
 Read this manual carefully to understand all safety precautions, controls, proper operation and maintenance of your RedMax power auger. Failure to do so could result in serious injury.

SAFETY FIRST

Instructions contained in warnings within this manual marked with a  symbol concern critical points which must be taken into consideration to prevent possible serious bodily injury, and for this reason you are requested to read all such instructions carefully and follow them without fail.

Note that there may be times when warning seals peel off or become soiled and impossible to read. If this happens, you should contact the dealer from which you purchased the product to order new seals and affix the new seal(s) in the required location(s).

■ Notes on types of warnings

WARNING

Instructions labeled as shown at left concern critical steps or procedures which must be followed in order to prevent accidents which could lead to serious bodily injury or death. This mark is used to indicate instructions which must be followed without exception.

IMPORTANT

Instructions labeled as shown at left concern steps or procedures which, if not followed correctly, could lead to mechanical failure, breakdown, or damage.

NOTE

Used to label supplementary instructions designed to provide hints or directions useful in the use of the product.

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1. Safety Precautions

- In order to ensure proper and safe operation of your power auger

- Read this Owner/Operator Manual carefully. Be sure you understand how to operate this unit properly before you use it. Failure to do so could result in serious injury.



- Be sure to keep this manual handy so that you may refer to it later whenever any questions arise. Also note that you are requested to contact the dealer from whom you purchased the product for assistance in the event that you have any questions which cannot be answered herein.
- Always be sure to include this manual when selling, lending, or otherwise transferring the ownership of this product.

- This product has been designed for use in earth drilling, and it should never be used for any other purpose since doing so could result in unforeseen accidents and injuries occurring.

- You should never use this power auger when under the influence of alcohol, when suffering from exhaustion or lack of sleep, when suffering from drowsiness as a result of having taken cold medicine, or at any other time when a possibility exists that your judgment might be impaired or that you might not be able to operate the power auger properly and in a safe manner. Also be sure never to allow children or anyone unable to fully understand the directions given in this manual to use this power auger.



- Avoid running the engine indoors. The exhaust gases contain harmful carbon monoxide.



- Never use your power auger under circumstances like those described below:

1. When the ground is slippery or when other conditions exist which might make it not possible to maintain a steady posture while using the power auger.
2. At night, at times of heavy fog, or at any other times when your field of vision might be limited and it would be difficult to gain a clear view of the area where the power auger is to be used to ensure safety.
3. During rain storms, during lightning storms, at times of strong or gale-force winds, or at any other times when weather conditions might make it unsafe to use this product.

- When using this product for the first time, before beginning actual work, take the power auger to a wide, clear, open space, turn on the power, and practice handling the power auger until you are sure that you will be able to handle it in properly in actual operation.
- Lack of sleep, tiredness, or physical exhaustion results in lower attention spans, and this in turn leads to accidents and injury. When planning your work schedule, allow plenty of time to perform the work of cutting and allow plenty of time for rest. Limit the amount of time over which the power auger is to be used continuously to somewhere around 30-40 minutes per session, and take 10-20 minutes of rest between work sessions. Also try to keep the total amount of work performed in a single day under 2 hours or less.

1. Safety Precautions

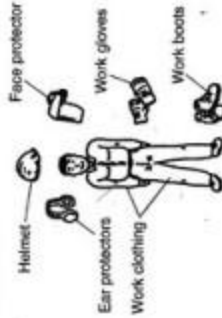
- Work gear and clothing

- When using your power auger, always be sure to wear strong, durable, work clothing: shirts should be long-sleeved shirts and pants should be full-length pants reaching down to the ankles.

- Always be sure to wear and helmet and face protector when using your power auger.

- When using your power auger, always be sure to wear thick work gloves to protect your hands and non-slip-sole work boots to prevent you from slipping. Never use your power auger when wearing pants with loose cuffs, when wearing sandals, or when barefoot.

- When using your power auger for an extended period of time, you should wear ear protectors to protect yourself from loss of hearing from overexposure to high levels of sound.



- Warnings considering handling of fuel
- The engine of the power auger is designed to run on a mixed fuel which contains highly flammable gasoline. This fuel is highly flammable and you should never store cans of fuel or refill the tank of the power auger in any place where there is a boiler, stove, wood fire, electrical sparks, welding sparks, or any other source of heat or fire which might ignite the fuel.



