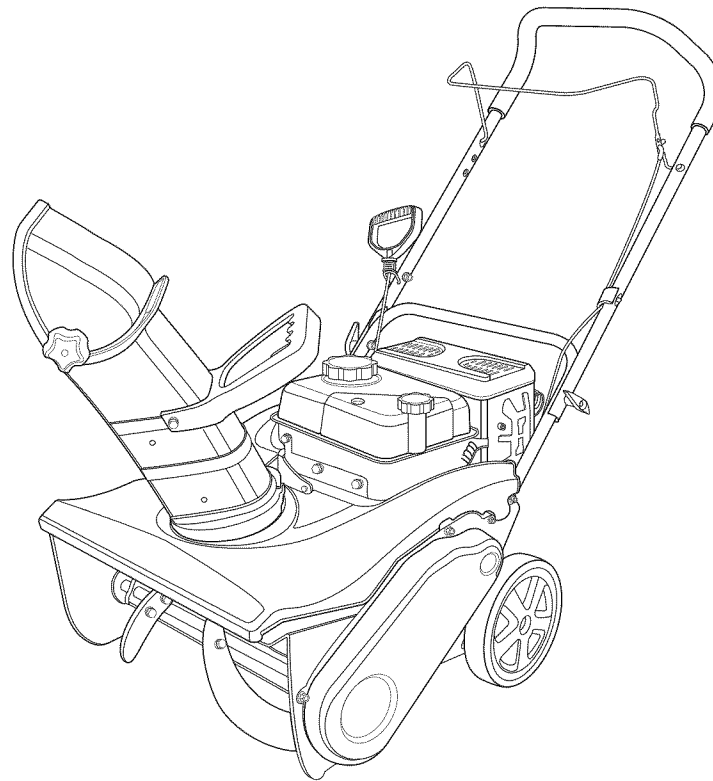




# OPERATOR'S MANUAL



## Snow Joe Max Single Stage Gas Snow Thrower Series Models **SJ803/805**

### **⚠ WARNING**

Read and follow all safety rules and instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. Save these instructions.

This unit is equipped with an internal combustion engine and may spark resulting in fire or explosion if used near combustible material or fluid. Only use when the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). The spark arrester shall be maintained in effective working order by operator.

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SNOW JOE LLC, 86 EXECUTIVE AVENUE, EDISON, NJ 08817

Form NO. 7SJ800-800

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## Record Product Information

### Model and Serial Numbers

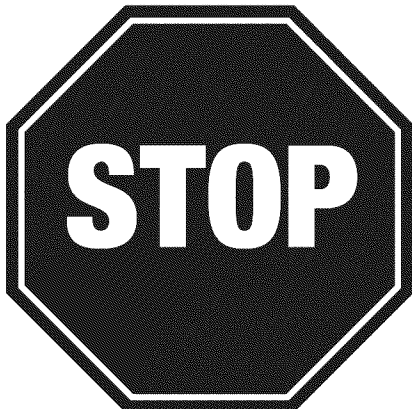
When contacting the company, reordering parts, or arranging service from an authorized dealer, you will need to provide the model and serial numbers, which can be found on the bottom of the engine mount. Copy these numbers into the space provided to the right.

Please record the following numbers from the decal on the main cover of your new product:

Model #:
S   J   8   0
Serial #:

---

## Customer Support



**DO NOT return this SNOW JOE/SUN JOE product to the Retailer!**

Please call our customer service team for assistance at **866-766-9563 (866-SNOW-JOE)** Or visit **www.snowjoe.com** and click on **'Customer Service'**.

Our service representatives and technicians will be happy to assist you with any questions you may have. Our office hours are 9am to 5:30 pm Eastern Time.

Thank you for choosing our products!

# Introduction

Thank you for purchasing a Snow Joe Snow Thrower. This machine has been engineered to provide excellent performance when properly operated and maintained.

It is important that you read, and understand, the safety, operation and maintenance information before using the snow thrower. This manual is used for both the SJ803 and SJ805 model snow throwers. Save this manual for future reference.

## 1. Safety

### ⚠ WARNING

This symbol indicates important safety instructions. Failure to observe and follow these instructions may result in personal injury or property damage. Read and follow all instructions in this manual before attempting to operate this machine.

### ⚠ WARNING

#### CALIFORNIA PROPOSITION 65

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

## Training

Follow these rules:

- Read, understand and follow all instructions on the snow thrower and in the manual(s) before attempting to assemble and operate. Save this manual for reference and ordering replacement parts.
- Never allow children under 14 years old to operate this machine. Children 14 years old and over should be trained and supervised by an adult who understands the operation of the snow thrower.
- Never allow an untrained individual to operate the snow thrower.
- Understand the function of all the controls and their proper operation. Know how to stop the machine and disengage them quickly.
- Always plan your snow-throwing pattern to avoid discharge of material toward people, pets and property. Thrown objects can cause serious personal injury.
- Keep people, pets and property at least 75 feet from the snow thrower while it is in operation. Stop the snow thrower if people or pets enter the discharge area.
- Always observe the surface conditions in order to avoid slipping or falling, especially when operating in reverse.

## Preparation

Always inspect the area where the show thrower is to be used. Remove all objects (e.g.: doormat, newspapers, stones and foreign objects) that could be thrown by the auger/impeller or cause the operator to trip.

- Thrown objects can cause serious injury to the eyes and exposed body. Always wear safety glasses or eye shields during operation and while performing an adjustment or repair.
- Always operate wearing adequate winter outer garments. Do not wear jewelry, long scarves or other loose clothing, which could become entangled in moving parts. Wear footwear that provides sure footing.
- Use a grounded three-wire extension cord and receptacle for units that have electric start engines. The electric starter is equipped with a ground three-wire power cord and plug and is designed to operate on 120 volt AC household current. It

must be used with a properly grounded three-prong receptacle at all times to avoid the possibility of electric shock. Follow all instructions carefully prior to operating the electric starter. DO NOT use electric starter in rain.

- Adjust collector housing height to clear gravel or crushed rock surfaces. Do not attempt to make any adjustments while engine is running, except if specifically recommended in this operator's manual.
- Before starting the engine, disengage all clutch levers.
- Let the engine adjust to the outdoor temperature before starting to clear snow.

Gasoline is extremely flammable and the vapors are explosive which may result in serious injury or property damage. Use extreme care when handling gasoline, avoid spilling gasoline on yourself or your clothes. Wash your skin and change your clothes immediately if gasoline spills on them.

Follow these rules:

- Extinguish all cigarettes, cigars, pipes and other sources of ignition when around gasoline.
- Always use an approved gasoline container.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- Always fuel machine outdoors, never indoors.
- Do not remove the gas cap or add fuel while the engine is hot or running. Allow engine to cool at least two minutes before refueling.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use the nozzle lock-open device.
- Provide space for fuel expansion. Fill the fuel tank to no more than 1/2 inch below bottom of filler neck. Do not over fill fuel tank.
- Wipe off gasoline that spills on the engine and snow thrower body. Move machine to another location and wait 5 minutes before starting the engine.
- Always replace gasoline cap and tighten securely.
- Allow machine to cool at least 5 minutes before storing.
- Never store the machine or fuel container inside where there

is an open flame, spark or pilot light (e.g.: furnace, water heater, space heater, clothes dryer etc.).

## Operation

Follow these rules:

- Do not operate machine while under the influence of alcohol or drugs.
- Keep all safety devices in place and working. Do not operate with a missing or damaged chute assembly. Bypassing the auger/impeller control makes the snow thrower unsafe and may cause personal injury.
- When manually starting the engine, pull cord slowly until resistance is felt, then pull rapidly. Rapid retraction of the starter cord (kickback) will pull hand and arm towards engine faster than you can let go. Broken bones, fractures, bruises or sprains could result.
- Ensure the controls operate easily in both directions and automatically return to the disengaged position when released.
- Contact with the rotating parts can amputate hands and feet. Do not put hands or feet near rotating parts, in the auger/impeller housing or chute assembly.
- Engine exhaust contains carbon monoxide, an odorless and deadly gas. Always have the show thrower outdoors, or ventilated area, when running the engine.
- Muffler and engine become hot and can cause a burn. Do not touch.
- Plan your snow-throwing pattern to avoid discharge towards people or property (e.g.: windows, cars etc.). Do not direct discharge at children, bystanders and pets or allow anyone in front of the machine.
- Exercise caution when changing direction, operating on slopes or crossing gravel surface. Always look for hidden obstacles or hazards.
- Only operate the snow thrower when there is good visibility or light. Always watch your footing and keep a firm hold on the handles. Walk don't run!
- Do not operate the snow thrower at high transport speeds on slippery surfaces. Check your footing when in reverse (Applies to Dual Stage Models).
- Do not overload machine capacity by attempting to clear snow at too fast of a rate.
- Stop the engine and disengage all controls before you leave the operating position (behind the handles) to unlog the chute assembly, before making any adjustments or inspections. Wait until the auger/impeller comes to a complete stop.
- Do not put your hand in the discharge or collector openings. Always use a cleanout tool to unlog the discharge opening. Do not unlog chute assembly while engine is running. Shut off engine and remain behind handles until all moving parts have stopped before unclogging.
- If the snow thrower should start to vibrate abnormally, stop the engine, disconnect the spark plug wire and ground it against the engine. Inspect thoroughly for damage.
- When transporting or not in use disengage the power to the auger/impeller.
- Use only attachments and accessories approved by the manufacturer (e.g. wheel weights, tire chains, cabs etc.).
- Always use care and good judgment when you have a situation that is not covered in this manual. If unsure, always contact the distributors where you bought the snow thrower or your nearest service location before proceeding.

