ENG MANUAL

SXP1328PRO

SNOWBLOWER



GS, CE, EPA

N.D.E.C. Version 11.3

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ENG - INTRODUCTION

Thank you for purchasing Snowbuster 1100E. Please follow the safety instructions provided in this manual and ensure that you fully understand all safety instructions. Please keep this manual for future reference or in preparation for resale.

IMPORTANT SAFE OPERATION PRACTICES

WARNING! Parts of the machine components and engine exhaust, contains chemicals known to cause sustain damage to body and health.

DANGER! This machine was built to be operated according to the safe operation practices in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating fingers, toes and feet and throwing foreign objects. Failure to observe the following safety instructions could result in serious injury or death.

SAFETY INSTRUCTIONS

You should pay particular attention to safety precautions, marked with the exclamation point!

Please read and understand this manual and the safety information prior to starting the engine.

Danger: Indicates a hazardous situation which, if not avoided could result in death or serious injury.

Warning: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Caution: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

Please read this manual thoroughly before operating the machine. If you do have questions about safety and operating features, contact your dealer.

Failure to comply with the safety instructions can result in serious injury or death. All instructions regarding safety and maintenance of the snowbuster are for your own safety.

Safety symbols

The table below shows and describes safety symbols that may appear on the product



READ THE MANUAL

Read, understand and follow all instructions in the manual before assembling and operating the snow blower.



WARNING - ROTATING PARTS

Keep hands out of inlet and discharger opening, while the machine is operative. The rotating blades inside the auger housing can cause amputation.



WARNING - DISCHARGER

Keep hands out of discharger opening, while machine is operative.



WARNING - ROTATING AUGER

Do not put hands or feet near auger housing or discharge opening. The auger is capable of amputating fingers, toes and feet. Failure to observe could result in serious injury or death.



WARNING - THROWNING OBJECTS

The machine may pick up and capable of throwing heavy foreign objects, which can cause serious injury which can cause serious personal injury



WARNING - FIRE HAZARDOUS

Do not fill the gasoline tank indoors, while the engine is running, or while the engine is still hot. Spilled gasoline is extremely flammable. Allow the engine to cool before refueling.



WARNING - CARBON MONOXIDE

Never start the engine indoor or in areas with low ventilation. The exhaustion from the engine contains carbon monoxide. Failure to observe could result in perm injury or death.



WARNING - ELECTRICAL SHOCK

Do not use the engines electric starter in the rain

Setup

- Read this manual carefully. Make sure that you are familiar with the different control settings and handles of the equipment.
- \triangle Know how to stop the unit and ensure that you are familiar with emergency stop.
- 1 Never allow children to operate equipment.
- The machine must only be operated by persons who are familiar with the safety of the snowblower.
- ⚠ If you feel unwell, tired or have consumed alcohol or drugs, do not operate the machine.
- 1 The operator of the machine is responsible for people's safety. Never use the machine near children or animals.
- Thoroughly inspect the area, where the equipment is to be used. If necessary remove foreign objects such as doormats, sleds etc.
- Disengage clutch and shift into neutral before starting engine.
- ⚠ Do not fill the gasoline tank indoors, while the engine is running, or while the engine is still hot. Spilled gasoline is extremely flammable.
- ⚠ Wipe off any spilled gasoline before starting the engine. It may cause a fire or explosion!
- 1 Use an earth grounded socket for electric starter.
- Adjust auger height so it is level with the surface.
- A Never attempt to make any adjustments, while the engine is running.
- 1 Let engine and machine adjust to outdoor temperature before operation.
- Always wear safety glasses and earmuffs during operation or while performing an adjustment or repair, this is to protect eyes from foreign objects that may be thrown from the machine in any direction. Boots with non-slip soles with steel jacket is required. Avoid loose-fitting clothes.
- 1 Only use original spare parts and accessories.