- Smoking while operating the power auger or refilling its fuel tank is extremely dangerous. Always be sure to keep lit cigarettes away from the power auger at all times.
- When refilling the tank always turn off the engine first and take a careful look around to make sure that there are no sparks or open flames anywhere nearby before refueling.
- If any fuel spillage occurs during refueling, always be sure to use a dry rag to wipe any fuel which has been spilled onto the power auger before turning the engine back on again.
- After refueling, screw the fuel cap back tightly onto the fuel tank and then carry the power auger to a spot 10 feet or more away from where it was refueled before turning on the engine.

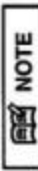
▲ 1. Safety Precautions

- Things to check before using your power auger
 - Before beginning work, look around carefully to get a feel for the shape of the land, and whether or not there are any obstacles which might get in the way while working, and remove any obstacles which can be cleared away before beginning work.
 - The area within a perimeter of 45 feet of the person using the power auger should be considered a hazardous area into which no one should enter while the power auger is in use, and when necessary yellow warning rope, warning signs, or some other form of warnings should be placed around the perimeter of the area. When work is to be performed simultaneously by two or more persons, care should also be taken to constantly look around or otherwise check for the presence and locations of other people using power auger within the work area so as to maintain a distance between each person sufficient to ensure safety.
 - Before beginning work, each component of the power auger should be checked to make sure that it is in proper working order and to make sure that there are no loose screws or bolts, fuel leaks, ruptures, dents, or any other problems which might interfere with safe operation. Be especially careful at this time to check that there is nothing wrong with the drills or with the joints by which the drills are attached to the power auger.
- Things to check before starting up the engine
 - Take a careful look around to make sure that no obstacles exist within a perimeter of 15 feet or less around the power auger before starting the engine.



- The power auger is equipped with a centrifugal clutch mechanism which causes the drills to begin to rotate as soon as the engine is started by putting the throttle into the start position. When starting the engine, hold it firmly in place so as to ensure that the throttle may not come into contact with any obstacles when the engine starts up.
- Never place the throttle into the high speed position when starting the engine.
- After starting up the engine, check to make sure that the drills stop rotating when the throttle is moved fully back to its original position.

■ Avoid noise problem



- Check and follow the local regulations as to sound level and hours of operations for power auger.**
- In general, operate power auger between 8a.m. and 5p.m. on week days and 9a.m. to 5p.m. weekends. Avoid using power auger late at night and/or early in the morning.

▲ 1. Safety Precautions

- Things to be careful about when using your power auger
 - When using your power auger, grip the handles of the power auger firmly with both hands, place your feet slightly apart (slightly further apart than the width of your shoulders) so that your weight is distributed evenly across both legs, and always be sure to maintain a steady, even posture while working.
 - Maintain the speed of the engine at the level required to perform drilling work, and never raise the speed of the engine above the level necessary.
 - Always be sure never to allow other persons to come within the work area while drilling.
 - Be especially careful not to slip if it is raining or if rain has just stopped, as the ground is likely to be slippery at such times.
 - If the grass or other object gets caught in the drill during operation, always be sure to turn off the engine before removing the object.
 - Guard against hazardous situations at all times. Warn adults to keep pets and children away from the area. Establish a safe method for gaining your attention during operation. Be careful if you are approached.
 - If someone calls out or otherwise interrupts you while working, always be sure to turn off the engine before turning around.
 - Keep operation area clear of all persons, particularly small children and pets.
 - Never touch the spark plug or plug cord while the engine is in operation. Doing so may result in being subjected to an electrical shock.
- Never touch the muffler, spark plug, or other metallic parts of the engine while the engine is in operation or immediately after shutting down the engine. These metallic parts reach high temperatures during operation and doing so could result in serious burns.



- When you finish drilling in one location and wish to continue work in another spot, turn off the engine before carrying it to the new location.
- Never transport the power auger over rough roads over long distances without first removing all fuel from the fuel tank, as doing so might cause fuel to leak from the tank as a result of shocks absorbed during transport.
- Notes on care and maintenance of your power auger
 - In order to maintain your power auger in proper working order, perform the maintenance and checking operations described in this manual at regular intervals.
 - Under no circumstances should you ever take apart the power auger or alter it in any way. Doing so might result in the power auger becoming damaged during operation or the power auger becoming unable to operate properly.
 - Always be sure to turn off the engine before performing any maintenance or checking procedures.
 - When removing, or reattaching the drills, be sure to wear thick, sturdy gloves and use only proper tools and equipment to prevent injury.