## Maintenance and Storage

Follow these rules:

- Maintain or replace safety and instruction labels.
- Disengage all controls, stop the engine and wait until the auger/impeller comes to a complete stop before cleaning, repairing or inspecting the snow thrower.
- Disconnect the spark wire and ground against the engine to prevent unintended starting. Do not crank engine with spark plug removed.
- Regularly check the following:
  - Accumulation of debris around the muffler could cause a fire. Inspect and clean before every use.
  - Safety devices are operating properly. Do not tamper with or adjust safety devices. Do not change the engine governor setting or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
  - Bolts and screws for proper tightness. Visually inspect machine for any damage and that the snow thrower is in safe working condition.
  - Snow thrower shave plates and skid shoes for wear and damage. Replace with original equipment manufacturer's (OEM) parts only. Replacement parts that do not meet the original equipment specifications may lead to improper performance and compromise safety.
  - Clutch controls. Verify they engage and disengage properly and adjust, if necessary.
  - Fuel line, tank cap, and fittings frequently for cracks or leaks. Replace if necessary.
- Prior to storing, run the snow thrower a few minutes to clear snow from machine and prevent freeze up of auger/impeller.
- Do not store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer etc.
- Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment
- Always refer to the operator's manual for proper instructions on off-season storage.
- **At the end of the Average Useful Life** have the machine inspected annually to ensure that all mechanical and safety systems are working properly and not worn excessively. Failure to do so can result in accidents, injuries and death. **NOTE:** According to Consumer Products Safety Commission (CPSC) and the U.S. Environmental Protection Agency (EPA), this product has an Average Useful Life of seven (7) years, or 60 hours of operation)

## Engine Modification

Tampering with the governor setting can lead to a runaway engine and cause it to operate at unsafe speeds. To avoid serious injury or death, do not modify the engine in any way. Never tamper with factory setting of the engine governor.

## Emissions

Engines that are certified to comply with California and federal EPA emissions regulations for SORE (Small Off Road Equipment) are certified to operate on regular unleaded gasoline, and may include the following emissions control systems: Engine Modification (EM), Oxidizing Catalyst (OC), Secondary Air Injection (SAI) and Three Way Catalyst (TWC) if so equipped.

## Spark Arrester

### ⚠ WARNING

This machine is equipped with an internal combustion engine and should 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).

When a spark arrester is used it should be maintained in effective working order. The State of California requires this by law (Section 4442 of the California Public Resource Code). Other states may have similar laws. Federal laws apply on federal lands.

## Technical Data

### MODEL SJ803









Clearing width - 21"  
 Clearing depth - 9.05"/230mm  
 Engine displacement - 179cc  
 Torque - 9 Nm  
 Fuel tank volume - 2.5 L (0.66 US gal.) unleaded gasoline  
 Oil reservoir capacity - 0.5L/0.53 Quart

### MODEL SJ805

Clearing Width - 21"  
 Clearing depth - 9.05"/230mm  
 Engine displacement - 208cc  
 Torque -11.0 Nm  
 Fuel capacity - 2.7L(0.71US gal.) unleaded gasoline  
 Oil reservoir capacity - 0.6L/0.63 Quart

## Safety Symbols

The following table depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

Symbol	Description
	<b>READ THE OPERATOR'S MANUAL(S)</b> Read, understand and follow all instructions in the manual(s) before attempting to assemble and operate.
	<b>WARNING! ROTATING BLADES</b> Keep hands out of inlet and discharge openings running. There are rotating blades inside.
	<b>WARNING! ROTATING BLADES</b> Keep hands out of inlet and discharge openings while machine is running. There are rotating blades inside.
	<b>WARNING! ROTATING AUGER</b> Do not put hands or feet near rotating parts, in the auger/impeller housing or chute assembly. Contact with the rotating parts can amputate hands and fee.
	<b>WARNING! THROWN OBJECTS</b> This machine may pick up and throw objects which can cause serious personal injury.
	<b>WARNING! GASOLINE IS FLAMMABLE</b> Allow the engine to be cooled at least two minutes before refueling.
	<b>WARNING! CABBON MONOXIDE</b> Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
	<b>WARNING! ELECTRICAL SHOCK</b> Do not use the engine's electric starter in the rain.

# Assembly

**NOTE:** Reference to right or left side of the snow thrower is determined from behind the unit in the operating position. The “operator’s position” is defined as standing directly behind the snow thrower.

## Unpacking

The contents of the carton include:

- (1) Snow thrower
  - (2) Ignition/Safety keys (secured to unit)
  - (1) Operator’s manual
  - (1) Oil funnel for adding engine oil
  - (1) Chute locking collar (secured to discharge chute)
  - (1) 5/8 Spark plug wrench
  - (1) Electric cord
  - (1) Oil can (empty)
- Remove snow thrower from the carton.
  - If necessary, remove and discard plastic bag that covers the unit.
  - Remove any loose parts included with the unit.

## Control Cable Attachment

1. With the upper handle in the down position, connect the control cable to the Auger control.

**Note:** Connect the control cable to the lower hole first. You may need to adjust this setting prior to use. See ‘Adjustments to Control Cable’ on page 13.

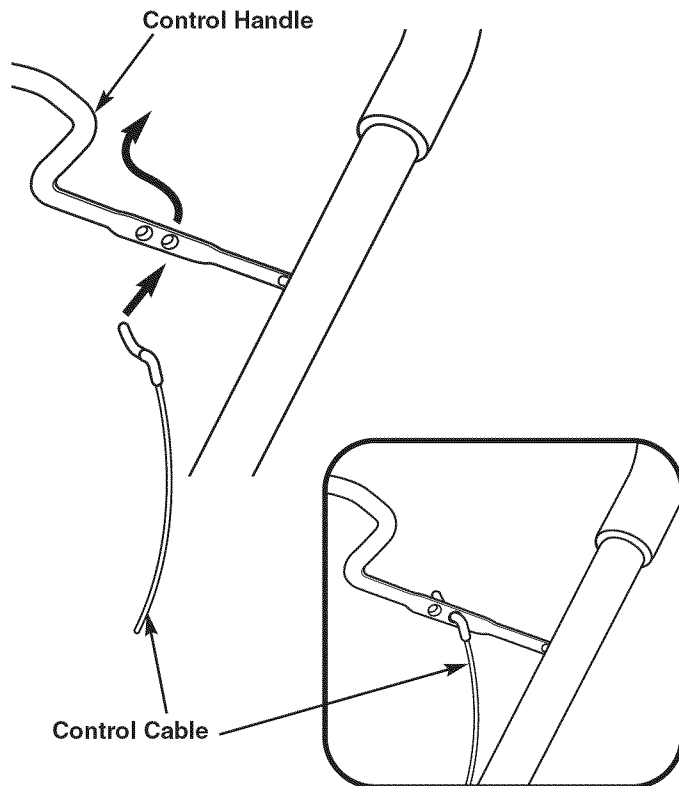


Figure 1

## Upper and Lower Handle

1. Pivot the upper handle into the operating position until it clicks. Ensure the cable is not pinched in the process, or wrapped around the lower left engine casing or oil drain plug (see Fig. 2-1 and 2-2).
2. Tighten the wing knobs to secure the handle in place (see Fig. 2-3).