Operation

- Do not put hands or feet near rotating parts. Keep discharge opening clear at all times.
- Exercise extreme caution when operating on crossing gravel drives, walks, or roads.
- ! Beware of traffic.
- 1 Do not carry passengers or transporting heavy load.
- After striking a foreign object, stop the engine immediately, remove the spark plug cap and inspect the machine thoroughly for damage. Repair the damage before continuing
- If the snow blower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of damage.
- Always disengage the auger, shift into neutral, turn off the engine, and remove the ignition key, when the unit is left unattended.
- Always turn off the engine and ensure that all moving parts have come to a complete stop before making any repairs, adjustments, or inspections.
- Don't start the engine indoors. However, it is safe to start the engine indoors, if it is to transport the machine in and out of a building.
- ⚠ Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
- A Never operate snow blower near windows, enclosures, cars, etc. without proper adjustment of chute discharge angle.
- Do not overload machine capacity by attempting to clear snow at too fast a rate.
- A Never operate the machine at a fast pace on slippery surfaces. Be extra cautious when reversing the snow thrower.
- A Never direct discharge at bystanders or allow anyone in front of unit.
- Always disengage the auger if not in use.
- ① Only use orginal spare parts or accessories. If not orginal parts or accessories is used, the liability is no longer applied.

- ⚠ Only operate the machine at daylight or in fully illuminated areas
- ⚠ Ensure a stable foothold and always keep a firm hold on the handles. Always walk, never run.

Gasoline safety

- ⚠ Use extreme care in handling gasoline. Gasoline is extremely flammable and the fumes are explosive. Serious personal injury can occur, when gasoline is spilled on yourself or your clothes. Rinse your skin and change clothes immediately!
- ⚠ Use only an approved gasoline container. Do not use soft drink bottle or similar!
- ⚠ Extinguish all cigarettes, cigars, pipes and other sources of ignition.
- A Never refuel your machine indoors.
- 1 Let the engine cool down before refilling
- A Never fill the fuel tank to more than 2.5 cm below bottom of filler in order to provide space for fuel to expansion.
- After refueling, ensure that the cap tighten securely.
- \triangle Never use the lock-function on the gasoline gun, when refueling.

Maintenance and storage

- ⚠ Check regularly that all bolts and nuts are tightened. Retighten if necessary.
- 1 The engine must be completely cooled before storing indoors or covered.
- \triangle If the machine unused for a period of time, please refer to the instructions in this manual.
- ⚠ Maintain or replace safety and instruction labels, as necessary.
- Let the machine run a few minutes after finishing sweeping snow, this is to prevent freeze up of auger and other parts

IDENTIFICATION OF CONTENT

Description of Parts 1. Machine 1100E Handlebar for wheel drive/clutch Gear shift panel 3. Handle bar for auger function 4. Chute rod knob 5. Bracket of chute rod 6. Lower handle bar with bolts and nuts 7. 8. Chute discharger assembly Chute Plastic plate Chute Metal plates with bolts and nuts 9. 10. Auger sheagring bolt 11. Handlebar Chute discharge angle 12. Ignition keys 13. Primer 14. 15. Choke Lever 16. On-Off Switch 17. Oil Drain Plug Fuel Cap 18. Oil Filler Cap / Dipstick 19. Throttle Lever 20. 21. Control panel 20 5 15 16 21

ASSEMBLY

Control panel

1. Attach the control panel onto the lower handlebar



- 2. Align the handlebars.
- 3. Insert 2 bolts, washer on the right side and fasten.



