HONDA

Power
Equipment

Owner's Manual
SNOWTHROWER
HS621

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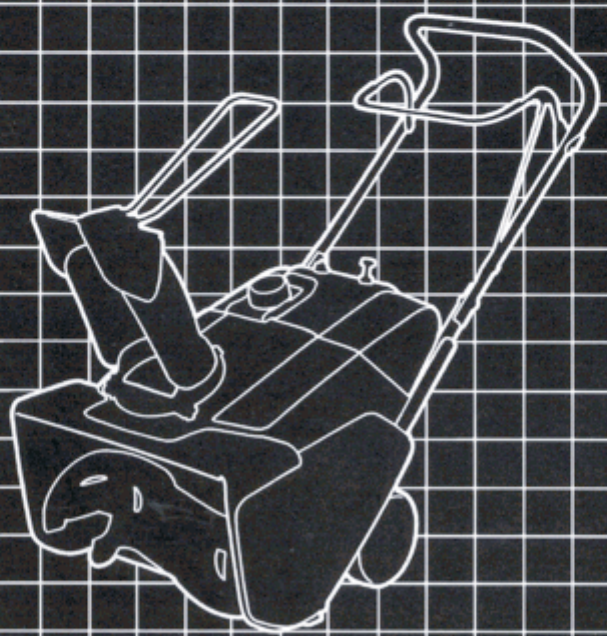


⚠ WARNING: ⚠

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Thank you for purchasing a Honda snowthrower. We want to help you get the best results from your new snowthrower and to operate it safely. This manual contains the information on how to do that; please read it carefully.
This owner's manual describes the operation and maintenance of Honda HS621 snowthrower.

All information in this publication is based on the latest product information available at the time of printing.
Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

This manual should be considered a permanent part of the snowthrower and should remain with it if it is resold.

Safety Messages
Your safety and the safety of others is very important. We have provided important safety messages in this manual and on the snowthrower. Please read these messages carefully.

A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol ⚠ and one of three words: DANGER, WARNING, or CAUTION.

These mean:

⚠DANGER You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠WARNING You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠CAUTION You CAN be HURT if you don't follow instructions.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

Damage Prevention Messages
You will also see other important messages that are preceded by the word NOTICE.

This word means:

NOTICE Your snowthrower or other property could be damaged if you don't follow instructions.

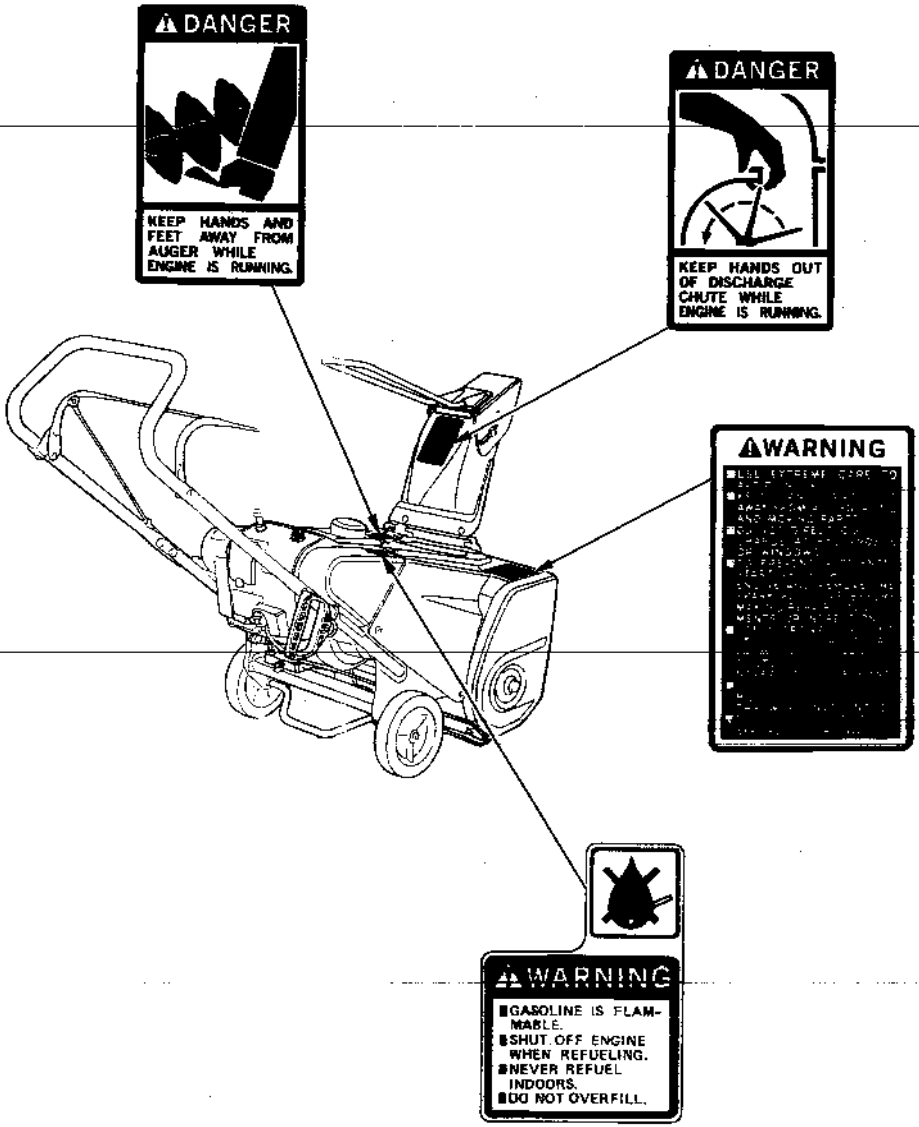
The purpose of these messages is to help prevent damage to your snowthrower, other property, or the environment.

CONTENTS

SAFETY LABEL LOCATIONS

These labels warn you of potential hazards that can cause serious injury. Read them carefully.

If a label comes off or becomes hard to read, contact your Honda snowthrower dealer for a replacement.



SAFETY INFORMATION

Most accidents with snowthrowers can be prevented if you follow all instructions in this manual and on the snowthrower. The most common hazards are discussed below, along with the best way to protect yourself and others.

- **Always make a pre-operation check (pages 11 thru 14) before you start the engine. You may prevent an accident or equipment damage.**

- **Honda snowthrowers are designed to give safe and dependable service if operated according to instructions. Read and understand this Owner's Manual before operating the snowthrower. Failure to do so could result in personal injury or equipment damage.**

- **Before operating the snowthrower, inspect the area in which you are going to clear snow. Remove debris and other obstacles the snowthrower might strike or throw, as that may cause injury or damage to the snowthrower.**

- **Inspect the snowthrower before operating it. Repair any damage and correct any malfunction before operation. If you hit an obstacle while operating the snowthrower, stop the engine immediately, and check for damage. Damaged equipment may increase the possibility of injury during operation.**

- **Do not use the snowthrower when visibility is poor. Under conditions of poor visibility, there is a greater risk of striking an obstacle or causing injury.**

- **Never use the snowthrower to clear snow from a gravel road or driveway, as rocks may be picked up and ejected. They may cause injury to bystanders.**

- Adjust the snow discharge chute to avoid hitting the operator, bystanders, windows, and other objects with ejected snow. Stay clear of the snow discharge chute while the engine is running.

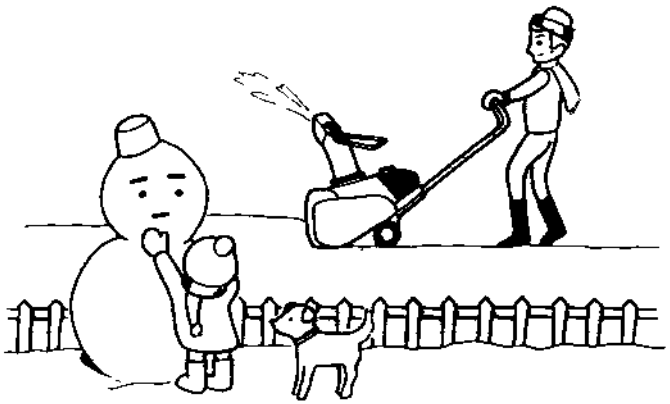
- Children and pets must be kept away from the area of operation to avoid injury from flying debris and contact with the snowthrower.

- To avoid overturning, be careful when changing the direction of the snowthrower while operating it on a slope. Do not use the snowthrower to remove snow from roofs. The snowthrower may overturn on steep slopes if left unattended, causing injury to the operator or bystanders.

- Know how to stop the snowthrower quickly, and understand the operation of all controls.

- Never permit anyone to operate the snowthrower without proper instruction. If people or pets suddenly appear in front of the snowthrower while it is in operation, immediately release the auger and drive clutch levers to stop the snowthrower and avoid possible injury from rotating auger blades.

- If the snow discharge chute becomes clogged, stop the engine and use a wooden stick to unclog it. Never put your hand into the snow discharge chute while the engine is running; serious personal injury could result.



