

# BENCHMARK™

5140-101

## 52cc 2-STROKE GAS POWERED EARTH AUGER

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**OWNER'S MANUAL**



This product is supported by **Midland Power**. Contact us directly for assistance and warranty help. Do not return this product to store.

You must register online for your warranty to be valid. It only takes a minute, do it now while you still have your purchase receipt.

**Register Your Product Online**

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Support for your product is available online, including parts, service center locations, and live expert advice.

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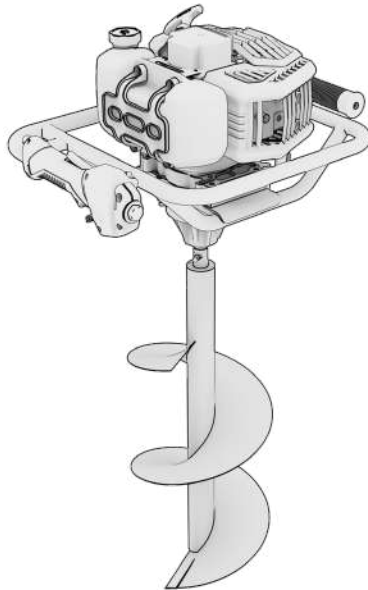
Or call us anytime at **1-877-528-3772**.

# Thanks for choosing the Benchmark™ 52CC 2-STROKE GAS POWERED EARTH AUGER!

You're excited to get started, we'll keep this brief.

## READ THIS ENTIRE GUIDE BEFORE USING THIS PRODUCT AND SAVE FOR LATER USE.

This user guide contains important instructions including safety, setup, operation, and maintenance that must be followed. All information in this guide is based on information available at the time of print. This guide or revised editions can be found on our website for download. No part of this publication may be reproduced without written permission.



**THIS PRODUCT MEETS ALL CERTIFICATION REQUIREMENTS FROM:**



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



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## TABLE OF CONTENTS

<b>1. Safety</b>	<b>1</b>
<b>2. Learn About Your Auger</b>	<b>4</b>
2.1 Component Identification	4
2.2 Control Functions	6
2.3 Make Sure You Have Everything	7
<b>3. Getting Started</b>	<b>8</b>
3.1 Installing the Drill	8
3.2 Add Gasoline and 2-Stroke Oil	9
<b>4. Pre-Operation Check</b>	<b>11</b>
<b>5. Starting The Engine</b>	<b>12</b>
<b>6. Stopping The Engine</b>	<b>14</b>
<b>7. Using The Auger</b>	<b>15</b>
7.1 Adjusting The Drill Speed	15
<b>8. Drilling Tips</b>	<b>16</b>
<b>9. Maintenance</b>	<b>17</b>
9.1 Maintenance Schedule	17
9.2 Cleaning the Air Filter	18
9.3 Spark Plug Service	18
9.4 Lubricating the Gear Box	20
9.5 Cleaning the Drill	20
9.6 Carburetor Modification for High Altitude Operation	21
<b>10. Transportation &amp; Storage</b>	<b>23</b>
10.1 Draining the Fuel Tank	23
10.2 Transporting the Auger	24
10.3 Storage	24
<b>11. Troubleshooting</b>	<b>26</b>
<b>12. Technical Specifications</b>	<b>28</b>
<b>13. Limited Warranty</b>	<b>29</b>

# 1. SAFETY

<b>⚠ DANGER</b>	
Using a generator indoors <b>CAN KILL YOU IN MINUTES</b> . Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.	
	
NEVER use inside a home or garage, <b>EVEN IF</b> doors and windows are open.	Only use <b>OUTSIDE</b> and far away from windows, doors, and vents.
Avoid other generator hazards. <b>READ MANUAL BEFORE USE.</b>	

## **⚠ WARNING!**

**This product can expose you to chemicals including carbon monoxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

## 1.1 OPERATOR SAFETY

### **⚠ WARNING!**

- Always perform an oil, fuel and air filter check before starting the engine.
- Properly inspect, clean, and maintain the equipment.
- Operate the auger according to instructions for safe and dependable service.
- Before operating the auger, read the user guide carefully. Otherwise, it may result in personal injuries or equipment damage.
- Never run the auger in an enclosed area to avoid harm from exhaust emissions of a poisonous carbon monoxide gas.
- Be careful not to touch the exhaust system during operation due to risk of burns.
- Pay attention to the warning labels. The engine exhaust system will become heated during operation and remain hot immediately after the engine is stopped.
- Gasoline is a highly flammable and explosive liquid. Refuel in a well-ventilated area with the engine stopped.
- Use of gasoline with an ethanol content greater than 10% can damage the engine and fuel system and will void the manufacturer's warranty.
- When refueling the auger, keep it away from cigarettes, open flames, smoke and/or sparks.

- Place the auger at least 3 feet away from buildings or other equipment during operation.
- Know how to stop the auger quickly and understand operation of all the controls. Never permit anyone to operate the auger without proper instructions.
- Keep children, pets and machinery with rotating parts away during operation.
- DO NOT operate the auger in rain or snow.
- DO NOT operate the auger if damaged. Have the machine repaired before use.
- DO NOT touch the spark plug while the engine is operating or shortly after the engine has been shut down.
- Wear ear and eye protection while operating this unit.
- Wear sturdy, rough-soled work shoes (steel-toed shoes are recommended) and close-fitting pants and shirts. Never operate this machine while barefoot, in sandals, slippery or lightweight (e.g. canvas) shoes.

## 1.2 USE SAFETY

### **⚠ WARNING!**

- This auger is intended to be used in private property and is not intended to be used in public spaces, parks, or fields.
- DO NOT operate the auger in a confined space where dangerous carbon monoxide fumes can collect.
- Refuel outdoors only and DO NOT smoke while refueling. Never remove the cap of the fuel tank or add gas while the engine is running or when the engine is hot.
- If gas is spilled, DO NOT attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until gas vapours have dissipated.
- Operate only in daylight or in good artificial light.
- Never operate the auger without proper shields, guards, or other safety protective devices in place and working.
- Never operate the auger with damaged safety devices. Failure to do so can result in personal injury.
- Thoroughly inspect the area where the auger is to be used and remove all foreign objects. Your equipment can propel small objects at high-speed causing personal injury or property damage.

- Watch for holes, roots, bumps, or other rough ground. Tall grass can hide obstacles.
- Always check your back and blind-spots, and use caution when pulling the auger towards you.
- Always start the auger on the level surface.
- Do not drill on a slope greater than 10 degrees.
- DO NOT attempt to drill hard soil, drill too deep or drill at an overly fast rate that can overload the auger.
- Always be sure of your footing. A slip and fall can cause serious personal injury. If you feel you are losing your balance, release the control lever immediately and the drill will stop rotating.
- DO NOT drill near drop-offs, ditches, or embankments, you could lose your footing or balance.
- After striking a foreign object, stop the engine, disconnect the spark plug wire and ground against the engine. Thoroughly inspect the auger for any damage. Repair the damage before starting and operating the auger.

