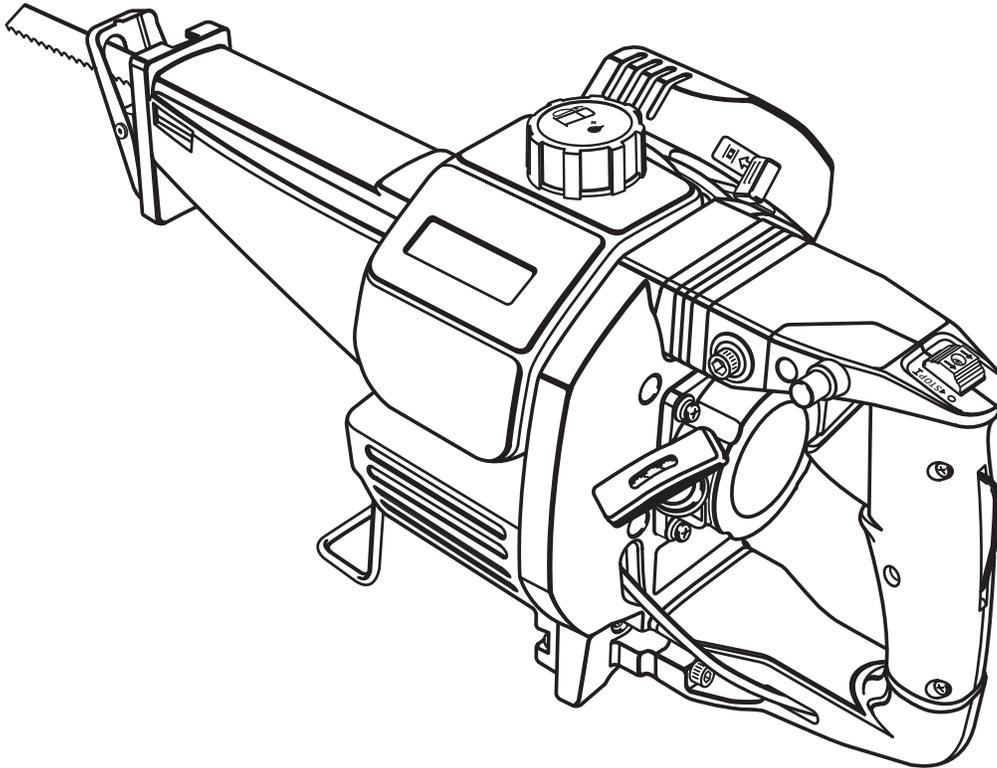




OPERATOR'S MANUAL 2 CYCLE GASOLINE POWERED RECIPROCATING SAW MODEL NO. EJ101



SPECIFICATIONS:	
Length of stroke	1 in. (25.4mm)
Strokes per minute	0-2000 spm
Length (without blade)	17 in. (430 mm)
Engine Type	Air Cooled 2 Cycle Gasoline Engine
Displacement	15.9 cc
Starting System	Recoil
Carburetor	Diaphragm
Fuel Tank Capacity	0.35 literes
Net weight	11 lbs.

For Questions, Call 1-800-525-2579 in the U.S. or 1-800-265-6778 in Canada
www.ryobi.com

SAVE THIS MANUAL FOR FUTURE REFERENCE

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THANK YOU

Thank you for purchasing this quality product. Your new saw has been engineered and manufactured to Ryobi's high standard for dependability, ease of operation, and operator safety. Properly cared for, it will provide many hours of useful service. You will find it to be a great labor saving device.

This operator's manual provides you with easy-to-understand operating instructions. Read the entire manual and follow all the instructions to keep your new outdoor power tool in top operating condition.

CAUTION:

Carefully read through this entire operator's manual before using your new saw. Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your saw properly and only for what it is intended, you will enjoy years of safe, reliable service.

PRODUCT REFERENCES, ILLUSTRATIONS AND SPECIFICATIONS

All information, illustrations and specifications in this manual are based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice.

Important Service Information

Service on this unit within and after the warranty period should be performed only by a authorized service technician. For service we suggest you return the tool to your nearest **Ryobi Authorized Service Center** for repair. When servicing use only identical Ryobi replacement parts.

For the nearest **Ryobi Authorized Service Center**, call 1-800-525-2579 in the U.S. or 1-800-265-6778 in Canada.

DO NOT return the unit to the retailer.

Note: Proof of purchase will be required for warranty service.

CONTENTS OF CARTON

The following items are included in the carton:

- Model EJ101 Reciprocating Saw
- 4 mm Hex Key Wrench
- Spark Plug Wrench
- Blade Pack – Includes One Each Of The Following:
 - Steel Cutting Blade No. 51
 - Steel Cutting Blade No. 52
 - Wood Cutting Blade No. 53
- Operator's Manual
- Warranty Registration Card

CALIFORNIA EMISSION REGULATIONS

The engine of your mixer meets the 1995 to 1998 California emissions regulations. To ensure that your unit continues to meet these regulations, refer to the following information and instructions in this operator's manual.

These units are identified by the label on the engine of your product. A typical identification label is shown.

California Proposition 65 Warning:



RYOBI®

IMPORTANT ENGINE INFORMATION

ENGINE DISPLACEMENT: 31cc

ENGINE FAMILY: SN4031UB24RA; EM

THIS ENGINE CONFORMS TO U.S. EPA PH1 AND 1995-1998 CALIFORNIA EMISSION REGULATIONS FOR ULGE ENGINES. REFER TO OPERATOR'S MANUAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.

SPARK ARRESTOR

Note: For users on U.S. Forest Land and in the states of California, Maine, Oregon and Washington. All U.S. Forest Land and the state of California (Public Resources Codes 4442 and 4443), Oregon and Washington require, by law that certain internal combustion engines operated on forest brush and/or grass-covered areas be equipped with a spark arrestor, maintained in effective working order, or the engine be constructed, equipped and maintained for the prevention of fire. Check with your state or local authorities for regulations pertaining to these requirements. Failure to follow these requirements could subject you to liability or a fine. **This unit is not factory equipped with a spark arrestor.** If these items are required in your area, ask your local service dealer to install the **Optional Spark Arrestor Kit.**

RULES FOR SAFE OPERATION

THE PURPOSE OF SAFETY SYMBOLS IS TO ATTRACT YOUR ATTENTION TO POSSIBLE DANGERS. THE SAFETY SYMBOLS, AND THE EXPLANATIONS WITH THEM, DESERVE YOUR CAREFUL ATTENTION AND UNDERSTANDING. THE SAFETY WARNINGS DO NOT BY THEMSELVES ELIMINATE ANY DANGER. THE INSTRUCTIONS OR WARNINGS THEY GIVE ARE NOT SUBSTITUTES FOR PROPER ACCIDENT PREVENTION MEASURES.

SYMBOL	MEANING
	SAFETY ALERT SYMBOL: Indicates danger, warning, or caution. May be used in conjunction with other symbols or pictographs.
	DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.
	WARNING: Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.
	CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.
NOTE:	Advises you of information or instructions vital to the operation or maintenance of the equipment.

WARNING:

Do not attempt to operate this tool until you have read thoroughly and understand completely all instructions, safety rules, etc. contained in this manual. Failure to comply can result in accidents involving fire, electric shock, or serious personal injury. Save operator's manual and review frequently for continuing safe operation, and instructing others who may use this tool.

WARNING:



The operation of any reciprocating saw can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields.



Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.