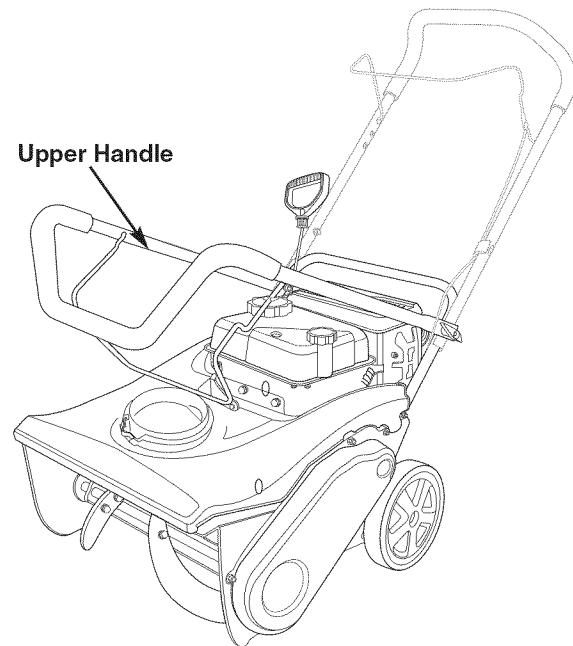


Figure 2-1

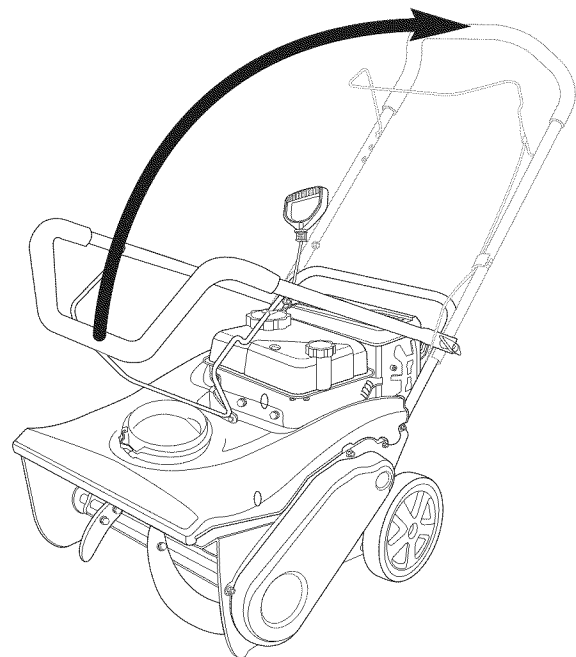
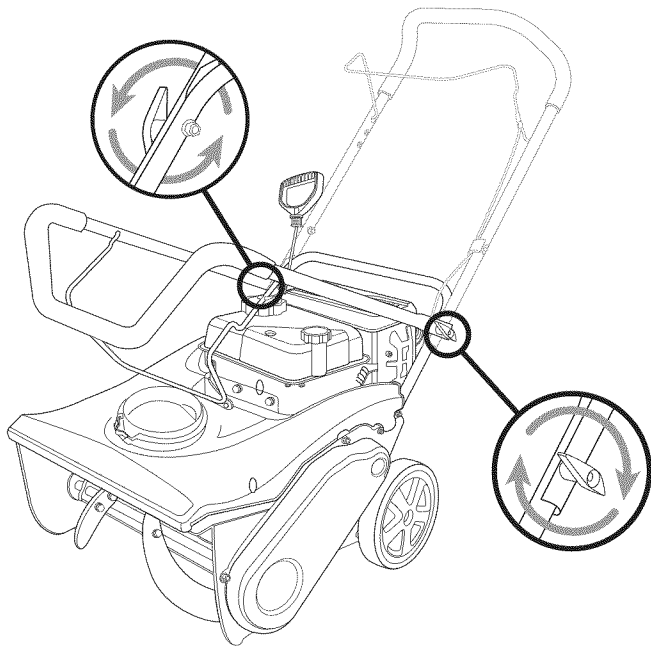
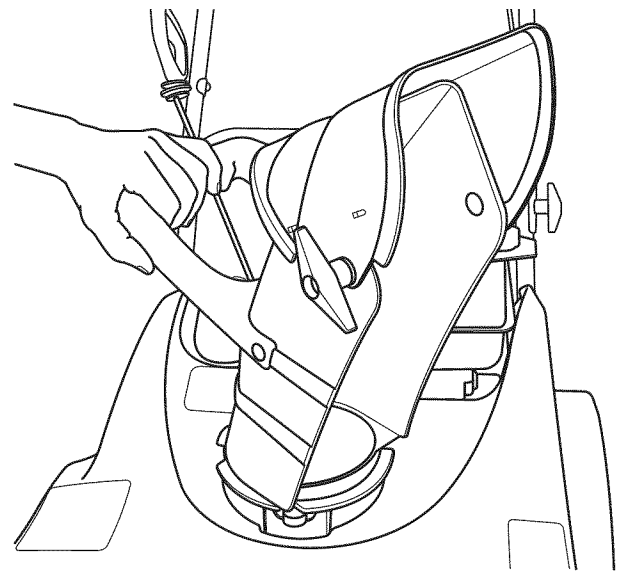


Figure 2-2



**Figure 2-3**



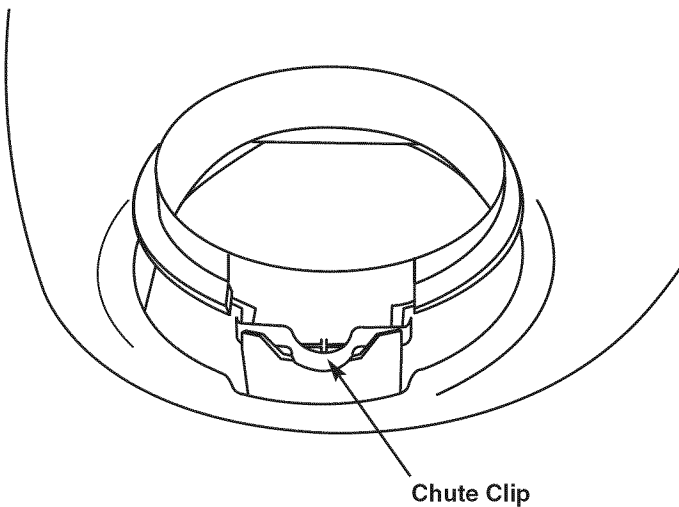
**Figure 4**

4. Using the locking collar, secure the discharge chute to the base (see Fig. 5-1, 5-2).

**Note:** The clip on the locking collar must be in the back of the discharge chute.

## Chute Assembly

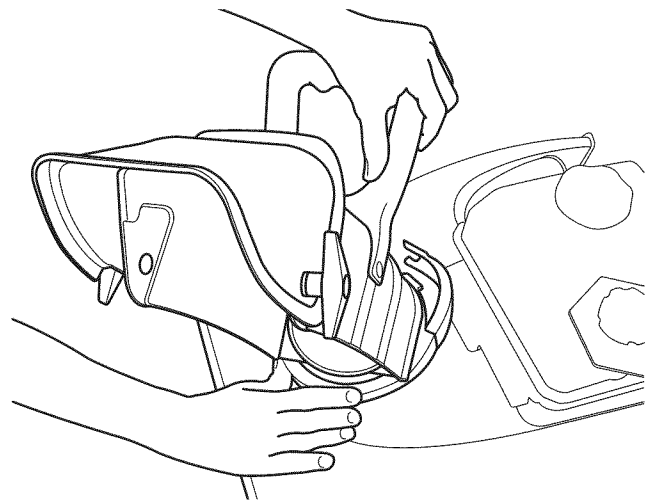
1. Remove the locking collar from the base of the discharge chute.
2. Ensure that the chute clip is in its cradle (see Fig. 3).



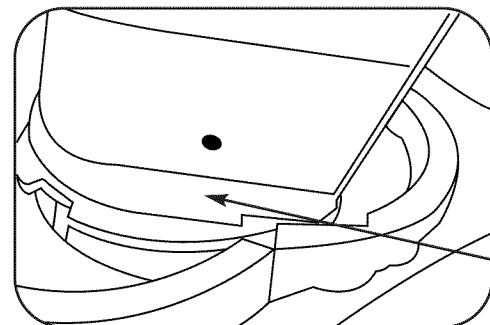
**Figure 3**

3. Align the discharge chute onto the unit (see Fig.4).

**Note:** You will need to hold the discharge chute in place.



**Figure 5-1**



**Figure 5-2**

5. Fasten the locking collar and snap into plate (see Fig.6-1, 6-2).

**Note:** The locking mechanism should be in back of the chute. If you have trouble installing the discharge chute, please visit [www.snowjoe.com](http://www.snowjoe.com) for a step by step assembly video. You can also call toll free 866-Snow-Joe for live support Monday to Friday 9 am-5pm Eastern time.

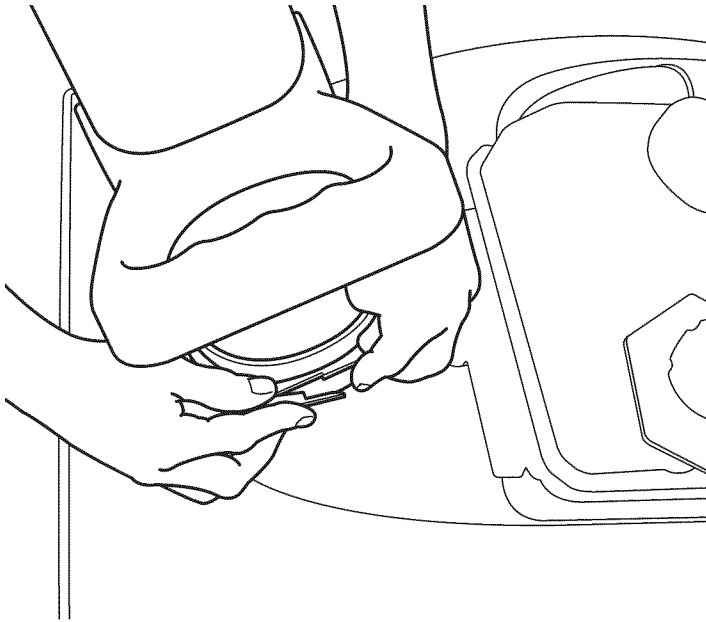


Figure 6-1

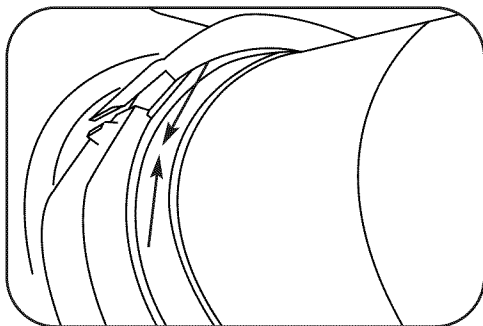


Figure 6-2

6. Loosen the knobs found on the top of the chute assembly and pivot the upper chute up or down to the desired angle. Tighten the knobs before operating the snow thrower.
7. Use the chute handle to position the direction you want to throw the snow (see Fig. 7).