### 1.3 MAINTENANCE SAFETY

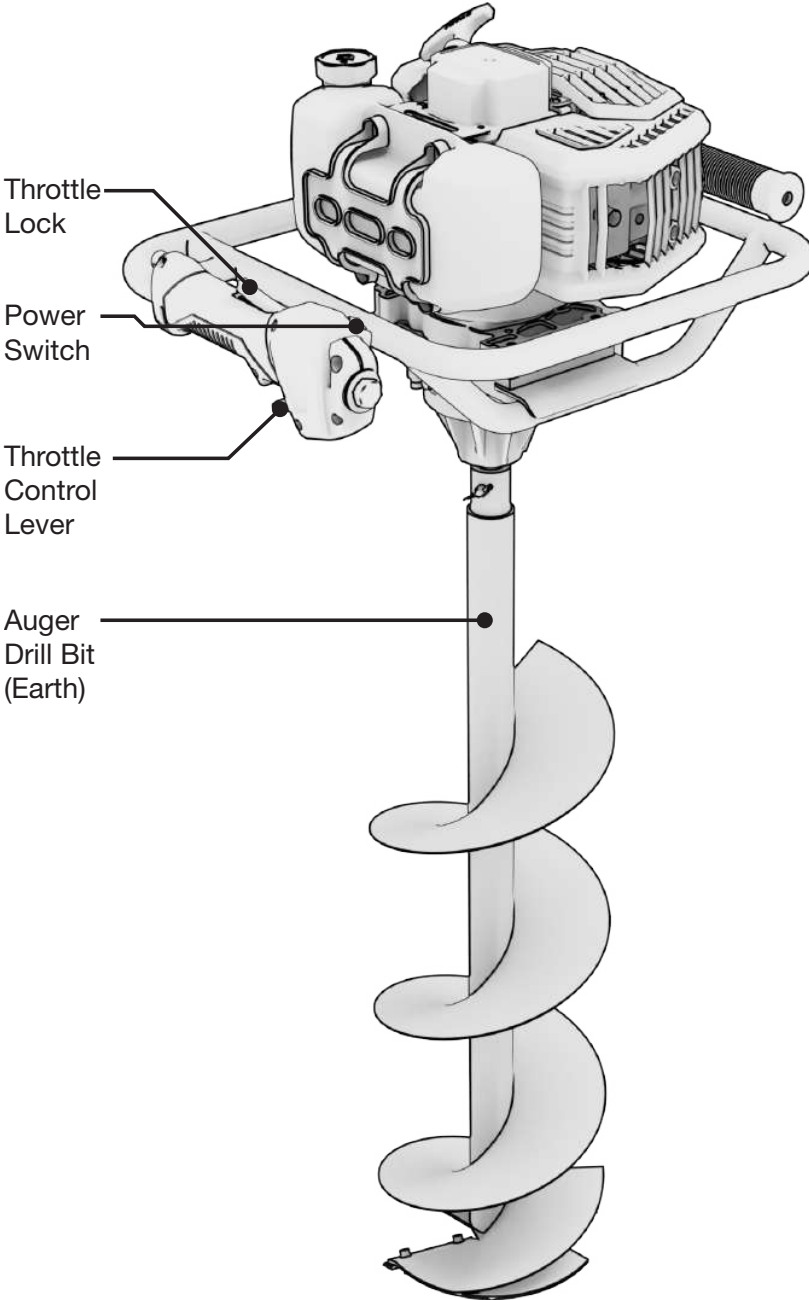
#### **⚠ WARNING!**

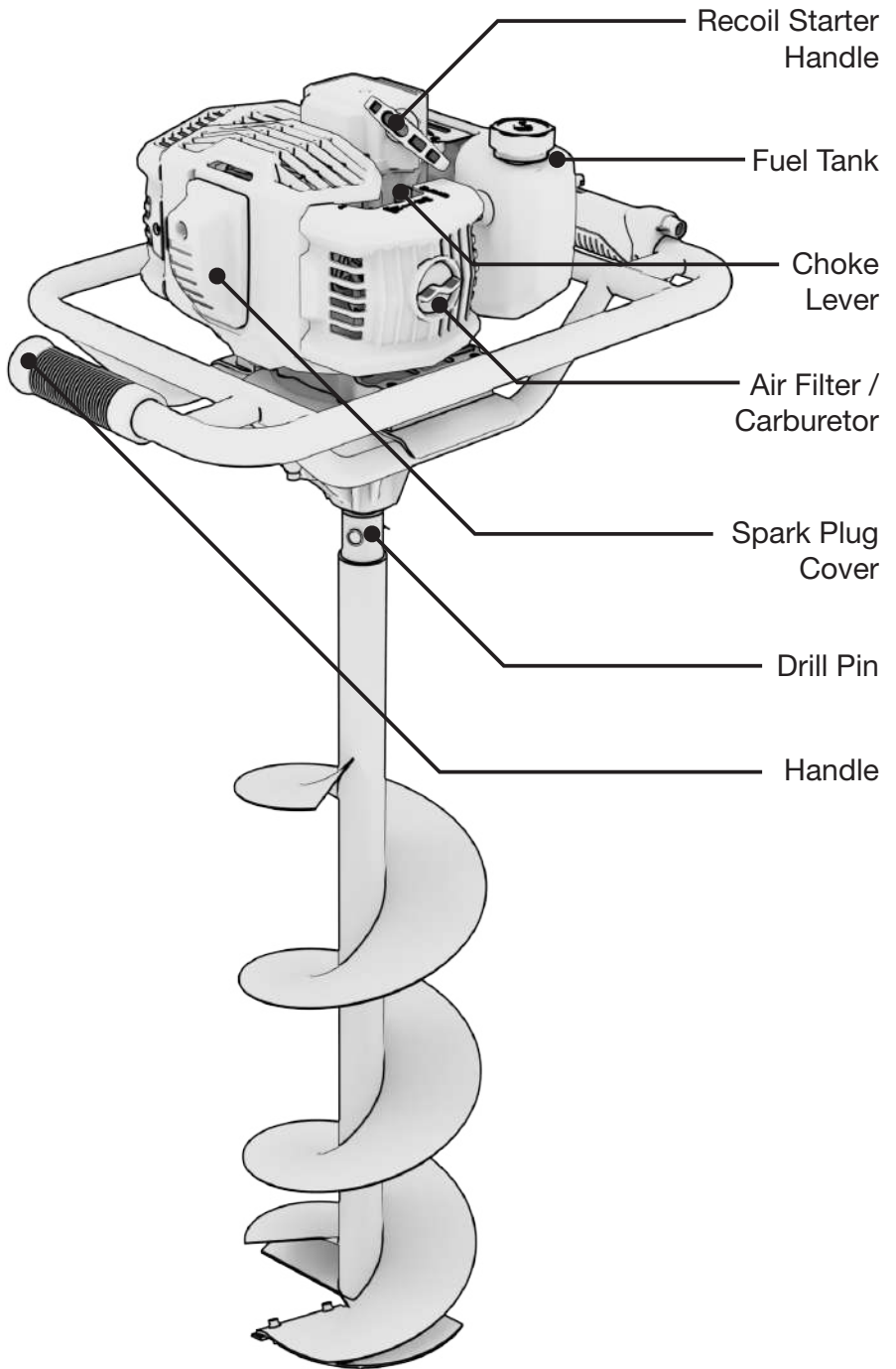
- Turn off the engine before performing any maintenance. Failure to do so can cause severe personal injury or death.
- Use rubber gloves when coming into contact with engine oil.
- After any maintenance is performed, wash immediately using soap and clean water. Repeated exposure to oils may cause skin irritation.
- DO NOT clean the filter element with flammable liquids like gasoline; an explosion may occur.
- Allow the auger to cool down before performing any maintenance.
- To reduce the fire hazard, keep the engine and gasoline storage area free of grass, leaves, or excessive grease.
- Drain the fuel tank outdoors only.
- Auger components are subject to wear and damage. Frequently check components and replace damaged parts immediately with genuine replacement parts only, available through Customer Service.
- Only qualified maintenance personnel with knowledge of fuels and machinery hazards should perform maintenance procedures.
- See 'Maintenance Schedule' for the recommended maintenance schedule.

## 2. LEARN ABOUT YOUR AUGER

This section will show you how to identify key parts of your auger. Going over the terminology below will make sure we're on the same page.

### 2.1 COMPONENT IDENTIFICATION





## 2.2 CONTROL FUNCTIONS

### Drill

- Used to drill into earth. Includes a 6 and 8 inch drill.

### Drill Pin

- Used to secure the drill in place.

### Power Switch

- The Power switch allows the auger to be recoil started, and shuts down the engine.

### Recoil Starter Handle

- The recoil starter handle is used to manually start the engine. Stand behind the unit and pull the recoil starter rope to start the unit.

### Throttle Control Lever

- The lever located on the underside of the handle controls the drill speed.

### Throttle Lock

- The lever located on the top of the handle prevents the throttle from being activated accidentally.

### Choke Lever

- Opens or closes an air valve which adjusts the amount of air being mixed with the fuel entering the carburetor. When you close the choke you allow less air into the carburetor, causing the fuel/air mixture to run “rich”, this makes cold-starting the engine easier.

### Air Filter

- Prevents dust and debris from entering and damaging the engine. Be sure to inspect and clean regularly according to maintenance schedule.