RULES FOR SAFE OPERATION

READ ALL INSTRUCTIONS

- **KNOW YOUR POWER TOOL** - Read operator's manual carefully. Learn its applications and limitations as well as the specific potential hazards related to this tool.
- **KEEP GUARDS IN PLACE** and in working order.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- **AVOID DANGEROUS ENVIRONMENT.** Don't use power tool in damp or wet locations or expose to rain. Keep work area well lit.
- **KEEP CHILDREN AND VISITORS AWAY.** All visitors should wear safety glasses and be kept a safe distance from work area. Do not let visitors contact tool or extension cord.
- **STORE IDLE TOOLS.** When not in use, tools should be stored in a dry, high or locked-up place - out of the reach of children.
- **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
- **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy duty tool. Don't use tool for purpose not intended - for example - Don't use a circular saw for cutting tree limbs or logs.
- **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Also, wear protective hair covering to contain long hair and keep it from being drawn into air vents.
- **ALWAYS WEAR SAFETY GLASSES.** Everyday eyeglasses have only impact-resistant lenses; they are **NOT** safety glasses.
- **PROTECT YOUR LUNGS.** Wear a face or dust mask if operation is dusty.
- **PROTECT YOUR HEARING.** Wear hearing protection during extended periods of operation.
- **SECURE WORK.** Use clamps or a vise to hold work. Both hands are needed to operate the tool.
- **DON'T OVERREACH.** Keep proper footing and balance at all times. Do not use on a ladder or unstable support.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **DISCONNECT TOOLS.** When not in use, before servicing, or when changing attachments, blades, bits, cutters, etc., all tools should be disconnected from power supply.
- **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **KEEP BLADES CLEAN AND SHARP.** Sharp blades minimize stalling and kickback. Also, keep blades properly tightened at all times.
- **KEEP HANDS AWAY FROM CUTTING AREA.** Keep hands away from blades. Do not reach underneath work while blade is cutting. Do not attempt to remove material while blade is cutting.
- **NEVER USE IN AN EXPLOSIVE ATMOSPHERE.** Normal sparking of the motor could ignite fumes.
- **KEEP HANDLES DRY, CLEAN, AND FREE FROM OIL AND GREASE.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products or any strong solvents to clean your tool.
- **STAY ALERT.** Watch what you are doing and use common sense. Do not operate tool when you are tired. Do not rush.
- **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless indicated elsewhere in this instruction manual.
- **DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF.** Have switches replaced by an authorized service center.
- **CUTTING INTO ELECTRICAL WIRING IN WALLS CAN CAUSE BLADE AND METAL PARTS TO BECOME ELECTRICALLY LIVE.** Grasp only the handle(s) provided on the tool and be sure that hidden electrical wiring, water pipes, or any mechanical hazards are not in blade path.
- **Inspect for** and remove all nails from lumber before cutting.

RULES FOR SAFE OPERATION

- **DRUGS, ALCOHOL, MEDICATION.** Do not operate tool while under the influence of drugs, alcohol, or any medication.
- **WHEN SERVICING USE ONLY IDENTICAL RYOBI REPLACEMENT PARTS.**
- **WARNING: TO AVOID POSSIBLE SERIOUS INJURY, KEEP HANDS AND FINGERS FROM BETWEEN THE MOTOR HOUSING AND SAW BLADE CLAMP.**
- **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.

SAVE THESE INSTRUCTIONS

BEFORE OPERATING

- Read the instructions carefully. Be familiar with the controls and proper use of the unit.
- Do not operate this unit when tired, ill, or under the influence of alcohol, drugs, or medication.
- Children and teens under the age of 15 must not use the unit, except for teens guided by an adult.
- Inspect the unit before use. Replace damaged parts. Check for fuel leaks. Make sure all fasteners are in place and secure. Replace blades that are cracked, chipped, or damaged in any way. Make sure blades are properly installed and securely fastened. Make sure the shoe is secured properly and positioned as recommended. Failure to do so can result in personal injury to the operator and bystanders, as well as damage to the unit.
- Be aware of the risk of injury to the head, hands and feet.
- Clear the work area before each use. Remove all objects such as nails or wire which can contact the blade. Clear the area of children, bystanders, and pets. At a minimum, keep all children, bystanders, and pets outside a 50 feet (15.2 m) radius; there still may be a risk to bystanders from thrown objects. Bystanders should be encouraged to wear eye protection. If you are approached, stop the engine immediately.
- Squeeze the throttle control and check that it returns automatically to the idle position. Make all adjustments or repairs before using unit.

SAFETY WARNINGS FOR GASOLINE ENGINES

- **WARNING:** Gasoline is highly flammable, and its vapors can explode if ignited. Take the following precautions:
- Store fuel only in containers specifically designed and approved for the storage of such materials.
- Always stop the engine and allow it to cool before filling the fuel tank. Never remove the cap of the fuel tank, or add fuel, when the engine is hot. Never operate the unit without the fuel cap securely in place. Loosen the fuel tank cap slowly to relieve any pressure in the tank.

- Mix and add fuel in a clean, well-ventilated area outdoors where there are no sparks or flames. Slowly remove the fuel cap only after stopping engine. Do not smoke while fueling or mixing fuel. Wipe up any spilled fuel from the unit immediately.
- Avoid creating a source of ignition for spilled fuel. Do not start the engine until fuel vapors dissipate.
- Move the unit at least 50 feet (15.2 m) from the fueling source and site before starting the engine. Do not smoke, keep sparks and open flames from the area while adding fuel or operating the unit.

WHILE OPERATING

- Never start or run the unit inside a closed room or building. Breathing exhaust fumes can kill. Operate this unit only in a well ventilated area outdoors.
- Wear safety glasses or goggles that are marked as meeting ANSI Z87.1-1989 standards, and ear/hearing protection when operating this unit. Wear a face or dust mask if the operation is dusty.
- Do not wear loose clothing, jewelry, sandals or go barefoot. Secure hair above shoulder level.
- This unit has a clutch. The blade remains stationary when the engine is idling. If it does not, have the unit adjusted by an authorized service technician.
- Be sure the blade is not in contact with anything before starting the unit.
- Use the unit only in daylight or good artificial light.
- Avoid accidental starting. Be in the starting position whenever pulling the starter rope. The operator and unit must be in a stable position while starting. See Starting/Stopping Instructions.
- Use the right tool. Only use this tool for the purpose intended.
- Do not overreach. Always keep proper footing and balance.
- Always hold the unit with both hands when operating.
- Keep hands, face, and feet at a distance from all moving parts. Do not touch the blade when it is rotating.
- Do not touch the engine or muffler. These parts get extremely hot from operation. When turned off they remain hot for a short time.
- Do not operate the engine faster than the speed needed for the cut being made. Do not run the engine at high speed when not cutting.
- If you strike a foreign object, stop the engine immediately and check for damage. Do not operate before repairing damage. Do not operate the unit with loose or damaged parts.
- Stop and switch the engine to off for maintenance, repair, or for changing blades.

RULES FOR SAFE OPERATION

- Use only genuine Ryobi replacement parts when servicing this unit. These parts are available from your authorized service dealer. Do not use parts, accessories or attachments not authorized by Ryobi for this unit. Doing so could lead to serious injury to the user, or damage to the unit, and void your warranty.
- Keep unit clean from foreign materials.
- To reduce fire hazard, replace faulty muffler and spark arrestor, keep the engine and muffler free from debris, excessive grease, or carbon build up.

