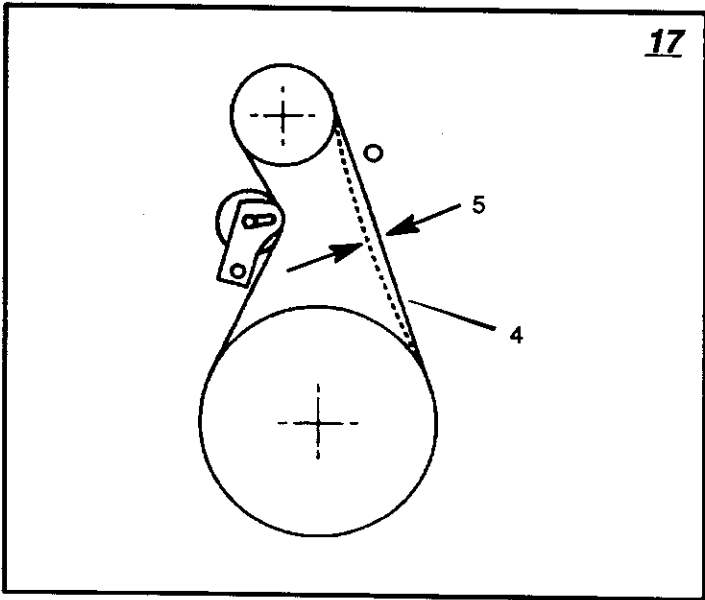
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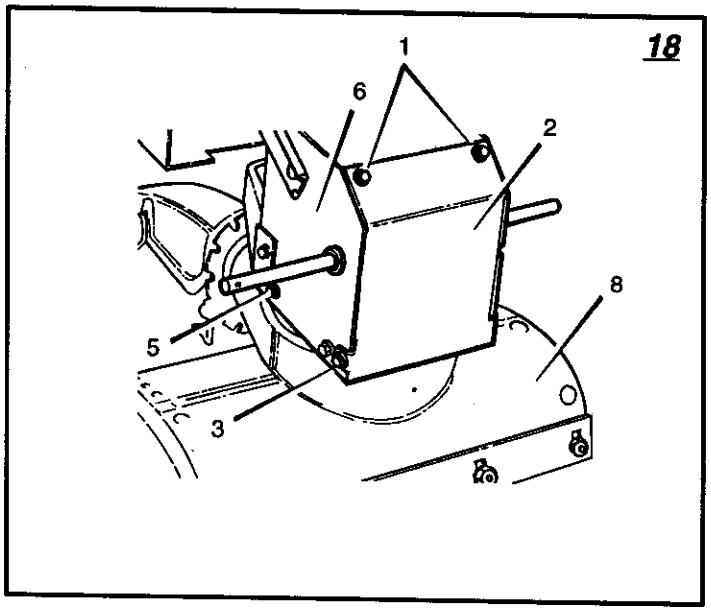
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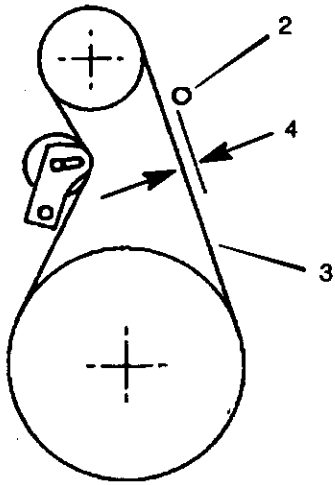
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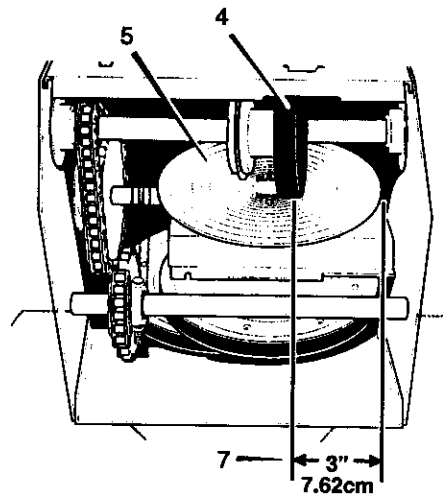
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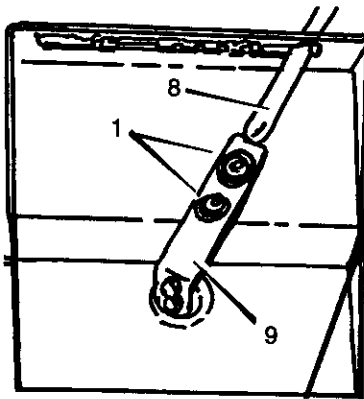
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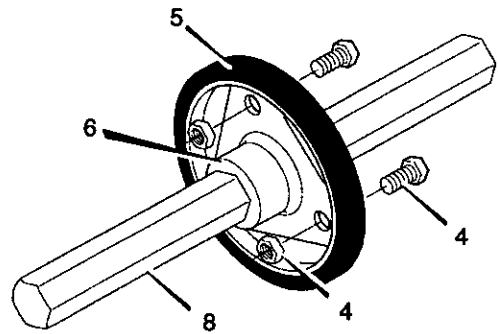
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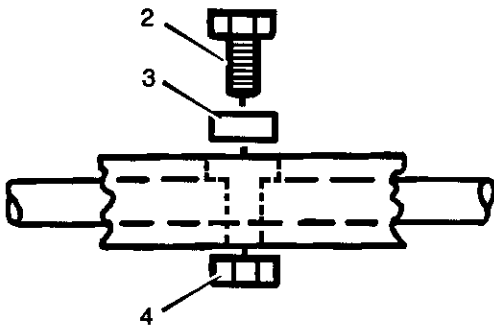
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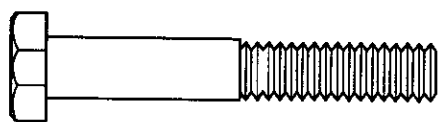


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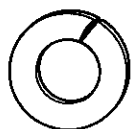


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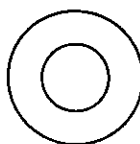




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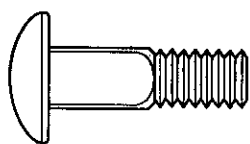
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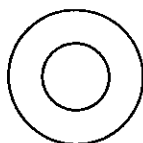
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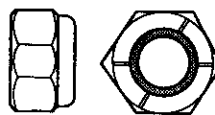
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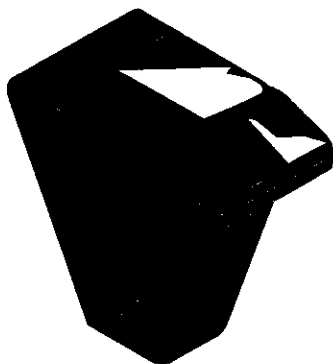
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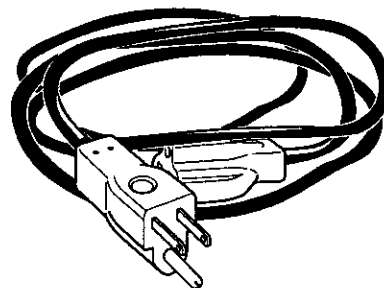
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CONTENTS