4. Insert 1 bolt, washer in the lower hole on the left side and fasten.

Chute bracket

1. Attach chute bracket onto left side of the handlebar, insert bolt, washer and fasten with M8 nut.





Chute rod / crank assembly

1. Insert chute rod knob through the bracket hole and onto the chute rod crank lock with split.



Gear control

1. Insert gear knob through the control panel
Attach and fit gear rod onto the gear knob and crank fasten when adjusted.



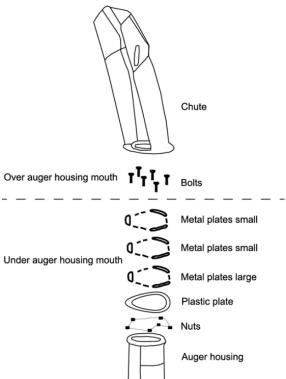
2. Pull split and attach the other end of the gear rod crank onto the transmission axle



3. Re-adjust by tighen the nut to put tension on the gear

Chute discharger

Follow the instruction below



Once the chute discharger is assembled, it should be free to move by hand. If not please recheck whether the plates are in the correct sequence and that the bolts are not over-tightened.

If the chute control knob is over-turned. The teeth might slip and thereby jam the chute assembly. In such case please loosen the support plates and readjust teeth and plates.

Chute discharger control knob

- 1. Pull the discharge cable from the control panel and align.
- 2. Attach discharge cable onto the discharge bracket on the chute.



- 3. Pull cable further to the adjustable guard
- 4. Insert tip of discharger cable onto the adjuster bolt of the guard



- 5. Adjust and tigten the cable on the discharge guard nut.
- 6. Check the tension of the cable by pulling the handle

Skids

- 1. Attach the skids to auger house
- 2. Insert M8X16 bolt and M8 Washer and tighten loosely with nut



- 3. Adjust the skids the auger house so they are level with ground.
- 4. Fasten the M8X16 bolt with nut.

CABLE ADJUSTMENT

Auger and traction cable

The auger and traction cable will need to be adjusted for proper traction and impeller loading. Please follow the steps below.

Important: The cables must in emergency situations, trigger the dead man lever, once the handles are released.

Warning: Do not engage the auger while adjusting the traction cable! **Warning:** Ensure that no people are around the machine during this adjustment!

- 1. Block up the Snowblower.
 - This step will stop the machine from moving, if the cables are too tight.
- 2. Tighten the turnbuckle until there is no slack in the cables.
- 3. Start the engine once the cables are adjusted.

Traction adjustment

- 4. Pull the traction lever, the wheels should spin.
 - If the wheels do not spin, tighten the cable even more using the turnbuckle
- 5. Release the traction lever, the wheels should immediately stop spinning.
 - If the wheels still spin, release the tension in the cable using the turnbuckle.

Auger adjustment

- 6. Pull the auger lever, the auger should turn.
 - If the auger does not turn, tighten the cable even more using the turnbuckle
- 7. Release the auger lever; this should immediately stop the auger from turning.
 - If the auger turns, release the tension in the cable using the turnbuckle.

Emergency stop

Release both traction and auger lever at the same time, if proper adjusted the dead man levers and shut off the engine switch.

If not; then readjust either the auger or the traction cable.

OPERATION ENGINE

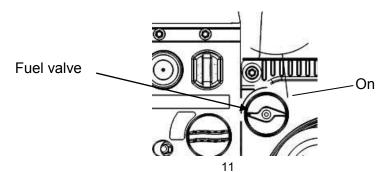
Important! You must fill up with engine oil and fuel before you can start the engine.

- Check the fuel and engine oil levels and top up it necessary
- Make sure that the spark plug cap is secured to the spark plug
- Clear and secure the work area

Starting the engine

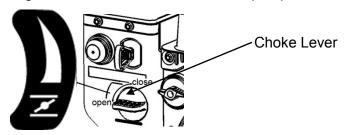
1. Engine fuel valve

Turn the fuel valve to the ON position.



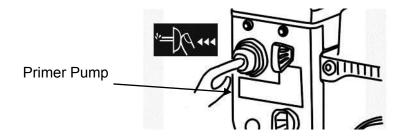
2. Engine choke

To start a cold engine, move the choke lever to the close position. To restart a warm engine, leave the choke lever in the open position.