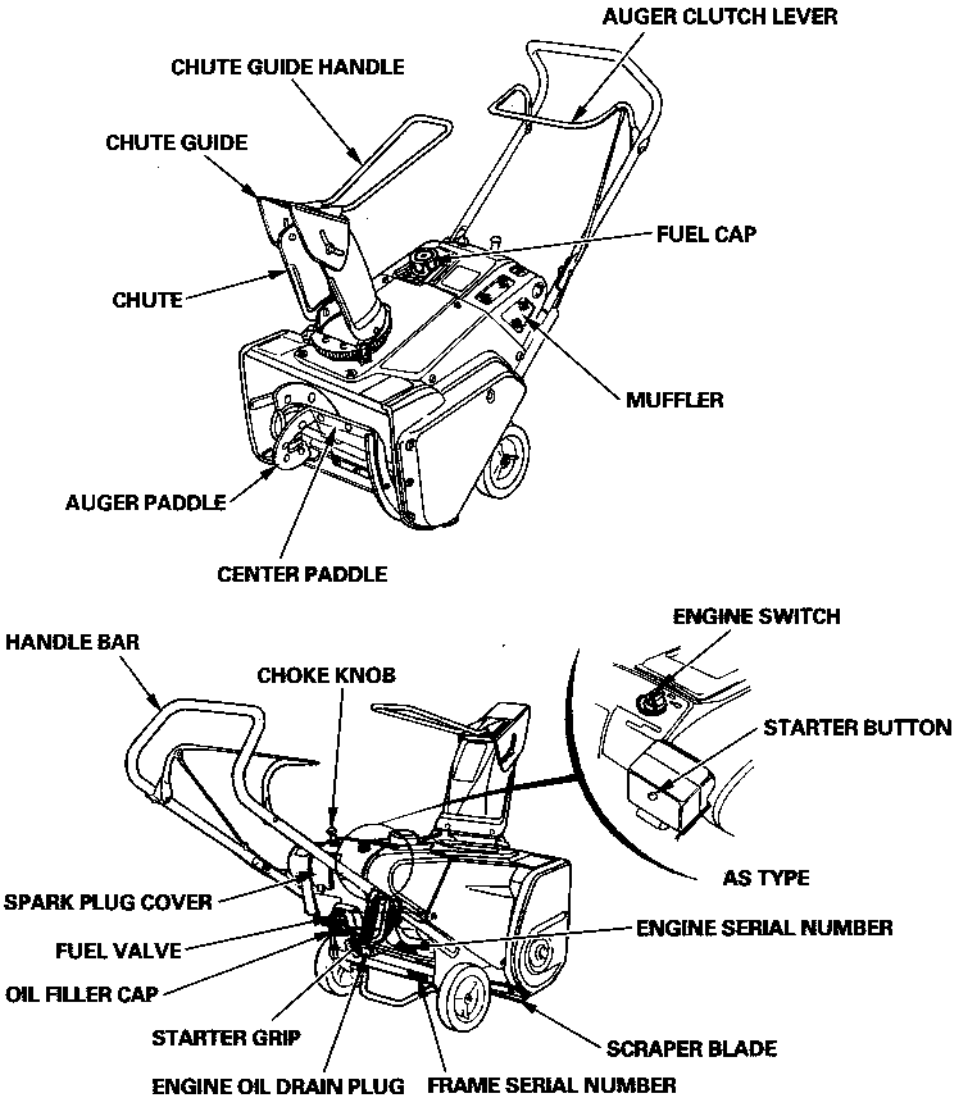
- **Gasoline is extremely flammable and is explosive under certain conditions.**
  Do not smoke or allow flames or sparks where the snowthrower is refueled or where gasoline is stored. Allow the engine to cool down before refueling.

  Refuel in a well-ventilated area with the engine stopped. Do not overfill the fuel tank, and make sure the filler cap is closed securely after refueling.

- **Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.**

- **The muffler becomes very hot during operation, and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the snowthrower indoors.**

- **While operating the snowthrower, hold the handle firmly, and walk, don't run. Wear suitable winter boots that resist slipping.**



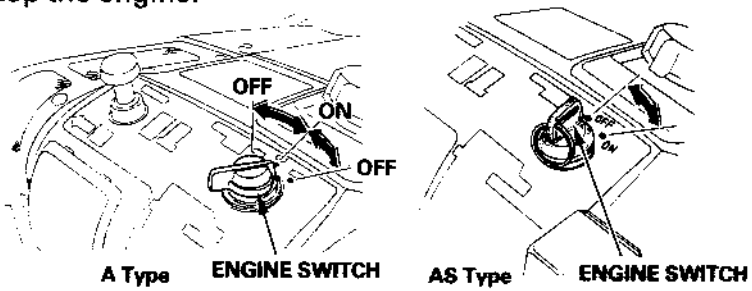
Record the frame and engine serial numbers for your reference. Refer to the serial numbers when ordering parts, and when making technical or warranty inquiries (see page 46).

Frame serial number:_____

Engine serial number:_____

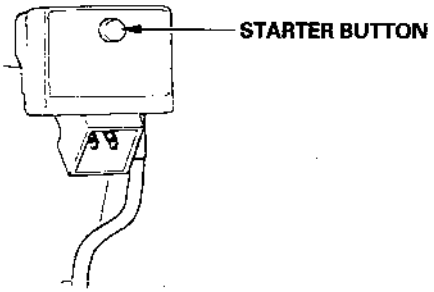
Engine Switch

Use the engine switch to turn the ignition system ON for starting and OFF to stop the engine.



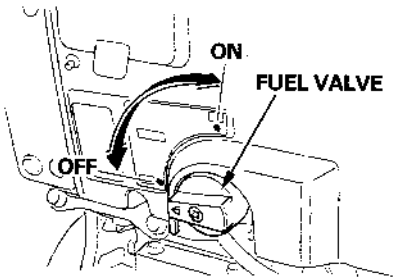
AC Starter Button (AS type)

Push the starter button to operate the electric starter.



Fuel Valve

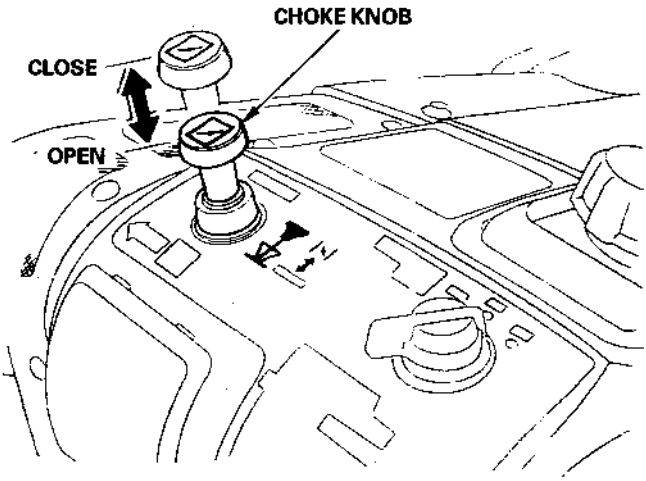
The fuel valve opens and closes the fuel line leading from the fuel tank to the carburetor. Make sure that the valve is positioned exactly at either the ON or OFF position. When the snowthrower is not in use, always leave the fuel valve in the OFF position to reduce the possibility of fuel leakage.



If the snowthrower is to be transported from one location to another, be sure to turn the fuel valve to the OFF position. This will prevent carburetor flooding and reduce the possibility of fuel leakage.

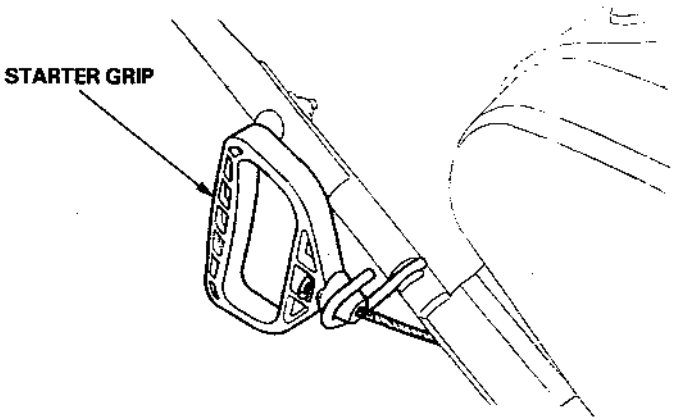
Choke Knob

Close the choke when the engine is cold or difficult to start.



