

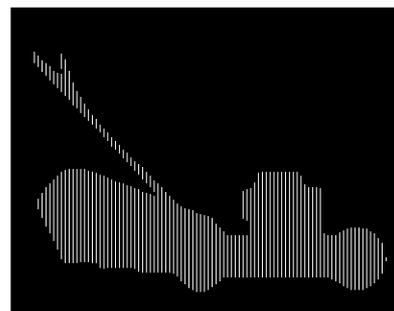
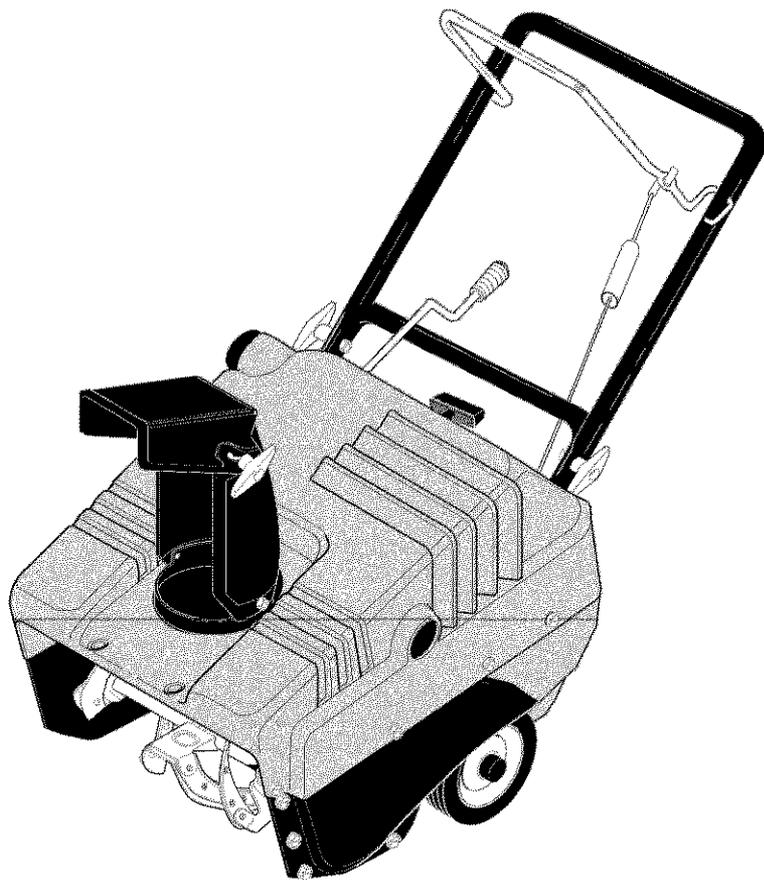
Instruction Book
Manuel d'instructions

Snow Thrower
chasse-neige

Model 621450x4D
modèle 621450x4D

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.



WARNING:



Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.

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.

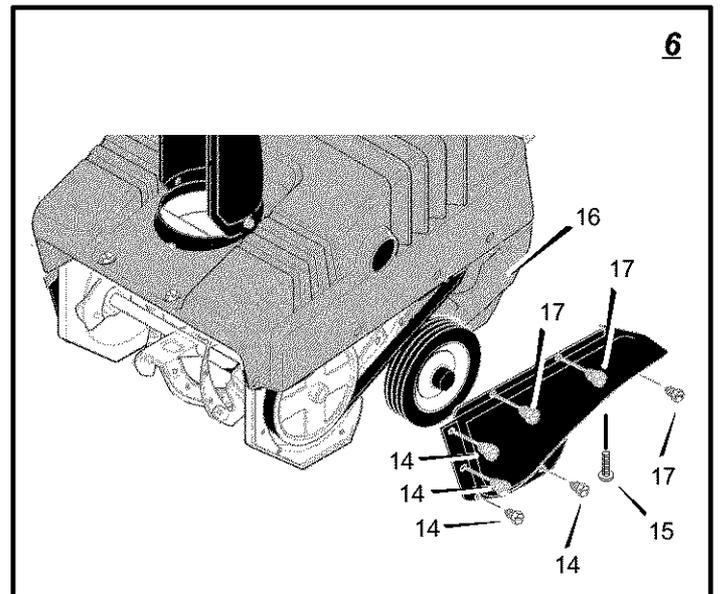
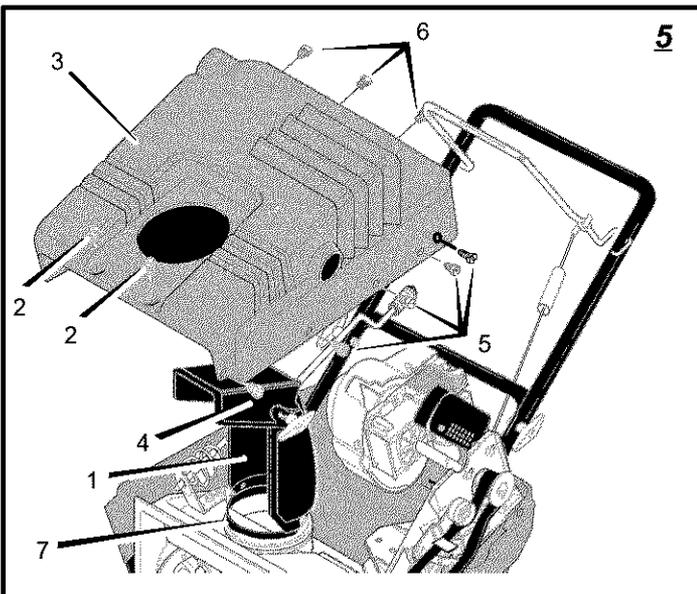
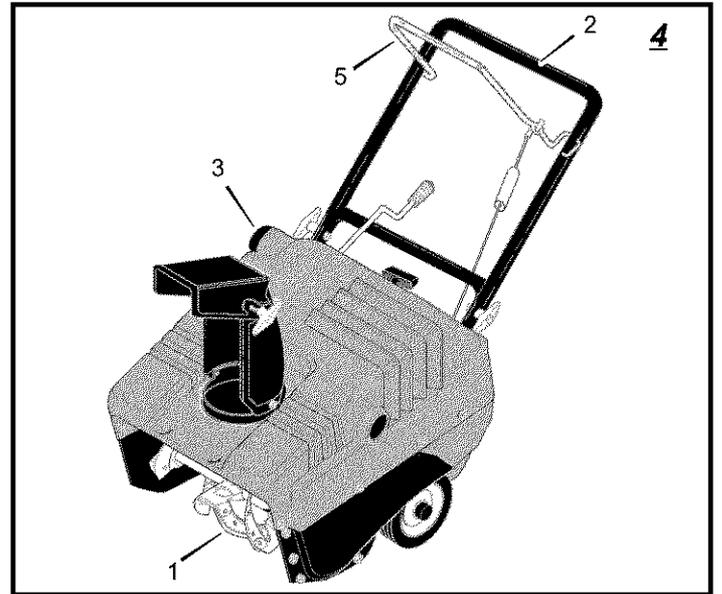
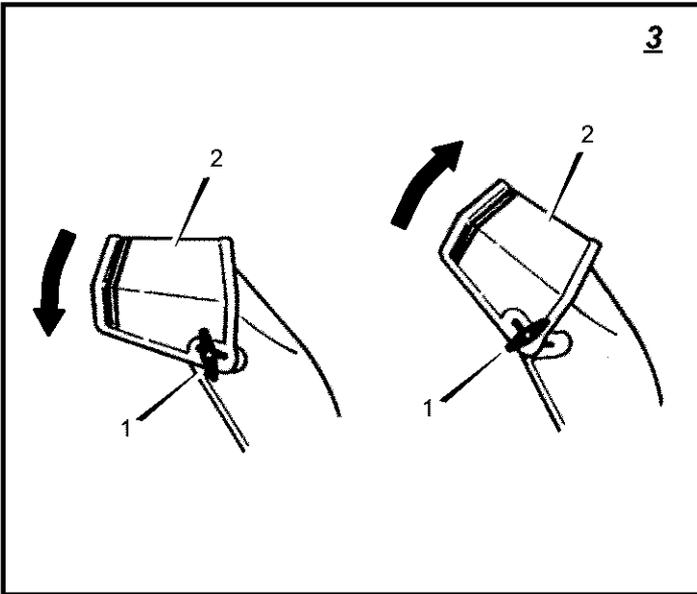
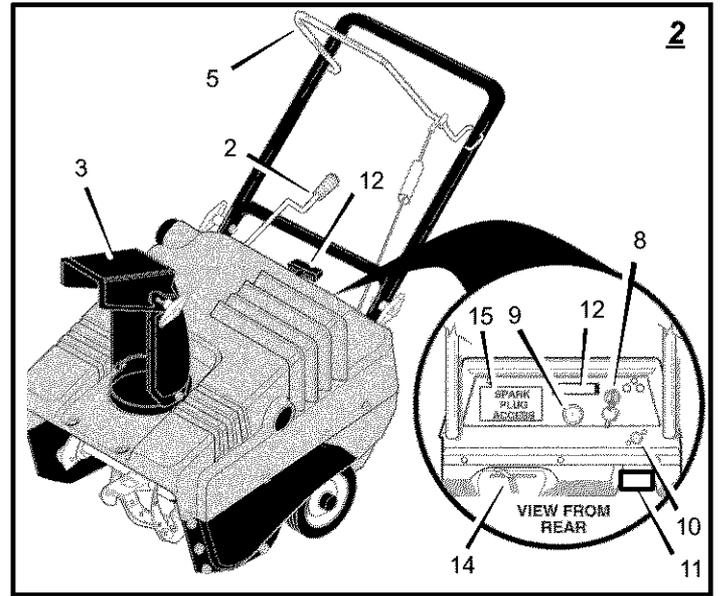
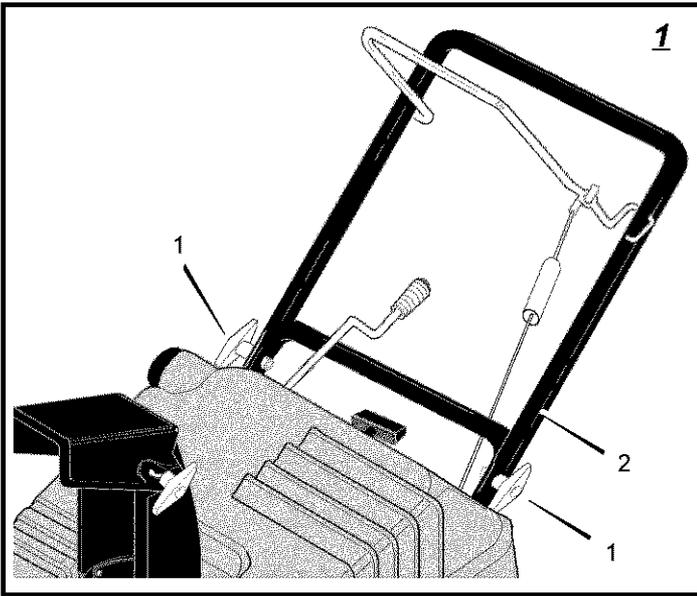