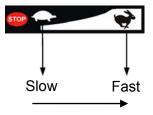
3. Primer

When the engine is cold the primer supplies the carburetor with more gasoline. When using the primer it should not be pushed more than 3 times



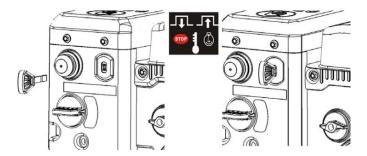
4. Throttle

Move the throttle lever about 1/3 away from the slow position towards the fast position.



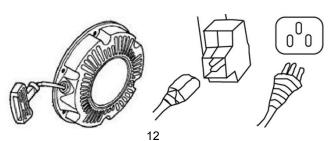
5. Engine key

Put the ignition key in the keyhole and turn.



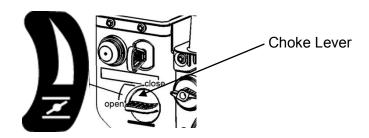
6. 230V electric starter

Plug the cord into electrical outlet and press the start button. After the engine is started remove the plug from the socket alternatively pull the recoil starter to crank the engine



7. Engine choke

Push the choker gradually from close position to open position as the engine warms up

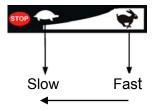


Turn off the engine

To turn off the engine use the following procedure.

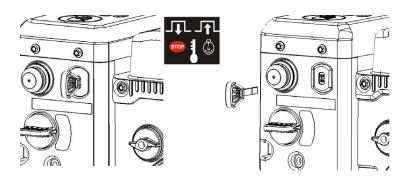
1. Throttle

Move the throttle lever to the slow position.



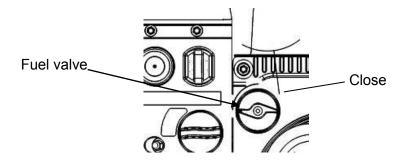
2. Engine Key

Turn and pull the engine key.



3. Fuel valve

Turn the fuel valve to the close position



FUNCTION

Handle with embedded heat

Push the heater button on the control panel to turn the heater for the handles on.





Front light

Push the front light button to turn the headlight on.



OPERATION 1100E

Important! Clear and secure the work area. The operator of the snow blower can and will be held liable for personal injury or damage on property to injured party.

First stage: Preperation

1. Push the throttle on full power (fast-rabbit)

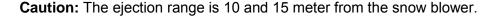


2. Adjust the vertical throw out angle of the chute, using chute rod knob (4)



3. Adjust the horizontal throw out angle of the chute, using chute discharger control knob (13) on the leftside of the control panel.

Warning: Never direct discharge at bystanders or allow anyone in front of unit.





Second stage: Sweeping

- 1. Pull the right-hand control lever to engage the drive unit and the snow blower will start to move.
- 2. Use the 6 forward gears and 2 reverse (R1 and R2) to achieve the desired working speed.
- 3. Push the left-hand control lever to engage the auger unit.

Note: Do not overload machine capacity by attempting to clear snow at too fast a rate.

Advice: Select a slower speed for wet heavy snow, and a higher speed for light powdery snow.

Warning!

- Exercise extreme caution when operating on crossing gravel drives, walks, or roads.
- Do not clear snow across the face of slopes.
- Exercise extreme caution when changing direction on slopes.
- Do not attempt to clear steep slopes.

Auger unit

The drive shaft on auger is secured by shearing bolts. The shearing bolts will break, if the auger strikes any hard object, this is to prevent the snow blower from sustain further damage. Two spare bolts with nuts are supplied on the control panel.

Warning: Do not replace the shearing bolts with other types of bolts!





If the chute discharger is blocked: Shut the engine down. Ensure all rotaring parts has come to an complte stop. Clean the Chute and auger unit using the cleanout tool.



MAINTENANCE

Importance of maintenance

Good maintenance is cost-saving and essential for safe and trouble-free operation.