**Note: Never lift the unit by the chute handle**

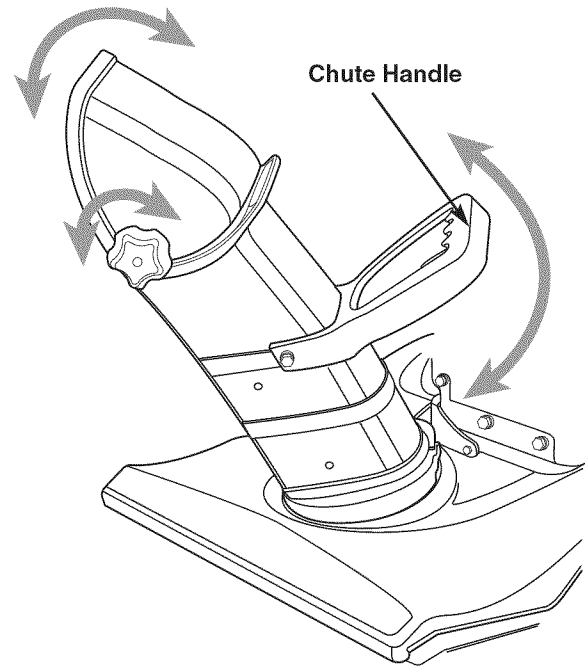


Figure 7

## Fuel Recommendation

Use automotive gasoline (unleaded or low leaded to minimize combustion chamber deposits) with a minimum of 87 octane. Gasoline with up to 10% ethanol or 15% MTBE (Methyl Tertiary Butyl Ether) can be used. **Do not use an oil/gasoline mixture**, dirty or E85 gasoline. Avoid getting dirt, dust, or water in the fuel tank.

- Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
- **Do not** overfill the fuel tank. After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Avoid gasoline contact with skin or breathing of vapor.

## Adding Fuel

### ⚠ WARNING

Gasoline is extremely flammable and the vapors are explosive which may result in serious injury or property damage. **Do not** fuel the snow thrower indoors or when the engine is hot. **Do not** use a pressurized starting fluid. Extinguish cigarettes, cigars, pipes and other sources of ignition. Use extreme care when handling gasoline, avoid spilling gasoline on yourself or your clothes. Wash your skin and change your clothes immediately if gasoline spills on them.

1. Clean around fuel filler neck before removing the fuel cap.
2. A fuel level indicator is located in the fuel tank. Fill the tank until the fuel reaches the fuel level indicator. Be careful not to overfill (see Fig. 8).

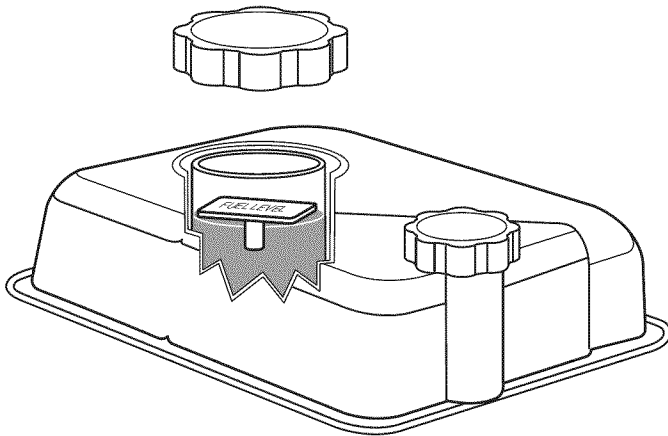


Figure 8

## Adding Oil

### ⚠ CAUTION

The engine is shipped without oil in the engine. You must fill the engine with oil before operating. Running the engine with insufficient oil can cause serious engine damage and void the engine warranty.

1. Remove the oil filler cap and dipstick. Wipe the dipstick clean (see Fig. 9).
2. Slowly add oil until the oil level registers between high and low (see Fig. 9). Refer to the Engine Maintenance section for the correct oil viscosity and engine oil capacity.

### ⚠ WARNING

**DO NOT** overfill

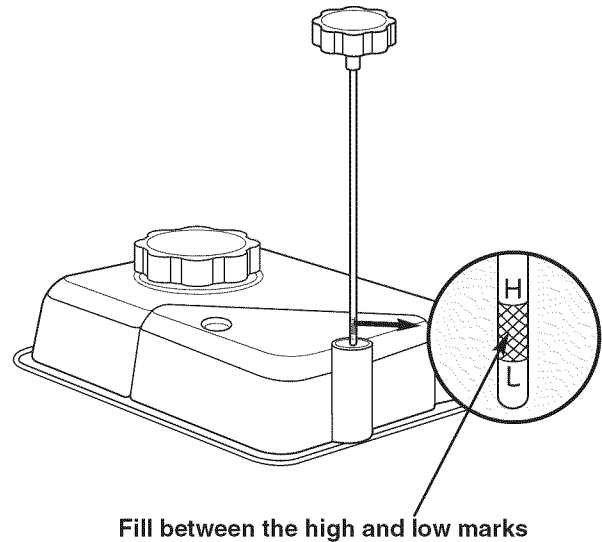


Figure 9

## Control and Features

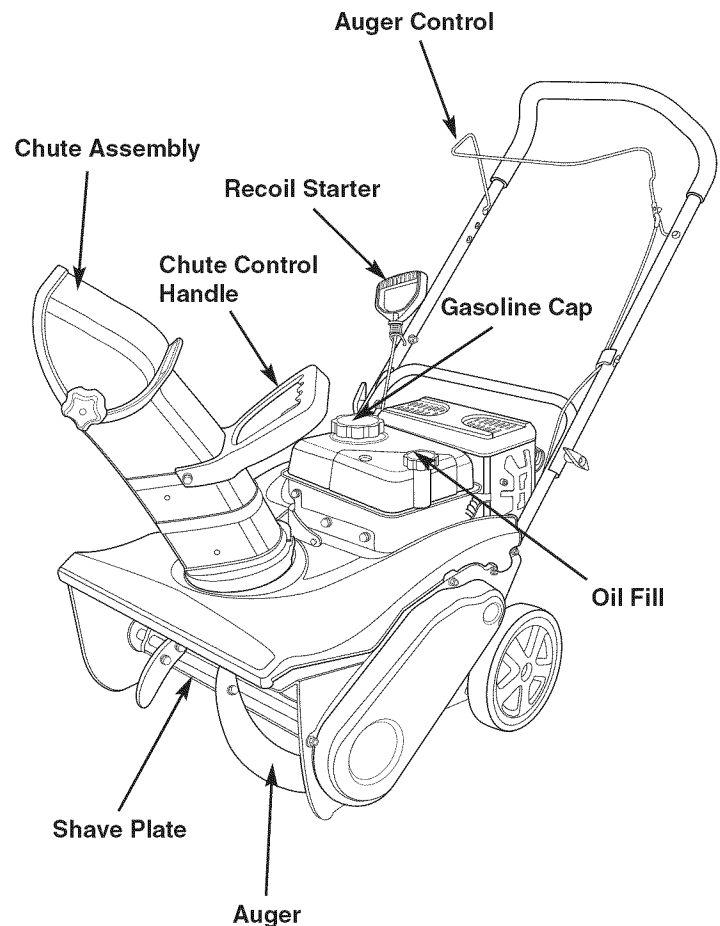
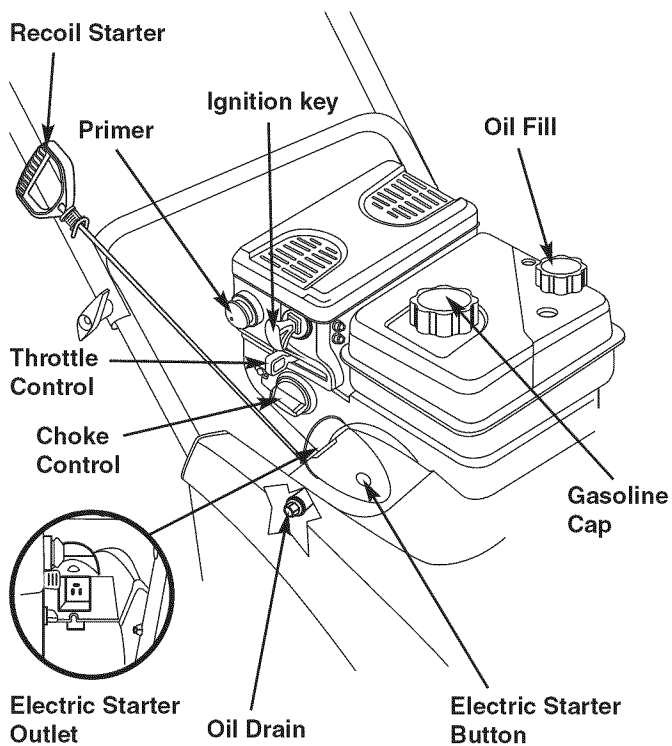


Figure 10



**Figure 11**

**Choke Control:** Moving the choke control closes the choke plate on the carburetor and assists in starting engine.

**Primer:** When pressed, forces fuel directly into engine's carburetor to aid in coldweather starting.

**Ignition/Safety Key:** The ignition key must be fully inserted in order for the engine to start. The ignition key is safety device and should be removed when the snow thrower is not in use.