PRODUCT INFORMATION 8
OWNER'S INFORMATION 8
INTERNATIONAL PICTORIALS 9
ASSEMBLY 11
OPERATION 11
MAINTENANCE 14
MAINTENANCE CHART 14
TROUBLE SHOOTING CHART 17

TWO YEAR LIMITED WARRANTY

Murray, Inc. warrants to the original purchaser that this unit shall be free from defects in material and workmanship under normal use and service for a period of **Two (2) Year** from the date of purchase; however, this warranty does not cover engines, accessories (such as electric starters) and Normal Wear Parts (except as noted below) as the companies that manufacture these items furnish their own warranties and provide service through their authorized field service facilities. For additional information, see the warranties covering these particular parts. If you are uncertain whether

your unit contains or is equipped with one or more of these parts, consult your dealer prior to purchase. Subject to the terms and conditions noted in this Limited Warranty, we shall, at our option, repair or replace at no cost to the original purchaser any part covered by this Limited Warranty during the applicable warranty period. Normal Wear Parts are defined as drive belts, augers, shear pins, tires and headlights. These parts are warranted to be free from defects in material and workmanship as delivered with the product. Any claim for repair or replacement of Normal Wear Parts must be made within thirty (30) days of the date of purchase. No claims involving damage caused from material use, abuse or misuse will be honored.

This Murray, Inc. **Two (2) Year Limited Warranty** is your exclusive remedy; however, this warranty is void or does not apply to any unit that has been tampered with, altered, misused, abused or used for rental or other commercial and/or professional (non-homeowner) uses. Your warranty does not cover minor mechanical adjustments which are not due to any defect in material or workmanship. For assistance in making such adjustments, consult your Instruction Book. To make a claim under this Murray, Inc. **Two (2)**

Year Limited Warranty, return the unit (or if authorized in advance, the defective part) along with your proof of purchase to an Authorized Service Center near you. To locate the nearest Authorized Service Center, call the Central Parts Distributor for your area shown in the list provided with your unit or check the Yellow Page listings in your local telephone directory. If you return the entire unit, we will repair the unit. If we authorize the return of the defective part only, we will either replace or repair the part. This Murray, Inc. **Two (2) Year Limited Warranty** gives you specific legal rights, and you may also have other rights which vary from state to state. **This Limited Warranty is given in lieu of all other expressed and implied warranties including the implied warranty of merchantability and warranty of fitness for a particular purpose.** If you need additional information on this written warranty or assistance in obtaining service, write:

MURRAY CANADA, INC.,
 Factory Customer Service
 1195 Courtneypark Drive East
 Mississauga, Ont. L5T-1R1
 1-800-661-6662.

PRODUCT INFORMATION

The owner must be certain that all the product information is included with the unit. This information includes the INSTRUCTION BOOKS, the REPLACEMENT PARTS and the WARRANTIES. This information must be included to make sure state laws and other laws are followed.

OWNER'S INFORMATION

This instruction book is written for a person with some mechanical ability. Like most service books, not all the steps are described. Steps on how to loosen or tighten fasteners are steps anyone can follow with some mechanical ability. Read and follow these instructions before you use the unit.

Know your product: If you understand the unit and how the unit operates, you will get the best performance. As you read this manual, compare the illustrations to the unit. Learn the location and the function of the controls. To help prevent an accident, follow the operating instructions and the safety rules. Keep this manual for future

reference.

IMPORTANT: Many units are not assembled and are sold in cartons. It is the responsibility of the owner to make sure the assembly instructions in this manual are exactly followed. Other units are purchased in an assembled condition. On assembled units, it is the responsibility of the owner to make sure the unit is correctly assembled. The owner must carefully check the unit according to the instructions in this manual before it is first used.



WARNING: Look for this symbol to indicate important safety precautions. This symbol indicates: "Attention! Become Alert! Your Safety Is At Risk."

Responsibility Of The Owner

The responsibility of the owner is to follow the instructions below.

1. Carefully read and follow the rules for safe operation.

2. Follow all the assembly and preparation instructions.
3. Inspect the unit.
4. Make sure that the operator of the unit knows how to correctly use all standard and accessory equipment.
5. Operate the unit only with guards, shields, and other safety items in place and working correctly.
6. Correctly adjust the unit.
7. Service the unit only with authorized or approved replacement parts.
8. Complete all maintenance on the unit.

Environmental Awareness

- Do not fill the engine's fuel tank completely full.
- Drain fuel for off-season storage.
- Use only unleaded gasoline.
- Service the air cleaner regularly.
- Change oil regularly. Use 5W-30 oil.
- Tune-up the engine regularly.
- Keep equipment in efficient operating condition.
- Dispose of used engine oil properly.



















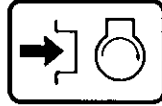


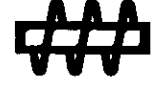











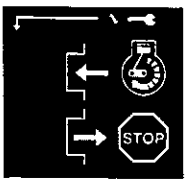
INTERNATIONAL PICTORIALS

IMPORTANT: The following pictorials are located on your unit or on literature supplied with the product. Before you operate the unit, learn and understand the purpose for each pictorial.

Safety Warning Symbols

 DANGER Thrown Objects. Keep Bystanders Away.	 DANGER Thrown Objects. Keep Bystanders Away.	 WARNING	 IMPORTANT Read Owner's Manual Before Operating This Machine.	 DANGER Avoid Injury From Rotating Auger. Keep Hands, Feet And Clothing Away.
 WARNING Hot Surface	 STOP	 DANGER Stop The Engine Before Unclogging Discharge Chute!		

Control And Operating Symbols

 Slow	 Fast	 Electric Start	 Engine Start	 Engine Run	 Engine Off
 Engine Stop	 On	 Choke Off	 Choke On	 Neutral	 Forward
 Reverse	 Throttle	 Primer Button	 Ignition Key	 Ignition Off	 Ignition On
 Push To Engage Electric Starter	 Engage	 Auger Clutch	 Auger Collector	 Discharge DOWN	 Discharge UP
 Discharge LEFT	 Discharge RIGHT	 Drive Clutch	 Fuel	 Oil	 Fuel Oil Mixture
 Weight Transfer Lift Handle To Engage	 Weight Transfer Depress Pedal To Disengage	 Transmission	 Ignition Key Insert To Run, Pull Out To Stop.		

Safe Operation Practices for Snow Throwers As Recommended By: American National Standards Institute.

IMPORTANT: Safety standards require operator presence controls to minimize the risk of injury. Your snow thrower is equipped with such controls. Do not attempt to defeat the function of the operator presence control under any circumstances.