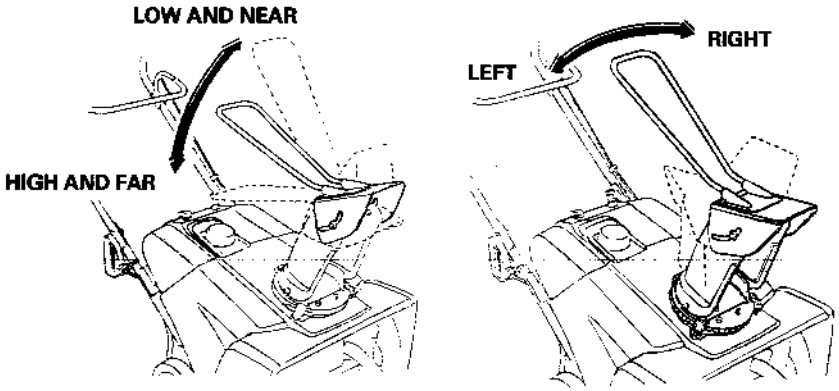
Starter Grip

Pull this grip to start the engine.
See page 15 for starting procedures.



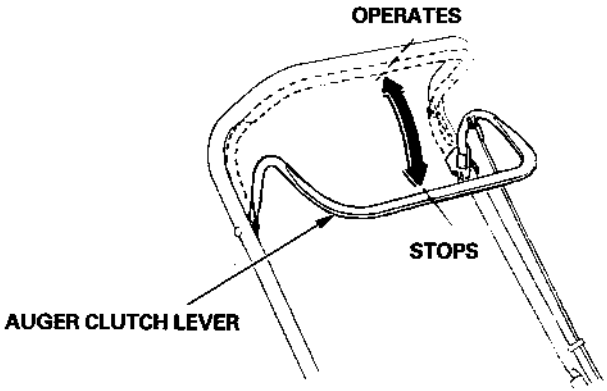
Chute Guide Handle

The chute guide controls the snow discharge angle and direction.



Auger Clutch Lever

When the clutch lever is squeezed, the snowthrowing mechanism is put into operation, and the snowthrower moves forward.



NOTE:
Never squeeze the auger clutch on cleared ground; the snowthrower will start suddenly.

Fuel

Refueling

Fuel tank capacity: 1.25 ℓ (0.330 US gal , 0.275 Imp gal)

Refill the tank if the fuel level is low.

⚠WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- **Stop the engine and keep heat, sparks, and flames away.**
- **Handle fuel only outdoors.**
- **Wipe up spills immediately.**

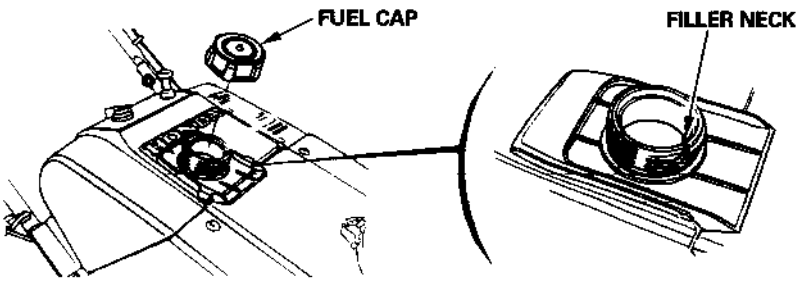
Refuel in a well-ventilated area before starting the engine. If the engine has been running, allow it to cool. Refuel carefully to avoid spilling fuel. Do not overfill: there should be no fuel in the filler neck. After refueling, tighten the fuel tank cap securely.

Never refuel the snowthrower inside a building where gasoline fumes may reach flames or sparks. Keep gasoline away from appliance pilot lights, barbeques, electric appliances, power tools, etc.

Spilled fuel is not only a fire hazard, it causes environmental damage. Wipe up spills immediately.

NOTICE

Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilled fuel is not covered under warranty.



Fuel Recommendations

Use unleaded gasoline with a pump octane rating of 86 or higher.

This engine is certified to operate on unleaded gasoline. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

Occasionally you may hear a light "spark knock" or "pinging" (metallic rapping noise) while operating under heavy loads. This is no cause for concern.

If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of gasoline. If spark knock or pinging persists, see an authorized Honda servicing dealer.

NOTICE

Running the engine with persistent spark knock or pinging can cause engine damage.

Running the engine with persistent spark knock or pinging is misuse, and the Distributor's Limited Warranty does not cover parts damaged by misuse.

Oxygenated Fuels

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions.

If you use an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

Before using an oxygenated fuel, try to confirm the fuel's contents. Some states/provinces require this information to be posted on the pump.

The following are the EPA-approved percentages of oxygenates:

ETHANOL — (ethyl or grain alcohol) 10% by volume
You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name "Gasohol".

MTBE — (Methyl Tertiary Butyl Ether) 15% by volume
You may use gasoline containing up to 15% MTBE by volume.

METHANOL — (methyl or wood alcohol) 5% by volume
You may use gasoline containing up to 5% methanol by volume, as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

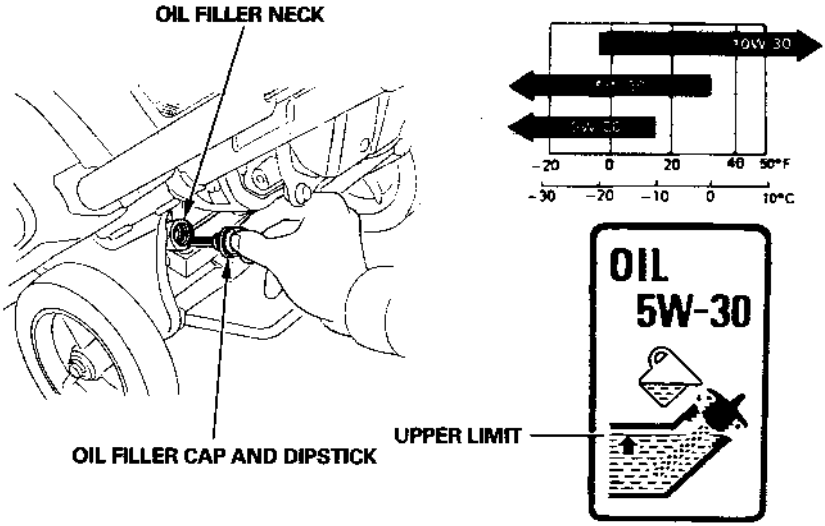
If you notice any undesirable operating symptoms, try another service station, or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under warranty.

Engine Oil

Inspection:
With the snowthrower on a level surface, remove the oil filler cap and wipe the dipstick clean. Insert the dipstick into the filler neck, but do not screw it in. Remove the dipstick and check the oil level.

If the level is low, fill to the top of the oil filler neck with the recommended oil.



Oil capacity: 0.60 ℓ (0.63 US qt , 0.53 Imp qt)

Recommended oil
Use 4-stroke motor oil that meets or exceeds the requirements for API service classification SF or SG. Always check the API SERVICE label on the oil container to be sure it includes the letters SF or SG.

SAE 5W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

NOTICE

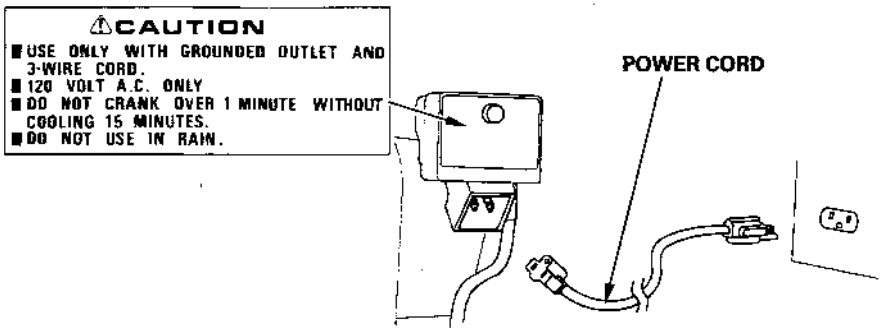
- **Using nondetergent oil can shorten the engine's service life, and using 2-stroke oil can damage the engine.**

- **Running the engine with a low oil level can cause engine damage.**

⚠WARNING

Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.