### Carburetor

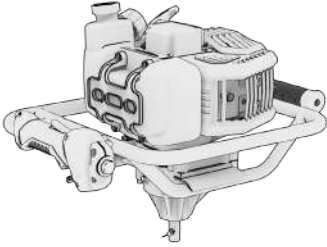
- The Carburetor combines air with fuel in the engine. Be sure to inspect and adjust with a high-altitude jet if operating above 2000 feet.

### Spark Plug Cover

- Cover for the spark plug. Be sure to inspect and clean regularly according to maintenance schedule.

## 2.3 MAKE SURE YOU HAVE EVERYTHING

Make sure your package has everything listed in the diagram below.



1x Auger Head



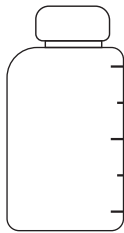
6-in Earth Auger Drill Bit



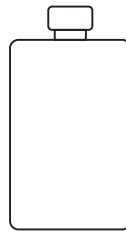
8-in Earth Auger Drill Bit



Extension Rod



Oil Mixing Bottle



Bottle 2-Stroke Oil



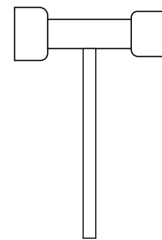
Screw-Driver



2x Allen Wrenches



Wrench (10/13)

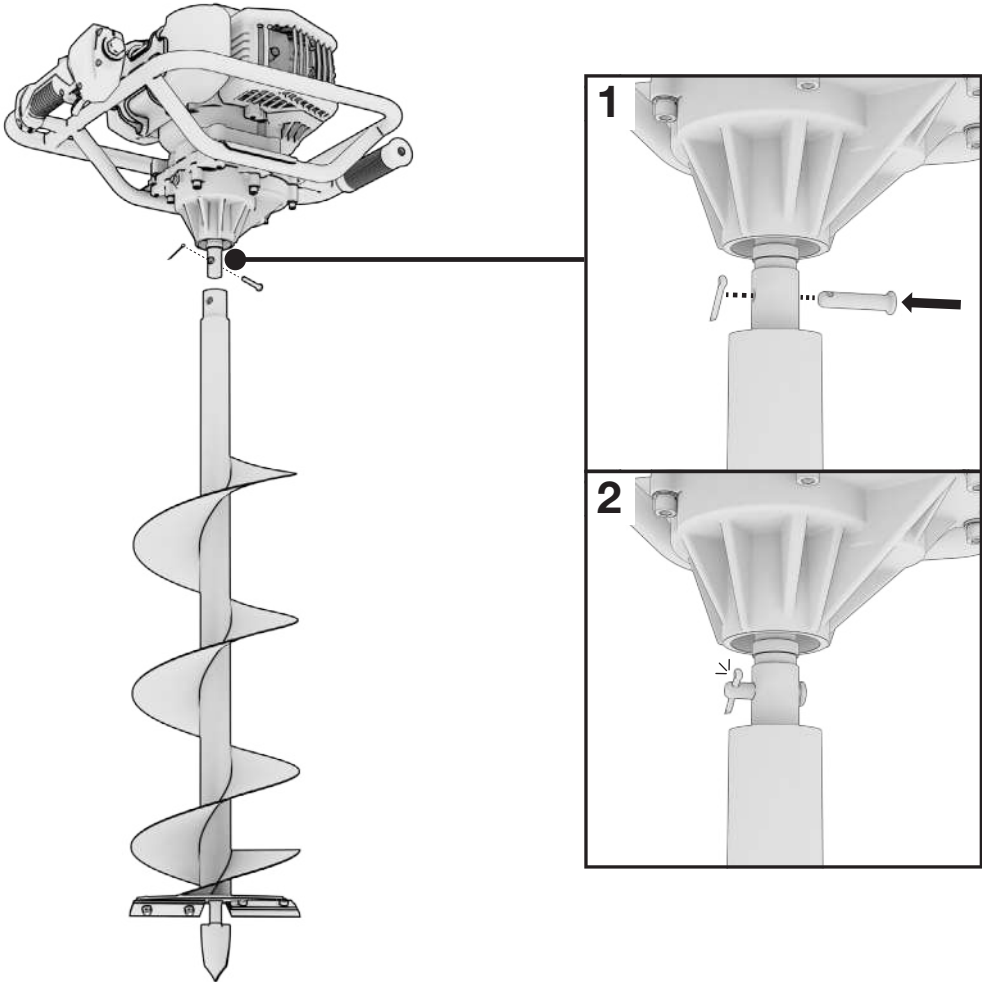


Socket Spanner

### 3. GETTING STARTED

Cut the four corners of the carton from top to bottom instead of attempting to lift it out of the box.

#### 3.1 INSTALLING THE DRILL



1. Insert the drill (6-in or 8-in) into the Auger Head's drive shaft. Align the pin hole of the drill's shaft with the pin hole of the drive shaft.
2. Insert clevis pin into the engine and drill shaft. Secure using split cotter.
3. Ensure that the drill is completely secured onto the drive shaft.

## 3.2 ADD GASOLINE AND 2-STROKE OIL

### **⚠ WARNING!**

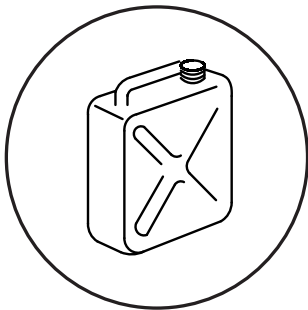
Used 2-stroke oil can cause skin irritations if left in long-term contact with skin. Thoroughly wash off used oil as soon as possible with soap and water.

Gasoline and 2-stroke oil is highly flammable and explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped. **DO NOT** smoke or allow open flames or sparks in the area where the auger is being refueled, or where gasoline or 2-stroke oil is stored. **DO NOT** overfill the tank. Be careful not to spill gasoline or 2-stroke oil when refueling. Wipe up any spilled gasoline and 2-stroke oil, and let the area dry before starting the engine.

Gasoline substitutes such as gasohol are not recommended. They may be harmful to the fuel system.

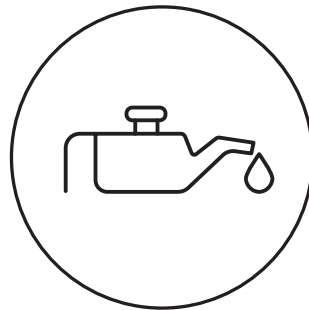
### 3.3.1 MIXING GASOLINE AND 2-STROKE OIL

This engine requires a mixture of gasoline and oil to run properly.



**GASOLINE**

**40:1**  
GAS:OIL  
RATIO



**2-STROKE OIL**

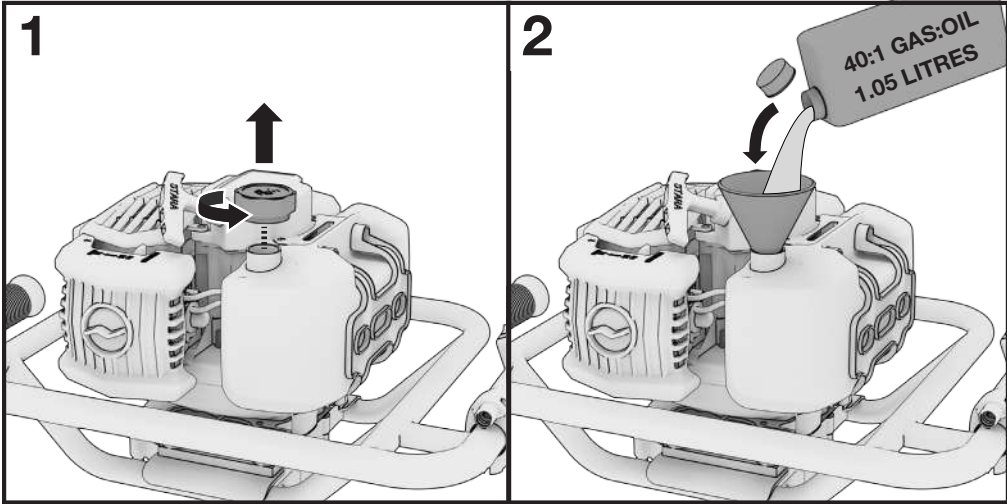
- Mix 40 parts gasoline and 1 part 2-stroke oil (40:1) thoroughly.
- Tank Size: 1.05L
- **Max Capacity** - Gasoline: 1,024 mL. 2-stroke oil: 26 mL.