Training

1. Read the operating and service instruction manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
2. Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction.
3. Keep the area of operation clear of all persons, particularly small children and pets.
4. Exercise caution to avoid slipping or falling especially when operating in reverse.

Preparation

1. Thoroughly inspect the area where the equipment is to be used and remove all doormats, sleds, boards, wires, and other foreign objects.
2. Disengage all clutches before starting the engine (motor).
3. Do not operate the equipment without wearing adequate winter outer garments. Wear footwear that will improve footing on slippery surfaces.
4. Handle fuel with care; it is highly flammable.
 - a. Use an approved fuel container.
 - b. Never remove fuel tank cap or add fuel to a running engine (motor) or hot engine (motor).
 - c. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
 - d. Replace fuel cap securely and wipe up spilled fuel.
 - e. Never store fuel or snow thrower with fuel in the tank inside of a building where fumes may reach an open flame or spark.
 - f. Check fuel supply before each use, allowing space for expansion as the heat of the engine (motor) and/or sun can cause fuel to expand.
5. For all units with electric starting motors use electric starting extension cords certified CSA/UL. Use only with a receptacle that has been installed in accordance with local inspection authorities.
6. Adjust the snow thrower height to clear gravel or crushed rock surface.

7. Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by manufacturer).
8. Let engine (motor) and snow thrower adjust to outdoor temperatures before starting to clear snow.
9. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair to protect eyes from foreign objects that may be thrown from the snow thrower.

Operation

1. Do not operate this machine if you are taking drugs or other medication which can cause drowsiness or affect your ability to operate this machine.
2. Do not use this machine if you are mentally or physically unable to operate this machine safely.
3. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
4. Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for hidden hazards or traffic.
5. After striking a foreign object, stop the engine (motor), remove the wire from the spark plug, thoroughly inspect snow thrower for any damage, and repair the damage before re-starting and operating the snow thrower.
6. If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
7. Stop the engine (motor) whenever you leave the operating position, before unclogging the auger/impeller housing or discharge chute and when making any repairs, adjustments, or inspections.
8. When cleaning, repairing, or inspecting, make certain the auger/impeller and all moving parts have stopped and all controls are disengaged. Disconnect the spark plug wire and keep the wire away from the spark plug to prevent accidental starting.
9. Take all possible precautions when leaving the snow thrower unattended. Disengage the auger/impeller, stop engine (motor), and remove key.
10. Do not run the engine (motor) indoors, except when starting the engine (motor) and for transporting the snow thrower in or out of the building. Open the outside doors; exhaust fumes are dangerous (containing CARBON MONOXIDE, an ODORLESS and DEADLY GAS).

11. Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
12. Never operate the snow thrower without proper guards, plates or other safety protective devices in place.
13. Never operate the snow thrower near enclosures, automobiles, window wells, drop-offs, and the like without proper adjustment of the snow discharge angle. Keep children and pets away.
14. Do not overload the machine capacity by attempting to clear snow at too fast a rate.
15. Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when backing up.
16. Never direct discharge at bystanders or allow anyone in front of the unit.
17. Disengage power to the collector/impeller when snow thrower is transported or not in use.
18. Use only attachments and accessories approved by the manufacturer of the snow thrower (such as tire chains, electric start kits, ect.).
19. Never operate the snow thrower without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk; never run.
20. Do not over-reach. Keep proper footing and balance at all times.
21. Exercise caution if operating on steep sloping surfaces.
22. This snow thrower is for use on sidewalks, driveways and other ground level surfaces.
23. Do not use the snow thrower on surfaces above ground level such as roofs of residences, garages, porches or other such structures or buildings.

Maintenance And Storage

1. Check shear bolts and other bolts at frequent intervals for proper tightness to be sure the equipment is in safe working condition.
2. Never store the snow thrower with fuel in the tank inside a building where ignition sources are present such as hot water and space heaters, clothes dryers, and the like. Allow the engine (motor) to cool before storing in any enclosure.
3. Always refer to operator's guide instructions for important details if the snow thrower is to be stored for an extended period.
4. Maintain or replace safety and instruction labels, as necessary.
5. Run the snow thrower a few minutes after throwing snow to prevent freeze-up of the auger/impeller.

ASSEMBLY

Read and follow the assembly and adjustment instructions for your snow thrower. All fasteners are in the parts bag. Do not discard any parts or material until the unit is assembled.



WARNING: Before doing any assembly or maintenance to the snow thrower, remove the wire from the spark plug.

NOTE: In this instruction book, left and right describe the location of a part from the operator's position behind the unit.

NOTE: Torque is measured in foot pounds (metric N.m). This measurement describes how tight a nut or bolt must be. The torque is measured with a torque wrench.

NOTE: Illustrations begin on page 3.

NOTE: To assemble the following loose parts, use the fasteners shown at full size in Figure 24.

Tools Required

- 1 Knife
- 1 Pliers
- 1 1/2 inch adjustable open end wrenches
- 1 9/16 inch adjustable open end wrenches
- 1 3/4 inch adjustable open end wrenches
- 1 Measuring tape or ruler
- 1 Screwdriver

How To Remove The Snow Thrower From The Carton

1. (Figure 1) The snow thrower is shown in the shipping position.
 2. Locate all parts that are packed separately and remove from the carton.
 3. Remove and discard the packing material from around the snow thrower.
 4. Cut down all four corners of the carton and lay the side panels flat.
 5. Hold onto the lower handle and pull the snow thrower off the carton.
- CAUTION:** DO NOT back over cables.
6. Remove the packing material from the handle assembly.
 7. Cut the ties that secure the clutch control cables (1) to the lower handle (2). Move the cables away from the motor frame.

How To Assemble The Handle And Crank Assembly

1. (Figure 3) Loosen, but do not remove, the fasteners (1) in the upper holes of the lower handle.
 2. (Figure 2) Put the shift lever (6) into first forward position.
 3. (Figure 3) Raise the upper handle (2) to the operating position.
- NOTE:** Make sure the cables are not caught between the upper and lower handle.
4. Install the screw (4), flatwasher (5), lockwasher (6), and hex nut (7) into the bottom holes on each side of the handles. Make sure fasteners in the bottom holes are tight.

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5. (Figure 4) Cut the cable tie that holds the upper crank rod (10) to the handle. Carefully remove the cotter pin (12) and clevis pin (13) from the yoke (17) on lower end of the upper crank rod (10). Do not remove the universal joint pin (14).
NOTE: Make sure the universal joint pin (14) and the universal joint (16) are mounted in the yoke (17). If not, secure the universal joint (16) inside the yoke (17) with the universal joint pin (14).
6. Hole the universal joint (16) in place and slide the upper crank rod (10) down through the eye bolt (11) and onto the yoke end of the lower crank rod (15).
7. Secure the upper crank rod (10) to the lower crank rod (15) with clevis pin (13) and cotter pin (12). Spread the ends of the cotter pin (12) to lock in place.
8. (Figure 3) Tighten nut (9) on eye bolt (11). Make sure eye bolt (11) is properly aligned and the crank (18) can freely rotate.
9. Tighten all handle fasteners.