**Note:** Do not turn the ignition key/safety key in an attempt to start the engine. Doing so may cause it to break.

**Throttle:** Regulates engine speed and will shut the engine OFF when moved into the STOP position.

**Recoil Starter:** Used to manually start the engine.

**Gasoline Cap:** Protect fuel from dirt and debris. Remove to add fuel.

**Auger:** When engaged draws snow into the auger housing and throws it out the discharge chute.

**Auger Control:** Used to engage and disengage the drive to the auger.

**Chute Assembly:** Controls the direction and pitch of the discharged snow.

**Shave Plate:** The shave plate maintains contact with the pavement as the snow thrower is propelled, allowing snow close to the pavement's surface to be discharged.

**Electric Starter Outlet:** The electric starter outlet requires the use of a three-prong outdoor extension cord and a 120V power source / wall outlet.

**Electric Starter Button:** Pressing the electric starter button engages the engine's electric starter when plugged into a 120V power source.

## Operation

### ⚠ WARNING

Review all safety warnings in this manual and labels on the machine before initiating operation. Failure to do so may result in serious injury or death. (see Safety section).

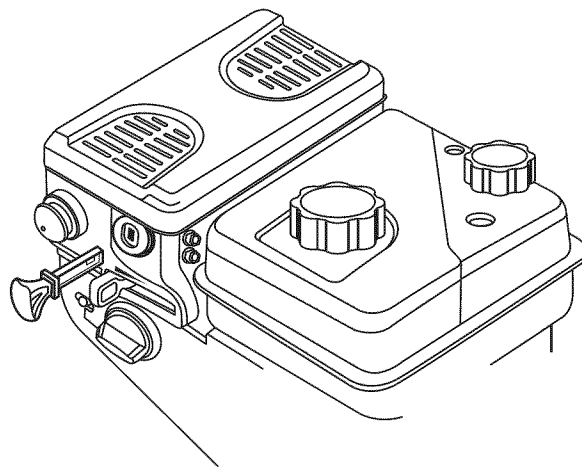
**Important!** Allow the engine to warm up for a few minutes after starting. The engine will not develop full power until it reaches operating temperature.

## Starting the Engine

Determine if your home wiring is a three-wire grounded system. If you are unsure have a licensed electrician check. **Do not** use the electric starter if your house does not have the proper wiring! See "Recoil Starter" for manual starting instructions. If your house is properly wired follow the steps in "Electric Starter".

### Electric Starter (Not all models)

1. Insert the ignition key/safety key completely until it snaps into place.



**Figure 12**

2. Connect the three-prong outdoor extension cord to Electric Starter Outlet on engine. Plug the other end of the cord into a three-hole, grounded 120 volt AC receptacle.

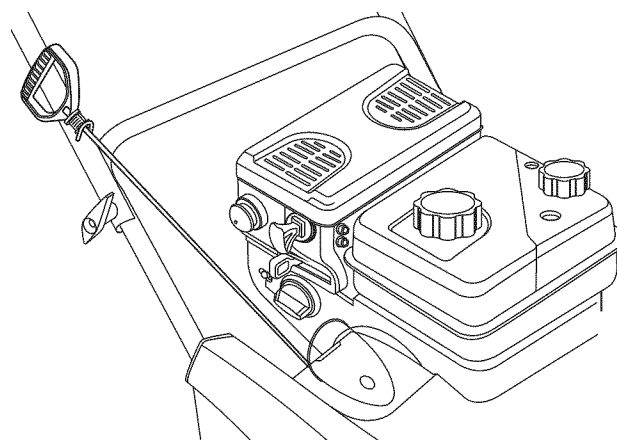
3. Move the Throttle Control to the FAST (rabbit) position.
4. Move Choke Control on the engine to the CHOKE position (cold engine start). If the engine is warm, move the lever to the RUN position.
5. Push Primer three (3) times, making sure to cover vent hole when pushing. If the engine is warm, push the primer only once. Always cover the vent hole when pushing. Cool weather may require priming to be repeated.
6. Push Electric Starter Button on the Electric Starter Outlet to start the engine. Immediately release the button once the engine starts. Continuing to press may damage the electric starter. The electric starter is equipped with thermal overload protection; the system will temporarily shut-down to allow starter to cool if electric starter becomes overloaded.
7. As engine warms, slowly move Choke Control to the RUN position. If the engine falters, restart the engine and run with the Choke Control at half-choke position for a short period of time, and then slowly rotate the choke into the RUN position.
8. After the engine is running, disconnect the power cord from the electric starter. When disconnecting the power cord, always unplug from the three-prong receptacle first and then from the snow thrower.

## Recoil Starter

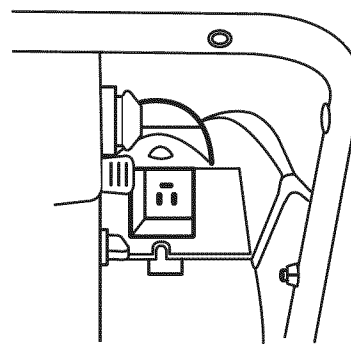
### ⚠ CAUTION

Pulling the Recoil Starter Handle while the engine is running may cause personal injury or damage to the machine. **Do not** pull the Recoil Starter Handle when the engine is running.

1. Insert the ignition key/safety key completely until it snaps into place.
2. Move the Throttle Control to the FAST (rabbit) position.
3. Move Choke Control on the engine to the CHOKE position (cold engine start). If the engine is warm, move the lever to the RUN position.
4. Push Primer three (3) times, making sure to cover vent hole when pushing. If the engine is warm, push the primer only once. Always cover the vent hole when pushing. Cool weather may require priming to be repeated.
5. Pull gently on the starter handle until it begins to resist, then pull quickly and forcefully to overcome the compression. Do not release the handle and allow it to snap back. Return the rope SLOWLY to the original position. If required, repeat this step.
6. As engine warms, slowly move Choke Control to the RUN position. If the engine falters, restart the engine and run with the Choke Control at half-choke position for a short period of time, and then slowly rotate the choke into the RUN position.



**Figure 13**  
Recoil Start



**Figure 14**  
Electric Start

## Engaging the Drive

Lift up slightly on the handle to allow the rubber paddles on the auger to contact the pavement and propel the snow thrower forward. Pushing downward on the handle will raise the augers off the ground and stop the forward motion.

**Note:** Excessive upward pressure on the handle will result in premature wear on the rubber auger blades and is not covered by the warranty.

## Engaging the Augers

To engage the augers and start throwing snow, squeeze the Auger Control against the handle. Release to stop the augers.

## Stopping the Engine

1. Run the engine for a few minutes before stopping to help dry off any moisture on the engine.
2. Move the Throttle Control to the STOP position.
3. Remove the Ignition Key. Removing the key will reduce the possibility of unauthorized starting of the engine while the equipment is not in use. Keep the key in a safe place. The engine cannot start without the ignition key.
4. Wipe any moisture away from the controls on the engine.

# Maintenance

## Lubrication

Lubricate the pivot points on the control handle and the extension spring at the end of the control cable with a light oil once every season and before the snow thrower is put into storage at the end of the season.

## Engine

### ⚠ WARNING

Unexpected start up may cause personal injury. Before servicing, repairing or inspecting the snow thrower, disengage the Auger Control. Stop the engine and remove the Ignition Key/Safety Lock.

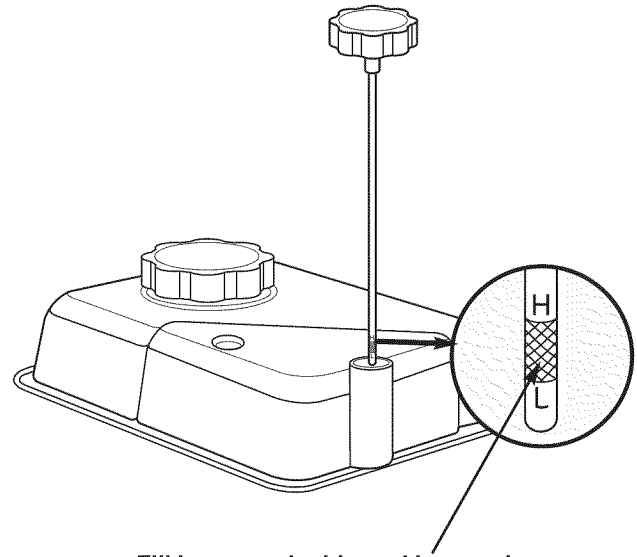
Periodic inspection and adjustment of the engine is necessary to maintain high level performance. Regular maintenance will also ensure a longer service life. The required service intervals and the type of maintenance to be performed are described in the table below. Follow the hourly or calendar intervals, whichever occur first. More frequent service is required when operating in adverse conditions.