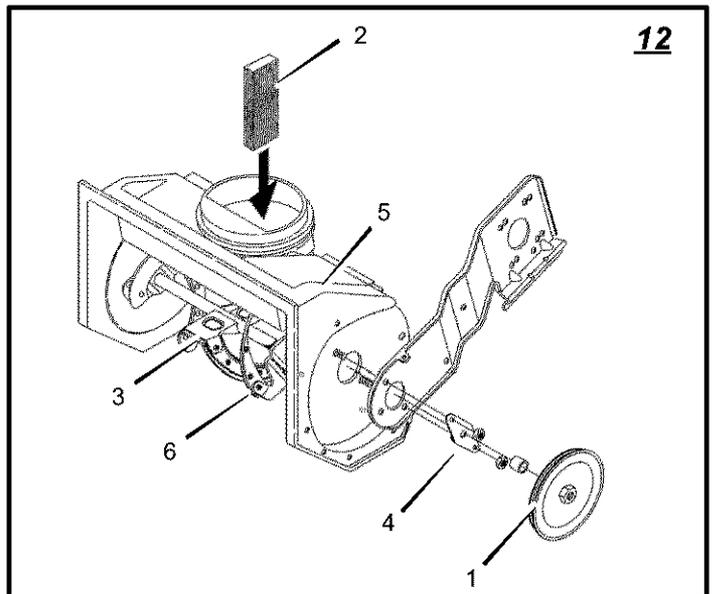
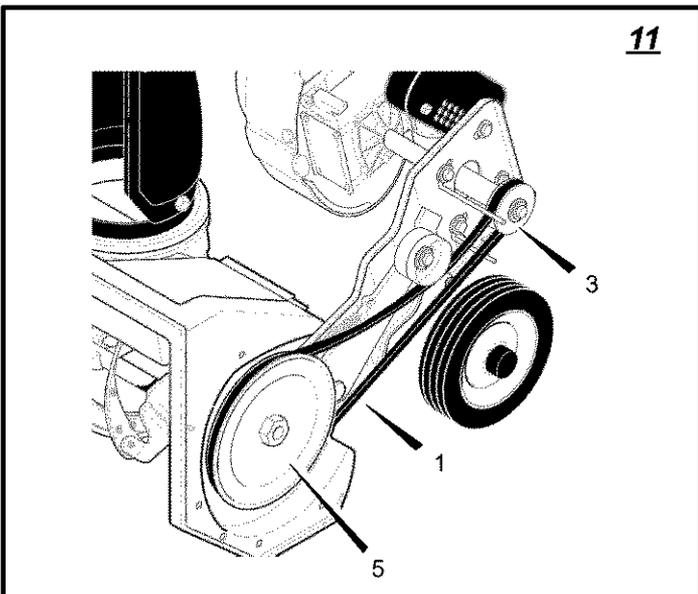
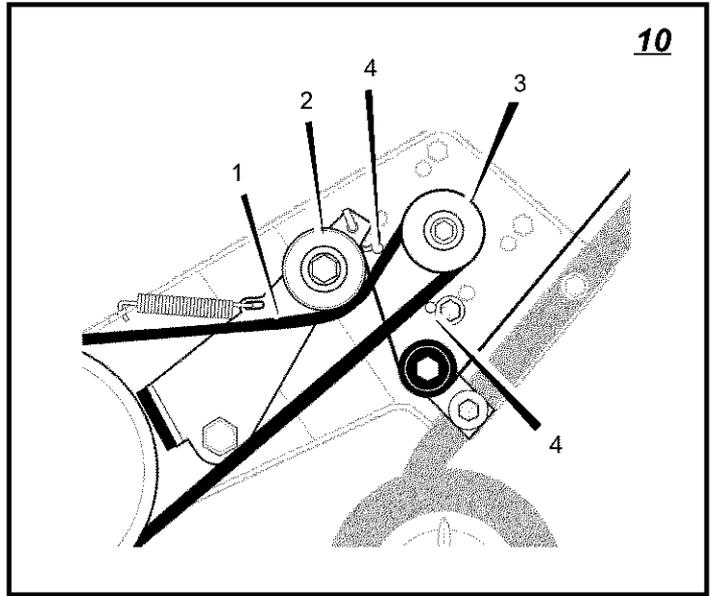
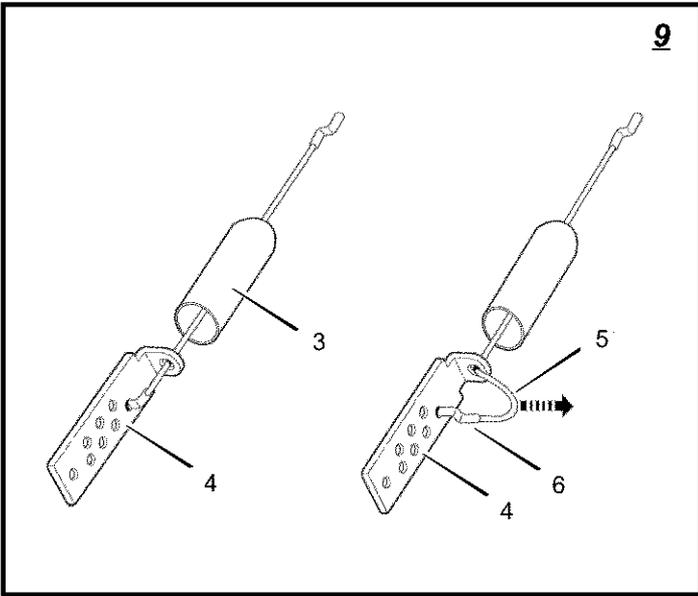
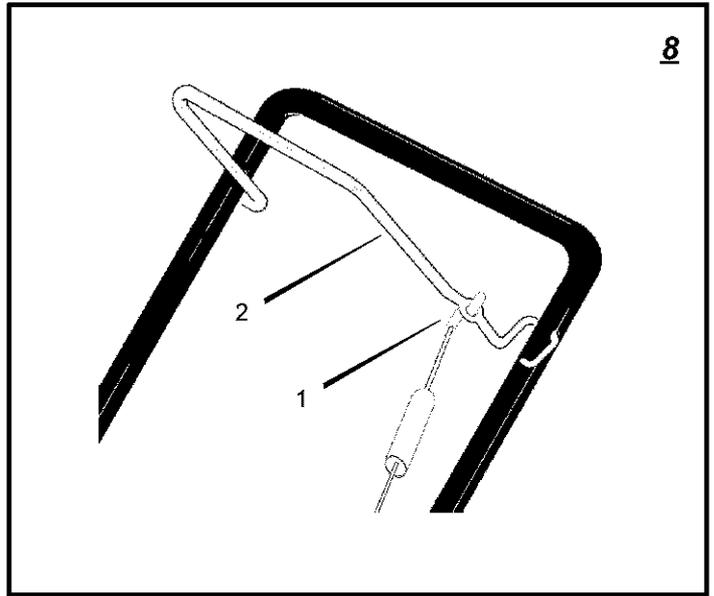
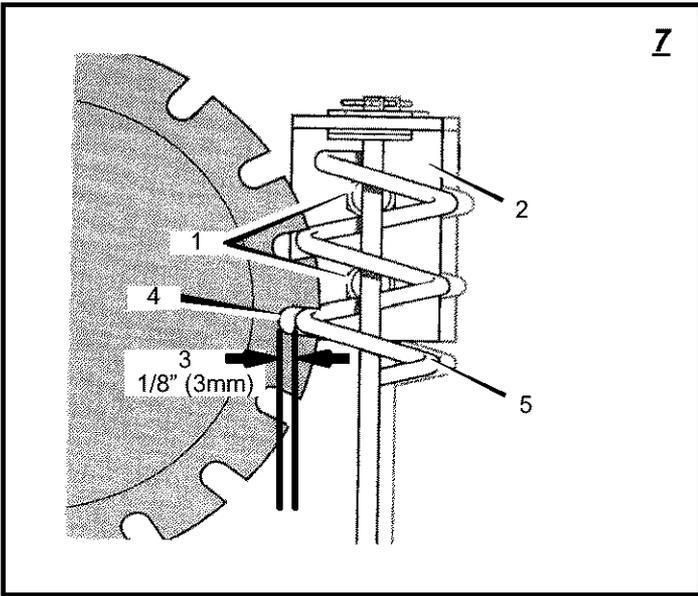
AVERTISSEMENT



Les gaz d'échappement du moteur, certains éléments de leur composition, ainsi que certains organes du véhicule contiennent ou émettent des substances chimiques qui, selon l'État de Californie, peuvent causer le cancer, des malformations à la naissance, ou représentent un danger pour la reproduction.