Check The Cables

1. (Figure 5) Check the traction drive cable (1) and the auger drive cable (2). If the bottom of the cables have become disconnected, reinstall the cable springs. Make sure the long spring (3) is attached to the traction drive and the short spring (4) is attached to the auger drive.
2. (Figure 6) If the top of the cables (5) have become disconnected from the drive levers (6), attach the cables (5) to the "Z" fitting (7).

How To Assemble The Snow Chute (Figure 7)

1. Install the snow chute (1) onto the snow chute flange (2). Align the three holes in the snow chute (1) with the holes in the snow chute flange (2).
 2. Fasten the snow chute (1) to the snow chute flange (2) with carriage bolts (3), washers (4) and nuts (5). Make sure the carriage bolts (3) are installed with the head of the bolts (3) on the inside of the snow chute flange (2) as shown in the illustration.
 3. Make sure all fasteners are tight.
- NOTE:** DO NOT overtighten the fasteners.

How To Install The Shift Knob (Figure 8)

1. Install the hex jam nut (3) onto the end of the speed shift rod (2).
2. Install the knob (1) onto the speed shift rod (2) until the knob (1) is snug against the hex jam nut (3). To lock in position, tighten the hex jam nut (3) against the knob (1).

How To Check The Cables

The traction drive cable and the auger drive cable are adjusted at the factory. Before operating, make sure adjustment of the cables have not changed. See "How To Check And Adjust The Cables" in the Maintenance section.

How To Set The Skid Height (Figure 2)

The snow thrower is equipped with height adjustable skids (7) mounted on the outside of the auger housing (4). To adjust the height of the

skids, see "How To Adjust The Height Of The Skids" in the Maintenance section.

How To Prepare The Engine

Note: The engine was shipped from the factory filled with oil. Check the level of the oil. Add oil as needed. Engine does not contain GASOLINE.



WARNING: Follow the engine manufacturer's instructions for the type of fuel and oil to use. Always use a safety fuel container. Do not smoke when adding gasoline to the engine. When inside an enclosure, do not fill with gasoline. Before you add fuel, stop the engine. Let the engine cool for several minutes.

Check the oil. See the engine manufacturer's instructions for the type of fuel and oil to use. Before you use the unit, read the information on safety, operation, maintenance, and storage.

OPERATION

NOTE: Illustrations begin on page 3.

Know Your Snow Thrower (Figure 2)

Read this Instruction Book and safety rules before operation the snow thrower. Compare the illustration with your snow thrower to familiarize yourself with the location of various controls and adjustments.

Traction Drive Lever (1) – Select the forward or reverse direction of travel.

Crank Assembly (2) – Changes the direction of the discharge chute.

Discharge Chute (3) – Changes the distance the snow is thrown.

Auger Drive Lever (5) – Starts and stops the auger and impeller (snow gathering and throwing).

Speed Shift Lever (6) – Selects the speed of the snow thrower.

Height Adjust Skid (7) – Adjusts the ground clearance of the auger housing.

Ignition Key (8) – Must be inserted to start the engine.

Primer Button (9) – Injects fuel directly into the carburetor for fast starts in cold weather.

Electric Start Button (10) – On electric start models, used to start the engine.

Switch Box (11) – On electric start models, used to attach a 120 volt electric power cord.

Recoil Starter Handle (12) – Use to manually start the engine.

Throttle Control (13) – Controls the speed of the engine.

Choke Control (14) – Use to start a cold engine.

How To Control The Discharge Of The Snow



WARNING: Never direct the discharge of snow toward bystanders.



WARNING: Always stop the engine before unclogging the discharge chute or the auger housing and before leaving the snow thrower.

1. (Figure 2) Turn the crank assembly (2) to change the discharge direction of the snow.
2. (Figure 9) Loosen the wing knob (1) on the chute deflector (2).
3. Move the chute deflector (2) up for more distance or down for less distance.
4. Tighten the wing knob (1).

How To Stop

The Snow Thrower (Figure 2)

1. To stop discharging snow, release the auger drive lever (5).
2. To stop the wheels, release the traction drive lever (1).
3. To stop the engine, push the throttle control lever (13) to off and remove the ignition key (8).

How To Go Forward or Backward (Figure 2)

1. To change the ground speed, first release the traction drive lever (1) and then move the speed shift lever (6) to the desired speed.
2. Ground speed is determined by snow conditions. Select the speed by moving the speed shift lever (6) into the appropriate notch on the shift lever plate.

Speed 1, 2	Wet, Heavy
Speed 3	Light
Speed 4	Very Light
Speed 5, 6	Transport only


3. To go forward, engage the traction drive lever (1). Maintain a firm hold on the handle as the snow thrower starts to move forward. Guide the snow thrower by moving the handle either left or right. Do not attempt to push the snow thrower.

4. To go backward, release the tractor drive lever (1).
5. Move the speed shift lever (6) into either first or second reverse.
6. Engage the traction drive lever (1).

IMPORTANT: Do not move the speed shift lever (6) while the traction drive lever (1) is engaged.

How To Throw Snow (Figure 2)

1. Engage the auger drive lever (5).
2. To stop throwing snow, release the auger drive lever (5).

 **WARNING:** The operation of any snow thrower can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating the snow thrower. We recommend standard safety glasses or use a wide vision safety mask over your glasses.

How To Use The Wheel Lockout Pin (Figure 10)

1. The left hand wheel is secured to the axle with a klick pin (1). This unit was shipped with this klick pin (1) through the wheel hole in the locked position (2).
2. For ease of maneuverability in light snow conditions, change the klick pin (1) to an unlocked position (3).

F-001052J

3. Disconnect the klick pin (1) from the wheel locked position (2). Push the klick pin (1) through the unlocked axle hole only. The unit is now in the single wheel drive unlocked position (3).

Before Starting The Engine

1. Before you service or start the engine, familiarize yourself with the snow thrower. Be sure you understand the function and location of all controls.
2. Check the tension of the clutch cable before starting the engine. See "How To Adjust The Clutch Cable" in the Maintenance section of this manual.
3. Make sure that all fasteners are tight.
4. Make sure the height adjust skids are properly adjusted. See "How To Adjust The Height Of The Skids" in the Maintenance section of this manual.
5. Check the air pressure in the tires. The correct air pressure is 14 PSI (1 BAR) to 17 PSI (1.25 BAR). Do not exceed the maximum amount of air pressure shown on the side of the tire.


How To Stop The Engine (Figure 2)

To stop the engine, move the throttle control (3) to the stop position and remove the ignition key (8). Keep the ignition key (8) in a safe place. The engine will not start without the ignition key (8).

How To Start The Engine (Figure 2)

Models equipped with an Electric Starter

NOTE: An electric starter kit can be added to recoil start engines. Electric starter kits are available from your nearest authorized service center.