### Engine Maintenance Schedule

Taks	First 5 Hrs.	Each Use or Every 5 Hrs.	Each Season or 25 Hrs.	Each Season or 50 Hrs.	Each Season or 100 Hrs.	Service Dates
Check engine oil		●				
Change engine oil	●			●		
Check spark plug			●			
Service spark plug					●	
Clean exhaust area		●				

## Checking the Engine Oil

To check the engine oil:



Fill between the hig and low marks

Figure 15

1. Remove the oil filler cap/dipstick and wipe the dipstick clean.
2. Insert the cap/dipstick into the oil filler neck, but DO NOT screw it in.
3. Remove the oil filler cap/dipstick. If the level is low, slowly add oil until oil registers between high and low (see “Changing the Engine Oil”).

## Changing the Engine Oil

### ⚠ CAUTION

**Do not** use non-detergent oil or 2-stroke engine oil. Doing so may shorten the engine’s service life. **Do not** overfill. Overfilling the engine with oil may result in the engine smoking, hard starting or spark plug fouling.

Refer to the “Engine Maintenance Schedule” table for service intervals. When changing, or adding oil to the engine refer to the viscosity chart below. Engine oil capacity is 600ml (approx. 20 oz.). Do not over-fill. Use a 4-stroke, SAE 5W30, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer’s requirements for service classification SG, SF. Motor oils classified SG, SF will show this designation on the container.

# Maintenance and Adjustments

## ⚠ WARNING

Unexpected auger movement may cause personal injury. Before servicing, repairing or inspecting the snow thrower, disengage the Auger Control. Stop the engine and remove the Ignition Key/Safety to prevent unintended start up.

## Adjustments

### Shave Plate

To check the adjustment of the shave plate, place the machine on a level surface. The wheels, shave plate and augers should all contact the level surface. If the shave plate is adjusted too high, snow may blow under the housing. If the shave plate wears out excessively, or the snow thrower does not self-propel, the shave plate may be too low and needs to be adjusted.

**Note:** On new snow throwers or machines with a new shave plate installed, the augers may be slightly off the ground.

To adjust the shave plate:

1. Drain the gas from the snow thrower.
2. Pull the Recoil Starter Handle until resistance is felt.
3. Tip the snow thrower back so that it rests on the handle.
4. Loosen the four lock nuts and bolts that secure the shave plate to the housing. Move the shave plate to the desired position and retighten the nuts and bolts securely (see Fig. 16).

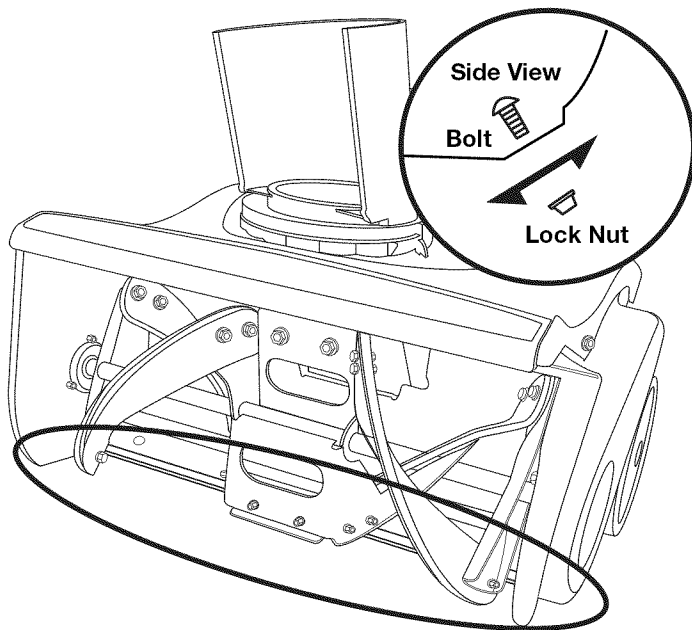


Figure 16

5. Tip the snow thrower into the operating position and pull the Recoil Starter Handle to test if it is difficult to pull. If it is difficult to pull then remove the spark plug, pull the handle several times to ensure trapped oil in the Head is removed.
6. Inspect the spark plug. If it is wet, clean off any oil and re-install.

## Control Cable

Wear causes stretching on both the Control Cable and Auger Drive Belt, periodic adjustments may be necessary. If the auger seems to hesitate when rotating, proceed as follows:

The upper hole in the control handle provides for an adjustment in cable tension. To adjust, disconnect the end of control cable from the bottom hole in the control handle and reinsert it in the upper hole. Insert the cable from the outside (see Fig.17).

Test the snow thrower to see if there is a noticeable difference. If after the adjustment to the control cable the auger still hesitates when rotating, see the "Replacing the Belt" for instructions on replacing the belt.

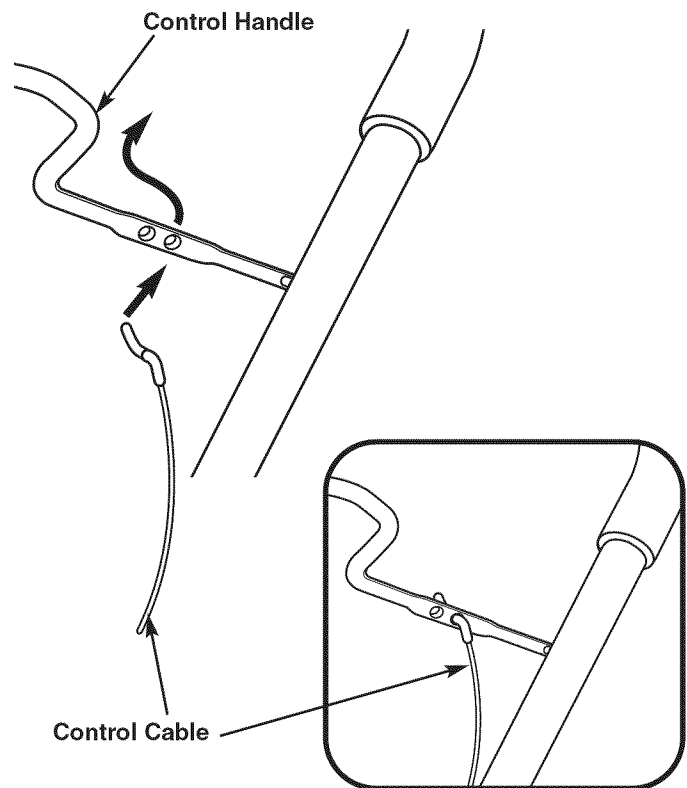
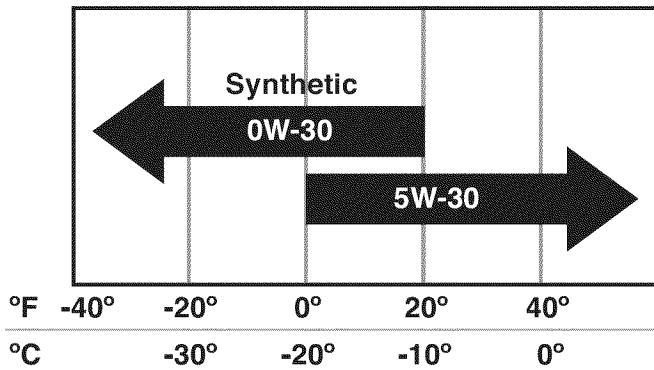
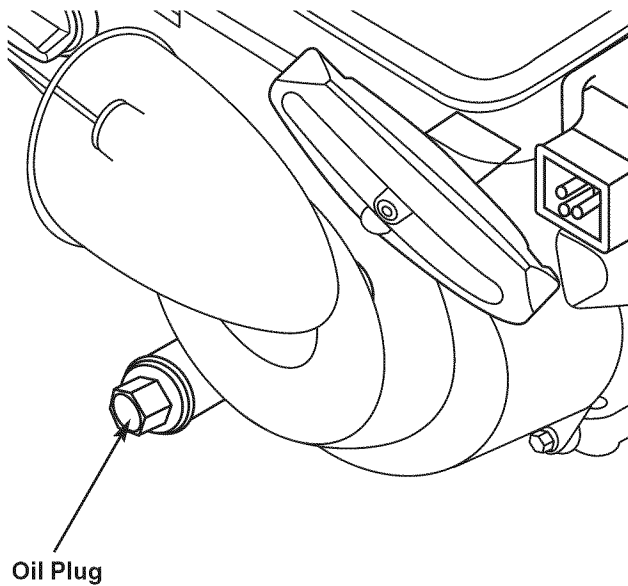


Figure 17



**To change the engine oil:**

1. Drain fuel from the tank by running the engine until the fuel tank is empty. Be sure the fuel cap is secure.
2. Place a suitable oil collection container under the oil drain plug.
3. Remove the oil drain plug.