Les bornes et pôles de batterie et autres accessoires de ce type contiennent du plomb et des composés de plomb, substances chimiques qui, selon l'État de Californie, peuvent causer le cancer, des malformations à la naissance, ou représentent un danger pour la reproduction.

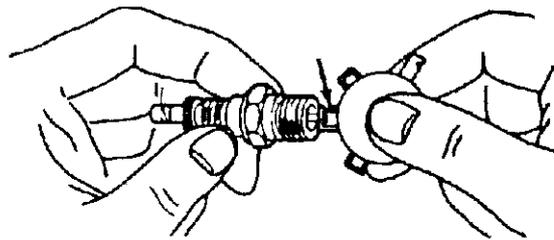




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TWO YEAR LIMITED WARRANTY

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, INC.
 Outdoor Power Equipment
 Customer Service Department
 P.O. Box 268
 Brentwood, Tennessee 37027
 1-800-251-8007

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.
- Tune-up the engine regularly.
- Keep equipment in efficient operating condition.
- Dispose of used engine oil properly.

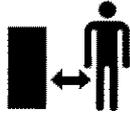
INTERNATIONAL PICTORIALS

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



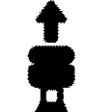
Choke Off



Choke On



Neutral



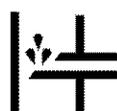
Forward



Reverse



Throttle



Primer Button



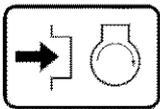
Ignition Key



Ignition Off



Ignition On



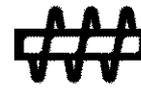
Push To Engage
Electric Starter



Engage



Auger Clutch



Auger Collector



Discharge DOWN



Discharge UP



Discharge LEFT



Discharge RIGHT



Drive Clutch



Fuel



Oil



Fuel Oil Mixture



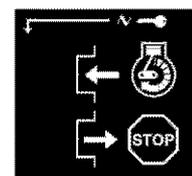
Weight Transfer
Lift Handle To Engage



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.

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. Locate all parts that are packed separately and remove from the carton.
2. Remove and discard the packing material from around the snow thrower.
3. Cut down all four corners of the carton and lay the side panels flat.
4. Hold onto the lower handle and pull the snow thrower off the carton.

CAUTION: DO NOT back over cables.

5. Remove the packing material from the handle assembly.

How To Assemble The Handle

1. Remove the packing material from the upper and lower handles.
2. (Figure 1) Loosen the knobs (1) on each side of the handle (2).
3. Raise the upper handle (2) to the operating position.. Hold the upper handle (2) apart to prevent scratching the lower handle.

NOTE: Make sure the cables are not caught between the upper and lower handle.

4. Tighten the knobs (1).

How To Prepare The Engine

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 the fuel mixture to the engine. When inside an enclosure, do not fill the fuel tank. Before you add the fuel mixture, stop the engine. Let the engine cool for several minutes.

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.

How To Mix The Fuel Mixture

The two cycle engine, used on this snow thrower, requires a mixture of gasoline and oil for lubrication of the bearings and other moving parts. The correct fuel mixture ratio is 50:1 (2.6 oz. oil per one gallon of gas – see the Fuel Mixture Chart). Gasoline and oil must be pre-mixed in a clean gasoline container. Always use fresh, clean, unleaded gasoline.

FUEL MIXTURE CHART (mixture 50:1)

U.S.		IMPERIAL		SI. (Metric)	
GAS	OIL	GAS	OIL	GAS	OIL
1 Gal.	2.6 oz	1 Gal.	3.1 oz	1 liter	20 ML

Mix gasoline and oil as follows:

1. Pour one (1) U.S. quart of fresh, clean, unleaded automotive gasoline into a one gallon size gasoline container.
2. Add 2.6 ounces of clean, high quality, two-cycle oil to the gasoline container.

IMPORTANT: Do not use outboard motor oil or multi-viscosity oils, such as 10W-30 or 10W-40.

3. Install the fuel cap onto the gasoline container. Vigorously shake the gasoline container to mix the oil with the gasoline.
4. Add an additional three (3) U.S. quarts of gasoline to the gallon container. Again shake the gasoline container.

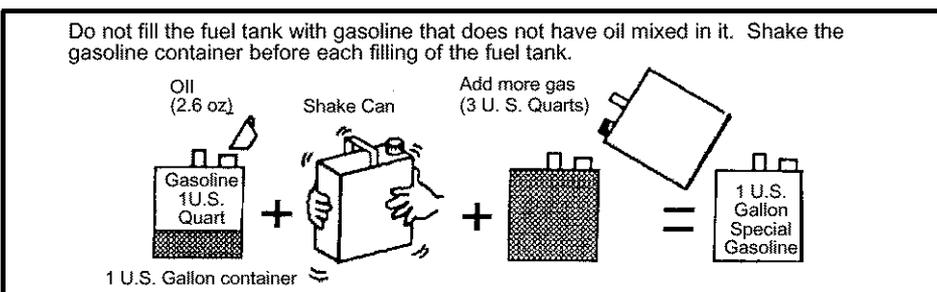
Before You Operate

Before you operate your new snow thrower, please review the following checklist:

- Make sure all assembly instructions have been completed.
- Make sure the discharge chute rotates freely.
- Make sure that no loose parts remain in the carton.

As you learn how to properly use the snow thrower, pay extra attention to the following important items.

- Make sure the fuel tank is filled with the correct mixture of gasoline and oil.
- Become familiar with the location of all controls and understand their function.
- Before starting the engine, make sure all controls operate correctly.



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.

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 which propels the snow thrower.

Ignition Key (8) – Must be inserted and turned to the on position 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.

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

Spark Plug Access Panel (15) – Remove to access the spark plug.

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 3) 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 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.

F-001141M

How To Stop Discharging Snow (Figure 2)

1. To stop discharging snow, release the **auger drive lever (5)**.
2. To stop the engine, turn the **ignition key (8)** to the off position.

How To Move Forward (Figure 4)

1. Hold the **auger drive lever (5)** against the **handle (2)**. The auger will begin rotating.
2. To go forward, raise the **handle (2)** to allow the **rubber auger blades (1)** to contact the ground. Maintain a firm hold on the **handle (2)** as the snow thrower starts to move forward. Guide the snow thrower by moving the **handle (2)** either left or right. Do not attempt to push the snow thrower.
3. To stop, release the **auger drive lever (5)**.

NOTE: If the auger continues to rotate, see "How To Adjust The Auger Control Cable" in the Service and Adjustments section.

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. Make sure that all fasteners are tight.
3. Make sure the fuel tank is filled with the correct mixture of gasoline and oil.
4. Become familiar with the location of all controls and understand their function.
5. Before starting the engine, make sure all controls operate correctly.

Add The Fuel Mixture



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 the fuel mixture to the engine. When inside an enclosure, do not fill the fuel tank. Before you add the fuel mixture, stop the engine. Let the engine cool for several minutes.

(Figure 4) Fill the **fuel tank (3)** to the full position with a fresh, clean fuel mixture. See "How To Mix The Fuel Mixture" in the Assembly section.

How To Stop The Engine (Figure 2)

To stop the engine, turn the **ignition key (8)** to the off position. 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. Fill the fuel tank with a fresh, clean fuel mixture. See "How To Mix The Fuel Mixture" in the Assembly section.
2. Move the **choke control** to FULL position.
3. Make sure the **auger drive lever (5)** is in the disengaged (released) position.
4. Insert the **ignition key (8)** and turn to the on position.
5. Move the **choke control (14)** to the full choke position.
6. (Electric Start) Connect the power cord to the **switch box (11)** located on the engine.
7. (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).
8. 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.
9. (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.
10. (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)**.
11. If the engine does not start in 5 or 6 tries, See the "Trouble Shooting Chart" Instructions.
12. (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.
13. (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.



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.

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 **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. Remove the **ignition key (8)**.
3. Disconnect the spark plug wire.
4. 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. This snow thrower will propel itself forward when the handle is raised enough to cause the auger blades to contact the ground. The auger should stop when auger control bar is released. If it does not stop, see "How To Adjust The Auger Control Cable" in the adjustment section.
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. The distance the snow will be discharged can be adjusted by moving the discharge chute deflector. Raise the deflector for more distance or lower the deflector for less distance.
6. In windy conditions, lower the chute deflector to direct the discharged snow close to the ground where it is less likely to blow into unwanted areas.
7. For safety and to prevent damage to the snow thrower, keep the area to be cleared free of stones, toys and other foreign objects.