 **WARNING:** The starter is equipped with a three-wire power cord and plug and is designed to operate on 120 volt A.C. household current. The power cord must be properly grounded at all times to avoid the possibility of electrical shock which can injure the operator. Carefully follow all instructions in the "How To Start The Engine" section. Make sure that your house wiring is a three-wire grounded system. If you are not sure, ask a licensed electrician. If your house wire system is not a three-wire grounded system, do not use this electric starter under any conditions. If your system is grounded but a three-hole grounded receptacle is not available to start the engine, have a three-hole grounded receptacle installed by a licensed electrician. To connect a 120 volt A.C. power cord, always connect the power cord to the switch box (11) on the engine first. Then, plug the other end into the three-hole grounded receptacle. When disconnecting the power cord, always unplug the end from the three-hole grounded receptacle first.

How To Start A Cold Engine (Figure 2)


1. Check the engine oil.
2. Fill the fuel tank with regular unleaded petrol. See "How To Prepare The Engine".

3. Make sure the traction drive lever (1) and the auger drive lever (5) are in the disengaged (released) position.

4. Move the throttle control (13) to the fast position.
5. Insert the ignition key (8) into the ignition slot. Make sure the ignition key (8) snaps into place. Do not turn the ignition key (8). Remove the extra ignition key and keep in a safe place.
6. Move the choke control (14) to the full choke position.
7. (Electric Start) Connect the power cord to the switch box (11) located on the engine.
8. (Electric Start) Plug the other end of the power cord into a three-hole, grounded 120 VOLT, A.C. receptacle. (See the WARNING in this section).
9. Push the primer button (9). Every time you push the primer button (9), wait two seconds. For the number of times required to push the primer button (9), see the engine manufacturer's instructions.
10. (Electric Start) Push on the electric start button (10) until the engine starts. Do not crank for more than 10 seconds at a time. The electric starter is thermally protected. If the electric starter overheats, it will automatically stop and can only be restarted when it has cooled to a safe temperature. A wait of about 5 to 10 minutes is required to allow the electric starter to cool.

11. (Recoil Start) Rapidly pull the recoil starter handle (12). Do not allow the recoil starter handle (12) to snap back. Slowly return the recoil starter handle (12).
12. If the engine does not start in 5 or 6 tries, See the "Trouble Shooting Chart" instructions.
13. (Electric Start) When the engine starts, release the electric start button (10) and move the choke control (14) to 1/2 choke position. When the engine runs smoothly, move the choke control (14) to the off position.
14. (Electric Start) First disconnect the power cord from the three-hole receptacle. Then, disconnect the power cord from the switch box (11).

- NOTE: In temperatures below 0°F, allow the engine to warm up for several minutes before blowing snow.
15. When throwing snow, always run the engine with the throttle control (13) in the fast position.

 **WARNING:** Never run the engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from any moving parts located on the engine or the snow thrower. The temperature of muffler and nearby areas may exceed 150°F. Avoid these areas.

- NOTE: Do not use the primer button (9) to start a warm engine.

NOTE: Do not use the primer button (9) to start a warm engine.

How To Start A Warm Engine (Figure 2)

If an engine has been running and is still warm, leave the choke control (14) in the off position and do not push the primer button (9). If the engine fails to start, follow the instructions "How To Start A Cold Engine".

NOTE: Do not use the primer button (9) to start a warm engine.

How To Start An Engine With A Frozen Electric Starter (Figure 2)

If the electric starter is frozen and will not turn the engine, follow the instructions below.

1. Pull out the **recoil starter handle (12)** as far as possible.
2. Quickly release the **recoil starter handle (12)**. Allow the **recoil starter handle (12)** to snap back against the recoil starter.

If the engine still fails to start, repeat the two previous steps until the engine starts. Then, continue with the directions "How To Start A Cold Engine".

To help prevent the possible freeze-up of the recoil starter and of the engine controls, proceed as follows after each snow removal job.

1. With the engine running, quickly pull the **recoil starter handle (12)** three or four times with a continuous full arm stroke. This will produce a loud clattering sound that is not harmful to the engine or starter.
2. Stop the engine. Wipe all snow and moisture from the carburetor cover, control levers and cables. Also move the **throttle control (13)**, **choke control (14)**, and **recoil starter handle (12)** several times.

How To Remove Snow or Debris From The Auger Housing (Figure 2)

WARNING: Do not attempt to remove snow or debris that may become lodged in auger housing without taking the following precautions.

1. Release the **auger drive lever (5)**.
2. Move the **throttle control (13)** to the stop position.
3. Remove (do not turn) the **ignition key (8)**.
4. Disconnect the spark plug wire.
5. Do not place your hands in the **auger housing (4)** or the **discharge chute (3)**. Use a pry bar to remove any snow or debris.

Snow Throwing Tips

1. For maximum snow thrower efficiency, change the ground speed, NEVER change the engine speed. The engine is designed to deliver maximum performance at full throttle and must be run in the fast position at all times. In deep, freezing, or wet snow, reduce forward speed. If the wheels slip, also reduce forward speed.

2. Most efficient snow throwing is accomplished when the snow is removed immediately after it falls.
3. For complete snow removal, slightly overlap each previous path.
4. Whenever possible, discharge the snow down wind.
5. For normal usage, set the skids so that the scraper bar is 1/8" above the skids. For extremely hard-packed snow surfaces, adjust the skids upward so that the scraper bar touches the ground.
6. Rocks and gravel must not be picked up and thrown by the machine. On gravel or crushed rock surfaces, set the skids at 1-1/4 inch below the scraper bar. See "How To Adjust The Height Of The Skids" in the Maintenance section.
7. After each snow throwing job, allow the engine to idle for a few minutes. The snow and accumulated ice will melt off the engine.
8. Clean the snow thrower after each use.
9. Remove ice, snow and debris from the entire snow thrower. Flush with water to remove all salt or other chemicals. Wipe snow thrower dry.

MAINTENANCE CHART

CUSTOMER RESPONSIBILITIES

SERVICE RECORDS Fill in dates as you complete regular service.	Before Each Use	First 2 Hours	Every 5 Hours	Every 10 Hours	Every 25 Hours	Each Season	Before Storage	SERVICE DATES
Check Engine Oil Level	√		√			√		
Change Engine Oil					√	√		
Check And Tighten All Screws and Nuts	√					√		
Check Spark Plug					√	√		
Adjust Drive Belt		√			√	√		
Check Fuel	√							
Drain Fuel							√	
Check Auger Clutch Cable Adjustment (See Cable Adjustment)		√				√		
Check Traction Clutch Cable Adjustment (See Cable Adjustment)		√				√		
Lubricate Disc Drive Plate Zerk (See Maintenance)							√	
Lubricate All Pivot Points				√			√	
Lubricate Auger Shaft (See Shear Bolt Replacement)				√			√	
Lubricate Drive Chains and Sprockets				√			√	

MAINTENANCE

NOTE: Illustrations begin on page 3.