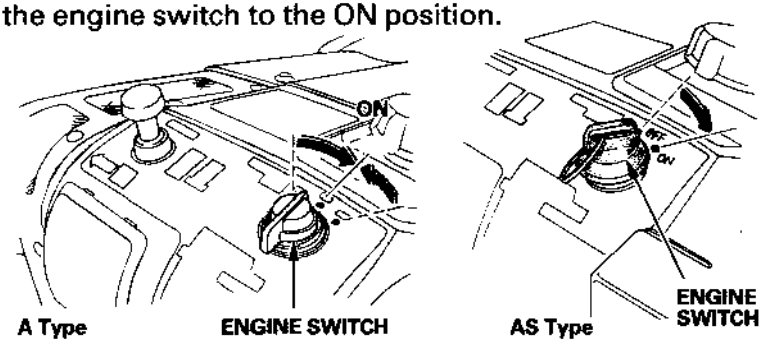
1. Connect your power cord to the switch box and the male end of the power cord to a properly grounded 120 Volt ac outlet. (AS Type)



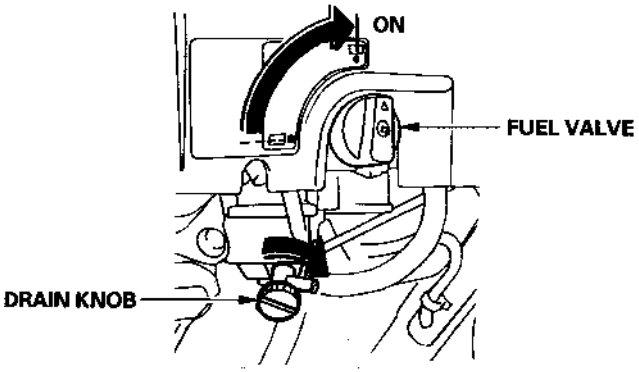
⚠WARNING

- **To minimize the possibility of potentially dangerous electrical shocks, always use a 3-conductor power cord with a power rating of no less than 15 amps. Also, be sure that the outlet you are using is properly grounded.**
- **Do not connect and disconnect the power cord with wet hands.**
- **Be sure to hold the plug when disconnecting the power cord from the electrical outlet or switch box. Do not disconnect by pulling on the power cord.**

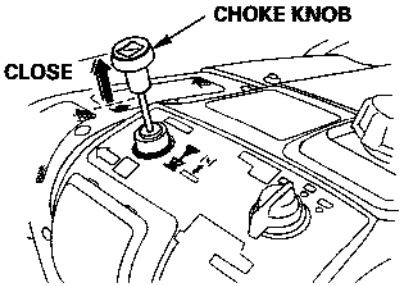
2. Turn the engine switch to the ON position.



2. Turn the fuel valve to the ON position.
Be sure that the drain knob is tightened securely.



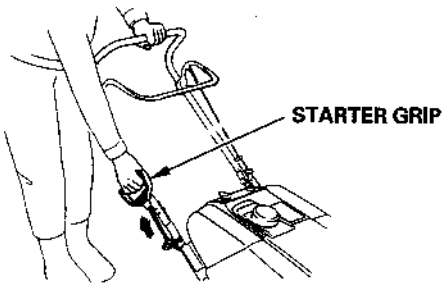
3. In cold weather and when the engine is cold, move the choke to the CLOSE position.



4. Pull the starter grip lightly until you feel resistance, then pull briskly.

NOTICE

- **Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.**
- **Damage may result if the starter grip is pulled while the engine is running.**

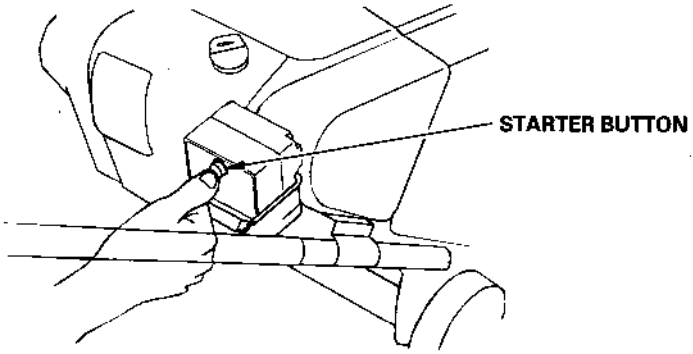


5. Push the starter button until the engine starts. After the engine starts, disconnect the power cord from the electrical outlet first, and then from the switch box. (AS Type)

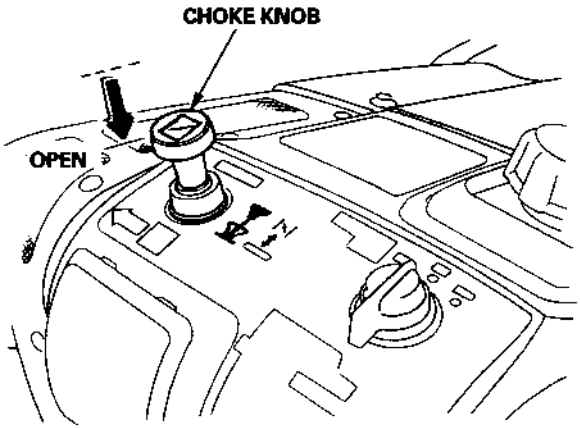
NOTICE

- **Do not operate the starter for more than 1 minute. If the engine fails to start, release the button and allow the starter to cool for 15 minutes before operating it again.**

- **To avoid serious engine damage, never operate the starter while the engine is running.**



6. Let the engine warm up for several minutes. If the choke has been moved to the CHOKE position, gradually move the choke knob to the OPEN position as the engine warms up.



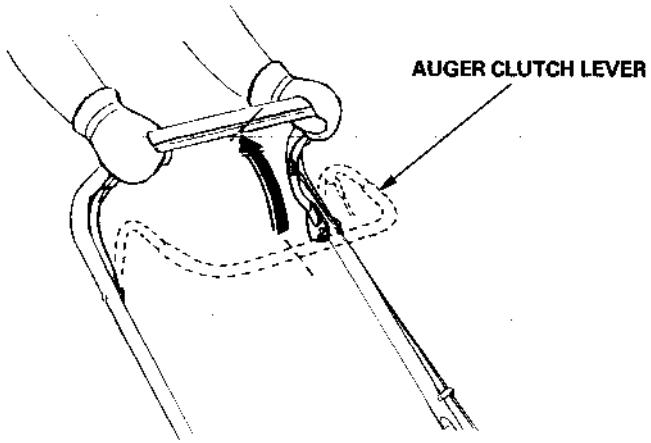
SNOWTHROWER OPERATION

1. Start the engine according to the procedures described on page 15 .

Before operating this equipment, you should read and understand the Safety information on pages 4 thru 6 .

2. Hold the handle firmly with your one hand.

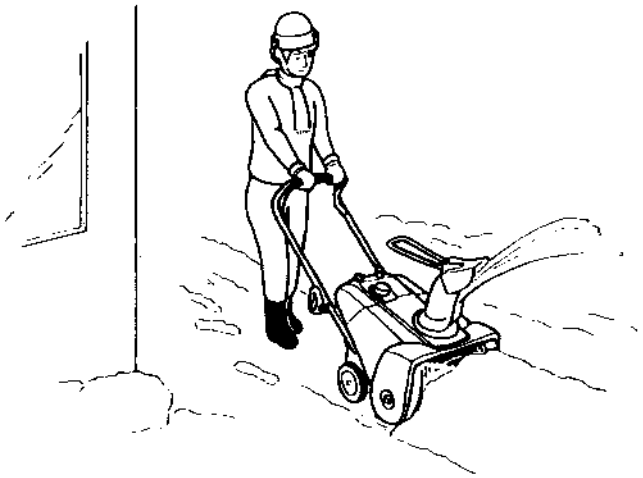
3. Squeeze the auger clutch lever with your other hand to engage the snowthrowing mechanism. When you release your hand, it will stop.



NOTE:
To move the snowthrower forward, raise the handle up and away from the ground. The snowthrower will move forward as long as the auger contacts the ground. To stop, push down on the handle to pivot the auger up and away from the ground, or release the auger clutch lever.

When operating the snowthrower, be sure your footing is secure and keep your hands firmly on the handle and auger clutch lever. Walk, never run with the machine.

4. Start the snowthrowing operation only after the engine has warmed up and is running smoothly.



⚠WARNING

- **Adjust the snow discharge chute to avoid hitting the operator, bystanders, windows, and other objects with thrown snow. Stay clear of the snow discharge chute while the engine is running.**

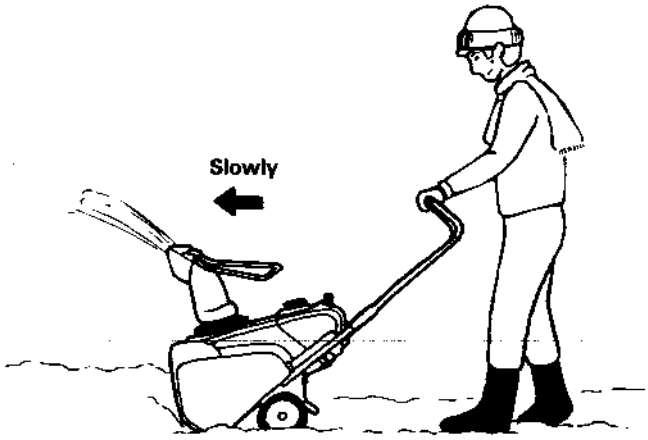
- **If the snow discharge chute becomes clogged, stop the engine and use a wooden stick to unclog it. Never put your hand into the snow discharge chute while the engine is running; serious personal injury could result.**

NOTE:

- For most efficient snowthrowing, clear snow before it melts and refreezes.

- When you are operating the snowthrower over bumpy ground, push down on the handle to raise the snowthrowing mechanism above ground level.

5. When the temperature is high, and the snow is wet and heavy, operate at reduced speed.



- Walk the snowthrower slowly to remove hard or deep snow. Push handle down and forward for additional traction and overlap each swath if necessary.

6. When the height of the snow is greater than the height of the snow-throwing mechanism, push the snowthrower back and forth to remove snow gradually.

High Altitude Operation

At high altitude, the standard air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your snowthrower at altitudes above 6,000 feet (1,800 meters), have your servicing dealer perform this carburetor modification.