2. Fuel

▲ WARNING

- Gasoline is very flammable. Avoid smoking or bringing any flame or sparks near fuel. Make sure to stop the engine and allow it cool before refueling the unit. Select outdoor bare ground for fueling and move at least 3m (10ft) away from the fueling point before starting the engine.



- The engines are lubricated by oil specially formulated for air-cooled 2-cycle gasoline engine use. Use quality oil expressly labeled for air-cooled 2-cycle engine use.
- Do not use BIA or TCW (2-stroke water-cooling type) mixed oil.



■ RECOMMENDED MIXING RATIO GASOLINE 25:OIL 1

- Exhaust emission are controlled by the fundamental engine parameters and components (eq., carburation, ignition timing and port timing) without addition of any major hardware or the introduction of an inert material during combustion.

- These engines are certified to operate on unleaded gasoline.
- Make sure to use gasoline with a minimum octane number of 89 RON (USA/Canada: 87AL)
- If you use a gasoline of a lower octane value than prescribed, there is a danger that the engine temperature may rise and an engine problem such as piston seizing may consequently occur.
- Unleaded gasoline is recommended to reduce the contamination of the air for the sake of your health and the environment.
- Poor quality gasolines or oils may damage sealing rings, fuel lines or fuel tank of the engine.

■ HOW TO MIX FUEL

⚠ IMPORTANT

Pay attention to agitation.

- Measure out the quantities of gasoline and oil to be mixed.
- Put some of the gasoline into a clean, approved fuel container.
- Pour in all of the oil and agitate well.
- Pour in the rest of gasoline and agitate

2. Fuel

again for at least one minute. As some oils may be difficult to agitate depending on oil ingredients, sufficient agitation is necessary for the engine to last long. Be careful that, if the agitation is insufficient, there is an increased danger of early piston seizing due to abnormally lean mixture.

- Put a clear indication on the outside of the container to avoid mixing up with gasoline or other containers.
- Indicate the contents on outside of container for easy identification.

■ FUELING THE UNIT

- Unwist and remove the fuel cap. Rest the cap on a dustless place.
- Put fuel into the fuel tank to 80% of the full capacity.
- Fasten the fuel cap securely and wipe up any fuel spillage around the unit.

▲ WARNING

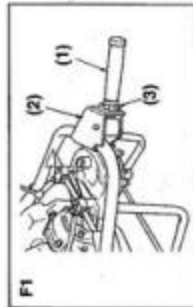
- Select bare ground for fueling.
- Move at least 10feet (3meters) away from the fueling point before starting the engine.
- Stop the engine before refueling the unit. At that time, be sure to sufficiently agitate the mixed gasoline in the container.

FOR YOUR ENGINE LIFE, AVOID:

- FUEL WITH NO OIL(RAW GASOLINE)** – It will cause severe damage to the internal engine parts very quickly.
- GASOHOL** – It can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
- OIL FOR 4-CYCLE ENGINE USE** – It can cause spark plug fouling, exhaust port blocking, or piston ring sticking.
- Mixed fuels which have been left unused for a period of one month or more** may clog the carburetor and result in the engine failing to operate properly.

- In the case of storing the product for a long period of time, clean the fuel tank after rendering it empty. Next, activate the engine and empty the carburetor of the composite fuel.
- In the case of scrapping the used mixed oil container, scrap it only at an authorized repository site.

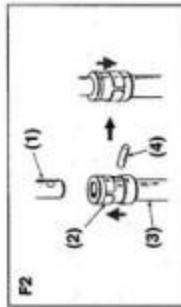
3. Operation



■ INSTALLING LEFT GRIP (F1)

- Screw in the left grip to the bracket provided on the frame and tighten the lock nut securely.

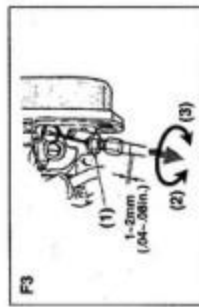
- (1) Left grip
- (2) Bracket
- (3) Lock nut



■ INSTALLING DRILL (F2)

1. Slide the ring clip and remove the lock pin from the drill.
2. Put the drill onto the auger output shaft and insert the lock pin. Cover it with the ring clip.

- (1) PTO shaft
- (2) Clip band
- (3) Drill
- (4) Pin



■ THROTTLE CABLE PLAY (F3)

- Check the throttle cable play and adjust to 1-2mm (.04-.08in.) as necessary.