Use the following maintenance section to keep your unit in good operating condition. All the maintenance information for the engine is in the engine manufacturer's instructions. Before you start the engine, read this book.



WARNING: Before you make an inspection, adjustment (except carburettor), or repair, disconnect the wire from the spark plug.

General Recommendations

The warranty on this snow thrower does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, the operator must maintain the snow thrower as instructed in this manual.

Some adjustments must be made periodically to properly maintain the snow thrower.

After Each Use

- Check for any loose or damaged parts.
- Tighten any loose fasteners.
- Check and maintain the auger.
- Check controls to make sure they are functioning properly.
- If any parts are worn or damaged, replace immediately.

F-001052J

All adjustments in the Maintenance section of this manual should be checked at least once each season.

As Required

The following adjustment should be performed more than once each season.

1. Adjust the auger drive belt after the first 2 to 4 hours, again at mid-season, and twice each season thereafter. See "How To Adjust The Auger Drive Belt" in the Maintenance section.

Lubrication

Every 10 Hours (Figure 11)

1. Lubricate the Zerk fittings (1) every ten hours with a grease gun.
2. Each time a shear bolt is replaced, the auger shaft must also be greased.
3. Lubricate all pivot points.

Every 25 Hours (Figure 12)

Lubricate the disc drive plate (1) every 25 hours, at the end of the season and before storage.

1. (Figure 2) Move the speed shift lever (6) to first gear.
2. Remove the gas from the gas tank. Stand the snow thrower up on the front end of the auger housing (4).



WARNING: Drain the gasoline outdoors, away from fire or flame.

3. (Figure 18) Remove the bolts (1) on each side of the bottom panel (2).
4. Loosen the bolts (3) on each side of the bottom panel (2).
5. Remove the bottom panel (2).
6. (Figure 12) Turn the disc drive plate (1) clockwise by hand until the Zerk fitting (2) is visible.
7. To prevent the rubber friction wheel (3) from contacting the drive disc plate (1), put a coin (4) (or a shim of equal thickness) between the rubber friction wheel (3) and the disc drive plate (1).
8. Lubricate the Zerk fitting (2) with a grease gun. Use a high temperature EP Moly grease. Fill the Zerk fitting (2) only until grease becomes visible below the bearing assembly (5) located under the Zerk fitting (2). **DO NOT** over fill. Clean all excess grease from the friction disc hub.
CAUTION: Do not allow grease to come in contact with the disc drive plate (1) or the friction wheel (3) or damage will result.
9. Remove coin (4) used in step 7. Make sure that a gap exists between the friction wheel (3) and the disc drive plate (1).
10. (Figure 18) Install the bottom panel (2).
11. Tighten the bolts (3) on each side of the bottom panel (2).
12. Install the bolts (1) on each side of the bottom panel (2).

Items Not To Lubricate (Figure 12)


1. Do not lubricate the hex shaft and sprockets (6). All bearings and bushings are life-time lubricated. For storage, put a slight amount of 5W-30 motor oil on a cloth and wipe the hex shaft and sprockets (6) to prevent rust.
2. If grease or oil comes in contact with the disc drive plate (1) or the friction wheel (3), the friction wheel (3) can be damaged. Make sure to thoroughly clean the disc drive plate (1) and the friction wheel (3).
CAUTION: Any greasing or oiling of the above components can cause contamination of the friction wheel (3). If the disc drive plate (1) or the friction wheel (3) become contaminated with grease or oil, damage to the friction wheel will result.
3. The auger gear case is lubricated at the factory and does not require additional lubrication. If for some reason the lubricant leaks out, have the auger gear case checked by a factory authorized service center.

How To Adjust The Height Of The Skids (Figure 2)

This snow thrower is equipped with two height adjustable skids (7). These skids elevate the front of the snow thrower. For normal hard surfaces, such as a paved driveway or walk, adjust the skids as follows.

1. Put the snow thrower on a level surface.
2. Make sure both tires are equally inflated. The correct air pressure is 14 PSI (1 BAR) to 17 PSI (1.25 BAR). Do not exceed the maximum amount of air pressure shown on the side of the tire.
3. Put the extra shear bolts (found in the parts bag) under each end of the scraper bar (15) next to the adjustable skids (7).
4. Loosen the mounting nuts (16) that hold the adjustable skids (7). To bring the front of the snow thrower down, raise each adjustable skids (7). Tighten the mounting nuts (16).

NOTE: For rocky or uneven surfaces, raise the front of the snow thrower by moving the adjustable skids (7) down.

 **WARNING: Be certain to maintain proper ground clearance for the area to be cleared. Objects such as gravel, rocks or other debris, if struck by the impeller, can be thrown with sufficient force to cause personal injury, property damage or damage to the snow thrower.**

How To Adjust The Scraper Bar (Figure 2)

After considerable use, the scraper bar (15) will become worn. The scraper bar (15), in conjunction with the skids, must be adjusted to allow 1/8 inch clearance between the scraper bar (15) and the sidewalk or area to be cleared.

1. Put the snow thrower on a level surface.
2. Make sure both tires are equally inflated. The correct air pressure is 14 PSI (1 BAR) to 17 PSI (1.25 BAR). Do not exceed the maximum amount of air pressure shown on the side of the tire.
3. Loosen the carriage bolts and nuts that hold the scraper bar (15) to the auger housing (4).

4. Adjust the scraper bar (15) to allow 1/8 inch clearance between the scraper bar (15) and the sidewalk or area to be cleared.
5. Tighten the carriage bolts and nuts. Make sure that the scraper bar (15) is parallel with the sidewalk or area to be cleared.
6. To extended the life of the scraper bar (15), remove and reverse the mounting of the scraper bar (15).

How To Check And Adjust The Cables

The traction drive cable and the auger drive cable are adjusted at the factory. During normal use, a cable can become stretched and must be checked and adjusted as follows.

How To Check The Cables (Figure 13)

1. To check for correct adjustment, disconnect the "Z" fitting (1) from the drive lever (2).
2. Move the drive lever (2) forward until the drive lever stop (9) is contacting the handle (3).
3. The control cable is correctly adjusted if the center of the "Z" fitting (1) is aligned (4) with the hole in the drive lever (2) and there is no droop in the cable.

How To Adjust The Cables

1. Remove the gas from the gas tank. Stand the snow thrower up on the front end of the auger housing.



WARNING: Drain the gasoline outdoors, away from fire or flame.

2. (Figure 13) Disconnect the "Z" fitting (1) from the drive lever (2).
3. (Figure 14) Pull the spring cover up to expose the spring (5). Push the cable (6) through the spring (5) to expose the square end (7) on the cable (6).
4. Hold the square end (7) with pliers and adjust the locknut (8) in or out until the excess slack is removed.
5. Pull the cable (6) back through the spring (5).
6. (Figure 13) Connect the "Z" fitting (1) to the drive lever (2).

NOTE: When the traction drive belt or the auger drive belt is adjusted or replaced, check and adjust the cable.