### **NOTE**

- Only use unleaded gasoline (Pump Octane 87 or higher).
- We recommend B3C 'Ethanol Shield' 2-Cycle Oil & Fuel Stabilizer.
- NEVER use stale or contaminated gasoline.
- DO NOT use a mixture of gasoline containing methanol. This will cause serious damage to the engine.
- Use of gasoline with an ethanol content greater than 10% can damage the engine and fuel system and will void the manufacturer's warranty.

### 3.3.2 ADDING GASOLINE AND 2-STROKE OIL MIXTURE

Now that your gasoline and oil are properly mixed, it is time to fill the engine.



1. Remove fuel tank cap. Place funnel securely in place (not included).
2. Add gasoline and 2-stroke oil mixture carefully. DO NOT fill up to the base of the fuel neck. Fill the fuel tank no closer than 1 inch from top of tank to provide space for expansion.
3. Secure the fuel tank cap and wipe off any excess mixture.

#### **NOTE**

- Tank Size: 1.05L
- **Max Capacity** - Gasoline: 1,024 mL. 2-stroke oil: 26 mL.
- Avoid getting dirt or water into the fuel tank.
- DO NOT OVERFILL.

## 4. PRE-OPERATION CHECK

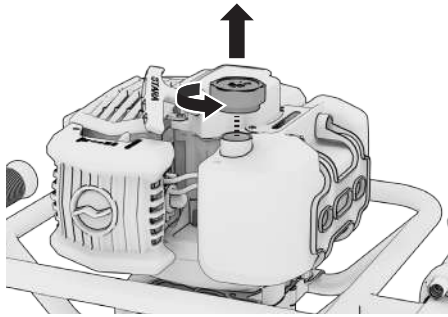
### **⚠ WARNING!**

**Exhaust gas contains poisonous carbon monoxide. NEVER run the auger in an enclosed area. Be sure to provide adequate ventilation. Operate the auger on a level surface. If the auger is tilted, fuel spillage may result. Keep away from rotating parts while the auger is running. The auger is air-cooled and may be damaged if ventilation is inadequate.**

These quick checks should be done each time the auger is started to ensure you get the most out of your auger.

Set the auger on a level surface and the power to OFF.

### 4.1 CHECK THE GASOLINE AND 2-STROKE OIL LEVEL



1. Check the fuel level by removing the fuel tank cap to visually check the level.
2. Add gasoline and 2-stroke oil mixture carefully. DO NOT fill up to the base of the fuel neck. Fill the fuel tank no closer than 1 inch from top of tank to provide space for expansion.
3. Tighten the fuel cap securely after refilling

### **NOTE**


- Only use unleaded gasoline (Pump Octane 87 or higher).
- We recommend B3C 'Ethanol Shield' 2-Cycle Oil & Fuel Stabilizer.
- NEVER use stale or contaminated gasoline.
- Avoid getting dirt or water into the fuel tank.
- DO NOT use a mixture of gasoline containing methanol. This will cause serious damage to the engine.
- Use of gasoline with an ethanol content greater than 10% can damage the engine and fuel system and will void the manufacturer's warranty.
- DO NOT OVERFILL.

## 4.2 SURVEY YOUR AREA

- Familiarize yourself with the area in which you plan to operate the auger. Mark off all boundaries of where you plan to drill.
- Ensure the area to be drilled is free of debris or objects that could be picked up by the drill and thrown.
- Ensure the operating area is clear of bystanders, especially children and pets. Be alert and turn the unit off if bystanders enter the area. Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

## 5. STARTING THE ENGINE

**⚠ DANGER! ⚠**

<b>⚠ DANGER</b>	
Using an engine indoors <b>CAN KILL YOU IN MINUTES</b> . Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell.	
 <b>NEVER</b> use inside a home or garage, <b>EVEN IF</b> doors and windows are open.	 Only use <b>OUTSIDE</b> and far away from windows, doors, and vents.
Avoid other engine hazards. <b>READ MANUAL BEFORE USE.</b>	

**Using a gas powered engine indoors WILL KILL YOU IN MINUTES. Engine exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. If you can smell the engine exhaust, you are breathing CO. Even if you cannot smell the exhaust, you could be breathing CO.**

**NEVER** use an engine inside a home, garage, crawlspace, or other partly enclosed area, deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors will **NOT** supply enough fresh air.

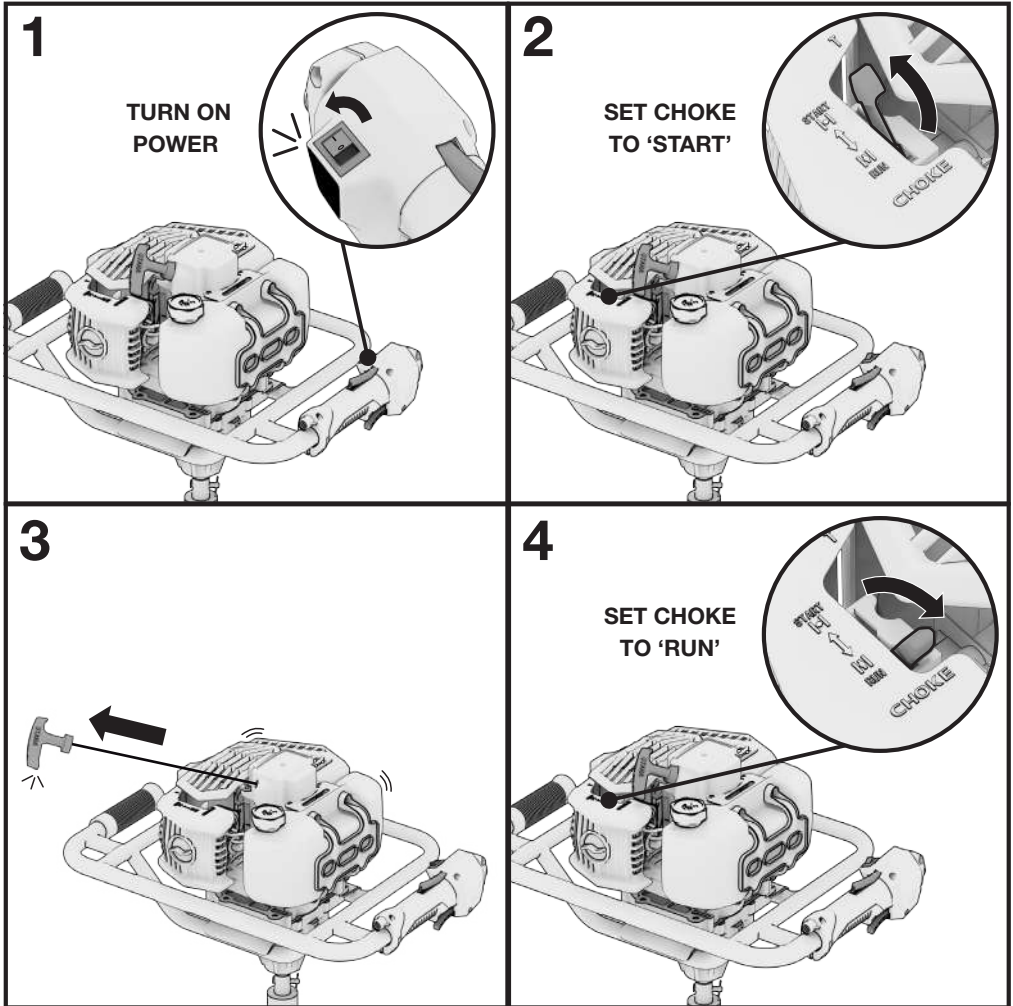
**ONLY** use an engine outdoors and far away from open windows, doors, and vents. These openings can pull in engine exhaust. Even when you use an engine correctly, **CO** may leak into the home. **ALWAYS** use a **CO** alarm in your home.