- (1) Lock nut
- (2) Big
- (3) Small

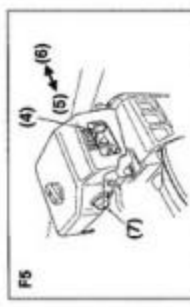


■ STARTING ENGINE

1. Fill fuel and tighten the cap securely.
2. Put the switch to "START" position. (F4)
3. Close the choke. (F5)

⚠ NOTE

When restarting immediately after stopping the engine, leave the choke open. (F5)

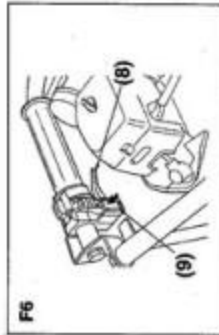


4. Push the primer pump until overflow fuel flows out in the clear tube. (F5)

⚠ NOTE

The pump operation is not necessary when restarting the engine immediately after stopping it.

3. Operation



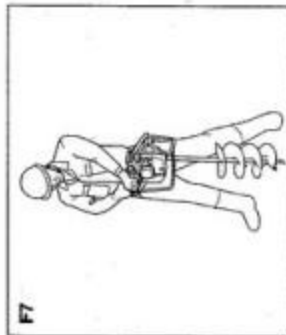
5. Push the start set button of the handle left aspect while holding the throttle lever, and set the throttle lever in the start position. (F6)

- (1) Engine switch
- (2) Start
- (3) Stop
- (4) Choke lever
- (5) Open
- (6) Close
- (7) Primer pump
- (8) Throttle lever
- (9) Lock button

6. While supporting the auger with your left waist and left hand as shown in the figure, pull the starter rope, first lightly and add force when compression is felt. (F7)

⚠ WARNING

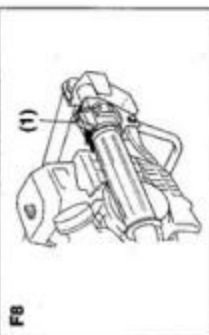
Keep the drill clear of everything around it as it will start rotating upon starting of engine.



7. When the engine has started, gradually open the choke and release the throttle lever.
8. Allow the engine to warm up for a half minutes before starting operation.

⚠ NOTE

- When re-starting immediately after stopping the engine, keep the choke open.
- If the engine won't start after repeated attempts, it may be overfilled with fuel. Remove and dry the spark plug, and try to start again with the choke open.



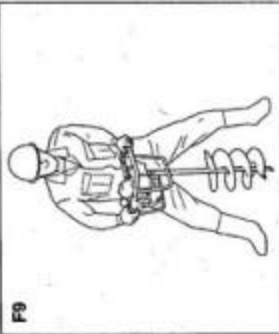
■ STOPPING ENGINE

1. Release the throttle lever to allow the engine idling for a few minutes
2. Put the switch to the "STOP" position. (F8)

- (1) Engine switch

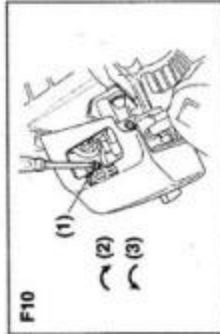
3. Operation

F9



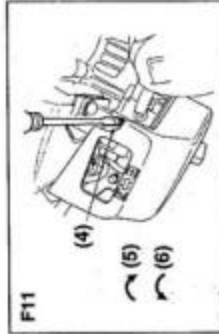
- **DRILLING (F9)**
- Keep a firm grip of the auger at all times on a wide stance and by holding the handle with both hands.
 - A reacting motion may occur on the auger when spinning drill has hit on stones or tree roots under the ground. Always hold the auger securely to control such motion.
 - Start drilling with half-throttle, and gradually increase the engine speed so that the drill may get into the ground smoothly.
 - When the drill has been caught in the ground and cannot be pulled out, stop the engine and rotate the auger counter-clockwise.

F10



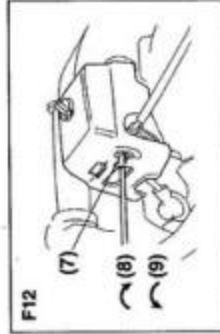
- **ADJUSTING CARBURETOR (F10,11,12)**
- The carburetor on your unit has been factory adjusted, but may require fine tuning due to change in operating conditions. Before adjusting the carburetor, make sure that provided are clean air/fuel filters and fresh, properly mixed fuel.