8. Do not use the auger propelling feature when clearing gravel or crushed rock driveways. Move the handle down to slightly raise the auger.
9. The forward speed of the snow thrower is dependent on the depth and weight of the snow. Experience will establish the most effective method of using the snow thrower under different conditions.
10. After each snow throwing job, allow the engine to run for a few minutes. The snow and accumulated ice will melt off the engine.
11. Clean the snow thrower after each use.
12. Remove ice, snow and debris from the entire snow thrower. Flush with water to remove all salt or other chemicals. Wipe snow thrower dry.

Dry And Average Snow

1. Snow up to eight inches deep can be removed rapidly and easily by walking at a moderate rate. For snow or drifts of a greater depth, slow your pace to allow the discharge chute to dispose of the snow as rapidly as the auger receives the snow.
2. Plan to have the snow discharged in the direction the wind is blowing.

Wet Packed Snow

Move slowly into wet, packed snow. If the wet, packed snow causes the auger to slow down or the discharge chute begins to clog, back off and begin a series of short back and forth jabs into the snow. These short back and forth jabs, four to six inches, will "belch" the snow from the chute.

Snow Banks And Drifts

In snow of greater depth than the unit, use the same "jabbing" technique described above. Turn the discharge chute away from the snow bank. More time will be required to remove snow of this type than level snow.

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 And Tighten All Screws and Nuts	√					√		
Check Spark Plug					√	√		
Check Drive Belt						√		
Check Fuel	√							
Drain Fuel							√	
Lubricate Chute Control Flange							√	

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.

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

How To Remove The Top Cover (Figure 5)

1. Remove the **discharge chute (1)**.
2. Remove the fuel cap.
3. Remove the two **bolts and nuts (2)** from the front of the **top cover (3)**.
4. Remove the two **bolts (4)** from the left and right side of the **top cover (3)**.
5. Remove the eight **screws (5)** on the left and right side of the **top cover (3)**.
6. Remove the three **screws (6)** from the top portion of the control panel.

7. Carefully pull the rear of the **top cover (3)** up and over the gas tank.
8. To install the **top cover (3)**, reverse the above steps.

Lubrication

Before Storage (Figure 5)

1. Remove the **top cover (3)**. See "How To Remove The Top Cover".
2. Lubricate the **clute control flange (7)**. Apply a clinging type of grease such as Lubriplate.

How To Adjust The Chute Crank

If the chute crank will not rotate fully to the left or right, adjust as follows.

1. Remove the top cover. See "How To Remove The Top Cover".
2. **(Figure 7)** Loosen **nuts (1)**.
3. Move the **crank adjusting bracket (2)** to allow **1/8 inch (3mm) clearance (3)** between the notch in the **flange (4)** and the outer diameter of the **worm gear (5)**.
4. Tighten the **nuts (1)**.

How To Adjust The Auger Control Cable

The auger control cable are adjusted at the factory. During normal use, the auger control cable can become stretched and the auger drive lever will not properly engage or disengage the auger.

1. **(Figure 8)** Remove the "**Z**" **hook (1)** from the **auger drive lever (2)**.
2. **(Figure 9)** Slide the **cable boot (3)** off the **cable adjustment bracket (4)**.
3. Push the bottom of the **auger control cable (5)** through the **cable adjustment bracket (4)** until the "**Z**" **hook (6)** can be removed.
4. Remove the "**Z**" **hook (6)** from the **cable adjustment bracket (4)**. Move the "**Z**" **hook (6)** down to the next adjustment hole.
5. Pull the **auger control cable (5)** up through the **cable adjustment bracket (4)**.
6. Put the **cable boot (3)** over the **cable adjustment bracket (4)**.
7. **(Figure 8)** Install the "**Z**" **hook (1)** to the **auger drive lever (2)**.
8. To check the adjustment, start the snow thrower. Make sure the auger does not rotate when the auger drive lever is released.

How To Remove The Belt Cover (Figure 6)

1. If equipped, remove the **heat shield (12)** from the rear of the **belt cover (13)**.
2. Remove the four **bolts and nuts (14)** holding the **belt cover (13)** to the auger housing.
3. Remove the one **screw (15)** holding the **belt cover (13)** to the **bottom cover (16)**.
4. To remove, hold the bottom portion of the **belt cover (13)** and pull down and out.
5. To install the **belt cover (13)**, reverse the above steps.

How To Replace The Drive Belt

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

1. Remove the belt cover. See "How To Remove The Belt Cover".
2. **(Figure 10)** Remove the **drive belt (1)** from the **idler pulley (2)**.
3. Remove the **drive belt (1)** from the **engine pulley (3)**. Be careful, not to bend the belt guides (4).
4. **(Figure 11)** Remove the **drive belt (1)** from the **auger pulley (5)**.
5. Remove the old **drive belt (1)**.
6. To install the new **drive belt (1)**, reverse the above steps.
7. Make sure the **drive belt (1)** is seated properly on the pulleys.

NOTE: When the auger control lever is engaged, the belt guides (4) must be 1/16" from the drive belt (1).

8. Install belt cover. See "How To Remove The Belt Cover".

How To Replace The Auger (Figure 12)

1. Remove the belt cover. See "How To Remove The Belt Cover".
2. Remove the drive belt. See "How To Replace The Drive Belt".
3. Remove the **auger pulley (1)** from the auger shaft (threads are left hand; turn clockwise to remove).
4. To keep the **auger (6)** from rotating, set a 2"x4" piece of **wood (2)** on the center **paddle (3)** to secure **auger (6)**.
5. Remove the fasteners from the **bearing assembly (4)**. Remove the **bearing assembly (4)** from the **auger housing (5)**.

6. Slide the **auger (6)** out of the bearing assembly on the right side of the snow thrower.
7. Tip the **auger (6)** enough to allow the **auger (6)** to slide out of the **auger housing (5)**.
8. To install **auger (6)**, reverse the above steps.

How To Replace The Spark Plug

NOTE: This spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

NOTE: This engine complies with all current Australian and New Zealand limitations electromagnetic interference.

The spark plug is housed in the engine compartment under the top cover and cannot be seen under normal conditions.

1. (**Figure 13**) Open the spark plug **access door (1)** on the control panel.
2. The spark plug and wire are now visible.
3. Remove the spark plug wire.
4. Clean the area around the spark plug base to prevent dirt from entering the engine when the spark plug is removed.
5. Remove the spark plug.
6. Check the spark plug. If the spark plug is cracked, fouled or dirty, it must be replaced .
7. (**Figure 14**) Set the gap between the electrodes of the new spark plug at .030 inch. Next, install the spark plug in the cylinder head and firmly tighten. Recommended torque is 18 to 20 foot pounds.

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. 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.
4. Thoroughly clean the snow thrower.
5. Lubricate all lubrication points. See the Maintenance section.
6. Be sure that all nuts, bolts and screws are securely fastened. Inspect all visible moving parts for damage, breakage and wear. Replace if necessary.
7. Cover the bare metal parts of the blower housing and auger with spray rust preventative lubricant.
8. Put the unit in a building that has good ventilation.
9. If the machine must be stored outdoors, block up the snow thrower to be sure the entire machine is off the ground.
10. 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, INC.

Outdoor Power Equipment
Customer Service Department
P.O. Box 268
Brentwood, Tennessee 37027
1-800-251-8007 Collect telephone calls will not be accepted.

Replacement parts for the engine, transaxle, or transmission, are available from the manufacturer's authorized service center 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:

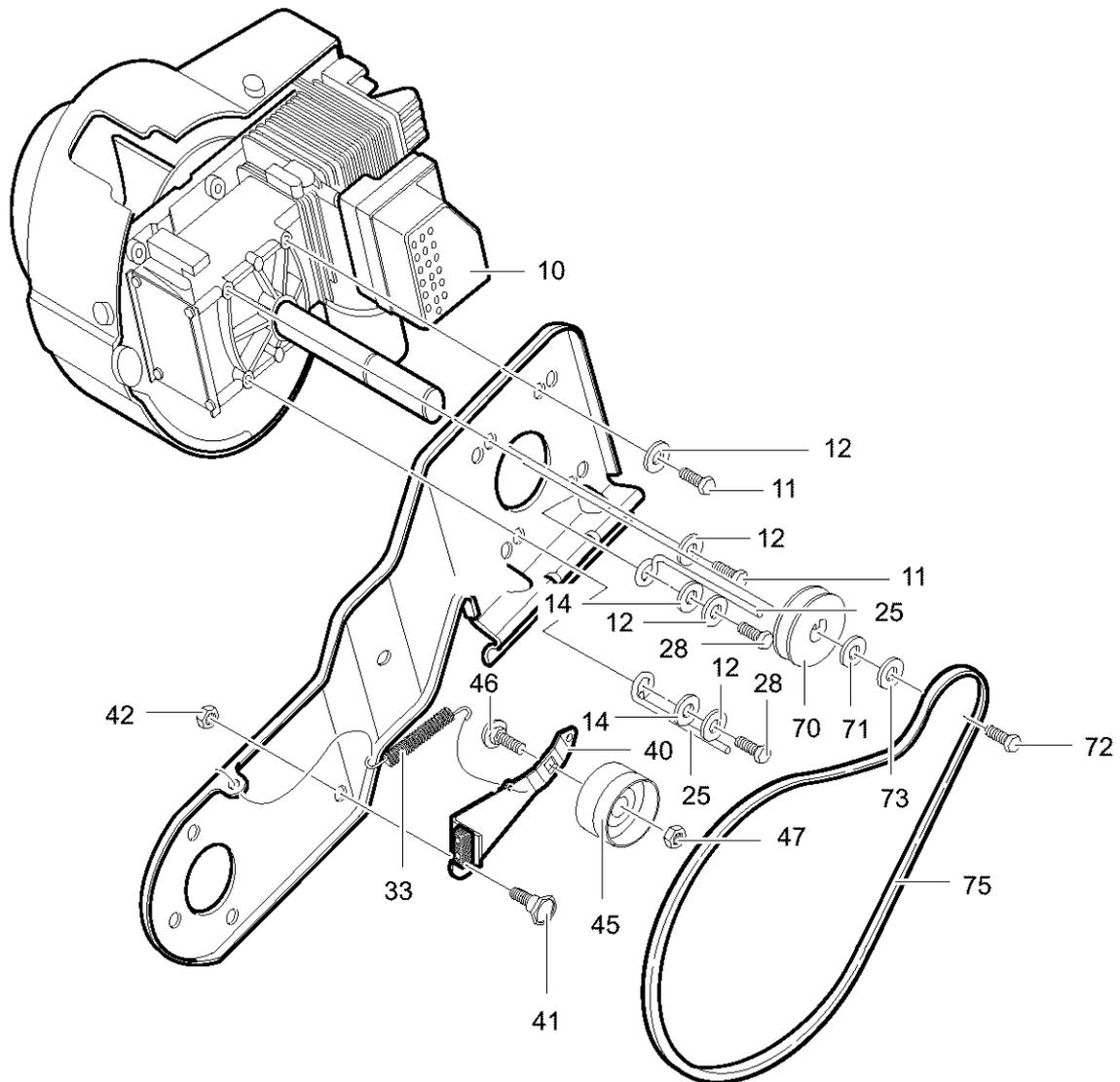
- (1) The Model Number
- (2) Serial Number
- (3) Part Number
- (4) Quantity