If you start to feel sick, dizzy, or weak after the engine has been running, move to fresh air **RIGHT AWAY** and seek medical attention. You could have carbon monoxide poisoning. Never run the engine in an enclosed space.

### **NOTE**

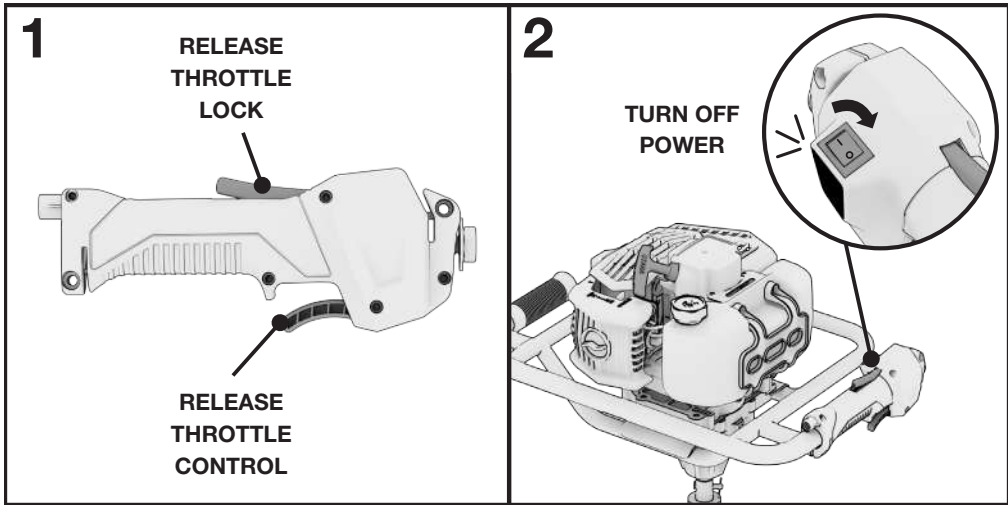
- DO NOT crank the engine with the spark plug removed.

## 5.1 MANUAL RECOIL START



1. Set the Power Switch to the ON position.
2. Set the choke lever to the START position.
3. Pull recoil handle out rapidly, to start the engine. Carefully allow the recoil handle to return. Repeat this step until the engine starts.
4. Move the choke lever to the RUN position when the engine warms.

## 6. STOPPING THE ENGINE

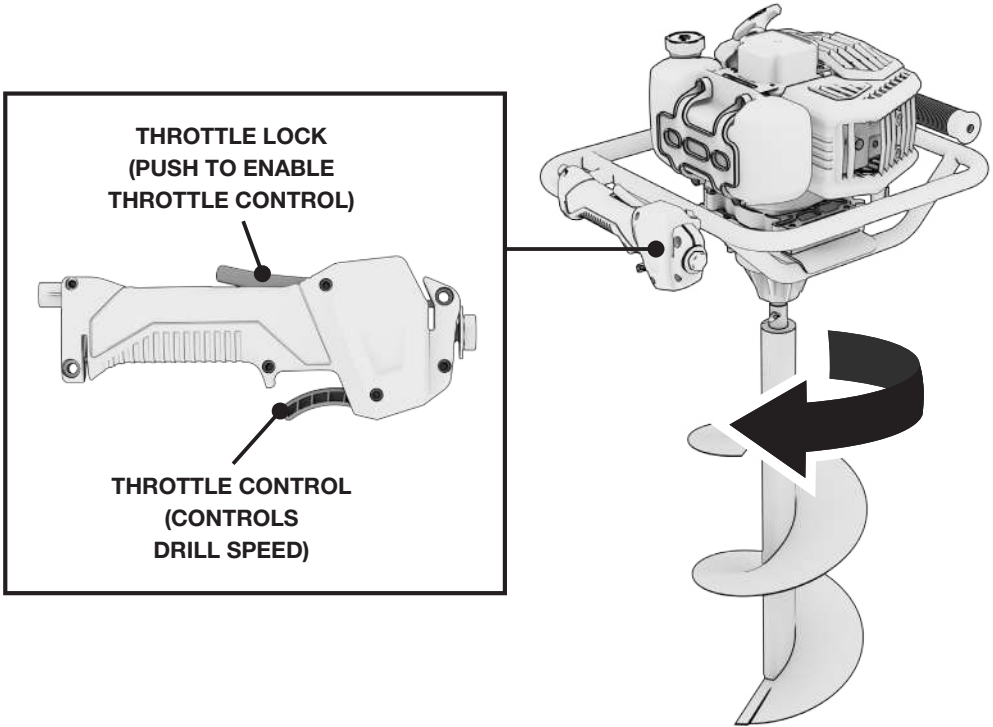


1. Release the throttle control lever and throttle control lock.
2. Turn Power Switch to the OFF position.

# 7. USING THE AUGER

## 7.1 ADJUSTING THE DRILL SPEED

Drilling speed is controlled by the throttle control lever. The throttle control lock must be held down first before activating the throttle control.



1. Hold the throttle lock down to enable throttle control.
2. Squeeze the throttle control lever to activate the drill. The more the lever is pressed, the faster the drill spins.

## 8. DRILLING TIPS

### **⚠ WARNING!**

**Ensure that the ground that will be drilled has no debris, pipes, cables, or other obstructions.**

**Ensure that you have proper permission to drill the ground. Check with local authorities to guarantee you are clear to drill the ground, and that there will be no damage occurred when drilling.**

- Earth, dirt, and clay can have many pieces of debris, such as rocks, tree roots, or even service cables and pipes underneath. Drill as slowly as possible, and stop immediately if the auger is obstructed.
- Extremely compact and dry dirt can be very difficult to drill. Consider bringing tools such as a soaker hose, backhoe, shovel, or other digging tools when working on tough ground.
- Consider carrying a shovel, crowbar, or other digging/prying tools while drilling to easily remove obstacles encountered during drilling.
- Use the appropriate drill bit for the scenario. Do not use a drill that is too small or too large for the work you are doing.

# 9. MAINTENANCE

**⚠ WARNING!**

**Fuel and its vapors are extremely flammable, which could cause burns or fire resulting in death or serious injury. When performing maintenance that requires the unit to be tipped, the fuel tank must be empty, or fuel can leak out and result in a fire or explosion.**

Only use genuine parts and recommended fluids to replace the worn components. Improper maintenance may cause the auger to malfunction and can lead to serious injury. Contact customer support if you have any maintenance questions.

## General Inspection Tips

- Look for fuel leaks around the fuel tank, fuel hose, and fuel valve. Close the fuel valve and repair leaks immediately.
- Look and listen for exhaust leaks while the engine is running. Have all the leaks repaired before continuing operation.
- Check for dirt and debris and clean as necessary.
- Check the gasoline and 2-stroke oil level and add more as necessary.

## 9.1 MAINTENANCE SCHEDULE

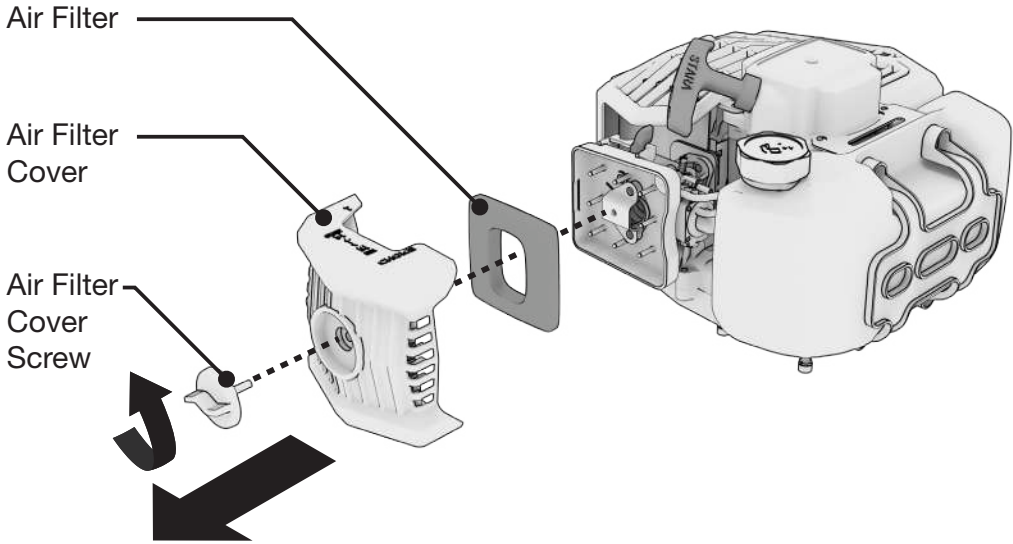
Regular maintenance will improve performance and extend the service life. Maintain the auger according to the maintenance schedule below.