Even with carburetor modification, engine horsepower will decrease about 3.5 % for each 1,000 foot (300 meter) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

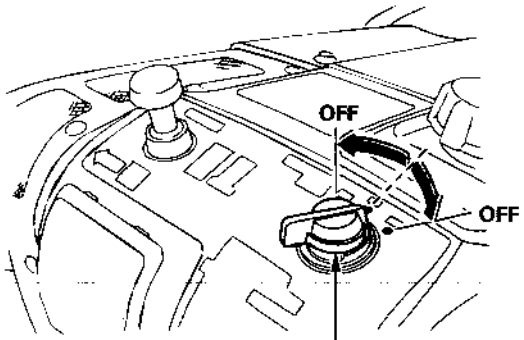
NOTICE

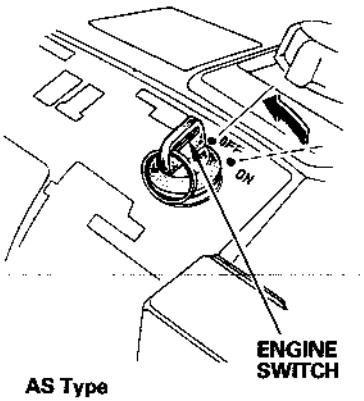
When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 6,000 feet (1,800 meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

STOPPING THE ENGINE

- In an emergency:

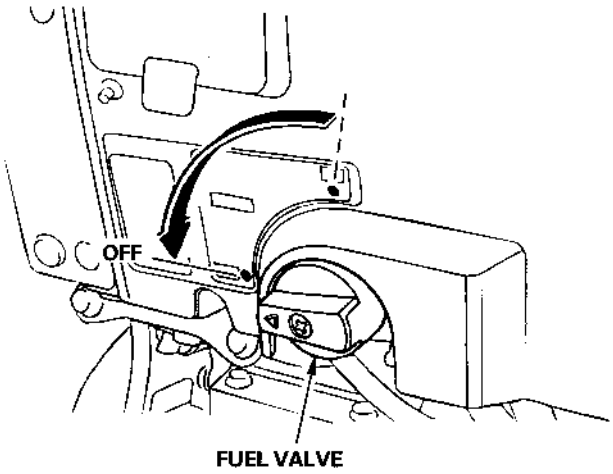
  Turn the engine switch to the OFF position.





- In normal use:

  1. Release the auger clutch lever.
  2. Turn the engine switch to the OFF position.
  3. Turn the fuel valve to the OFF position.



The Importance of Maintenance

Good maintenance is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution.

⚠WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

To help you properly care for your snowthrower, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a Honda technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your snowthrower under unusual conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any engine repair establishment or individual, using parts that are "certified" to EPA standards.

Maintenance Safety

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

⚠WARNING

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed.

Always follow the procedures and precautions in the owner's manual.

Safety precautions

- Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:

  — **Carbon monoxide poisoning from engine exhaust.**
  Be sure there is adequate ventilation whenever you operate the engine.

  — **Burns from hot parts.**
  Let the engine and exhaust system cool before touching.

  — **Injury from moving parts.**
  Do not run the engine unless instructed to do so.

- Read the instructions before you begin, and make sure you have the tools and skills required.

- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related parts.

Remember that your servicing dealer knows your snowthrower best and is fully equipped to maintain and repair it.

To ensure the best quality and reliability, use only new, genuine Honda parts or their equivalents for repair or replacement.

Emission Control System Information

Source of emissions
The combustion process produces carbon monoxide, oxides of nitrogen, and hydrocarbons. Control of hydrocarbons and oxides of nitrogen is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.

Honda utilizes lean carburetor settings and other systems to reduce the emissions of carbon monoxide, oxides of nitrogen, and hydrocarbons.

The U.S. and California Clean Air Acts
EPA and California regulations require all manufacturers to furnish written instructions describing the operation and maintenance of emission control systems.

The following instructions and procedures must be followed in order to keep the emissions from your Honda engine within the emission standards.

Tampering and altering
Tampering with or altering the emission control system may increase emissions beyond the legal limit. Among those acts that constitute tampering are:

- Removal or alteration of any part of the intake, fuel or exhaust systems.
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters.

Problems that may affect emissions
If you are aware of any of the following symptoms, have your engine inspected and repaired by your servicing dealer.

- Hard starting or stalling after starting.
- Rough idle.
- Misfiring or backfiring under load.
- Afterburning (backfiring).
- Black exhaust smoke or high fuel consumption.

Replacement parts

The emission control systems on your Honda engine were designed, built, and certified to conform with EPA and California emission regulations. We recommend the use of genuine Honda parts whenever you have maintenance done. These original-design replacement parts are manufactured to the same standards as the original parts, so you can be confident of their performance. The use of replacement parts that are not of the original design and quality may impair the effectiveness of your emission control system.

A manufacturer of an aftermarket part assumes the responsibility that the part will not adversely affect emission performance. The manufacturer or rebuilder of the part must certify that use of the part will not result in a failure of the engine to comply with emission regulations.

Maintenance

Follow the maintenance schedule on page 34. Remember that this schedule is based on the assumption that your machine will be used for its designed purpose. Sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, will require more frequent service.

Maintenance Schedule

	ITEM	SERVICE PERIOD (3)	EACH USE	FIRST 20 HRS. OPERATION	EVERY YEAR		EVERY 5 YEARS
					BEFORE OPERATION	BEFORE STORAGE	
•	Engine oil	Check level	○				
		Change		○	○ (1)		
	Auger paddles	Check	○		○		
		Change					○ (1) (2)
	Scraper blade	Check			○		
		Change					○ (1)
•	Spark plug	Check-Readjust			○ (1)		
		Replace					○
	Bolts, nuts, fasteners	Check			○		
	Auger clutch cable	Check-Readjust			○ (1)		
	Drive belt	Check			○		
		Readjust or change					○ (1) (2)
•	Sediment CUP	Clean				○	
	Fuel tank and carburetor	Drain				○	
•	Idle speed	Check-adjust					○ (2)
	Anticorrosion oil	Apply oil				○	
•	Fuel line	Check (Replace if necessary)	Every 2 years (2)				
•	Valve clearance	Check-Readjust					○ (1) (2)
•	Fuel tank	Clean					○ (1) (2)

• Emission related items

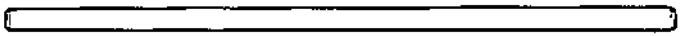
(1) These items may require more frequent inspection and replacement under heavy use.

(2) These items should be serviced by an authorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual for service information.

(3) For professional commercial use, log hours of operation to determine proper maintenance intervals.

Tools

SPARK PLUG WRENCH



WRENCH HANDLE

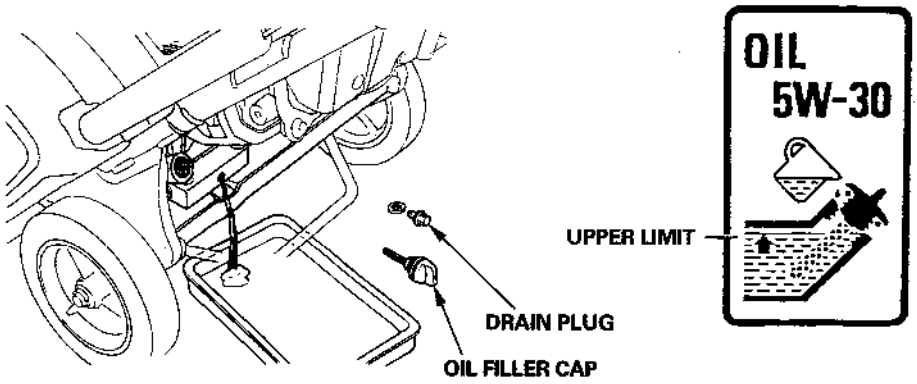
Engine Oil Change

Drain the oil while the engine is still warm to assure rapid and complete draining.

1. Remove the drain plug and filler cap, and drain the oil. Retighten the drain plug securely.

2. Fill the crankcase with the recommended oil (See page 14) and check the level.

   Oil capacity: 0.60 ℓ (0.63 US qt , 0.53 Imp qt)



Wash your hands with soap and water after handling used oil.

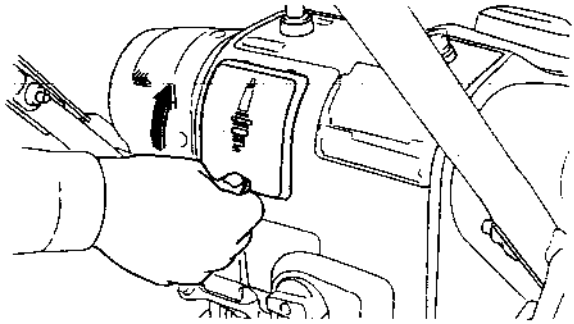
Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash, pour it on the ground, or down the drain.