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.
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.
	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.

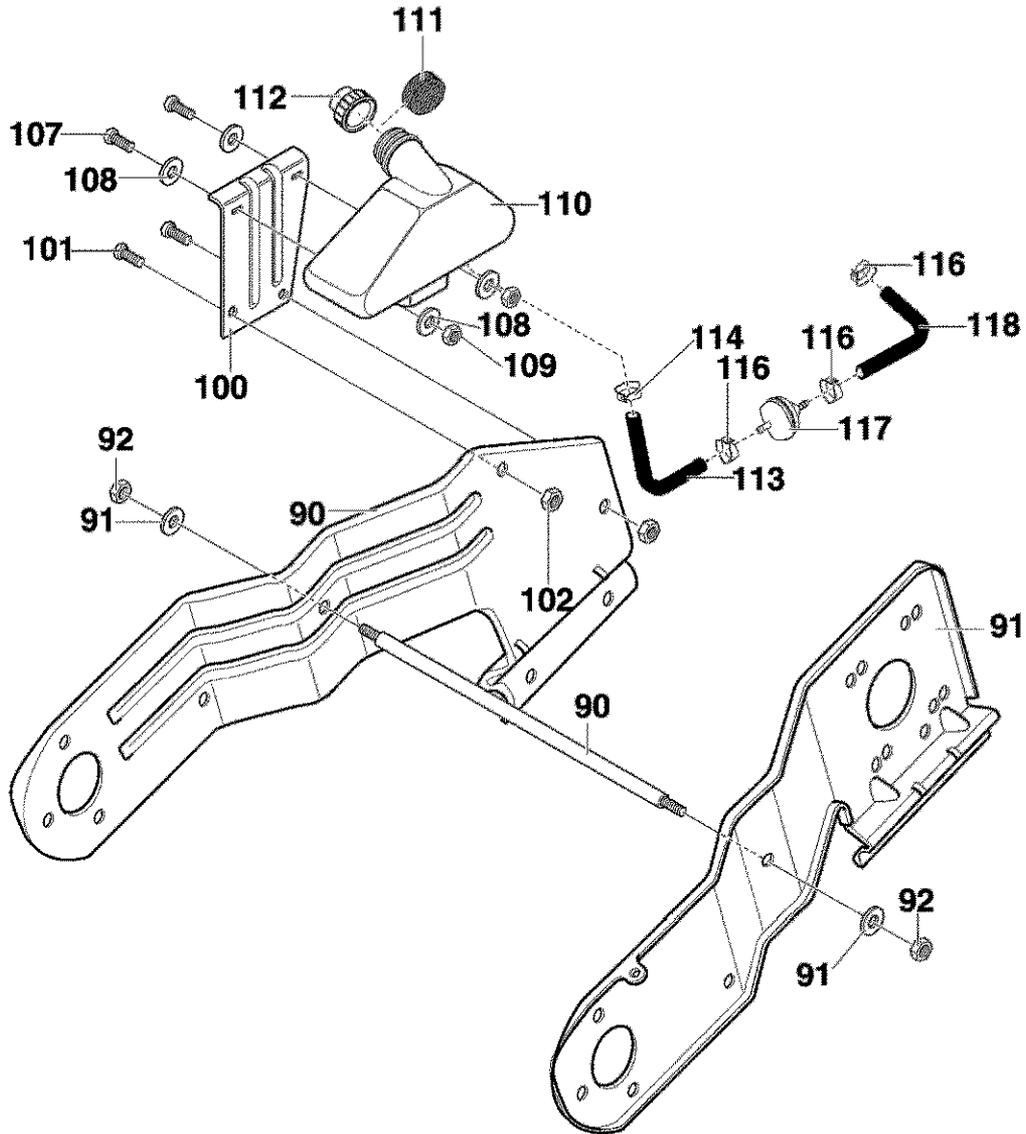
Parts List - Model 621450x4D

Liste de pièces - Modèle 621450x4D



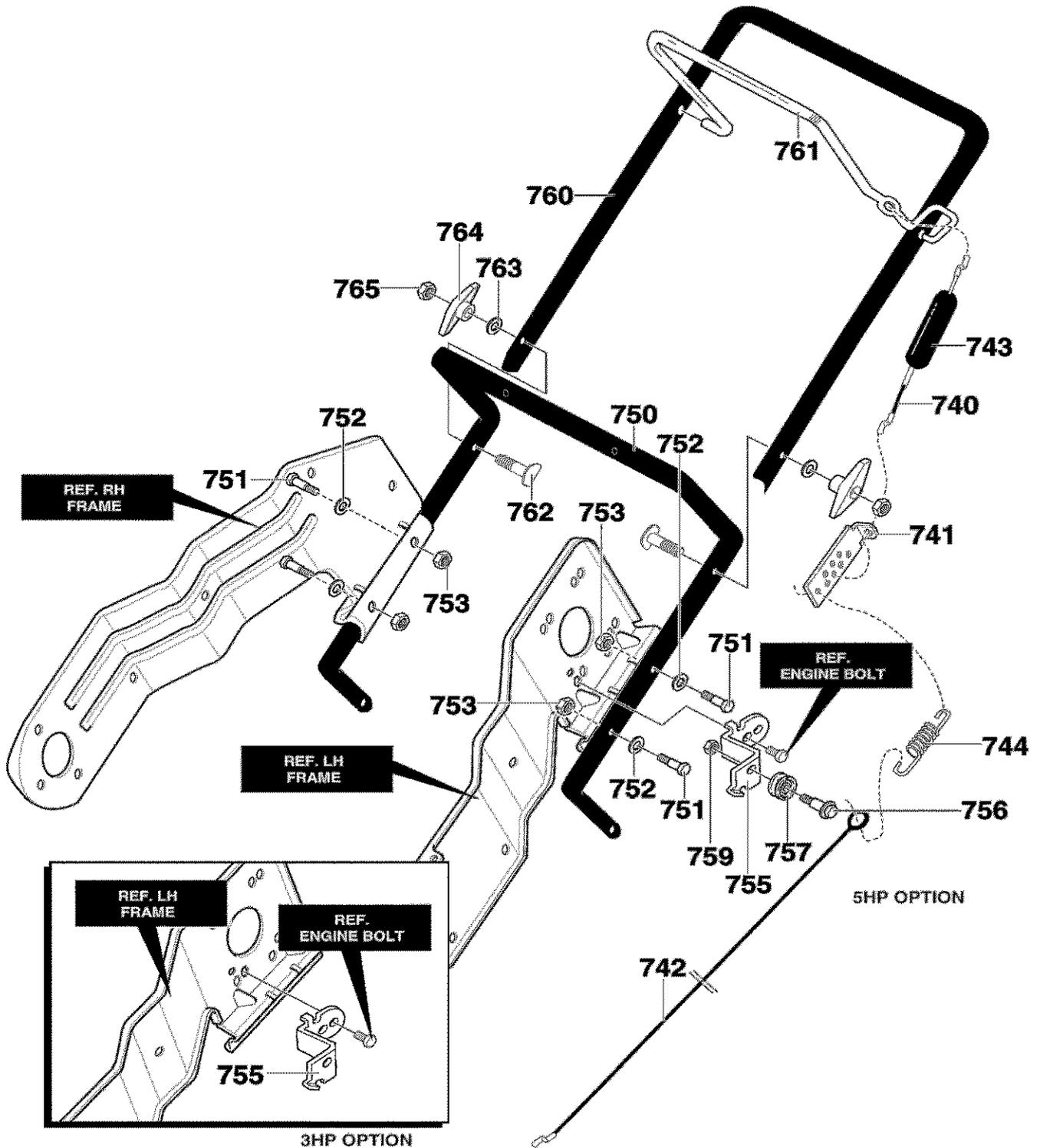
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Key No.	Description	Part No.
10	(SEE ENGINE MANUAL)	ENGINE
11	SCREW, 5/16-18 X.75	180077
12	WASHER, SPTLK	120638
14	FLATWASHER	71071
25	BELT GUIDE	313440
28	SCREW, 5/16-18X1.00	710312
33	SPRING, IDLER BRAKE	165x146
40	IDLER ARM	1501013
41	BOLT	333594
42	NUT	71391
45	PULLEY, IDLER	48924
46	BOLT	45892
47	NUT	590
70	PULLEY	338849
71	WASHER	25840
72	SCREW, 5/16-24X.75	181595
73	WASHER	120638
75	BELT	760928
—	BOOK, INSTRUCTION	F-001141M