**Figure 18**

4. Tip the engine to drain oil into the container. Used oil must be disposed of at a proper collection center.
5. Reinstall the drain plug and tighten it securely.
6. Refill with the recommended oil and check oil level. See section "Assembly: Adding Oil" for instructions.

**Important!** Always thoroughly wash your hands with soap and water as soon as possible after handling used oil. Dispose of used oil according to local, state and federal guidelines or laws.

## Replacing the Spark Plug

**⚠ WARNING**

Do not check for a spark with the spark plug removed. Do not crank the engine with the spark plug removed.

**⚠ WARNING**

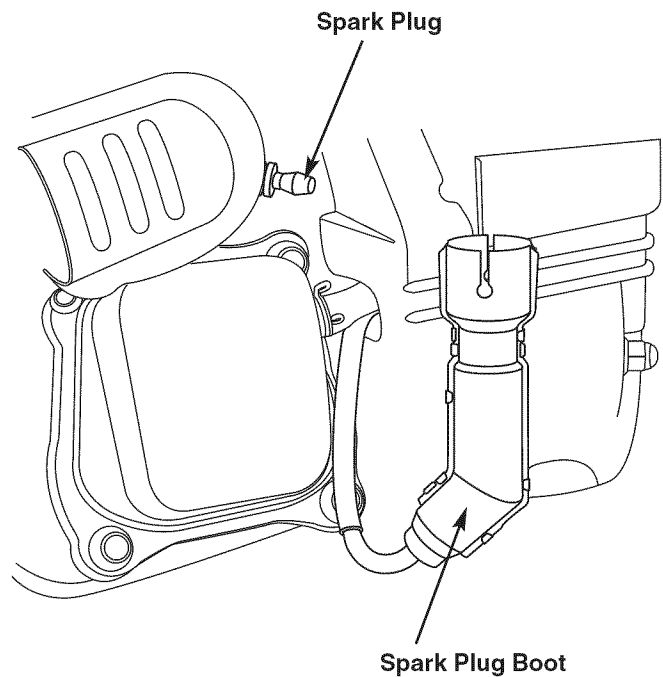
After the engine has been running the muffler is very hot and can cause burns. Allow the muffler to cool down before performing inspection or maintenance.

**⚠ CAUTION**

A loose spark plug can become very hot and can damage the engine. The spark plug must be tightened securely.

To replace the spark plug:

1. Remove the spark plug boot and use a spark plug wrench to remove the plug.



**Figure 19**

2. Visually inspect the spark plug. Discard the spark plug if there is any apparent wear, or if the insulator is cracked or chipped. Clean the spark plug with the wire brush if it is to be reused.
3. Measure the plug gap with a feeler gauge. To ensure proper engine operation, the spark plug must be properly gapped and free of deposits. Correct as necessary by bending the side electrode.

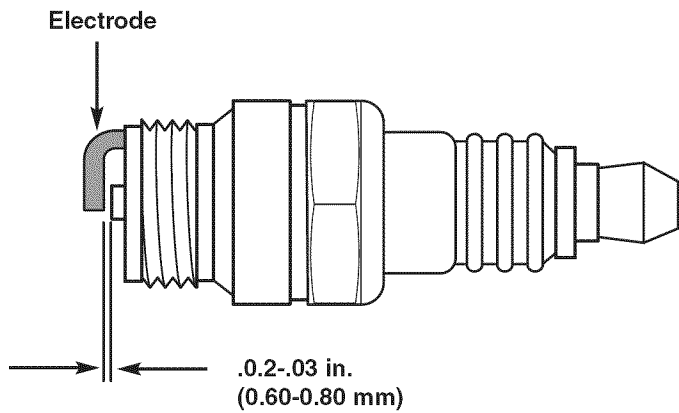


Figure 20

4. Check that the spark plug washer is in good condition and **thread the spark plug in by hand to prevent cross-threading.**
5. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

## Replacing the Belt

To replace the belt:

1. Remove the belt cover by removing the five hex screws that secure it to the frame.

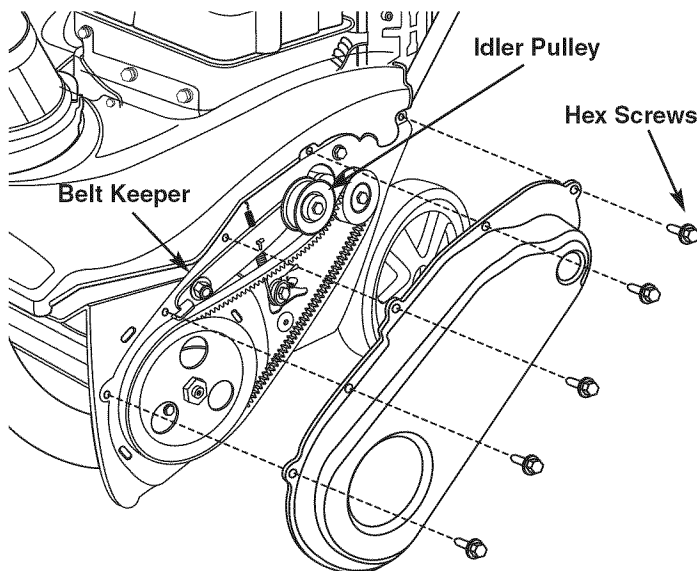


Figure 21

2. Push down on the idler pulley to release the old belt from under the belt keeper. Remove the old belt by grasping it from the bottom of the auger pulley and pulling outward.

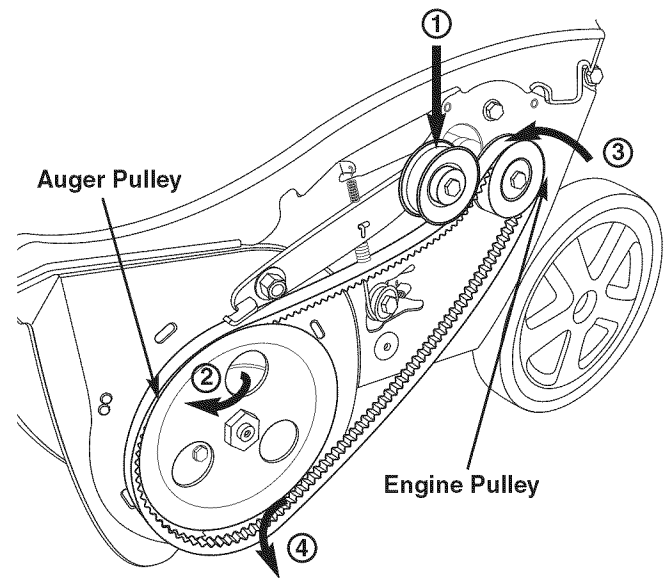


Figure 22

### Belt Off

To replace the belt follow these instructions and refer to Fig. 22:

1. Push down on the idler pulley.
2. Position the new belt on top of the auger pulley and under the belt keeper.
3. Route the belt around the engine pulley
4. Push the belt over the bottom of the auger pulley.
5. Reinstall the belt cover.

## Replacing the Auger Paddles

### ⚠ CAUTION

Do not allow the auger's rubber paddles to wear to the point where portions of the metal auger itself can come in contact with the pavement. Doing so can result in serious damage to your snow thrower.

To replace the rubber paddles:

1. Remove the existing rubber paddles by unthreading the self-tapping screws that secure them to the auger.

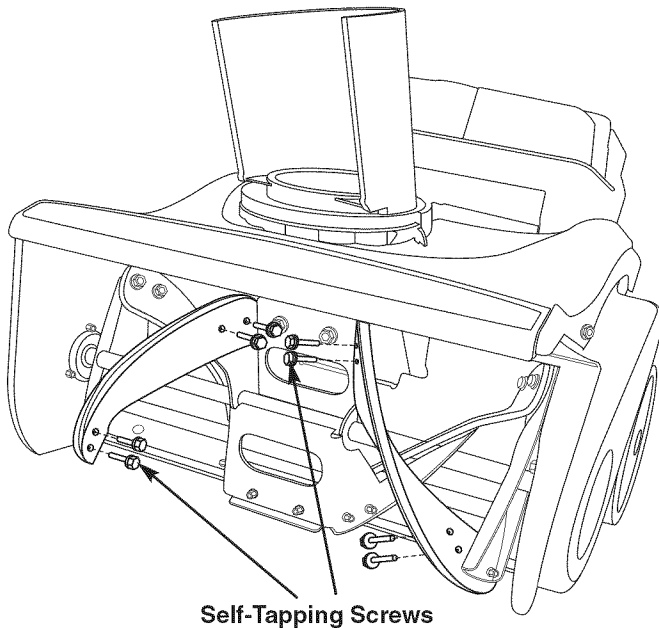


Figure 23

2. Secure the replacement rubber paddles to the auger housing.

## Storage

### Cleaning the Engine

#### ⚠ WARNING

Accumulation of debris around the muffler could cause a fire. Inspect and clean before every use.