Spark Plug Service

Recommended spark plug: BPR5ES (NGK)
W16EPR-U (DENSO)

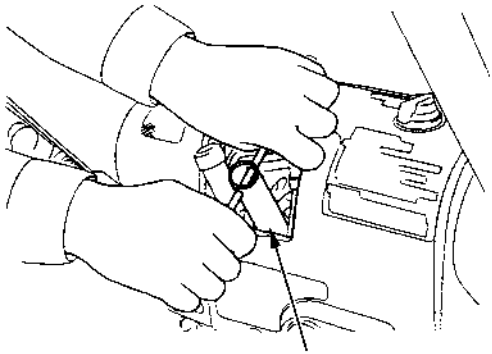
To ensure proper engine operation, the spark plug must be properly gapped and free of deposits. If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.

1. Remove the spark plug cover, then remove the spark plug cap.



2. Clean any dirt from around the spark plug base.

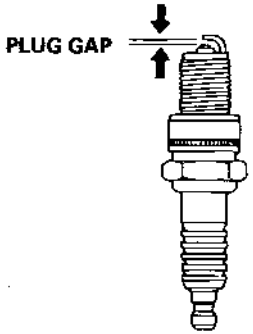
3. Use the wrench supplied in the tool kit to remove the spark plug.



SPARK PLUG WRENCH

4. Inspect the spark plug. Discard it if the electrodes are worn or if the insulator is cracked or chipped. If it is to be reused, clean the electrode and insulator with a wire brush.

5. Measure the plug gap with a feeler gauge.
   Correct as necessary by bending the side electrode.
   The gap should be:
   0.70 – 0.80 mm (0.028 – 0.031 in)



6. Make sure that the spark plug washer is in good condition, and thread the spark plug in by hand to prevent cross-threading.

7. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

   If installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer. If reinstalling a used spark plug, tighten 1/8 to 1/4 turn after the spark plug seats.

NOTICE

- **Use only the recommended spark plugs or equivalent. Spark plugs which have an improper heat range may cause engine damage.**

- **The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and may damage the engine.**

Scraper Inspection, Adjustment and Replacement

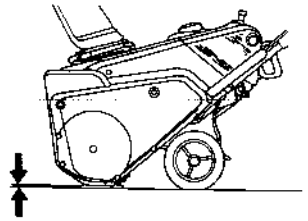
If the auger housing guard and the scraper are deformed or improperly adjusted, the snowthrower will not clear the snow evenly. The snowthrower should be inspected and adjusted, and any faulty parts should be replaced.

⚠WARNING

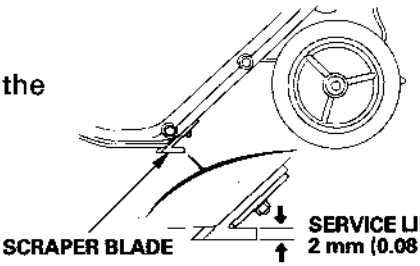
To prevent accidental starting, turn the engine switch to the OFF position and disconnect the spark plug cap.

Inspection:

1. Place the snowthrower on firm, level ground and check that the scraper blade contacts the ground evenly. Adjust the scraper blade if it does not contact the ground evenly.
2. Check that the auger paddle ground clearance:
   0—2 mm (0—0.08 in)
3. Replace the scraper blade if the service limit is exceeded.



PADDLE GROUND CLEARANCE:
0—2 mm (0—0.08 in)



Adjustment

Adjust auger paddle ground clearance by repositioning the scraper.

1. Drain the fuel (see page 41). Turn the fuel valve to the OFF position.

⚠WARNING

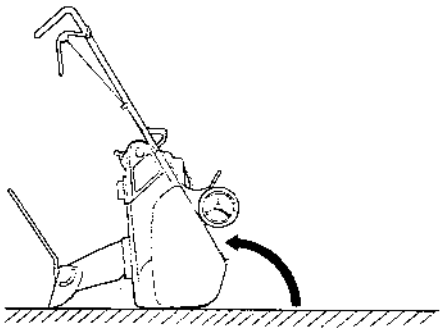
Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- **Stop the engine and keep heat, sparks, and flames away.**
- **Handle fuel only outdoors.**
- **Wipe up spills immediately.**

2. Set the chute straight ahead, and raise the chute guide to its highest position.

3. Tilt the snowthrower forward until it rests on the auger housing and chute guide.

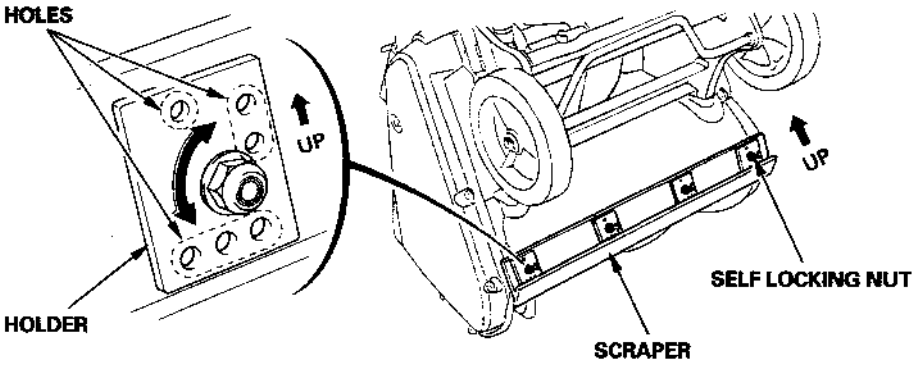


4. Loosen the four self-locking nuts and lower the scraper blade fully.

5. Adjust the auger paddle-to-ground clearance by rotating the holders.

NOTE:

- The holders can be set in four directions. Be sure that all holders are set in the same directions.
- The blade is set at its lowest position when the holders are installed with the three holes facing up.
- The holders are installed with the one hole facing up when the snowthrower leaves the factory.



6. Tighten the self-locking nuts securely while holding the blade firmly against the holders.

7. Return the snowthrower to the original position and check that the scraper blade contacts the ground evenly. Then, check that the auger paddle-to-ground clearance: 0—2 mm (0—0.08 in)

Replacement

The scraper must be replaced if it is worn abnormally or the service limit is exceeded.

1. Turn the engine switch off and drain the fuel tank.

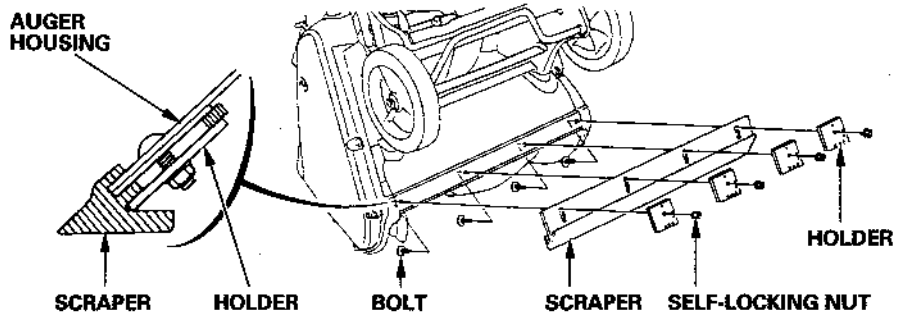
2. Lift the handle so that the auger housing faces down.

3. Remove the four self-locking nuts and holders from the scraper, and remove the scraper.

4. Insert a new scraper into the auger housing securely.

5. Install the self-locking nuts, and holders, then tighten the self-locking nuts securely.

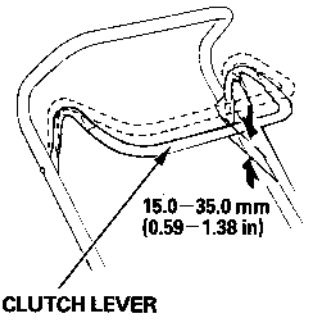
NOTE:
- Check that all holders are installed in the same direction.
- Be sure that there is no clearance between the scraper and ground when the snowthrower is placed on the ground, and that the auger paddle-to-ground clearance is correct, then tighten the self-locking nuts.
  Correct clearance: 0—2 mm (0—0.08 in)
- It is recommended to replace the scraper blade when the auger and center paddles are to be replaced.



Auger Clutch Cable Inspection and Adjustment

Inspection

For the auger brake to operate properly, there should be free play in the auger clutch cable with the auger clutch set in the "OFF" position.



Check the free play at the tip of the clutch lever.
Free play at the tip of the lever should be:
15.0—35.0 mm (0.59—1.38 in)

Adjustment is necessary if the free play is not within specification.