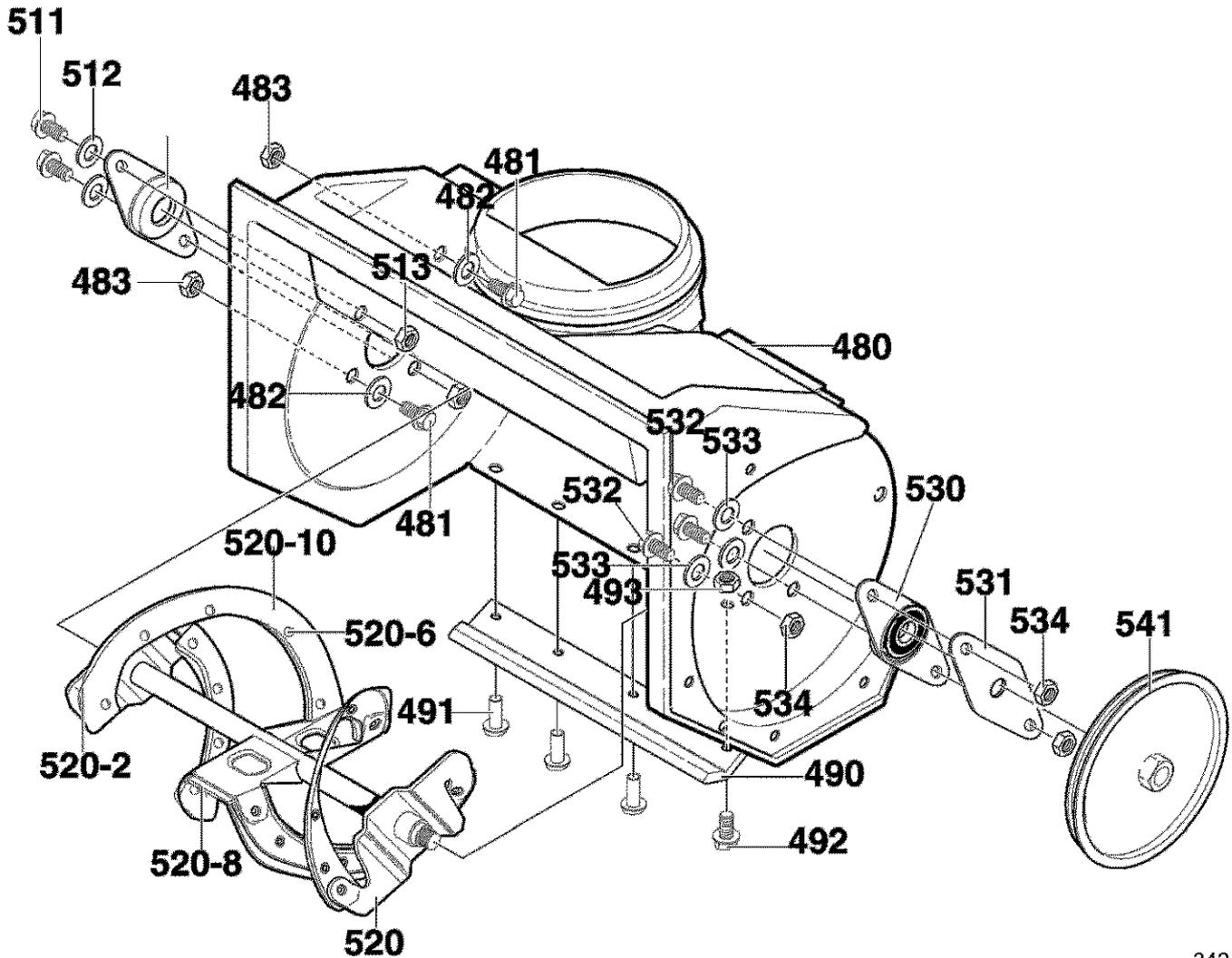


342434

Key No.	Description	Part No.
80	FRAME, SIDE SUPT STEEL RH	760272-853
81	FRAME, SIDE SUPT STEEL LH	760271-853
90	ROD, SUPPORT	760168
91	WASHER, HVSP TLK	71063
92	NUT, 3/8-16 REG HEX	71044
100	BRACKET, GAS TANK	333749-853
101	SCREW, 1/4-20X.75	180020
102	NUT, 1/4-20 REG HEX CTRLK	782585
107	SCREW, 1/4-20X.75	302628
108	WASHER, FLAT	71067
109	NUT, 1/420 REG HEX CTRLK	73826
110	TANK, FUEL	333739
111	RING, FOAM FUEL TANK	762224
112	CAP, GAS	340299
113	TUBING 8 IN.	323363
114	CLAMP, HOSE SCREW	47345
116	CLAMP, HOSE	323387
117	FILTER IN LINE	56679
118	TUBING, 6 IN.	335906

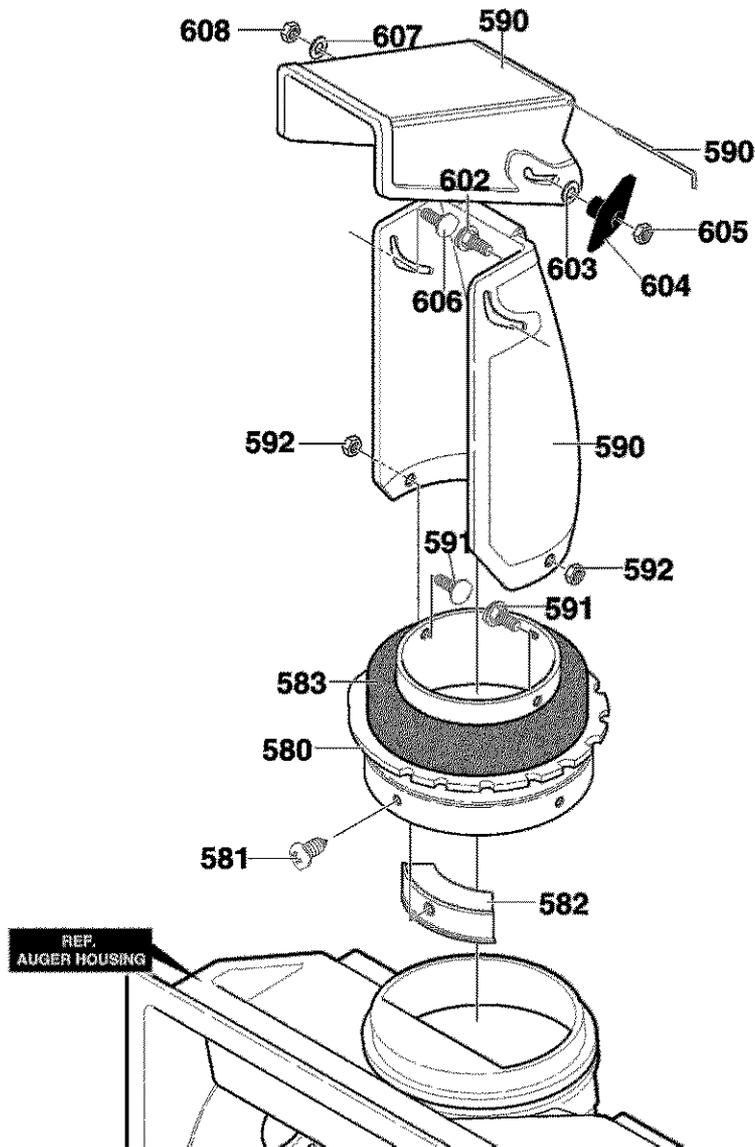


Key No.	Description	Part No.
740	CABLE, UPPER	760774
741	BRKT, CABLE ADJ	313441
742	CABLE LOWER CONTROL	760773
743	BOOT, CLUTCH SPRING	308146
744	SPRING	165x146
750	HANDLE LOWER	333909-853
751	SCREW, 1/4-20X1.25	313674
752	WASHER, FLAT .281X.63X.065	71067
753	NUT, 1/4-20 REGHEXCTRLK	782585
755	BRACKET, CABLE	761486-853
756	BOLT, .375X.375 1/4-20	712234
757	PULLEY, .906X.305	39298
759	NUT, 1/4-20 REGHEXCTRLK	782585
760	HANDLE, UPPER	333919-853
761	BAIL, CONTROL	333954-853
762	BOLT, 5/16-18X2.00	337584
763	WASHER, FORM	311936
764	KNOB,T	57171
765	NUT, 5/16-18 REGHEX	71037