WHILE OPERATING WITH EDGER ADD-ON

- Make sure the blade is installed correctly and secure.
- Do not attempt to touch or stop the blade when it is moving.
- A coasting blade can cause injury while it continues to reciprocate after the engine is stopped or the throttle control is released. Maintain proper control until the blade has completely stopped moving.
- If you strike or become entangled with a foreign object, stop the engine immediately and check for damage. Have any damage repaired before attempting further operations. Do not operate unit with a bent, cracked or dull blade. Discard blades that are bent, warped, cracked or broken.
- Stop the engine IMMEDIATELY if you feel excessive vibration. Vibration is a sign of trouble. Inspect thoroughly for loose nuts, bolts or damage before continuing. Repair or replace affected parts as necessary.

OTHER SAFETY WARNINGS

- Never store the unit, with fuel in the tank, inside a building where fumes may reach an open flame or spark.
- Allow the engine to cool before storing or transporting. Be sure to secure the unit while transporting.
- Store the unit in a locked up and dry or high and dry place to prevent unauthorized use or damage, out of the reach of children.
- Never douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use, see Cleaning and Storage instructions.

BEFORE OPERATING

- Wipe up any spilled fuel immediately. If fuel has been spilled, allow it to dry completely before starting the engine.
- Thoroughly inspect the mixer for loose or damaged parts before each use. Do not use until adjustments or repairs are made.
- Avoid accidental starting. Be in the starting position whenever pulling the starter rope.
- Keep all bystanders, especially children, and pets at least 50 ft. (15.2 m) away from the area.
- Before starting, make sure the mixing head is not in contact with anything.
- Always remain alert. To prevent injury to yourself and others, do not operate this mixer if you are fatigued.

FEATURES

UNPACKING

Your saw has been shipped completely assembled and ready for use. Inspect it carefully to make sure no breakage or damage has occurred during shipping. If any parts are damaged or missing, contact your nearest Ryobi dealer to obtain replacement parts before attempting to operate saw. A blade pack, spark plug wrench, 4 mm hex key, operator's manual, and warranty registration are also included.

KNOW YOUR RECIPROCATING SAW

Before attempting to use your saw, familiarize yourself with all operating features and safety requirements. See Figure 1.

⚠ WARNING:

Do not allow familiarity with your saw to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

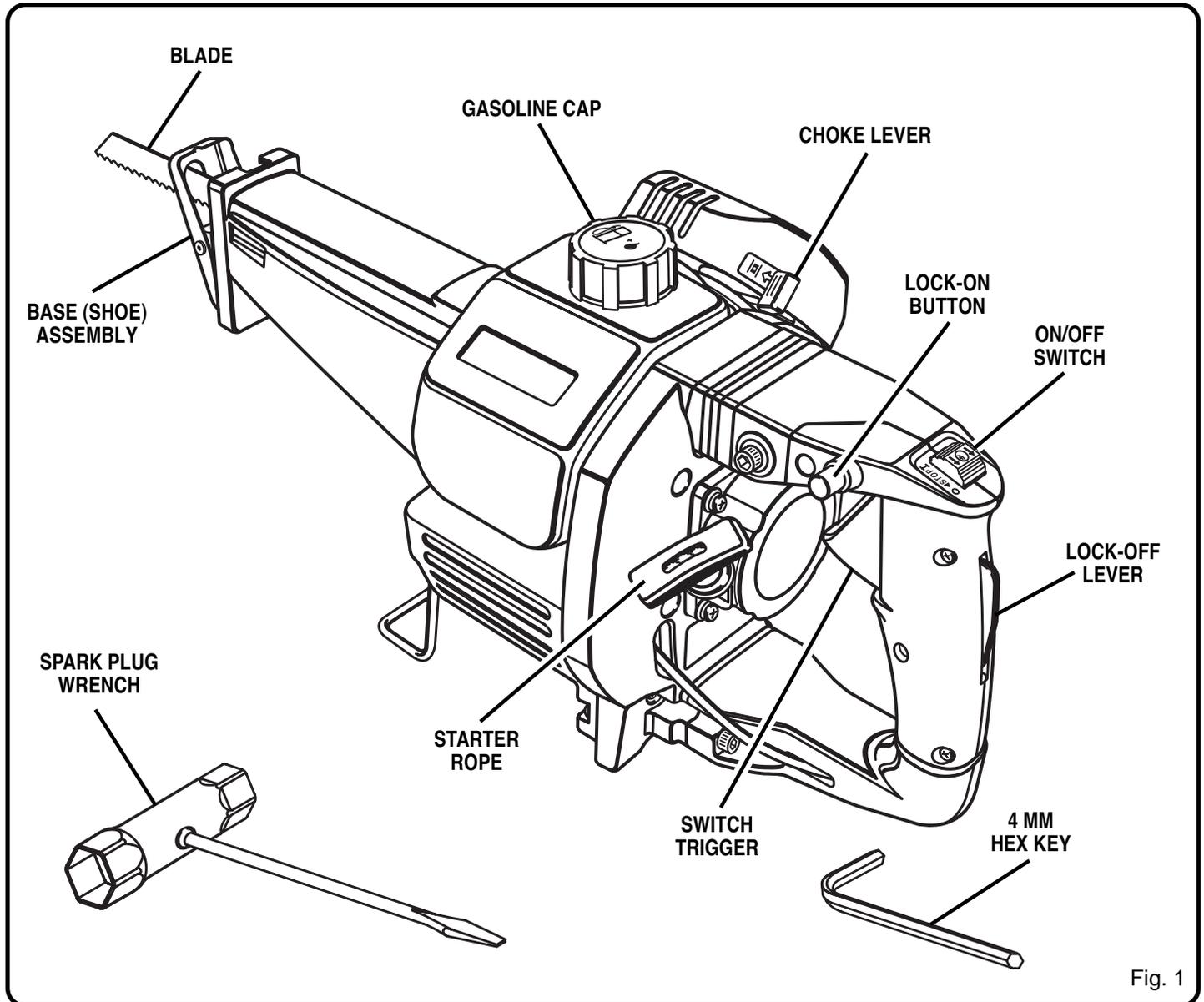


Fig. 1

⚠ WARNING:

If any parts are missing, do not operate your saw until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

FEATURES

SWITCH

See Figure 2.

Your saw is equipped with an **On/Off Switch** for starting and stopping the engine. You must slide the switch forward to the **ON (I)** position in order to allow for the engine to be started when pulling starter rope. Slide the switch back to **OFF (O)** position to stop engine.

LOCK-OFF LEVER

See Figure 2.

Your saw is also equipped with a **Lock-Off Lever** to prevent accidental depression of the switch trigger. You must depress the lock-off lever in order to depress the switch trigger when starting saw.

LOCK-ON BUTTON

See Figure 2.

Your saw is equipped with a **lock-on** feature, which is convenient when continuous cutting for extended periods of time is required. To lock-on, depress the lock-off lever, depress the switch trigger, push in and hold the lock-on button located on the side of the handle, then release switch trigger. Release "lock-on" button and your saw will continue running.

To release the lock, depress the switch trigger and release it. **DO NOT** lock the trigger on heavy jobs where your saw may have to be stopped quickly.

⚠ **WARNING:**

When using your saw with the switch lock-on, keep your finger near the trigger and be prepared to disengage the "lock-on" feature at all times. Failure to do so could result in loss of control leading to possible serious injury.

If you have the "lock-on" feature engaged during use and your saw runs out of gasoline, disengage the "lock-on" feature immediately.

⚠ **WARNING:**

Before connecting your saw to power supply source, always check to be sure it is not in "Lock-on" position (depress and release switch trigger). Failure to do so could result in accidental starting of saw resulting in possible serious injury. Also, do not lock the trigger on jobs where your saw may need to be stopped suddenly.

VARIABLE SPEED

See Figure 2.