**NOTE**

- Service more frequently when used in dusty areas or adverse conditions.
- These items should be serviced by an authorized service center unless you have the proper tools and are mechanically proficient. Refer to user guide for service procedures.

<b>Before Each Use</b>
Check and tighten all screws and nuts
<b>Every 10 Hours</b>
Clean air filter
<b>Every 20 Hours</b>
Add lubricating oil to the gear box
<b>Every 25 Hours</b>
Inspect spark plug and replace is necessary

## 9.2 CLEANING THE AIR FILTER



1. Remove filter cover screw and remove the air filter cover. Remove the air filter housing and elements and inspect for cleanliness.
2. Clean the *foam* air filter with soap and water and let dry.
3. Soak the *foam* air filter in clean 2-stroke oil.
4. Gently squeeze and then pat out all excess oil and reinstall.
5. Replace filter if it is damaged.

## 9.3 SPARK PLUG SERVICE

### NOTE

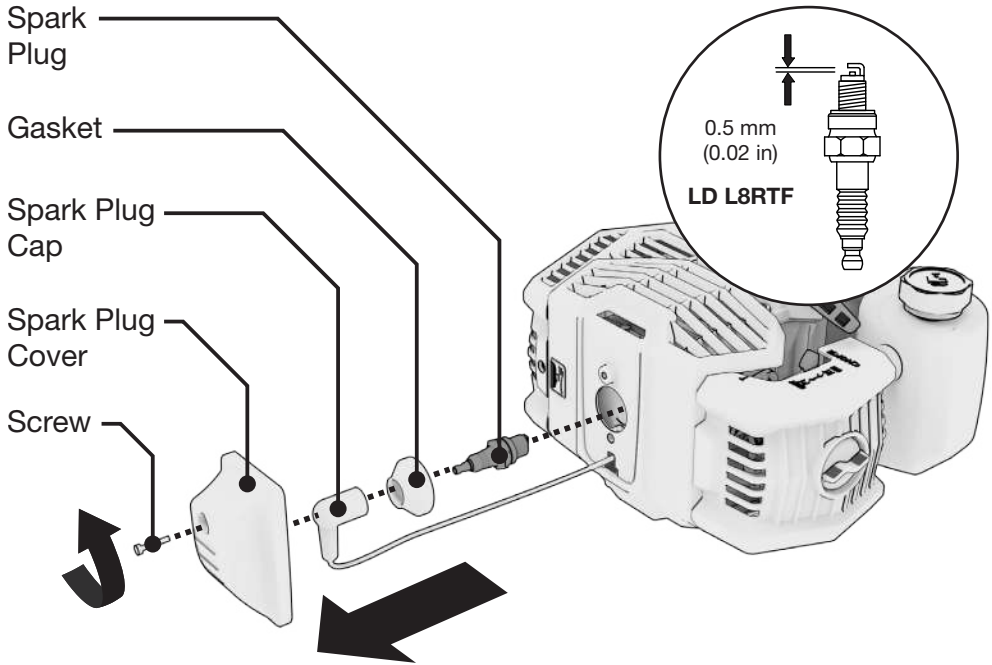
- Do NOT rinse spark plug in water. Follow guidelines and be careful not to overtighten the spark plug.

Recommended spark plug: **LD L8RTF**

Check the spark plug gap and clean the carbon deposits at the bottom of the spark plug.

**Tighten 1/2 turn when installing a new spark plug.**

**Tighten 1/8 TO 1/4 turn when re-installing an old spark plug.**



1. Remove the spark plug cover.
2. Remove the spark plug connector and gasket.
3. Remove the spark plug with the socket wrench.
4. Visually inspect the spark plug. Replace with a new one if the insulation is cracked or chipped. Clean with a wire brush if the spark plug is reused.
5. Measure the spark plug gap with a feeler gauge. The normal value is: 0.5mm (0.02in). Adjust the gap by carefully bending the electrode.
6. Carefully reinstall the spark plug by hand, to avoid cross-threading. A new spark plug should be tightened 1/2 turn with a wrench. A used spark plug should be tightened 1/8 to 1/4 turn with wrench.
7. Reinstall the spark plug connector and gasket.
8. Reinstall the spark plug cover.

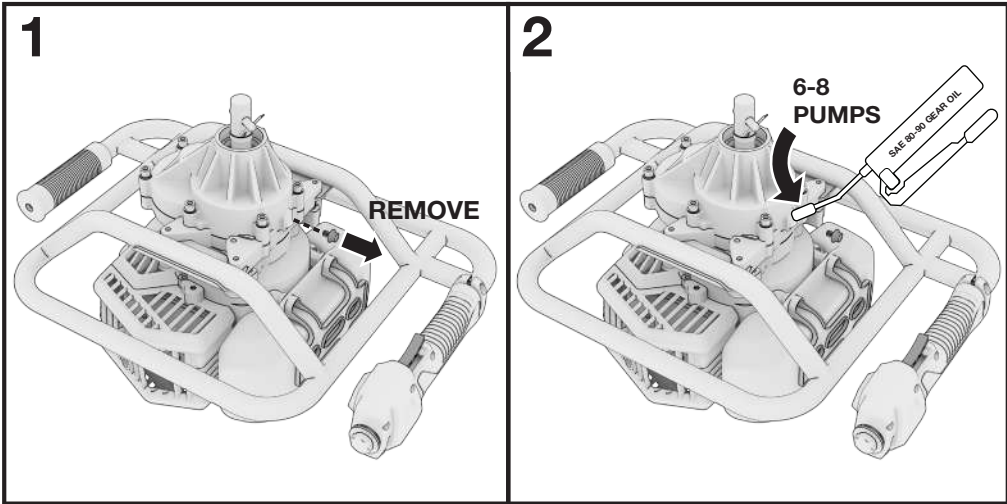
#### **NOTE**

- The spark plug must be securely tightened or it could cause the spark plug to heat up enough to damage the engine.
- Never use a spark plug with an improper heat range.

## 9.4 LUBRICATING THE GEAR BOX

### NOTE

- Before lubricating the auger, remove any attached drill.



1. Remove the lubrication bolt.
2. Using a grease gun (not included), add **SAE 80-90 gear oil** into the lubrication bolt hole. Use 6-8 pumps.
3. Re-insert the lubrication bolt.

## 9.5 CLEANING THE DRILL

1. Turn off engine and allow it to cool.
2. Remove spark plug cap and secure it away from the spark plug.
3. Position the auger so that the drill is exposed.
4. Remove all dirt, vegetation, string, wire, and other material that may have accumulated on the drill.
5. Slowly tip the auger back to a level position.
6. Replace spark plug wire.

## 9.6 CARBURETOR MODIFICATION FOR HIGH ALTITUDE OPERATION (Above 2,000 feet)

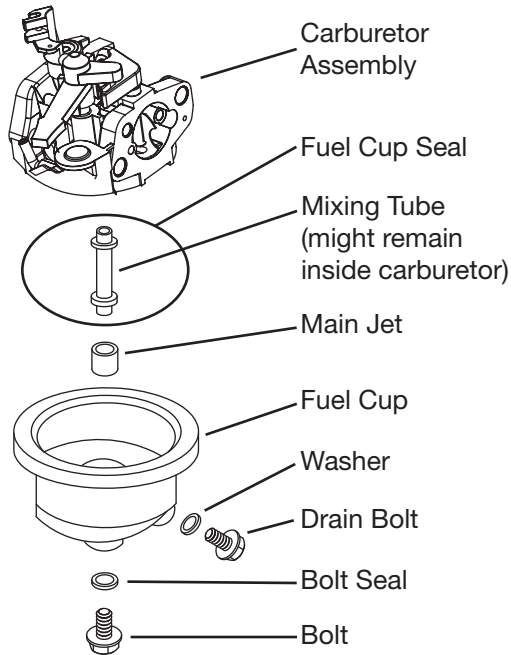
### NOTE

- This engine is equipped to run at altitudes below 2,000-ft.
- A high-altitude main jet is recommended when operated at 2,000 to 7,000-ft above sea level.
- At elevations above 7,000-ft the engine may experience decreased performance even with a high-altitude main jet.