Adjustment

1. Loosen the belt cover bolts and remove the belt cover.

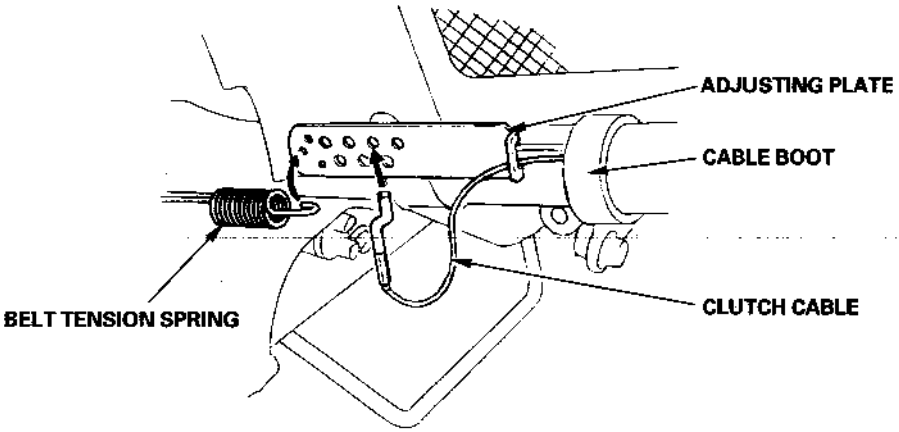
2. Pull the cable boot up to expose the adjusting plate.

3. Disconnect the cable end from the clutch lever. The cable end can be disconnected easily by squeezing the clutch lever and then holding the cable while releasing the lever. Be careful to avoid bending the cable.

NOTE:
Observe the position of the belt tension spring and lower cable end in the adjusting plate, so you will know which holes were used when the spring or cable is disconnected from the plate.

4. Adjust auger clutch lever free play by hooking the belt tension spring and/or clutch cable into the other holes in the adjusting plate.

   Move the spring and cable closer together to reduce free play, or farther apart to increase free play.



5. Connect the upper cable end to the clutch lever, and check clutch lever free play again (see page 35). Readjust if necessary.
   If you are unable to adjust free play to specifications contact your local Honda snowthrower dealer for repairs.

6. Pull the boot down over the adjusting plate after free play is correctly adjusted.

Paddle Inspection

The paddles are subject to wear and deterioration and should be checked every year before operation. Worn paddles reduce snow removal performance, and loose paddles, or loose material from damaged or deteriorated paddles, may damage the auger housing guard.

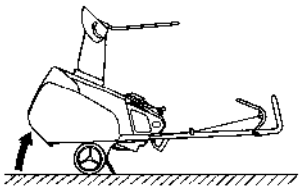
⚠WARNING

To prevent accidental starting, turn the engine switch to the OFF position and disconnect the spark plug cap.

1. Drain the fuel (See page 41).

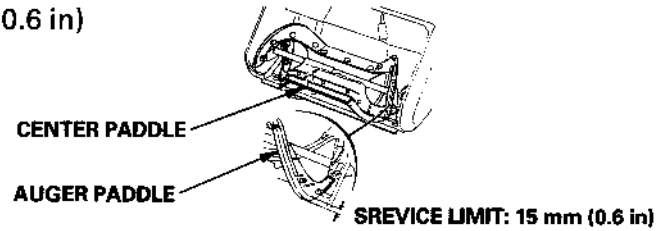
2. Tilt the snowthrower by raising the front end of the housing using the stopper.

3. Inspect the paddles to be sure they are in good condition and are securely attached.



4. Measure the distance from the outer edge of the auger to the outer edge of the rubber paddles.

   The paddles are worn out and should be replaced, if the distance is less than:
   15 mm (0.6 in)



NOTE:
If the paddles are worn out, the scraper may also have become worn. Inspect the scraper as described on page 32 .

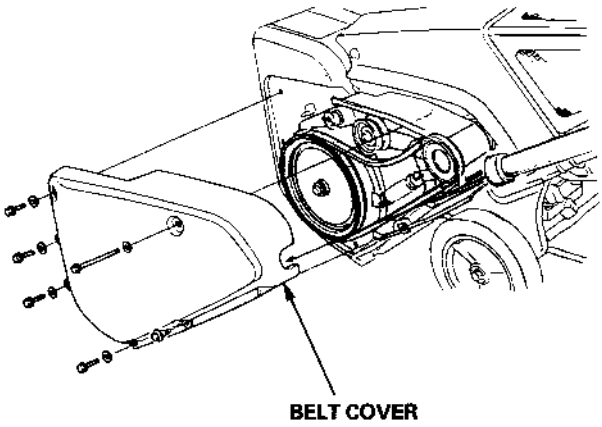
If paddle replacement or other repairs are needed, take the snowthrower to an authorized Honda snowthrower dealer.

Drive Belt Inspection

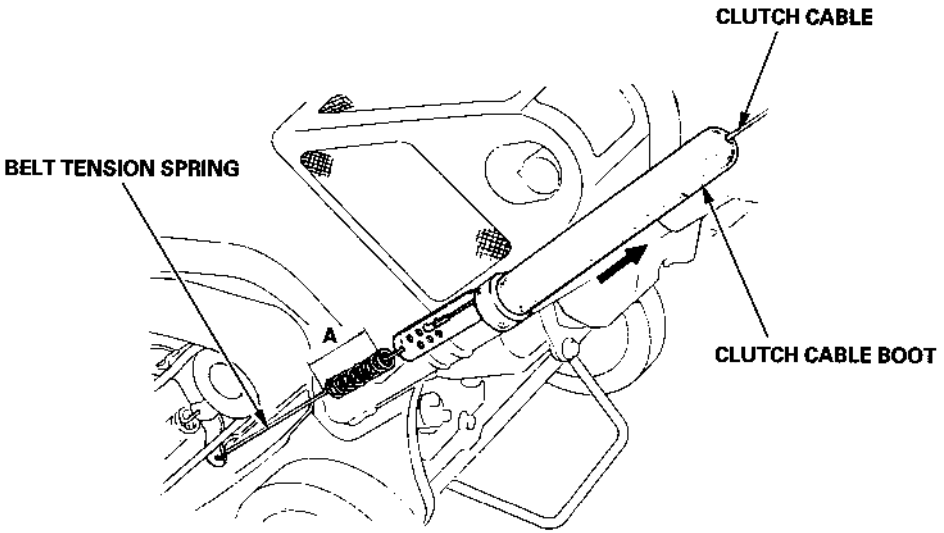
The drive belt is subject to wear and deterioration and should be checked every year before operation. If the snow discharge performance drops while operating the snowthrower, or if it clogs often with snow, the problem may be due to belt slippage.

1. Check auger clutch lever free play (see page 35), and adjust if necessary.

2. Remove the belt cover bolts, then remove the belt cover.



3. Slide the cable boot upward. The drive belt should be adjusted if the length "A" of the drive belt tension spring is less than 30 mm (1.18 in) with the auger clutch lever squeezed fully. If adjustment is required, consult your authorized Honda dealer.



Other Checks

1. Check all bolts, nuts and other fasteners for security.

2. Check each part for operation.

3. Check the entire machine for any damage that might have occurred in previous operation.

STORAGE

STORAGE TIME	RECOMMENDED SERVICE PROCEDURE TO PREVENT HARD STARTING
Less than 1 month	No preparation required
1 to 2 months	Fill with fresh gasoline and add gasoline conditioner*.
2 months to 1 year	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl and fuel sediment cup (see page 41).
1 year or more	Fill with fresh gasoline and add gasoline conditioner*. Drain the carburetor float bowl and fuel sediment cup (see page 41). Put a tablespoon of oil in the cylinder through the spark plug hole (see page 42). Pull the starter grip several times to distribute the oil in the cylinder. Then pull the starter grip slowly until resistance is felt; this will close the valves so moisture cannot enter the cylinder. After removal from storage, drain the stored gasoline into a suitable container, and fill with fresh gasoline before starting.

*Use gasoline conditioners that are formulated to extend storage life. Contact your authorized Honda snowthrower dealer for recommendations of gasoline conditioners.

Before storing the snowthrower for an extended period:

1. Be sure the storage area is free of excessive humidity and dust.
2. Drain the fuel.

⚠WARNING

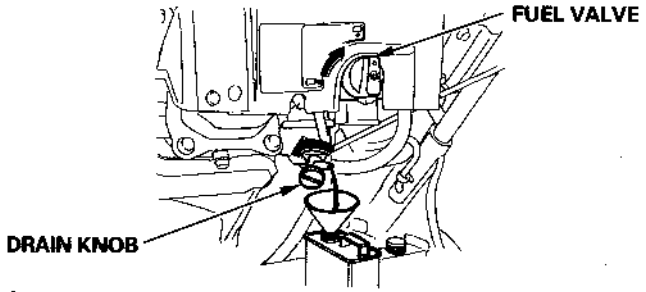
Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- **Stop the engine and keep heat, sparks, and flames away.**
- **Handle fuel only outdoors.**
- **Wipe up spills immediately.**

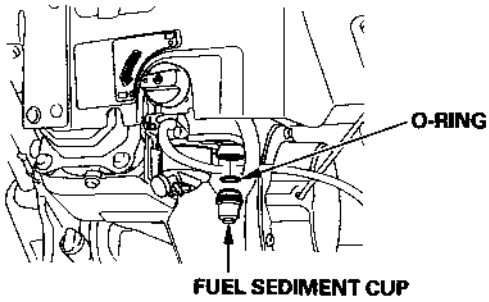
a. Turn the fuel valve ON.

b. Loosen the carburetor drain knob, and drain the gasoline into a suitable container. After draining, retighten the drain knob and turn the fuel valve OFF.