Operator control and adjustment of speed and power is controlled by the switch trigger. The speed and power of your saw can be increased or decreased by the amount of switch trigger depression.

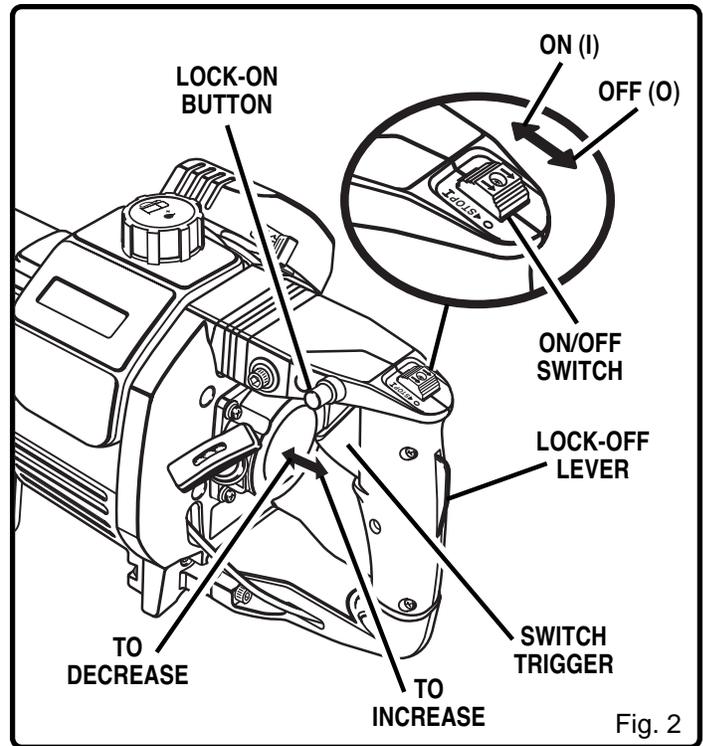


Fig. 2

⚠ **WARNING:**

The engine of your saw should never be running when you are assembling parts, making adjustments, installing or removing blades, when cleaning, or when not in use. Stopping the saw's engine and letting it cool will prevent accidental contact with the blade, muffler, etc. that could cause serious injury. Disconnect the spark plug to make sure the saw will not start.

BLADE SELECTION

To obtain the best performance from your saw it is important to select a specific blade for the particular application and type of material you wish to cut. By doing this you will get a smoother faster cut and prolong blade life. Replacement blades for this saw are available from your nearest Ryobi dealer.

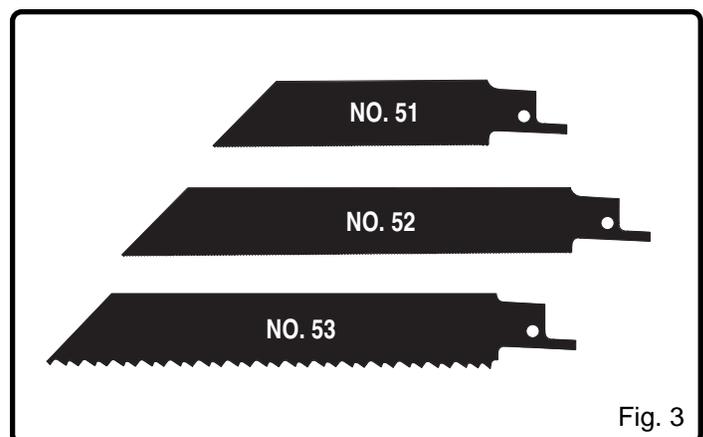


Fig. 3

OIL AND FUEL INFORMATION

OIL AND FUEL MIXING INSTRUCTIONS

Old and/or improperly mixed fuel are the main reasons for the unit not running properly. Be sure to use fresh, clean unleaded fuel. Follow the instructions carefully for the proper fuel/oil mixture.

DEFINITION OF BLENDED FUELS

Today's fuels are often a blend of gasoline and oxygenates such as ethanol, methanol or MTBE (ether). Alcohol-blended fuel absorbs water. As little as 1% water in the fuel can make fuel and oil separate. It forms acids when stored. When using alcohol-blended fuel, use fresh fuel (less than 60 days old).

USING BLENDED FUELS

If you choose to use a blended fuel, or its use is unavoidable, follow recommended precautions.

- Always use fresh fuel mix per your operator's manual.
- Use the fuel additive STA-BIL® or an equivalent.
- Always agitate the fuel mix before fueling the unit.
- Drain the tank and run the engine dry before storing the unit.

USING FUEL ADDITIVES

The use of fuel additive, such as STA-BIL® Gas Stabilizer or an equivalent, will inhibit corrosion and minimize the formation of gum deposits. Using a fuel additive can keep fuel from forming harmful deposits in the carburetor for up to six (6) months. Add 0.8 oz. (23 ml.) of fuel additive per gallon of fuel according to the instructions on the container. NEVER add fuel additives directly to the unit's fuel tank.

⚠ CAUTION:

For proper engine operation and maximum reliability, pay strict attention to the oil and fuel mixing instructions on the 2-cycle oil container. Using improperly mixed fuel can severely damage the engine.

Thoroughly mix the proper ratio of 2-cycle engine oil with unleaded gasoline in a separate fuel can. Use a 32:1 fuel/oil ratio. Do not mix them directly in the engine fuel tank. See the table below for specific gas and oil mixing ratios.

NOTE: One gallon (3.8 liters) of unleaded gasoline mixed with one 4 oz. (120 ml.) bottle of RYOBI 2 CYCLE OIL makes a 32:1 fuel/oil ratio.

	+	
UNLEADED GAS		RYOBI 2 CYCLE OIL
1 US GALLON + 4.0 FL. OZ. (3.8 LITERS) (120 ML)		
MIXING RATIO – 32:1		

⚠ WARNING:

Gasoline is extremely flammable. Ignited Vapors may explode. Always stop the engine and allow it to cool before filling the fuel tank. Do not smoke while filling the tank. Keep sparks and open flames at a distance from the area.

⚠ WARNING:

Remove fuel cap slowly to avoid injury from fuel spray. Never operate the unit without the fuel cap securely in place.

⚠ WARNING:

Add fuel in a clean, well ventilated area outdoors. Wipe up any spilled fuel immediately. Avoid creating a source of ignition for spilt fuel. Do not start the engine until fuel vapors dissipate.

NOTE: Dispose of the old fuel/oil mix in accordance to Federal, State, and Local regulations.

STARTING/STOPPING INSTRUCTIONS

PREPARING FOR OPERATION

1. Mix gas with oil. Fill fuel tank with fuel/oil mixture. See Oil and Fuel Mixing Instructions on previous page.
2. Do not overfill or spill fuel.
3. Replace gasoline cap on gas tank. Make sure it is securely tightened before attempting to start engine.
4. Make sure all screws and fasteners are tightened securely.
5. Check the throttle cable and make sure it moves smoothly without excessive play. If adjustments are needed, loosen the lock nut securing the adjustment screw and adjust as necessary to eliminate play.
6. Tighten lock nut securely.

STARTING INSTRUCTIONS

⚠ WARNING:

Avoid accidental starting. Be in the starting position when pulling the starter rope. The operator and unit must be in a stable position while starting to avoid serious personal injury.