WARNING

Improper maintenance or failure to comply with instructions, precautions can result in serious injury or death. Always follow the manual prescribed procedures and precautions

To ensure a proper upkeep of your machine, the following pages include a maintenance schedule and description plus an inspection procedure of your machine. For tasks that are more difficult, or require special tools, maintenance should be carried out by technician or qualified mechanic.

Maintenance safety

As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. It is impossible to warn against all hazards or hazardous situations, it is therefore important that the user of the machine exhibits vigilance to operate the machine safely and rationally to avoid bringing yourself and others in danger.

Safety precautions

Important: Before commencing any maintenance or repair ensure that the engine is shutdown

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 and other sources of ignition away from the machine.

Maintenance ch	art	Everytime	1st month	Every 3 month	Every 6 month	Once year
Engine oil	Check	X				
	Change		Х		Х	
Air cleaner	Check	X				
	Clean			Х		
	Replace					Х
Sediment Cup	Clean				Χ	
Spark plug	Check Clean				x	
	Replace					X
Spark arrester	Clean				Х	
Idle speed Combustion chamber	Check Adjust Clean					X
Valve clearance	Check Adjust					X
Fuel tank and strainer	Clean					Х
Fuel line	Check	Every 2 years (Replace if necessary)				

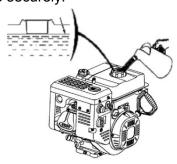
Refueling

With the engine stopped, remove the fuel tank cap and check the fuel level. Refill the tank if the fuel level is low.

Fuel recommendations

- Use only unleaded gasoline octane 95 or higher.
- Never use stale or contaminated gasoline or an oil/gasoline mixture.
- Avoid getting dirt or water in the fuel tank.

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 fill above the fuel strainer shoulder. After refueling, tighten the fuel tank cap securely.

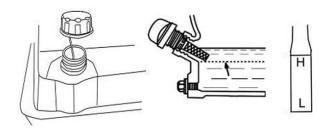


Engine oil level check

In order to check the engine oil level correctly the engine must be stopped and the machine in a level position.

How to:

- Remove the filler cap/dipstick and wipe it clean.
- Insert and remove the dipstick into the filler neck to check oil level.
 The Oil level must be within the specified interval at the end of the stick. If the oil level is at the lower end of the interval, refill with oil SAE 5 W-30.
- Screw in the filler cap / dipstick securely.



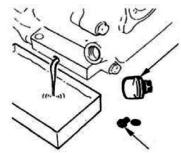
Warning: Never refill oil over the higher end of the interval, this will damage the engine.

Engine oil change

Drain the old / staled oil while the engine is warm. Warm oil is more fluid then cold and drains better.

How to:

- Place a suitable container below the engine to catch the used oil.
- Remove the filler cap and the drain plug.
- Drain completely!
- Reattach the drain plug, and tighten it securely.
- Refill new recommended oil.

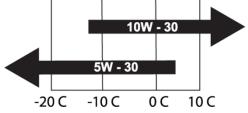


Please dispose the used engine oil environmentally correct. We suggest that you keep the used oil in a sealed container and dispose at your recycling center or service station for reclamation. Do not throw it in the waste; pour it on the ground; or down a drain.

Engine oil specifications

Oil is affecting the performance of your machine and service life. Use 4-stroke automotive detergent oil.

SAE 10W-30 is recommended for general use. The SA oil viscosity and service classification are in the API label on the oil container. We recommend that you use API SERVICE Category SE or SF oil.



The snowbuster 1100E has engine oil capacity of 1.1 Liter

Spark Plug

Check the spark plug for dirt and grime; if necessary clean it with a copper wire brush.

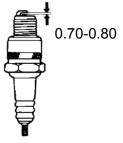
- first time after approximately 10 hours of operation
- Thereafter service the spark plug after every 50 hours of operation.