F11



1. Stop engine and screw in both H and L needles until they stop. Never force. Then set them back the initial number of turns as shown below.
2. Start engine and allow it to warm up at half-throttle.
3. Turn L needle slowly clockwise to find a position where idling speed is maximum, then set the needle back a quarter (1/4) turn counterclockwise.
4. Turn idle adjusting screw counterclockwise so that the drill does not turn. If idling speed is too slow, turn the screw clockwise.
5. Make a test run and adjust the H needle for best drilling power, not for maximum speed.

F12



- (1) Idle adjusting screw
- (2) rpm up
- (3) rpm down
- (4) H-needle
- (5) Fuel decrease
- (6) Fuel increase
- (7) L-needle
- (8) Fuel decrease
- (9) Fuel increase

4. Maintenance

Maintenance, replacement, or repair of the emission control device and systems may be performed by any non-road engine repair establishment or individual.

WARNING

Before cleaning, inspecting or repairing the auger, make sure that the engine has stopped and cooled down. Disconnect the spark plug terminal to avoid accidental engine starts.

■ **DAILY INSPECTION**

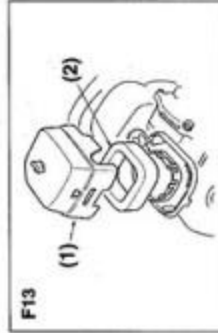
- Check all nuts and screws are securely tightened and no parts are missing.
- Check for leakage of fuel.

■ **PERIODICAL INSPECTION**

AIR FILTER (F13)

Check the air filter every 50 hours of use or more frequently if used under very dusty condition, and clean the element in warm soapy water as necessary. Dry completely before installing.

- (1) Cover
- (2) Element



SPARK PLUG (F14)

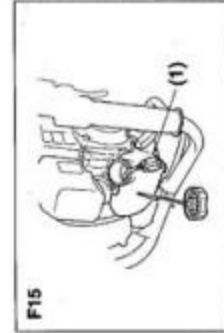
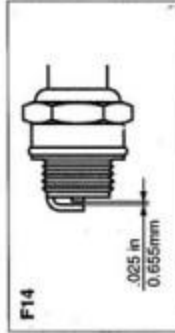
Check the spark plug every 50 hours of use and clean the gap with a wire brush. The gap should be set to .025 in. When replacing with a new plug, use a Champion RC-J-6V or NGK BPM7A.

FUEL FILTER (F15)

A clogged fuel filter can cause lack of power and poor pickup. Check the fuel filter every 25 use hours.

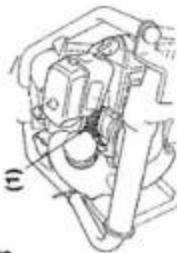
1. With a small wire hook, pull the fuel line and filter out of tank.
2. Disconnect the filter assembly.
3. If necessary, replace with new filter or clean by blowing air inside out after spraying a carburetor cleaning solvent.

(1) Fuel filter



4. Maintenance

F16



CYLINDER FINS (F16)

Dust clogging between the cylinder fins will cause overheating of the engine. Periodically check and clean the cylinder fins.

(1) Intake air cooling vent

F17



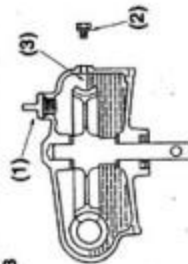
SPARK ARRESTER (F17)

This engine is equipped with a spark arresting screen at the exhaust port. Check periodically to see if it is good condition, especially when your machine is to be used on any forest covered, brush covered, or grass covered unimproved land.

1. Remove the muffler guard and pry off the spark arrester from the exhaust port.
2. Clean the metal screen with a wire brush. If damaged, replace with new one.

- (1) Muffler guard
- (2) Spark arrester

F18



GEAR BOX

Check oil level of the gear box every 50 hours of use and change with new oil as necessary. (SAE #80 - 90)

Recommended change interval

- 1st: After 50 hours of use
- 2nd and on: Every 100 hours of use

- (1) Oiling port
- (2) Oil drain port
- (3) Oil level

CLUTCH

Disconnect the engine from the gear box and check the clutch condition every 100 hours of use. Wipe off oil attached to the drum and shoes, and replace parts with a new one if found to be worn.

5. Storage

■ Before Long-term Storage

- Drain fuel tank and run engine out until all fuel in the carburetor is used up.
- Remove the spark plug and drop a spoonful of 2 cycle oil into the cylinder. Crank the engine several times and replace the plug.
- Pull starter until compression is felt.
- Brush off dirt from the drill surface and apply rust protective oil.
- Store the machine in a dry, dust-free place.

6. Disposal

When disposing your machine, fuel or oil for the machine, be sure to allow your local regulations.