1. Place the saw on a clear, firm, and flat surface. Do not start saw by holding it in one hand.
2. Slide the On/Off Switch to the **ON** position. See Figure 4.
3. Place the choke lever in the **FULL** choke position.
4. Lock the switch trigger in "lock-on" position. To "lock-on"; depress the lock-off lever, pull the switch trigger, depress the lock-on button, release the switch trigger, then release the lock-on button. The switch trigger should now be in "lock-on" position.
5. Fully press and release primer bulb slowly 5 to 7 times. Fuel should be visible in the bulb. If fuel is not visible, press three (3) more times, or until it is.
6. Pull starter rope briskly until the engine pops or sounds as though it wants to run. Normally this takes from 2 to 5 pulls.
7. Place the choke lever in **PARTIAL** (center) choke position.
8. Pull starter rope briskly 1 to 3 times to start the engine.
9. If the engine does not start, repeat the steps above.

NOTE: If the engine floods while trying to start, place the choke lever in the **RUN** position. Pull the starter rope briskly. The engine should start within three (3) to eight (8) pulls.

10. Once the engine starts, let it warm up for 5 to 10 seconds, then place the choke lever in the **RUN** position.

NOTE: Choking is unnecessary when starting a warm engine. Slide the On/Off Switch to the **ON** position and start in **PARTIAL** (center) choke position.

⚠ WARNING:

Operate this unit only in a well ventilated area outdoors. Carbon monoxide exhaust fumes can be lethal in a confined area.

STOPPING INSTRUCTIONS

1. Release switch trigger and allow the engine to cool down by idling.
2. Slide the On/Off Switch to **OFF** position.

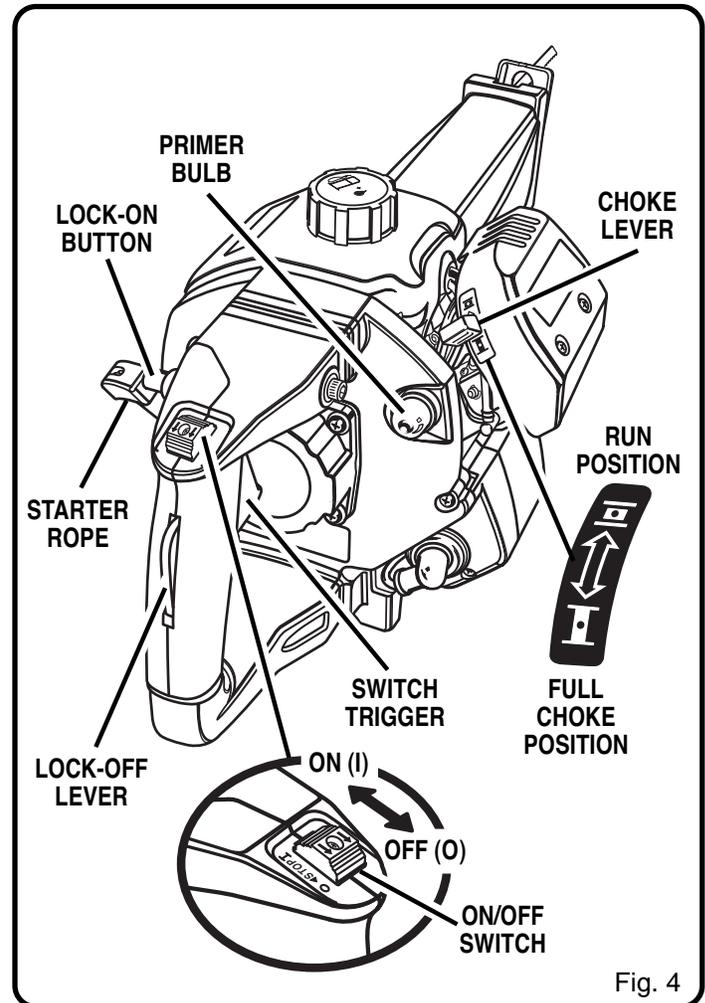


Fig. 4

OPERATION

⚠ WARNING:

The engine of your saw should never be running when you are installing or removing blades. Stop the engine and let it cool to prevent accidental contact with the blade, muffler, etc. that could cause serious injury. Disconnect the spark plug to make sure the saw will not start.

TO INSTALL BLADES

See Figure 5.

- Use the 4 mm hex key provided with this saw.
- Loosen the blade clamp screw enough to permit the saw blade to be inserted over the pin between blade clamp and saw bar.

NOTE: It is not necessary to remove the blade clamp from the tool or the blade clamp screw from the blade clamp to change the blade.

- Align and place the hole in the shank of the blade on the pin in the saw bar.
- Tighten blade clamp screw securely. **Do not** overtighten screw or use an aid with hex key.
- Remove hex key. Put it in a safe place for future use, such as a tool box.

NOTE: There may be times when the blade clamp sticks to the saw bar and will not loosen enough to allow blades to be installed or removed. If this happens, loosen the blade clamp screw with the hex key, then tap lightly on the end of the hex key with a mallet. See Figure 5.

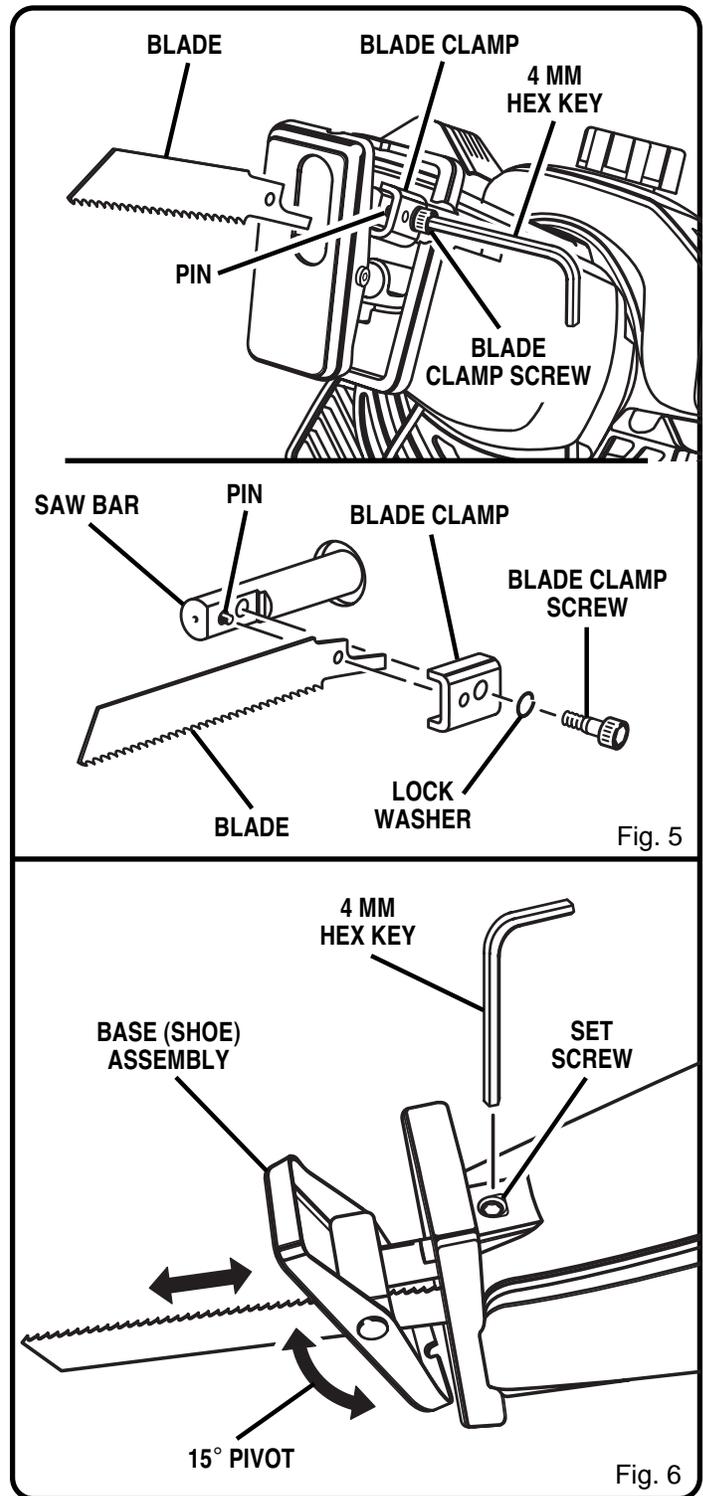
BASE (SHOE) ASSEMBLY

See Figure 6.