How to:

- Disconnect the spark plug cap, and remove any dirt from around the spark plug area.
- Remove the spark plug with a spark plug wrench. Inspect the spark plug.
- Replace it if the electrodes are worn, or if the insulator is cracked or chipped.
- Measure the spark plug electrode gap with a suitable gauge.

• The gap should be 0.70 - 0.80 m. Correct the gap, if necessary, by carefully bending the

side electrode



F7RTC or equivalent

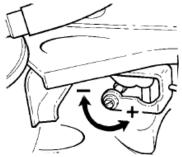
- Mount the spark plug carefully, by hand, to avoid cross-threading.
- After the spark plug seats, tighten with a spark plug wrench to compress the water. If reattaching a used spark plug, tighten 1/8 - 1/4 turn after the spark plug seats. If installing a new spark plug, tighten 1/2 turn after the spark plug seats.
- · Attach the spark plug cap.

NOTICE: An incorrect spark plug can cause engine damage.

Idle speed adjustment

How to:

- · Start the engine
- Move the lever to the lower throttle position (turtle).
- Turn the throttle adjusting screw to obtain the standard idle speed.
 Standard idle speed: 1,800 rpm ± 1500 rpm



Sediment cup

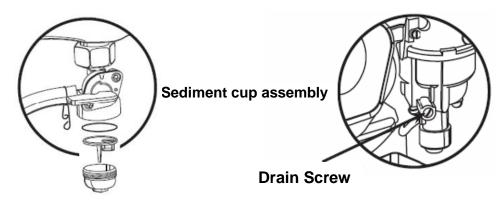
The sediment cup prevents dirt and water from entering the carburetor. If the engine has not been engaged over a period time, the sediment cup should be cleaned before use.

How to:

- Turn the fuel valve to the Off position.
- Remove the sediment cup using a 10 mm wrench.
- Remove the o-ring and filter.
- Clean each of the parts in a high flash-point solvent.
- Reinstall the filter, o-ring, and sediment cup.
- Tighten with 10 mm wrench to secure.
- Return the fuel valve to the on position and check for leaks

Draining the carburetor

- Loosen the carburetor drain screw.
- Allow gasoline to drain completely into suitable container.
- Retighten drain screw.



STORAGE

Proper preparation for long term storage is essential for keeping your snow blower free from rust corrosion and prevent part and function to parts impair. The following steps will make the engine easier to start after storage and prevent your snow blower from rusting during long term storage.

Notice: The warranty does not cover damage on machine or engine as a result of incorrect storage or negligence to comply with maintance recommendation and warning.

Cleaning

If the engine has been running, allow it to cool for at least half an hour before cleaning. Clean all exterior surfaces, seal up any damaged paint, and coat other areas that may rust with a light film of oil.

Caution: Using a garden hose or high-pressure cleaner can force water into the air cleaner or muffler opening. Water in the air cleaner will soak the air filter, and water that passes through the air filter or muffler can enter the cylinder, causing permantent damage.

Notice: Water directly on a hot engine can cause damage or worse crack the aluminum parts in the engine. If the engine has been running, allow it to cool for at least half an hour before washing.

Fuel

Gasoline will oxidize and deteriorate during storage. Stale gasoline will cause hard starting, and will leave gum deposits that will clog the fuel system.

Do not keep same gasoline in engine for more than 3 months!!!

Warning: Don't start the engine with oxidize and deteriorate gasoline in the fuel tank, it may damage the carburetor and other fuel system components!

Preparation for long term storage

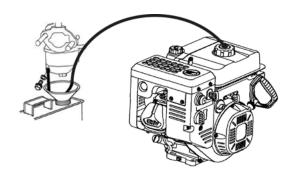
We recommend to drain the fuel tank and carburator before longterm storeage. However adding a fuel stabilizer can extend fuel service life.

Draining the fuel tank and carburetor

We recommend to drain the fuel tank first and herafter the carburetor.