At high altitudes the carburetor's air/fuel mixture becomes too rich, resulting in higher fuel consumption, lower performance, and carbon build-up on the spark plug. On the other hand, if the carburetor has been modified for high altitude operation and is operated below 2000-ft, the air/fuel mixture will then be too lean for low altitude use. Always use the correct main jet for your altitude.

The engine's carburetor, governor (if so equipped), and any other parts that control the air/fuel ratio will need to be adjusted by a qualified mechanic to allow efficient high-altitude use, and to prevent damage to the engine and any other devices used with this product. The fuel system on this engine may be influenced by operation at higher altitudes.

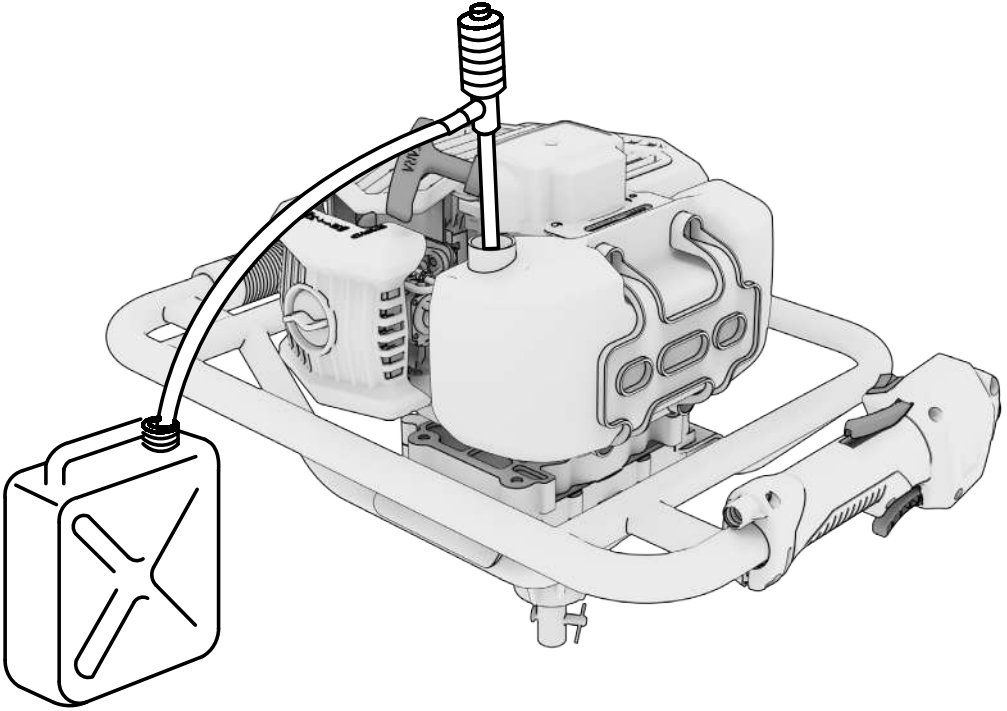
- Carburetor bowl may have gas in it which will leak upon removing the bolt.
- The mixing tube is held in place by the main jet and might fall out when it is removed. If it falls out, replace it in the same orientation before replacing the main jet.
- The fuel cup seal and bolt seal may be damaged during removal and should be replaced with the new ones.



1. Turn off the engine.
2. Close the fuel valve.
3. Place a bowl under the fuel cup to catch any spilled fuel.
4. Unthread the bolt holding the fuel cup.
5. Remove the bolt, bolt seal, fuel cup, fuel cup seal and main jet from the body of the carburetor assembly. A carburetor screwdriver (not included) is needed to remove and install the main jet.
6. Replace the main jet with the replacement main jet needed for your altitude range.
7. Replace the fuel cup seal, fuel cup, bolt seal, and bolt. Tighten in place. Do not cross thread bolt when tightening. Finger tighten first and then use a wrench to make sure the bolt is properly threaded.
8. Wipe up any spilled fuel and allow excess to evaporate before starting engine. To prevent FIRE, do not start the engine while the smell of fuel hangs in the air.

# 10. TRANSPORTATION & STORAGE

## 10.1 DRAINING THE FUEL TANK



Drain the old fuel and completely fill the tank with fresh gas and oil mixture. Add a fuel stabilizer according to the manufacturer's directions to keep your fuel fresh over long periods, we recommend B3C fuel additives. Run the engine for 2 minutes to circulate the fuel stabilizer.

## 10.2 TRANSPORTING THE AUGER

- Do not overfill the fuel tank (No residual fuel on the neck of tank).
- Avoid exposing the auger to prolonged direct sunlight while in an enclosed vehicle. The high temperature inside the vehicle could cause fuel to vaporize resulting in a possible explosion.
- Drain the auger of gasoline and 2-stroke oil mixture before being transported on rough roads.

## 10.3 STORAGE

Gasoline can oxidize in as little as 30 days, causing gum and varnish to build up in fuel system components.

### **NOTE**

- Ensure that the storage area is free of excess humidity and dust.
- DO NOT store auger in an unventilated area where fuel fumes may reach flame, sparks, pilot lights or an ignited object.
- Drain fuel outdoors away from any ignition sources. Use only approved fuel containers.

Storage Duration	Preparation Required
Less than 1 Month	<ul style="list-style-type: none"> <li>■ No storage preparation required, simply store as is.</li> </ul>
1 Month to 1 Year	<ul style="list-style-type: none"> <li>■ Drain the old gas and completely fill the tank with fresh gas before storage. Add fuel stabilizer according to the manufacturer's directions. Adding a quality fuel stabilizer can keep gas fresh for up to a year.</li> </ul>
1 Year or More	<ul style="list-style-type: none"> <li>■ Drain off the gasoline from the fuel tank, and store in a suitable container. This will help prevent deposits from forming in the fuel system.</li> <li>■ Loosen the carburetor drain bolt. Take off the spark plug cap and revolve the engine 3 or 4 times, by pulling the recoil handle, to fully discharge the gasoline from the fuel lines.</li> <li>■ Tighten the drain bolt of the carburetor.</li> <li>■ Remove the spark plug, and pour a tablespoon of clean engine oil (10~20ml) into the cylinder. Revolve the engine several times by pulling on the recoil start to distribute the oil. Reinstall the spark plug. Pull the starter grip slowly until you feel resistance. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed. This position helps to protect the engine from internal corrosion.</li> <li>■ Coat the drill axle lightly with axle grease to protect from rusting.</li> </ul>

# 11. TROUBLESHOOTING

Problem	Cause	Solution
<p>Engine difficult to start.</p>	<ul style="list-style-type: none"> <li>■ Out of fuel.</li> <li>■ Power Switch OFF.</li> <li>■ Spark plug wire disconnected.</li> <li>■ Fouled spark plug.</li> <li>■ Dirty Carburetor.</li> <li>■ Clogged air filter.</li> <li>■ Contaminated Fuel.</li> </ul>	<ul style="list-style-type: none"> <li>■ Add fresh fuel.</li> <li>■ Turn Power Switch ON.</li> <li>■ Attach spark plug wire to spark plug.</li> <li>■ Remove spark plug. Inspect. Replace if necessary.</li> <li>■ Take unit to an authorized service center for carburetor cleaning.</li> <li>■ Remove and clean air filter.</li> <li>■ Drain fuel tank. Clean fuel tank. Fill with fresh fuel.</li> </ul>
<p>Engine Problems. The engine smokes excessively, runs very “rough,” runs erratically, or cannot maintain full speed.</p>	<ul style="list-style-type: none"> <li>■ No engine oil.</li> <li>■ Fouled spark plug.</li> <li>■ Clogged air filter.</li> <li>■ Contaminated Fuel.</li> <li>■ Carburetor out of adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>■ Add engine oil to fuel mixture.</li> <li>■ Remove spark plug. Inspect. Replace if necessary.</li> <li>■ Remove and clean air filter.</li> <li>■ Drain fuel tank. Clean fuel tank. Fill with fresh fuel.</li> <li>■ Take unit to an authorized service center for carburetor adjustment.</li> </ul>
<p>Excessive vibration and noise.</p>	<ul style="list-style-type: none"> <li>■ Loose parts.</li> <li>■ Engine problems (above).</li> </ul>	<ul style="list-style-type: none"> <li>■ Tighten all fasteners.</li> <li>■ Refer to engine solutions (above).</li> </ul>