The base assembly of your reciprocating saw pivots up and down approximately 15° in both directions. It also is adjustable, allowing the use of the blade teeth at different positions on the blade.

TO CHANGE POSITIONS OF THE BASE ASSEMBLY:

- Loosen the set screw on bottom of the gear frame with the 4 mm hex key provided with this saw.
- Reposition base assembly to desired position.
- Retighten set screw securely. **Do not** overtighten screw or use an aid with hex key.
- Remove hex key and store it in a tool box or other safe place for future use.



OPERATION

GENERAL CUTTING

See Figure 7.

Hold your saw firmly in front of and clearly away from you. Make sure saw blade is clear of any foreign material. Be sure material to be cut is held firmly. Small work pieces should be securely clamped in a vise or with clamps to the work bench or table. Mark the line of cut clearly. Depress the lock-off lever, then pull switch trigger to start the cutting action. Place the base assembly against the work, then move the blade into the work. **DO NOT FORCE.** Use only enough pressure to keep the saw cutting. Let the blade and saw do the work. Use of excessive pressure that causes bending or twisting of the blade may result in broken blades.

PLUNGE CUTTING

See Figure 8.

Mark the line of cut clearly. Choose a convenient starting point inside the area to be cut out and place the tip of the blade over that point. Rest front edge of base assembly on work and hold firmly in position. Depress the lock-off lever, then pull switch trigger to start the cutting action.

⚠ CAUTION:

Make sure blade does not touch work until motor reaches full speed, since this could cause loss of control resulting in serious injury.

With saw blade at full cutting speed, slowly tilt saw downward until tip of blade starts cutting work. After blade penetrates work, tilt saw until blade is perpendicular to the work.

METAL CUTTING

See Figure 9.

Metals such as sheet steel, pipe, steel rods, aluminum, brass, and copper may be cut with your saw. Be careful not to twist or bend the saw blade. **DO NOT FORCE.** We recommend cutting oil when cutting most soft metals and steel. Cutting oil will also keep blades cool, increase cutting action, and prolong blade life.

Never use gasoline since normal sparking of motor could ignite fumes. Clamp the work firmly and cut close to the clamping point to eliminate any vibration of the work being cut. When cutting conduit pipe or angle iron, clamp work in a vise if possible and cut close to the vise. To cut thin sheet material, "sandwich" the material between hardboard or plywood and clamp the layers to eliminate vibration and material tearing.

LUBRICATION

All of the bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. Therefore, no further lubrication is required.

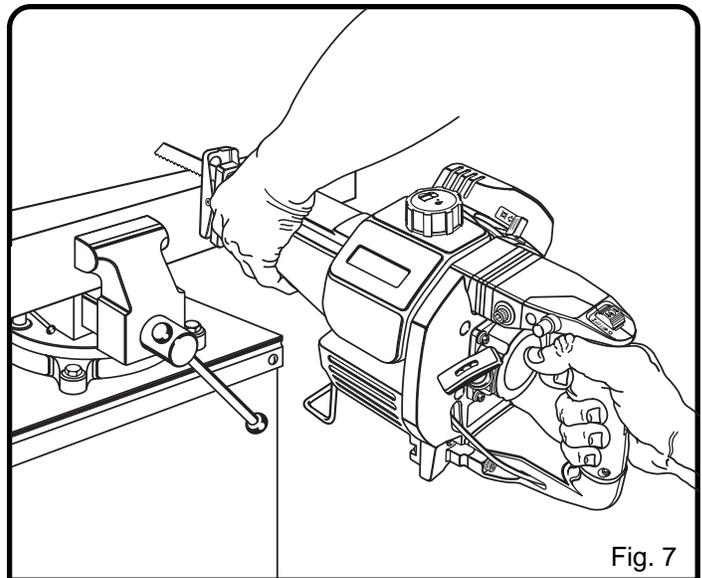


Fig. 7

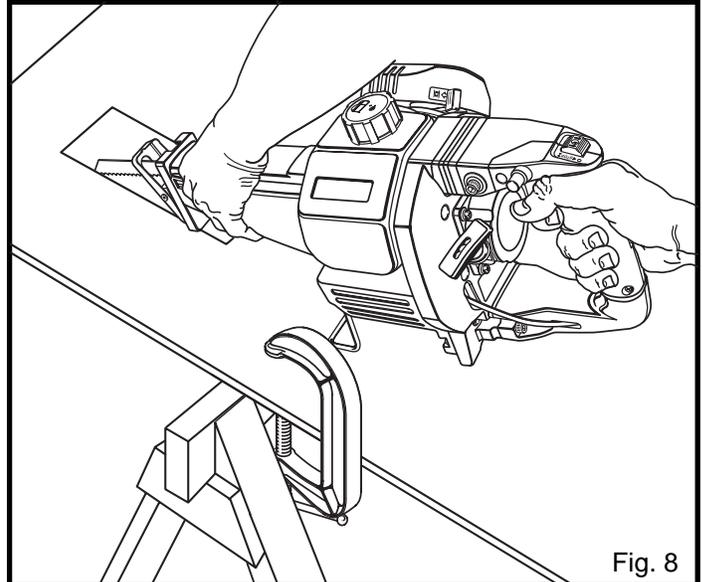


Fig. 8

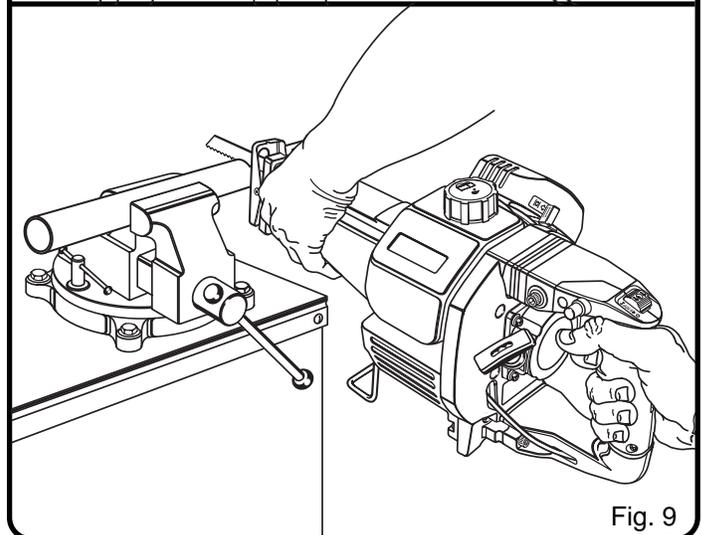


Fig. 9

MAINTENANCE

⚠ WARNING:

When servicing use only identical Ryobi replacement parts. Use of any other parts may create a hazard or cause product damage.

NOTE: Some maintenance procedures may require special tools or skills. If you are unsure about these procedures take your unit to an authorized service center.

MAINTENANCE SCHEDULE

These required maintenance procedures should be performed at the frequency stated in the table. They should also be included as part of any seasonal tune-up.