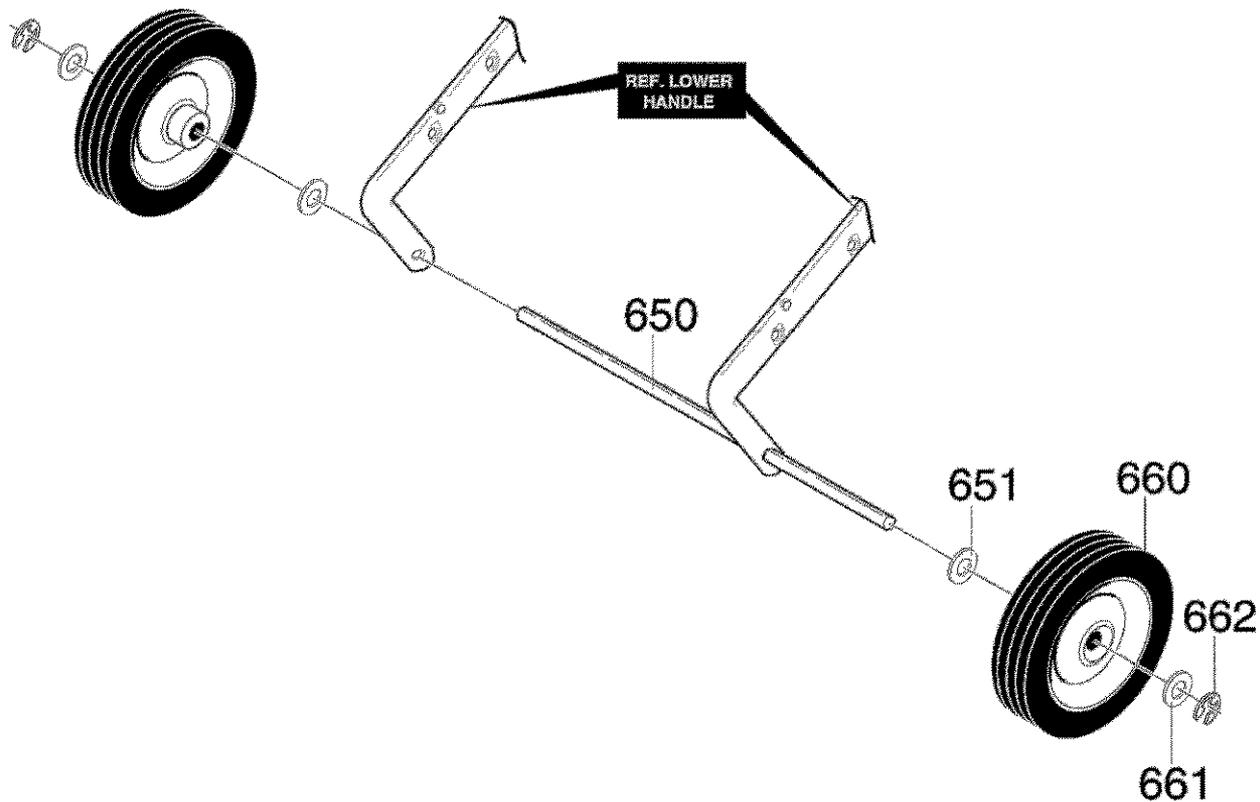
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Key No.	Description	Part No.
480	HOUSING, ASSY	340091
481	SCREW, 1/4-20X.75	302628
482	WASHER, FLAT .281X.63X.065	71067
483	NUT, 1/4-20 REGHEXCTRLK	73826
490	BLADE, SCRAPER	55323
491	RIVET, OVSET	577707
492	SCREW, 1/4-20X.75	302628
493	NUT, CNTRLK 1/4-20	302635
510	BRNG,FL	577023
511	SCREW, 1/4-20X1.00	710263
512	WASHER, FLAT .281X.63X.065	71067
513	NUT, CNTRLK 1/4-20	302635
520	AUGER, ASSY	327072
520-2	BLADE, AUGER	302565
520-6	RIVET	49838
520-8	BLADE, CENTER	335992
520-10	AUGER & BLADE SUPPORT	307049
530	BEARING & PLATE ASSY.	583459
531	PLATE, RETAINER	334287
532	SCREW, 1/4-20X.63	579052
533	WASHER, FLAT .281X.63X.065	71067
534	NUT, 1/4-20 REGHEXCTRLK	73826
541	PULLEY, V3L 6.00	338965



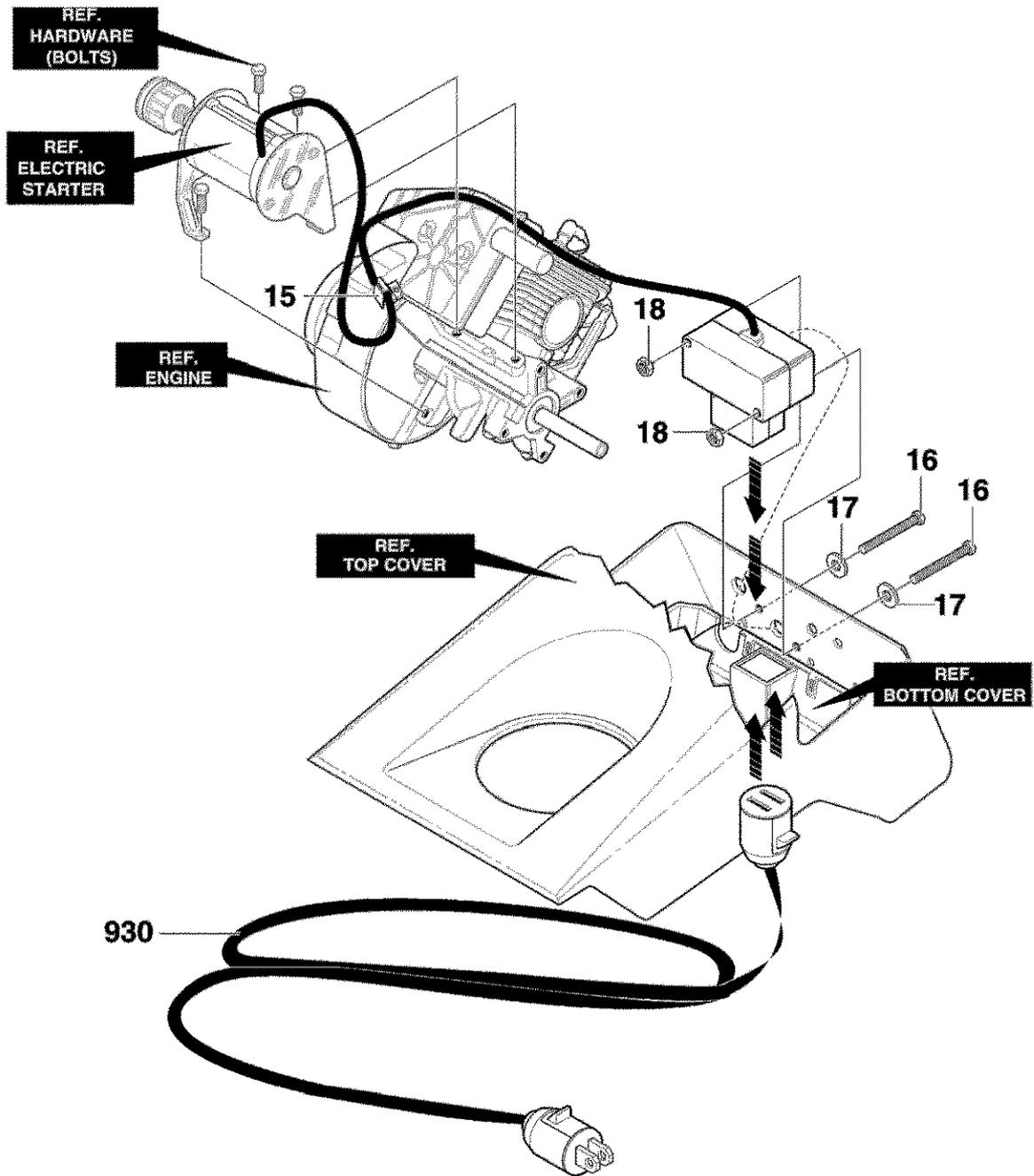
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Key No.	Description	Part No.
580	RING, CHUTE	333859
581	SCREW, #10X.50	711752
582	GUIDE, CHUTE	577021
583	DONUT FOAM	762173
590	CHUTE ASSY.	762222
591	SCREW 1/4-20X.50	313686
592	NUT, CNTRLK 1/4-20	302635
602	BOLT, 5/16-18X1.25 CARR.	302843
603	WASHER, FLAT .349X.69X.066	71071
604	KNOB, T	57171
605	NUT, 5/16-18 REGHEX	71037
606	SCREW, 5/16-18X.75	578088
607	WASHER, FLAT .349X.69X.066	71071
608	NUT, 5/16-18 REGHEXCTRLK	71391