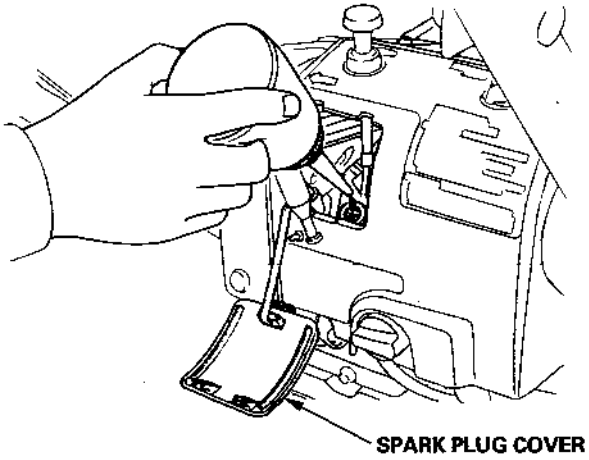


3. Clean the fuel sediment cup.

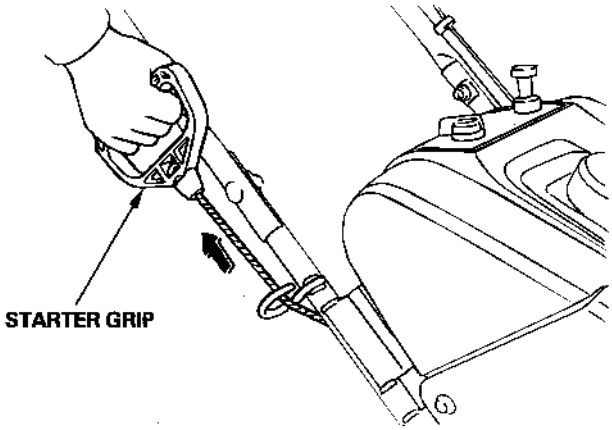
a. Turn the fuel valve OFF. Remove, empty, and clean the fuel sediment cup.
b. Reinstall the cup and O-ring and tighten securely.



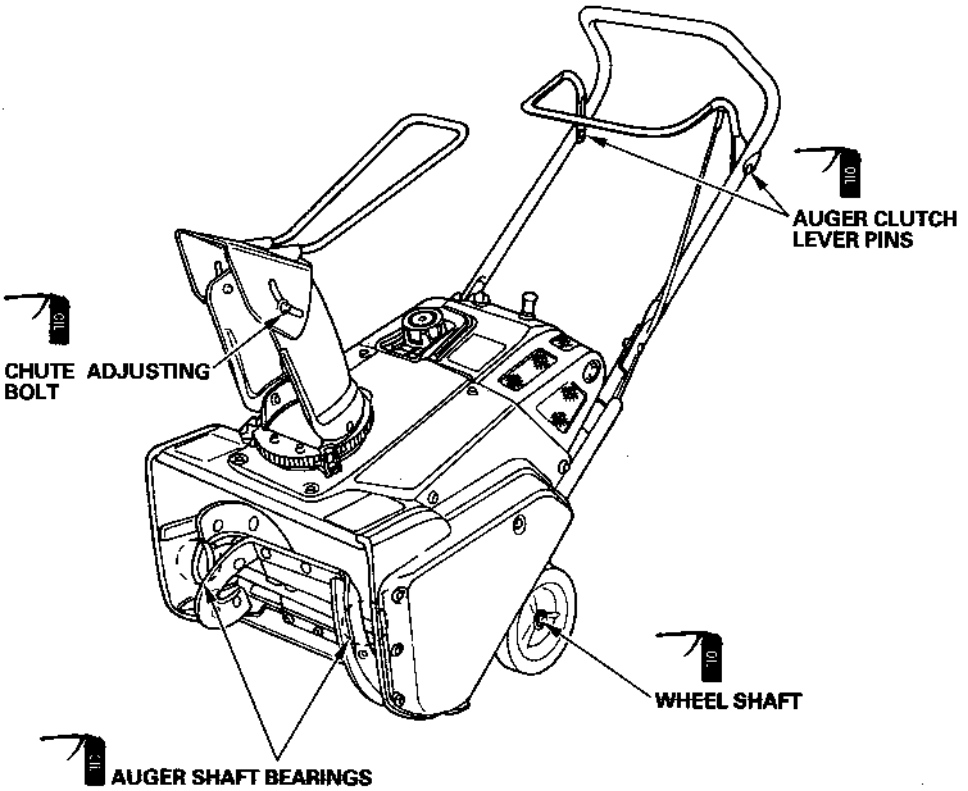
4. Remove the spark plug and pour a tablespoon (5—10 cc) of clean motor oil into the cylinder. Pull the starter rope slowly two or three times to distribute the oil. Reinstall the spark plug.



5. Pull the starter grip until resistance is felt. This closes the valves and protects the engine from internal corrosion.



6. Apply oil to the following parts for lubrication and rust prevention.



TROUBLESHOOTING

When the engine will not start:
1. Is there enough fuel?

2. Is the fuel valve on?

3. Is gasoline reaching the carburetor?
   To check, loosen the drain screw with the fuel valve on. Fuel should flow freely.

⚠WARNING

Gasoline is highly flammable and explosive.

You can be burned or seriously injured when handling fuel.

- **Keep heat, sparks, and flames away.**
- **Handle fuel only outdoors.**
- **Wipe up spills immediately.**

4. Is the engine switch on?

5. Is there a spark at the spark plug?

   a. Remove the spark plug cap. Clean any dirt from around the spark plug base, then remove the spark plug.
   b. Install the spark plug in the plug cap.
   c. Turn the engine switch on.
   d. Ground the side electrode at any engine ground and crank the engine to see if sparks jump across the gap.

⚠WARNING

Gasoline is highly flammable and explosive.

If ignited, gasoline can burn you severely.

- **Be sure there is no spilled fuel near the engine.**
- **Place the spark plug away from the spark plug hole.**

   e. If there are no sparks, replace the plug. If sparks occur, try to start the engine according to the instructions.

6. If the engine still does not start, take the snowthrower to an authorized Honda dealer.

Frame

Model	HS621	
Type / Items	A	AS
Power equipment discription code	SZAN	
Overall length	1,230 mm (48.4 in)	
Overall width	570 mm (22.4 in)	
Overall height	980 mm (38.6 in)	
Dry weight	41.5 kg (91.5 lbs)	43.5 kg (95.9 lbs)
Width of snow clearance	522 mm (20.6 in)	
Height of snow clearance	323 mm (12.7 in)	
Snowthrowing distance (differs according to the kind of snow)	Max. 10 m (32.8 ft)	
Clearing capacity	33 Ton/hour	
Continuous operating time	1.4 hours	

Engine

Model	HONDA GX160 K1
Maximum output	4.9 HP at 4,000 rpm
Displacement	163 cm^3 (9.9 cu-in)
Bore x stroke	68 × 45 mm (2.7 × 1.8 in)
Starting method	Recoil starter, Recoil or electric starter (AS Type)
Ignition system	Transistorized magneto
Oil capacity	0.60 ℓ (0.63 US qt , 0.53 Imp qt)
Fuel tank capacity	1.25 ℓ (0.330 US gal , 0.275 Imp gal)
Spark plug	BPR5ES (NGK) W16EPR-U (DENSO)

Tuneup

ITEM	SPECIFICATION	MAINTENANCE
Spark plug gap	0.70–0.80 mm (0.028–0.031 in)	Refer to page: 31
Valve clearance	IN: 0.15 ± 0.02 mm EX: 0.20 ± 0.02 mm	See your authorized Honda dealer
Other specifications	No other adjustments needed.	

Specifications are subject to change without notice.

WARRANTY SERVICE INFORMATION

Honda power equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Relations Office. You can write to:

American Honda Motor Co., Inc.
Power Equipment Division
Customer Relations Office
4475 River Green Parkway
Duluth, Georgia 30136-2565

Or telephone: (770)497-6400

When you write or call, please give us this information:

- Model and serial number (See page 7)
- Name of dealer who sold the snowthrower to you
- Name and address of dealer who services your snowthrower
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

Current customer service contact information:

United States, Puerto Rico, and U.S. Virgin Islands:

Honda Power Equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Relations Office. You can write:

American Honda Motor Co., Inc.
Power Equipment Division
Customer Relations Office
4900 Marconi Drive
Alpharetta, GA 30005-8847

Or telephone: (770) 497-6400 M-F, 8:30 am - 7:00 pm EST

When you write or call, please provide the following information:

- Model and serial numbers
- Name of the dealer who sold the Honda power equipment to you
- Name and address of the dealer who services your equipment
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

HONDA

HONDA MOTOR CO., INC. TOKYO, JAPAN

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