How To Adjust The Belts

The belts will stretch during normal use. If you need to adjust the belts due to wear or stretch, proceed as follows.

How To Adjust The Auger Drive Belt

If the snow thrower will not discharge snow, check the adjustment of the auger drive cable. See "How To Check And Adjust The Cables" in the Maintenance section. If the adjustment is correct, then check the condition of the auger drive belt. If the auger drive belt is damaged, replace the auger drive belt. See "How To Replace The Belts" in the Maintenance section. If the auger drive belt is loose, adjust as follows.

1. Disconnect the spark plug wire.
2. (Figure 15) Remove screw (2) from belt cover (1). Remove the belt cover (1).

3. (Figure 16) Loosen the nut (2) on the idler pulley (3). Move the idler pulley (3) 1/8 inch toward the auger drive belt (4).
4. Tighten the nut (2).
5. (Figure 17) Depress the auger drive lever. Check the tension on the auger drive belt (4). In correct adjustment, the auger drive belt (4) will deflect 1/2 inch (5) with moderate pressure. If the adjustment is not correct, repeat the adjustment.
6. (Figure 15) Install the belt cover (1). Tighten screw (2).
7. Check the adjustment of the auger drive cable. See "How To Check And Adjust The Cables" in the Maintenance section.
8. Attach the spark plug wire.

Traction Drive Belt

The traction drive belt has constant spring pressure and does not require an adjustment. If the traction drive belt is slipping, replace the belt. See "How To Replace The Belts" in the Maintenance section.

How To Replace The Belts

The drive belts are of special construction and must be replaced with original factory replacement belts available from your nearest authorized service center.

Some steps require the assistance of a second person.

How To Remove the Auger Drive Belt

If the auger drive belt is damaged, the snow thrower will not discharge snow. Replace the damaged belt as follows.

1. (Figure 2) Remove the gas from the gas tank. Stand the snow thrower up on the front end of the auger housing (4).



WARNING: Drain the gasoline outdoors, away from fire or flame.

2. Disconnect the spark plug wire.
3. (Figure 15) Remove screw (2) from belt cover (1). Remove the belt cover (1).
4. (Figure 18) Remove the bolts (5) on each side of the motor mount frame (6).
5. Loosen the bolts (3) on each side of the motor mount frame (6). The auger housing (8) and the motor mount frame (6) will separate, hinged by bolts (3).
6. (Figure 16) Loosen the belt guide (9). Pull the belt guide (9) away from the auger drive pulley (10).
7. Loosen the nut (2) on the idler pulley (3). Pull the idler pulley (3) away from the auger drive belt (4).
8. Remove the old auger drive belt (4) from the auger drive pulley (10) and from pulley (11). Replace the auger drive belt (4) with an original factory replacement belt available from an authorized service center.
9. Install the new auger drive belt (4) onto the auger drive pulley (10) and onto pulley (11).
10. Adjust the auger drive belt (4). See "How To Adjust The Auger Drive Belt" in the Maintenance section.
11. Adjust the belt guide (9). See "How To Adjust The Belt Guide" in the Maintenance section.

12. (Figure 18) Install the bolts (5) on each side of the motor mount frame (6).
13. Tighten the bolts (3) on each side of the motor mount frame (6).
14. (Figure 15) Install the belt cover (1). Tighten screw (2).
15. Check the adjustment of the cables. See "How To Check And Adjust The Cables" in the Maintenance section.
16. Connect the spark plug wire.

How To Remove the Traction Drive Belt

If the snow thrower will not move forward, check the traction drive belt for wear or damage. If the traction drive belt is worn or damaged, replace the belt as follows.

1. (Figure 2) Remove the gas from the gas tank. Stand the snow thrower up on the front end of the auger housing (4).



WARNING: Drain the gasoline outdoors, away from fire or flame.

2. Disconnect the spark plug wire.
3. Remove the auger drive belt. See "How To Remove The Auger Drive Belt" in the Maintenance section.
4. (Figure 16) Pull the traction drive idler pulley (12) away from the traction drive belt (13).
5. Remove the old traction drive belt (13) from the traction drive pulley (14) and from the engine pulley (15). Replace the traction drive belt (13) with an original factory replacement belt available from an authorized service center.
6. Install the new traction drive belt (13) onto the traction drive pulley (14) and onto engine pulley (15).
7. Make sure the traction drive idler pulley (12) is properly aligned with the traction drive belt (13).
8. Install and adjust the auger drive belt (4). See "How To Remove The Auger Drive Belt" in the Maintenance section.
9. Adjust the belt guide (9). See "How To Adjust The Belt Guide" in the Maintenance section.
10. (Figure 18) Install the bolts (5) on each side of the motor mount frame (6).
11. Tighten the bolts (3) on each side of the motor mount frame (6).
12. (Figure 15) Install the belt cover (1). Tighten screw (2).
13. Check the adjustment of the cables. See "How To Check And Adjust The Cables" in the Maintenance section.
14. Connect the spark plug wire.

How To Adjust The Belt Guide

1. Disconnect spark plug wire.
2. (Figure 15) Remove screw (2). Remove the belt cover (1).
3. (Figure 2) Engage the auger drive lever (5).
4. (Figure 19) Measure the distance between the belt guide (2) and auger drive belt (3). The correct distance (4) is 1/8 inch (3.175 mm).
5. If an adjustment is necessary, loosen the mounting bolt for the belt guide (2). Move the belt guide (2) to the correct position (4). Tighten the mounting bolt for the belt guide (2).

F-001052J

6. (Figure 15) Install the belt cover (1). Tighten screw (2).
7. Connect the spark plug wire.

How To Adjust Or Replace The Friction Wheel

How To Check The Friction Wheel

If the snow thrower will not move forward, check the traction drive belt, the traction drive cable or the friction wheel. If the friction wheel is worn or damaged, it must be replaced. See "How To Replace The Friction Wheel" in this section. If the friction wheel is not worn or damaged, check as follows.

1. (Figure 2) Remove the gas from the gas tank. Stand the snow thrower up on the front end of the auger housing (4).



WARNING: Drain the gasoline outdoors, away from fire or flame.

2. Disconnect the spark plug wire.
3. (Figure 18) Remove the bolts (1) on each side of the bottom panel (2).
4. Loosen the bolts (3) on each side of the bottom panel (2).
5. Remove the bottom panel (2).
6. (Figure 2) Position the shift speed lever (6) in the first forward gear.
7. (Figure 20) Note the position of the friction wheel (4) on the disc drive plate (5). In the correct position (7), the right outer side of the disc drive plate (5) must be three inches (7.62cm.) from the center of the friction wheel (4). If the friction wheel (4) is not in the correct position (7), adjust as follows.

How To Adjust The Friction Wheel

1. (Figure 21) Loosen the bolts (1) on the speed control rod (8).
2. (Figure 20) Move the friction wheel (4) to the correct position (7).
3. (Figure 21) Tighten the bolts (1) on the speed control rod (8).
4. (Figure 18) Install the bottom panel (2).
5. Tighten the bolts (3) on each side of the bottom panel (2).
6. Install the bolts (1) on each side of the bottom panel (2).