#### ⚠ CAUTION

Do not spray the engine with water to clean it because the water could contaminate the fuel. Using a garden hose or pressure washing equipment can also force water into the muffler opening. Water that passes through the muffler can enter the cylinder and cause damage.

If the engine has been running, allow it to cool for at least half an hour before cleaning.

Periodically remove dirt build-up from engine.

### Off-Season Storage

Engines stored over 30 days need to be **drained of fuel** to prevent deterioration and gum from forming in the fuel system or on essential carburetor parts. If the gasoline in your engine deteriorates during storage, you may need to have the carburetor, and other fuel system components, serviced or replaced.

If the snow thrower will not be used for 30 days or longer, follow these instructions:

1. Remove all fuel from the tank by running the engine until it stops.
2. Change the engine oil.
3. Remove the spark plug and pour approximately 1 oz. (30ml) of clean engine oil into the cylinder. Pull the Recoil Starter several times to distribute the oil, and reinstall the spark plug.
4. Clean debris from around the engine and behind the muffler. Apply a light film of oil on any areas that are susceptible to rust.
5. Store in a clean, dry, well ventilated area away from any appliance that operates with a flame or pilot light, such as a furnace, water heater or clothes dryer. Avoid any area with a spark producing electric motor, or where power tools are operated.
6. If possible, avoid storage areas with high humidity.
7. Keep the engine level in storage. Tilting the engine can cause fuel or oil leakage.


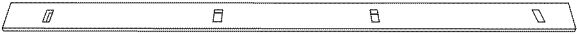
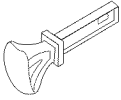
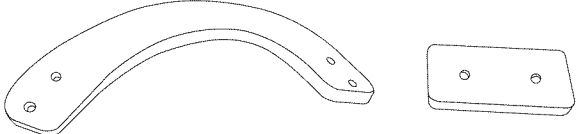
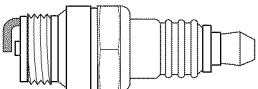

# Troubleshooting

Problem	Cause	Remedy
Engine fails to start	<ol style="list-style-type: none"> <li>1. Fuel tank empty, or stale fuel</li> <li>2. Blocked fuel line</li> <li>3. Key not inserted all the way.</li> <li>4. Spark plug wire disconnected.</li> <li>5. Faulty spark plug</li> <li>6. Primer button not being used properly.</li> <li>7. Engine flooded from excessive priming.</li> <li>8. Throttle may be in the STOP position.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill tank with clean, fresh gasoline. Fuel becomes stale after thirty days.</li> <li>2. Clean the fuel line.</li> <li>3. Insert key all the way.</li> <li>4. Connect spark plug wire.</li> <li>5. Clean spark plug, readjust gap or replace.</li> <li>6. Prime engine five to seven times.</li> <li>7. Wait at least ten minutes before starting.</li> <li>8. Move the throttle to the RUN position.</li> </ol>
Engine runs erratic	<ol style="list-style-type: none"> <li>1. Unit running on CHOKE</li> <li>2. Blocked fuel line or stale fuel</li> <li>3. Water or dirt in the fuel system</li> <li>4. Carburetor out of adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1. Move the Choke Control to RUN.</li> <li>2. Clean the fuel line; fill the tank with clean fresh gasoline.</li> <li>3. Drain the fuel tank and carburetor. Refill with fresh fuel.</li> <li>4. Contact an authorized Service Center.</li> </ol>
Loss of power	<ol style="list-style-type: none"> <li>1. Spark plug wire loose</li> <li>2. Gas cap vent hole plugged</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect and tighten spark plug wire.</li> <li>2. Remove ice and snow from gas cap. Be certain vent hole is clear.</li> </ol>
Engine Overheats	<ol style="list-style-type: none"> <li>1. Carburetor out of adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact an authorized Service Center.</li> </ol>
Loss of power	<ol style="list-style-type: none"> <li>1. Spark plug wire loose.</li> <li>2. Vent in gas cap plugged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Firmly connect spark plug wire.</li> <li>2. Clear vent.</li> </ol>

# Troubleshooting

Problem	Cause	Remedy
Excessive vibration	1. Loose parts or damaged auger.	1. Stop the engine immediately and disconnect the spark plug wire. Tighten all bolts and nuts. If vibration continues, have the unit serviced by an authorized service dealer.
Unit fails to propel itself	1. Auger control cable out of adjustment. 2. Drive belt loose or damaged.	1. Adjust auger control cable. Refer to Maintenance and Adjustments Section. 2. Replace drive belt. Refer to the Maintenance and Adjustments section.
Augers continue to rotate	1. Auger control cable out of adjustment.	1. Adjust auger control cable as shown in Maintenance and Adjustments section.
Unit fails to discharge snow	1. Chute assembly clogged. 2. Foreign object lodged in auger. 3. Auger control cable in need of adjustment.	1. Stop engine and disconnect spark plug wire. Clean chute and inside of auger housing with clean-out tool or a stick. 2. Stop engine immediately and disconnect spark plug wire. Remove object from auger. 3. Adjust auger control cable. Refer to Maintenance and Adjustments section.

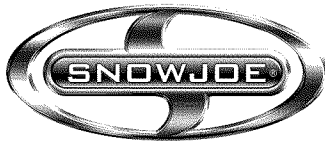
# Replacement Parts

Component	Part Number and Description
	SJ800-001 V Belt
	SJ800-002 Scrapper Blade 21"
	SJ800-003 Key
	SJ800-004 Auger Blade SJ800-005 Rubber Paddle SJ800-006 Replacement Kit (includes 4 crescents, 2 paddles and hardware)
	SJ800-007 Spark Plug
	SJ800-008 Auger Cable

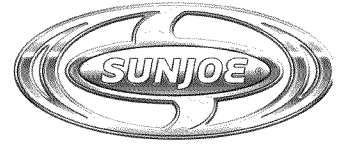
Please call our customer service team for assistance at **866-766-9563 (866-SNOW-JOE)**  
 Or visit **www.snowjoe.com** and click on **'Customer Service'**.

Our service representatives and technicians will be happy to assist you with any questions you may have. Our office hours are 9am to 5:30 pm Eastern Time. Thank you for choosing our products!





## A Two-Year Full Warranty for residential use in the United States and Canada



### General Conditions:

Snow Joe, LLC warrants this product to the original purchaser for two years against defects in material or workmanship when used for normal residential purposes. Snow Joe, LLC will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations, and exclusions set forth herein. Such repair or parts replacement will be free of charge to the original purchaser except noted below.

The duration of the warranty applies only if the product is put to personal use around the household or residence. If the product is put to any business use, commercial or industrial, then the duration of this warranty is 90 days from the date of original purchase. If any product is rented or leased, the duration of the warranty is 90 days from the date of original purchase.

It is the owner's responsibility to perform correctly all maintenance and minor adjustments explained in the owner's manual.

### Electric Products:

In order to obtain a replacement electric powered unit or repair the existing electric powered unit, you must return the complete unit, postage prepaid, to the **Snow Joe Center, 86 Executive Avenue, Edison, NJ 08817**

### Gasoline / Battery Products:

#### Limitations

- Batteries are warranted only for the period of 12 months after the date of purchase on a prorated basis. Rechargeable batteries will be replaced free of charge during the first 90 days. After the initial 90 days, batteries will be replaced at prorated cost to the customer
- Idlers, cables, and electrical components are warranted to the original purchaser for use at household or residence for a period of two years

#### Exclusions

- Snow Joe Brand Engines are covered under this warranty. All other engines and engine accessories are covered only by the engine manufacturer's warranty and are not covered by this warranty
- Parts used that are not genuine Snow Joe parts are not covered by this warranty
- Damages resulting from misuse, alteration, improper assembly, improper adjustment, neglect, or accident which requires repair is not covered under this warranty

Snow Joe, LLC may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating Snow Joe, LLC to incorporate such design changes into previously manufactured products, nor shall such changes be construed as an admission that previous designs were defective.

This warranty is intended to cover product defects only. Snow Joe, LLC is not liable for indirect, incidental or consequential damages in connection with the use of the Snow Joe Products covered by this warranty. This warranty does not cover any cost or expense incurred by the purchaser in providing substitute equipment or service during reasonable periods of malfunction or non-use of this product, while waiting for completion of repairs under this warranty. Some states do not allow exclusions of incidental or consequential damages, so the above exclusions may not apply in all states. This warranty gives you specific legal rights in your state, which vary from state to state.

**If you wish to contact Snow Joe, please direct inquiries to the:**

**Customer Service Department  
Snow Joe Center  
86 Executive Avenue  
Edison, NJ 08817**

Customers who have purchased Snow Joe products exported from the United States and Canada should contact their Snow Joe Distributor (Dealer) to obtain information applicable for your country, province, or state. If for any reason, you are not satisfied with the distributor's service, or if you have difficulty obtaining warranty information, contact your Snow Joe importer. If in the event your efforts are unsatisfactory, please write to the Snow Joe Center at the above address.

If you have any questions about your product warranty, please call 1-866-SNOW-JOE or visit us online at [www.snowjoe.com](http://www.snowjoe.com).