⚠ WARNING:

Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

⚠ WARNING:

To prevent serious personal injury, never do maintenance or repairs with unit running. Always do maintenance and repairs on a cool unit. Disconnect spark plug wire to make sure the unit will not start.

FREQUENCY	MAINTENANCE REQUIRED	REFER TO:
Before Starting Engine	Fill fuel tank with correct oil and fuel mixture.	Page 11
Every 10 Hours	Clean and re-oil air filter.	Page 16
Every 50 Hours	Clean carbon build up from muffler	Page 16
Every 50 Hours	Check spark plug condition and gap.	Page 17

MAINTENANCE

AIR FILTER MAINTENANCE

See Figure 12.

⚠ WARNING:

To avoid serious personal injury, always turn your saw off and allow it to cool before you clean or do any maintenance on it.

1. Using a small phillips screwdriver, loosen and remove the air filter cover screws (2) and air filter cover.
2. Separate and remove the air filter elements (2) from the plastic air filter element cover and air filter cover support casing (2 pieces).
3. Inspect elements for dirt, stains, etc.
4. Wash both in gasoline, then squeeze dry.
5. Dip elements in SAE 30 engine oil and squeeze out all excess.
6. Place air filter elements back in plastic air filter element cover and support.
7. Place plastic casing on carburetor and align screws holes in casing with screw holes on carburetor.
8. Position air filter cover on carburetor so that all screw holes are aligned.
9. Secure all parts to carburetor with air filter cover screws (2). Tighten securely, but do not over tighten. Plastic parts will break if screws are too tight.

⚠ CAUTION:

Do not sand blast, scrape, or clean electrodes. Grit in the engine could damage the cylinder.

CLEAN MUFFLER EXHAUST

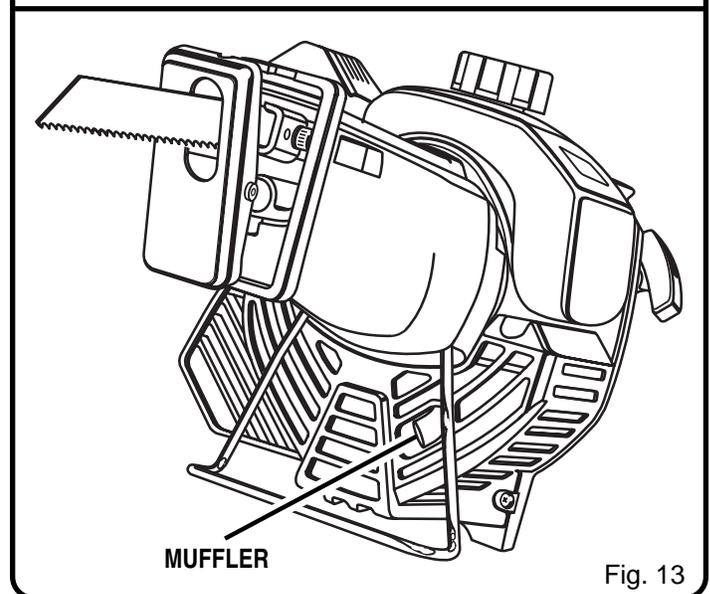
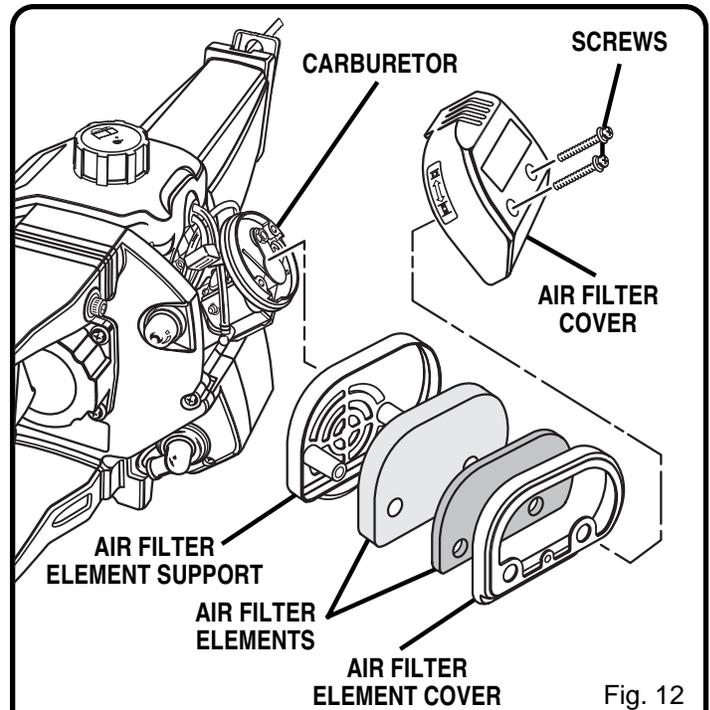
See Figure 13.

⚠ WARNING:

To avoid serious personal injury, always turn your saw off and allow it to cool before you clean or do any maintenance on it.

After extended periods of use carbon deposit will build up in the exhaust port of the muffler, causing it to become clogged. If this situation occurs, periodically remove the carbon build up with a slotted screwdriver. **Be careful, do not** damage the muffler, piston, or cylinder.

NOTE: If an excessive amount of carbon builds up, causing a loss of power, take your saw to an authorized service center to be cleaned by a authorized service technician. It may be necessary for him to remove the muffler and clean both the muffler and cylinder.



MAINTENANCE

CARBURETOR ADJUSTMENT

See Figure 10.

The carburetor on your saw has been factory set. After extended use of your saw adjustments may be required.

The high speed needle has been permanently set from the factory at 1-1/4 turns counterclockwise from the closed position. No additional adjustments should be required or made to this needle.

However, it is possible to make two basic adjustments; The idle adjusting screw and low speed needle.

The **idle adjusting screw** may be turned clockwise for a higher idle speed setting or counterclockwise for a lower idle speed setting. The idle rotating speed should be just under the speed required to make the blade reciprocate.

The **low speed needle** should be initially set at 1-1/4 turns counterclockwise from the closed position. Once the engine warms up, check to see how rich the fuel is burning. If you notice excessive smoke from the exhaust system it is burning too rich. Turn the low speed needle 1/8 turn clockwise (in toward the closed position). If you turn it too much the engine will not accelerate or it will hesitate when you attempt to accelerate. Continue to adjust the low speed needle 1/16 of a turn at a time until the engine stabilizes and accelerates properly.

NOTE: Careless adjustments can seriously damage your saw. Carburetor adjustments should be made by a authorized service technician at an authorized service center.

REPLACING THE SPARK PLUG

See Figure 11.

Use a Resistor type NGK BMR6A spark plug (or equivalent). The correct air gap is 0.7 mm. Remove the plug after every 50 hours of operation and check its condition.

1. Stop the engine and allow it to cool. Grasp the plug wire firmly and pull it from the spark plug.
2. Clean around the spark plug. Remove the spark plug from the cylinder head using the spark plug wrench provided.
3. Replace cracked, fouled, or dirty spark. Set the air gap at 0.7 mm using a feeler gage. See Figure 11.

⚠ CAUTION:

Do not sand blast, scrape, or clean electrodes. Grit in the engine could damage the cylinder.

4. Install a correctly gapped spark plug in the cylinder head. Tighten securely using the spark plug wrench provided.

If using a torque wrench torque to:

110-120 in.·lb. (12.3-13.5 N·m).

Do not over tighten.