Drill will not rotate.	<ul style="list-style-type: none"> <li>■ Debris interfering with the drill.</li> <li>■ Drill is loose.</li> <li>■ Damaged drive belts.</li> </ul>	<ul style="list-style-type: none"> <li>■ Remove debris from around drill.</li> <li>■ Replace drill bolts and nuts.</li> <li>■ Replace drive belts.</li> </ul>
Engine will not stop.	<ul style="list-style-type: none"> <li>■ Damaged Throttle Control or Throttle Lock.</li> </ul>	<ul style="list-style-type: none"> <li>■ Contact Customer Support.</li> </ul>
Drill will not dig properly.	<ul style="list-style-type: none"> <li>■ Damaged or worn drill.</li> <li>■ The drill is assembled incorrectly.</li> </ul>	<ul style="list-style-type: none"> <li>■ Contact Customer Support.</li> </ul>
Frequent engine stalling.	<ul style="list-style-type: none"> <li>■ Excessive drilling speed / depth.</li> <li>■ Engine problems (above).</li> </ul>	<ul style="list-style-type: none"> <li>■ Drill at a moderate pace. Make multiple passes.</li> <li>■ Refer to engine solutions (above).</li> </ul>

# 12. TECHNICAL SPECIFICATIONS

	SPECIFICATIONS	PARAMETERS
ENGINE	Type	Two Stroke
	Engine Displacement	52cc
	Max Engine Speed	7500 rpm
	Idle Engine Speed	8500 rpm (+/- 500 rpm)
	Spark Plug	LD L8RTF
	Spark Plug Gap	0.02 in (0.5mm)
	Start System	Recoil Start
	Fuel Type	Unleaded Gasoline
	Fuel Tank Volume	1.05 L
AUGER	Model Name	5140-101
	Drilling Width	Up to 8 in (20 cm)
	Drilling Depth	23.6 in (60 cm)
	Number of Drills (sets)	2
OTHER	Dimensions (L*W*H)	13.8 x 20.1 x 37.2 in
	Net Weight	34.4 lbs / 15.6 kg

# 13. LIMITED WARRANTY

This product is distributed by:  
Midland Power Inc.  
376 Magnetic Drive, Toronto, ON M3J 2C4, Canada

## Warranty

Beginning at the time of retail purchase and for the duration of the warranty period Midland Power Inc. (Midland) warrants that Equipment manufactured by it is warranted to be free from defects in material and workmanship. Midland will, at its sole discretion, replace or repair any part(s) which, upon evaluation and testing by Midland or an authorized service center, show a defect in workmanship or material. Valid proof of purchase must be submitted online for registration with Midland, or presented to Midland at time of claim, for warranty to be valid. This warranty is not transferable from the original owner.

### Limited Warranty Period:

Non-commercial use:

- Year 1, 2 and 3 - Parts and Labour
- Year 4 and 5 - Parts

Commercial use:

- First 6 Months - Parts and Labour

Commercial use includes utilization of the purchased product for a business or non-profit organization, or to financially benefit an individual. This includes, but is not limited to, usage in the context of a financial transaction, usage on commercial or non-profit property, or usage for advertising or marketing purposes.

Replacement parts sold to a consumer or installed by an authorized service center are warranted for a period of 90 days from date of purchase. Labour must be performed by an authorized service center unless given Midland's prior written approval. Midland will not bear any transportation or shipping fees to or from an authorized service center. Service calls, travel charges, overtime, or weekend rates, are not covered.

This warranty does NOT cover:

- i. Any repairs required as a result of any parts not supplied by Midland, and this part is responsible for the failure or malfunction;
- j. Any Equipment modified, altered, disassembled or remodelled;
- k. Any repairs required as a result of a failure to install, maintain, store, transport, or operate the Equipment in accordance with standard practices

set out in the user guide;

- l.** Damage that occurred after receipt of equipment, not caused by defects in workmanship or material;
- m.** Normal maintenance services, as outlined in the user guide and intended for a consumer to perform;
- n.** Replacement of parts made in connection with normal maintenance services including oils, adhesives, additives, fuel, filters, brushes, belts, lubricants, spark plugs, gaskets, seals, fasteners, wires, tubes, pipes, fittings, wheels, batteries, and other expendables susceptible to natural wear;
- o.** Any accessory or attachment.

Any battery supplied with this Equipment is considered a consumable item and is excluded from this warranty. Batteries can be damaged by shock, shorting terminals, heat, acid spillage, neglect, and other factors. It is the customer's responsibility to take great care when handling a battery so no spillage of acid occurs which may cause corrosion.

Midland disclaims any responsibility for loss of time or use of the product, transportation, or towing costs or any other indirect, incidental, or consequential damage, inconvenience or commercial loss.

This warranty is the entire and only warranty given by Midland for Midland products or equipment. No agent or employee is authorized to extend or enlarge this warranty on behalf of Midland by any written or verbal statement or advertisement.

## **California**

The California Air Resources Board and Midland Power Inc. are pleased to explain the emission control system warranty on your Midland Power Inc. engine. In California, new spark-ignited small off-road equipment engines must be designed, built, and equipped to meet the State's stringent anti-smog standards.

## **Other States, U.S. territories, and Canada**

In other areas of the United States and in Canada, your engine must be designed, built, and equipped to meet the U.S. EPA and Environment Canada emission standards for spark-ignited engines at or below 19 kilowatts.

## **All of the United States and Canada**

Midland Power Inc. must warrant the emission control system on your power equipment engine for the period of time listed below, provided there has been no abuse, neglect, or improper maintenance of your power equipment engine. Where a warrantable condition exists, Midland Power Inc. will repair your power equipment

engine at no cost to you including diagnosis, parts, and labor.

Your emission control system may include such parts as the carburetor or fuel injection system, the ignition system, and catalytic converter. Also included may be hoses, connectors, and other emission-related assemblies.

**Emission Control System Warranty Parts:**

This list applies to parts supplied by Midland Power Inc. and does not cover parts supplied by the equipment manufacturer. Please see the original equipment manufacturer’s emissions warranty for non-Midland Power Inc. parts.

Consumable parts are covered up to a maximum of 30 days.

<b>SYSTEMS COVERED IN WARRANTY</b>	<b>PARTS DESCRIPTION</b>
Fuel Metering	Carburetor assembly (includes starting enrichment system), Engine temperature sensor, Engine control module, Fuel regulator, Intake manifold
Evaporative	Fuel Tank, Fuel Cap, Fuel Hoses, Vapor Hoses, Carbon Canister, Canister Mounting Brackets, Fuel Strainer, Fuel cock, Fuel Pump, Fuel Hose Joint, Canister Purge Hose Joint
Exhaust	Catalyst, Exhaust Manifold
Air Induction	Air filter housing, Air filter element
Ignition	Flywheel magneto, Ignition pulse generator, Crankshaft position sensor, Power coil, Ignition coil assembly, Ignition control module, Spark plug cap, Spark plug
Crankcase Emission Control	Crankcase breather tube, Oil filler cap
Miscellaneous Parts	Tubing, fittings, seals, gaskets, and clamps associated with these listed systems

## **Enjoy!**

Be sure to check [www.benchmark.midlandpowerinc.com](http://www.benchmark.midlandpowerinc.com) for updates regarding your product.





## **Customer Service**

Online: [www.benchmark.midlandpowerinc.com](http://www.benchmark.midlandpowerinc.com)

E-mail: [support@midlandpowerinc.com](mailto:support@midlandpowerinc.com)

Toll Free: 1-877-528-3772



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**5140-101**