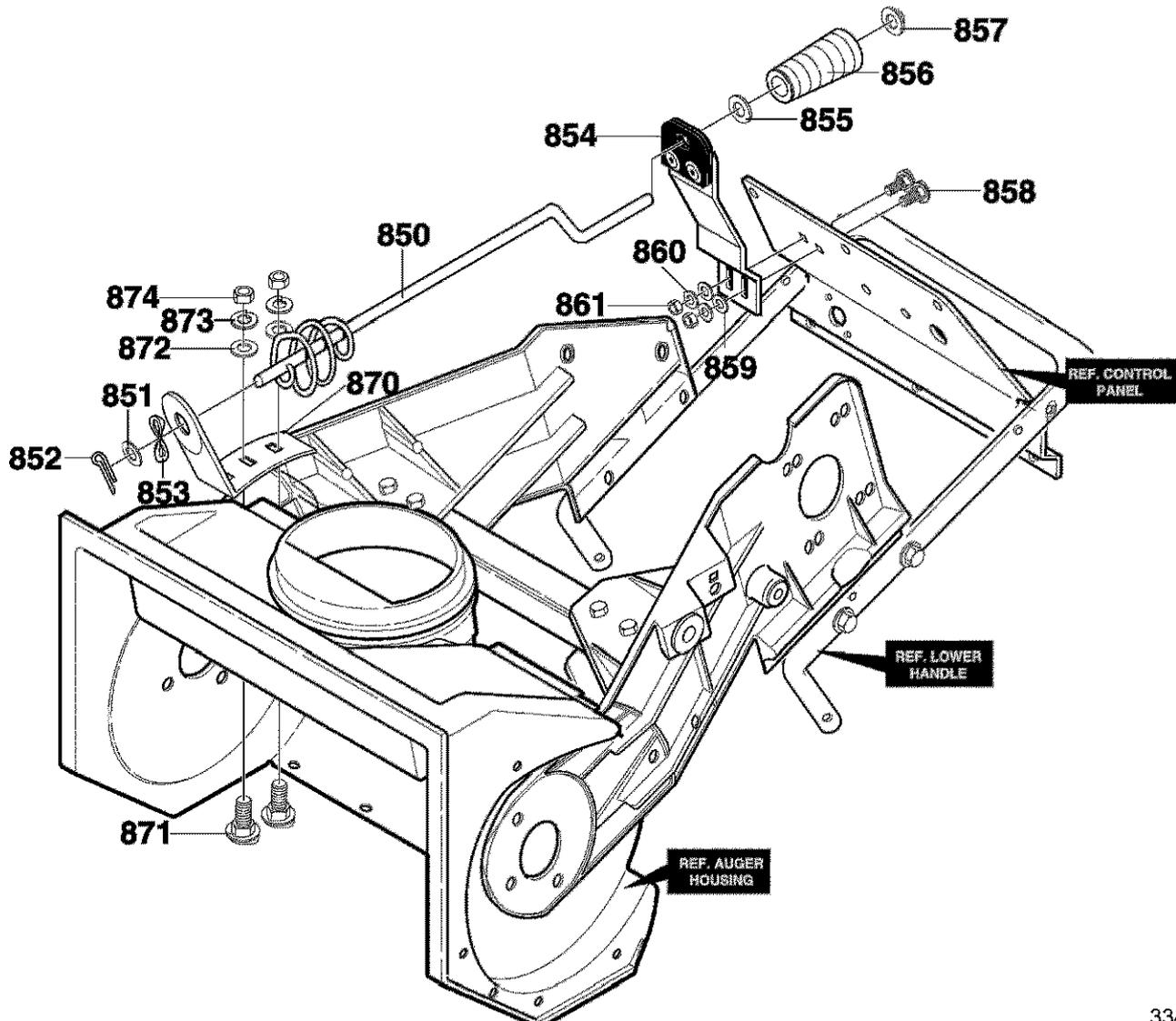
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Key No.	Description	Part No.
650	AXLE SHAFT	313678
651	WASHER, FLAT .391X1.00X1.25	583409
660	TIRE & RIM	760713
661	WASHER, FLAT .391X1.00X.125	583409
662	RING, RET E	577598



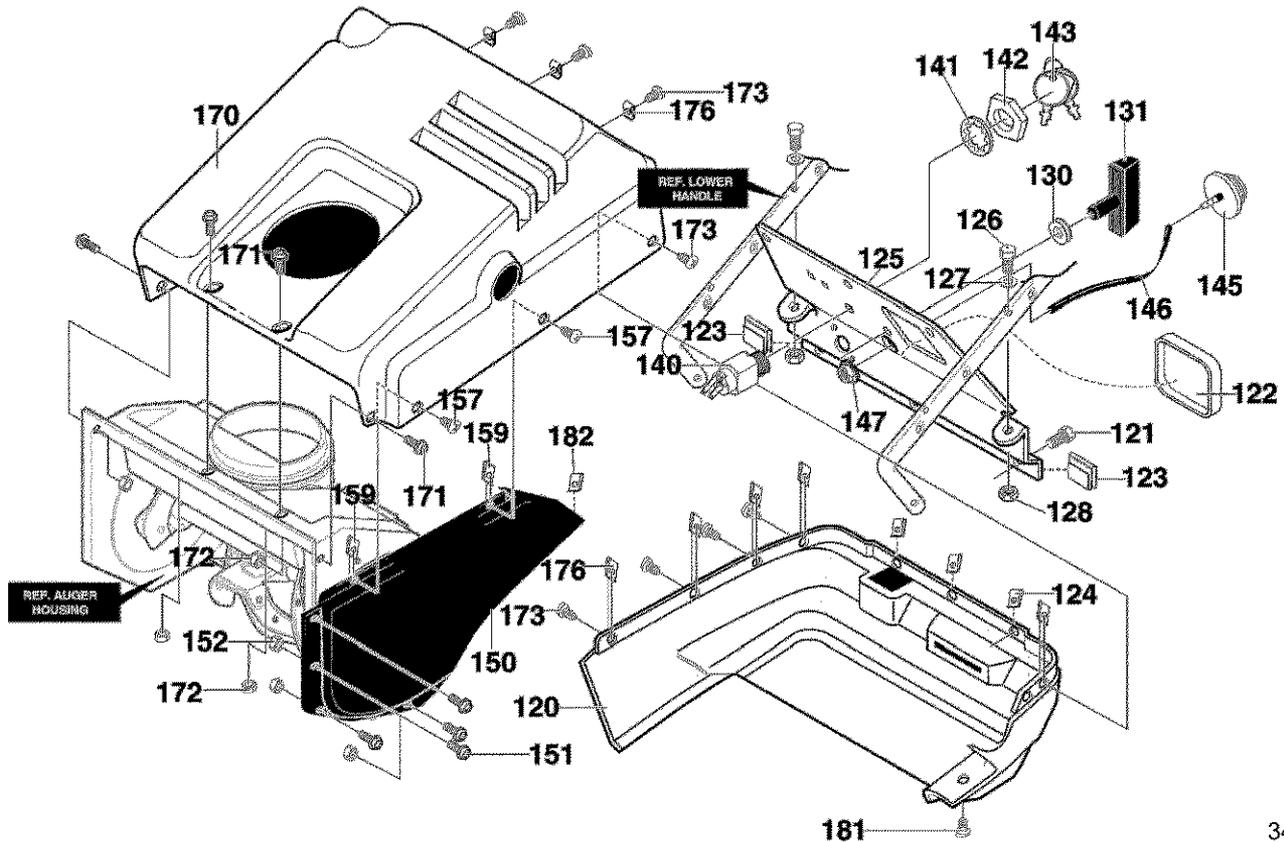
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Key No.	Description	Part No.
15	RETAINER	57569
16	SCREW #8-32X3.00	311633
17	WASHER, FLAT .188X.38X.040	414106
18	NUT, #8-32X3.00	271163
930	CORD EXTENSION	56023



334313

Key No.	Description	Part No.
850	ROD, CHUTE	337941
851	WASHER, FLAT .406X.81X.066	71072
852	PIN, COTTER	71082
853	WASHER CURVED	313431
854	ASSY, CHUTE CRANK	340186
855	WASHER, FLAT .406X.81X.066	71072
856	KNOB, SLEEVE	57082
857	NUT, PUSH	331532
858	BOLT, 1/4-20X.63 CARR.	3809
859	WASHER, FLAT .344X.69X.065	120393
860	WASHER, .31X.58X.08	71060
861	NUT, 1/4-20 REGHEX	71034
870	BRKT, CHUTE ROTATE	333946-853
871	BOLT, 5/16-18X.75 CARR	340720
872	WASHER, FLAT .349X.69X.066	71071
873	WASHER, SPTLK .31X.58X.08	71060
874	NUT, 5/16-18 REGHEX	71037



342028

Key No.	Description	Part No.
120	COVER, BOTTOM	340097
121	SCREW, 1/4-14X.75	313685
122	PANEL, SPARK ACCESS	761538
123	CLIP, "S" TINNEMAN	313057
124	NUT, 1/4-10 SPEED J TYPE	578109
125	CONTROL PANEL	761631-853
126	SCREW, 1/4-20X1.25	313674
127	FLATWASHER, .281X.63X.065	71067
128	NUT, 1/4-20 REGHEXCTRLK	782585
130	GOMMET & WASHER	57587
131	KNOB T	333643
140	SWITCH, IGNIT.	56992
141	WASHER, REGINTLK .640X1.1X.05	313683
142	NUT, 5/8-32	300193
143	KEYS & RING	49643
145	PRIMERBULB	54601
146	HOSE PRIM 9.50LG	335507
147	NUT, 1/4-20 REGHEXKEPS	271172
150	COVER, BELT	340089
151	SCREW, 10-24X.50	12342
152	NUT, #10-24 REGHEXCTRLK	312300
157	SCREW, 1/4-14X.75	313685
159	NUT, 1/4-10 SPEED J TYPE	578109
170	COVER, TOP	340165
171	SCREW, #10-24X.50	12342
172	NUT #10-24 REGHEXCTRLK	312300
173	SCREW, 1/4-14X.75	313685
176	NUT, 1/4-10 SPEED J TYPE	578109
181	SCREW, 1/4-14X.75	313685
182	NUT 1/4-10 SPEED J TYPE	578109

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