How to:

- 1. Place an approved gasoline container below the carburetor, and use a funnel to avoid spilling fuel.
- 2. Remove the carburetor drain bolt, and then pull out the fuel tube.
- 3. After all the fuel has drained into the container, reattach the drain bolt and fuel tube. Ensure that both bolt and tube are securely tightened.



Adding a fuel additive

Follow the fuel additive scale of the manufacturer.

How to:

- 1. Empty fuel tank for old gasoline and refill fresh.
- 2. Pour the fuel addtive in the tank.
- 3. After filling fuel additive into the tank. Idle run, the engine outdoors for 10 minutes. This will blend the fuel mixture in the engine block and carburetor.
- 4. Stop the engine, and move the fuel valve to the off position.

Precautionary measures against moist

In order to minimize the parts to impair from moist please do as follows:

- 1. Change the engine oil.
- 2. Remove the spark plugs.
- 3. Pour a tablespoon (5-10 cc) of clean engine oil into the cylinder.
- 4. Pull the starter rope several times to distribute the oil in the cylinder.
- 5. Reinstall the spark plugs.
- 6. Pull the starter rope slowly until resistance is felt. This will close the valves so moisture cannot enter the engine cylinder. Return the starter rope gently.

General advice

- Select a well-ventilated storage location, with low humidity in order to prevent rust and corrosion. Avoid locations where an ignition source is present.
- A drained fuel tank will, minimize the possibility of fuel leakage.
- Position the equipment so the engine is level.

 Tilting the machine can cause fuel or oil leakage.
- Cover the engine and exhaust system to prevent from dust.

Notice A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A nonporous cover will trap moisture around the engine, promoting rust and corrosion.

Preparing the engine after a long term storage

- Check your engine as described under maintenance
- Start your engine as described under operation.

Notice: Gasoline oxidizes and deteriorates over time, causing hard starting. If the cylinders were coated with oil during storage preparation, the engine may smoke briefly at startup. This is normal.

Storage planner

Less than 1- month

• No special preparation is required.

1 to 2 months

• Fill with fresh gasoline and add a gasoline conditioner.

2 months to 1 year

- Fill with fresh gasoline and add a gasoline conditioner.
- Drain fuel from carburetor.
- Clean fuel sediment cup.

1 year or more

- Drain fuel tank and carburetor.
- Clean fuel sediment cup.
- · Remove spark plug.
- Put a tablespoon of engine oil into the spark plug cylinder. Turn the engine slowly with the pull rope to distribute the oil. Reinstall spark plug.
- Change oil.

TROUBLESHOOTING

WARNING

Turn off the engine and pull out the ignition cable before making any inspection or adjustments.

If after making an adjustment or repair to the engine, and you let it run for a few minutes, remember that the exhaust and other parts will get hot.

Do not touch these parts as these may burn you.

Fault	Possible causes	Remedy
The unit does not operate smoothly and vibrates intensively	Bolts loose Auger unit mounting loose	Check bolts Check auger unit mounting
Engine does not run	Throttle lever in wrong position Spark plug defective Fuel tank empty Fuel cock closed	Check setting Replace spark plug Top up fuel Open fuel cock
Engine does not run smoothly	Bad Fuel Spark plug dirty	Empty Fuel Tank and refill with Fresh Fuel Clean the spark plug
Drive power falls	Clutch play too large Drive Belt loose or damaged	Adjust clutch cable Replace Drive Belt Contact authorized customer service
The engine will not start or dies after a short period of time	Choke in wrong position Spark plug Fouled No fuel	Check Choke setting Clean or replace spark plug (electrode spacing 0.6mm) Top up fuel
Inadequate or no ejection	Snow ejection until blocked Plow screw not turning Shearing bolts sheared	Clean the snow ejection unit with a solid object Adjust Auger clutch cable Replace shear bolts or contact authorized customer service
The snow is not removed fully	Skids maladjusted	Adjust the skids