How To Replace The Friction Wheel

If the friction wheel is worn or damaged, the snow thrower will not move forward. The friction wheel must be replaced as follows.

1. (Figure 2) Remove the gas from the gas tank. Stand the snow thrower up on the front end of the auger housing (4).



WARNING: Drain the gasoline outdoors, away from fire or flame.

2. Disconnect the spark plug wire.
3. (Figure 18) Remove the bolts (1) on each side of the bottom panel (2).
4. Loosen the bolts (3) on each side of the bottom panel (2).
5. Remove the bottom panel (2).
6. (Figure 21) Remove the speed control rod (8) from the spring lever (9).

7. (Figure 22) Remove the three fasteners (4) that hold the friction wheel (5) to the hub (6).
8. (Figure 12) Remove the four bolts that hold the bearing plates (7) on each side of the hex shaft (8).

NOTE: Take special note of the position of the washers and retaining ring on the hex shaft (8) and the sprocket assembly.

9. Remove the bearing plate (7) from the right side. Do not remove the hex shaft (8). Leave the hex shaft (8) in position. Carefully raise hex shaft (8) just enough to allow the friction wheel (3) to be removed.
10. (Figure 22) Remove the friction wheel (5) from the hub (6). Slip the friction wheel (5) toward the right off the hex shaft (8).
11. Assemble the new friction wheel (5) onto hub (6) with the fasteners removed earlier.
12. (Figure 12) Install the bearing plate (7) onto the right side. Make sure the hex shaft (8) is engaged with both bearing plates (7) and that the washers and retaining ring are installed in the original position.
13. Fasten the bearing plates (7) using the four bolts removed earlier.
14. Make sure the hex shaft (8) turns freely.
15. (Figure 21) Attach the speed control rod (8) to the spring lever (9).
16. Check the adjustment of the friction wheel. See "How To Adjust The Friction Wheel" in this section.
17. Make sure the friction wheel and the disc drive plate are free from grease or oil.
18. (Figure 18) Install the bottom panel (2).
19. Tighten the bolts (3) on each side of the bottom panel (2).
20. Install the bolts (1) on each side of the bottom panel (2).
21. Connect the spark plug wire.

How To Replace the Auger Shear Bolt

The augers are secured to the auger shaft with special shear bolts. These shear bolts are designed to break and protect the machine if an object becomes lodged in the auger housing. Do not use a harder bolt as the protection provided by the shear bolt will be lost.



WARNING: For safety and to protect the machine, use only original equipment shear bolts.

To replace a broken shear bolt, proceed as follows. Extra shear bolts were provided in the assembly parts bag.

1. (Figure 2) Move the throttle control (13) to the stop position. Disengage all controls.
2. Disconnect the spark plug wire. Make sure all moving parts have stopped.
3. (Figure 11) Lubricate the auger shaft Zerk fitting (1) with a grease gun.
4. (Figure 23) Align the hole in the auger with the hole in the auger shaft. Install the new shear bolt (2), spacer (3) and locknut (4).
5. Connect the spark plug wire.

How To Prepare The Snow Thrower For Storage



WARNING: Do not remove gasoline while inside a building, near a fire, or while you smoke. Gasoline fumes can cause an explosion or a fire.

1. Drain the fuel tank.

2. Let the engine run until it is out of gasoline.
3. Drain the oil from the warm engine. Fill the engine crankcase with new oil.
4. Remove the spark plug from the cylinder. Pour one ounce of oil into the cylinder. Slowly pull the recoil-start grip so that the oil will protect the cylinder. Install a new spark plug in the cylinder.
5. Thoroughly clean the snow thrower.
6. Lubricate all lubrication points. See the Maintenance section.
7. Be sure that all nuts, bolts and screws are securely fastened. Inspect all visible moving parts for damage, breakage and wear. Replace if necessary.
8. Cover the bare metal parts of the blower housing, auger, and the impeller with spray rust preventative lubricant.
9. Put the unit in a building that has good ventilation.
10. If the machine must be stored outdoors, block up the snow thrower to be sure the entire machine is off the ground.

11. Cover the snow thrower with a suitable protective cover that does not retain moisture. Do not use plastic.

How To Order Replacement Parts

The replacement parts are shown either on the back pages of this Instruction Book or in a separate Parts List Book.

Use only manufacturer's authorized or approved replacement parts. The letter placed on the end of the part number denotes the type of finish for the part, C for chrome, Z for zinc, a PA for purchased assembly. It is important that you include this when ordering a part. Do not use attachments or accessories not specifically recommended for this unit. In order to obtain proper replacement parts you must supply the model number (see nameplate).

Replacement parts, except for the engine, transmission, transaxle or differential, are available from the store where the product was purchased, a service shop recommended by the

store or from a "Murray, Inc. Central Parts Distributor" listed on the back page of this Instruction Book.

If you are unable to obtain parts or service in the manner outlined above, then contact:

MURRAY CANADA, INC.,
 Factory Customer Service
 1195 Courtneypark Drive East
 Mississauga, Ont. L5T-1R1
 1-800-661-6662.

Replacement parts for the engine, transaxle, or transmission, are available from the manufacturer's authorized service centre found in the yellow pages of the telephone directory. Also, see the individual engine or transmission warranties to order replacement parts.

When ordering the following information is required:

- (1) The Model Number
- (2) Serial Number
- (3) Part Number
- (4) Quantity

TROUBLE SHOOTING CHART

TROUBLE	CAUSE	CORRECTION
Difficult starting	Defective spark plug.	Replace spark plug.
	Water or dirt in fuel system.	Use carburetor bowl drain to flush and refill with fresh fuel.
Engine runs erratic	Blocked fuel line, empty gas tank, or stale gasoline	Clean fuel line; check fuel supply; add fresh gasoline
Engine stalls	Unit running on CHOKE.	Set choke lever to RUN position.
Engine runs erratic; Loss of power	Water or dirt in fuel system.	Use carburetor bowl drain to flush and refill with fresh fuel.
Excessive vibration	Loose parts: damaged impeller	Stop engine immediately and disconnect spark plug wire. Tighten all bolts and make all necessary repairs. If vibration continues, have the unit serviced by a competent repairman.
Unit fails to propel itself	Drive belt loose or damaged.	Replace drive belt.
	Incorrect adjustment of traction drive cable	Adjust traction drive cable.
	Worn or damaged friction wheel.	Replace friction wheel.
Unit fails to discharge snow	Auger drive belt loose or damaged.	Adjust auger drive belt; replace if damaged.
	Auger control cable not adjusted correctly.	Adjust auger control cable.
	Shear bolt broken	Replace shear bolt
	Discharge chute clogged.	Stop engine immediately and disconnect spark plug wire. Clean discharge chute and inside of auger housing.
	Foreign object lodged in auger	Stop engine immediately and disconnect spark plug wire. Remove object from auger.