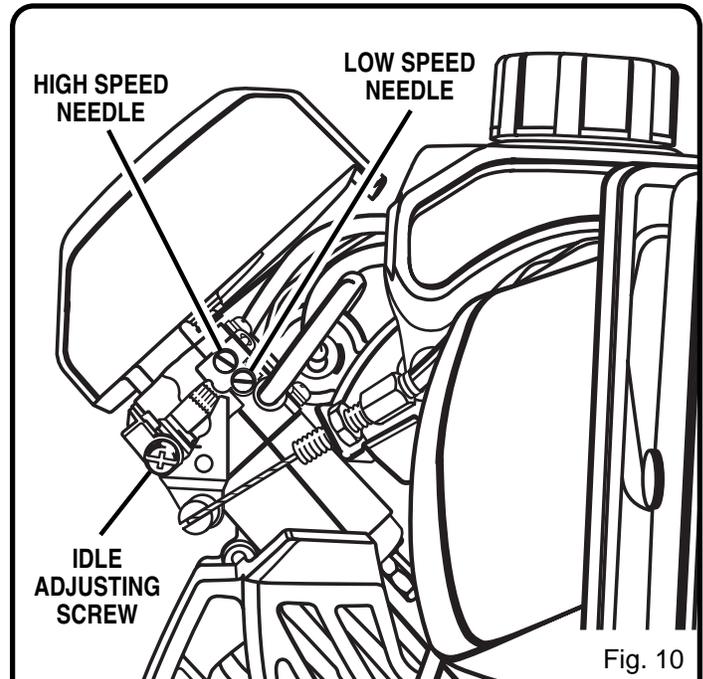


Fig. 10

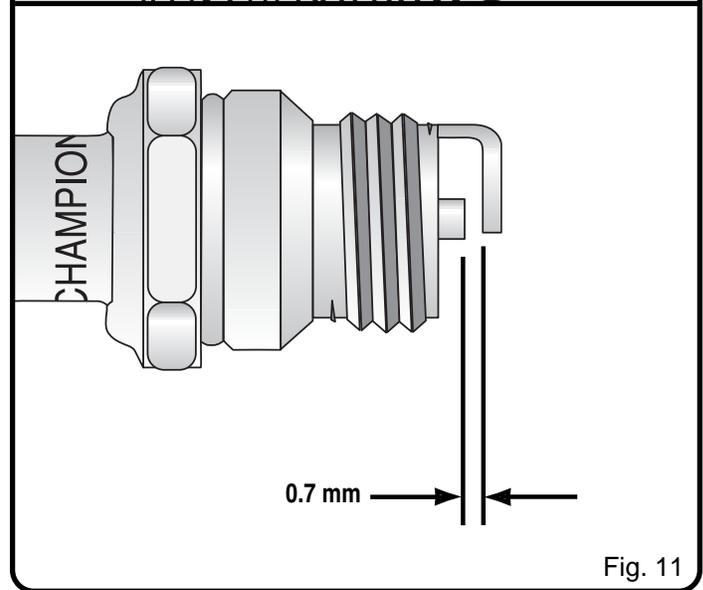


Fig. 11

CLEANING AND STORAGE

⚠ WARNING:

To avoid serious personal injury, always turn your saw off and allow it to cool before you clean or do any maintenance on it.

GENERAL

Avoid using strong detergents or solvents when cleaning plastic parts. Most plastics are susceptible to various types of commercial solvents and may be damaged by their use. Use a small brush to clean off the outside of the unit. Household cleaners that contain aromatic oils such as pine and lemon, and solvents such as kerosene, can damage plastic housing or handle. Use soft, clean cloths to remove dirt and wipe off any moisture.

⚠ WARNING:

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. They contain chemicals that can damage, weaken, or destroy plastic.

STORAGE

- Never store the unit with fuel in the tank where fumes may reach an open flame or spark.
- Allow the engine to cool before storing.
- Store the unit locked up to prevent unauthorized use or damage.
- Store the unit in a dry, well ventilated area.
- Store the unit out of the reach of children.

LONG TERM STORAGE

If the unit will be stored for an extended time, use the following storage procedure.

1. Drain all fuel from the fuel tank and drain into a container with the same 2-cycle fuel mixture. Do not use fuel that has been stored for more than 60 days. Dispose of the old fuel/oil mix in accordance to Federal, State, and Local regulations.
2. Start the engine and allow it to run until it stalls. This ensures that all fuel has been drained from the carburetor.
3. Allow the engine to cool. Remove the spark plug and put 1 oz. (30 ml.) of any high quality motor oil or 2-cycle oil into the cylinder. Pull the starter rope slowly to distribute the oil. Reinstall the spark plug.

NOTE: Remove the spark plug and drain all of the oil from the cylinder before attempting to start the trimmer after storage.

4. Thoroughly clean the unit and inspect for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts. The unit is ready for storage.

TRANSPORTING

- Allow the engine to cool before transporting.
- Secure the unit while transporting.
- Drain fuel from unit.
- Tighten fuel cap before transporting.

ACCESSORIES

2 – Cycle Oil
Spark Plug
Fuel Cap

blades
Ryobi

TROUBLESHOOTING

ENGINE WILL NOT START

CAUSE	ACTION
On/Off Switch is in OFF position	Turn On/Off Switch to ON
Empty fuel tank	Fill fuel tank with properly mixed fuel
Primer bulb wasn't pressed enough	Press primer bulb fully and slowly 5-7 times
Engine flooded	Use starting procedure with choke lever in the RUN position
Old or improperly mixed fuel	Drain gas tank / Add fresh fuel mixture
Fouled spark plug	Replace or clean the spark plug

ENGINE WILL NOT IDLE

CAUSE	ACTION
Air Filter is Plugged	Replace or clean the air filter
Old or improperly mixed fuel	Drain gas tank / Add fresh fuel mixture
Improper carburetor adjustment	Adjust per instruction Pg. 21

ENGINE WILL NOT ACCELERATE

CAUSE	ACTION
Old or improperly mixed fuel	Drain gas tank / Add fresh fuel mixture
Improper carburetor adjustment	Take to an authorized service dealer for carburetor adjustment
Cutting attachment bound with grass	Stop the engine and clean the cutting attachment
Dirty air filter	Clean or replace the air filter

ENGINE LACKS POWER OR STALLS WHEN CUTTING

CAUSE	ACTION
Old or improperly mixed fuel	Drain gas tank / Add fresh fuel mixture
Improper carburetor adjustment	Take to an authorized service dealer for carburetor adjustment



OPERATOR'S MANUAL 2 CYCLE GASOLINE POWERED RECIPROCATING SAW MODEL NO. EJ101

- **SERVICE**

Now that you have purchased your tool, should a need ever exist for repair parts or service, simply contact your nearest Ryobi Authorized Service Center. Be sure to provide all pertinent facts when you call or visit. Please refer to the insert or call 1-800-525-2579 in the United States or 1-800-265-6778 in Canada for your nearest Ryobi Authorized Service Center.

- **MODEL NO. AND SERIAL NO.**

The model number of this tool will be found on a plate attached to the motor housing. Please record the model number and serial number in the space provided below.

- **HOW TO ORDER REPAIR PARTS**

WHEN ORDERING REPAIR PARTS,
ALWAYS GIVE THE FOLLOWING INFORMATION:

- MODEL NUMBER **EJ101**
- SERIAL NUMBER _____

RYOBI AMERICA CORP.

1424 Pearman Dairy Road Anderson, SC 29625
Post Office Box 1207 Anderson, SC 29622-1207
Phone 1-800-525-2579

RYOBI CANADA INC.

Post Office Box 910
Cambridge, Ontario N1R 6K2
Phone 1-800-265-6778