Operator's Manual

CRAFTSMAN°

32cc/1.9 cu.in. 2-Cycle 17 Inch Cutting Path / 0.095 Inch Line GASOLINE BRUSHWACKER®

Model No. 358.795820

- Safety
- Assembly
- Operation
- Maintenance
- Parts List
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DANGER:

Read and follow all Safety Rules and Operating Instructions before first use of this product.

For answers to your questions about this product: Call 7 am-7 pm, Mon.-Sat., or 10 am-7 pm, Sun.

1-800-235-5878 (Hours listed are Central Time)

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

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WARRANTY STATEMENT

TWO YEAR FULL WARRANTY ON CRAFTSMAN® GAS BRUSHWACKER®

When used and maintained according to the operator's manual, if this product fails due to a defect in material or workmanship within two years from the date of purchase, return it to any Sears store, Sears Service Center, or other Craftsman outlet in the United States for free repair (or replacement if repair proves impossible).

This warranty excludes cutting line, blade, spark plug and air filter, which are expendable parts that can wear out from normal use in less than one year.

This warranty applies for only 30 days from purchase date if this product is used for commercial or rental purposes.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Hoffman Estates, IL 60179



IDENTIFICATION OF SYMBOLS

WARNING! This trimmer can be dangerous! Careless or improper use can cause serious or even fatal injury.



Read and understand the operator's manual before using the trimmer.



Always wear appropriate hearing protection, eye protection and head protection.



SAFETY RULES

WARNING: When using gardening appliances, basic safety precautions must always be followed to reduce the risk of fire and serious injury.

A DANGER: This power tool can be dangerous! This unit can cause serious injury including amputation or blindness to the operator and others. The warnings and safety instructions in this manual must be followed to provide reasonable safety and efficiency in using the unit. The operator is responsible for following the warnings and instructions in this manual and on the unit. Read the entire operator's manual before assembling and using the unit! Restrict the use of this unit to persons who read, understand, and follow the warnings and instructions in this manual and on the unit. Never allow children to operate this unit.



Term

OPERATOR'S MANUAL SAFETY INFORMATION ON THE UNIT

DANGER: Blade can thrust violently away from material it does not cut. Blade thrust can cause amputation of arms or legs. Keep people and animals 50 feet (15 meters) away.



WARNING: Blade/trimmer line can throw objects violently. You and others can be blinded or injured. Wear safety glasses and leg protection.



WARNING: Hazard zone for thrown objects. Blade/trimmer line can throw objects violently. Others can be blinded or injured. Keep people and animals 50 feet (15 meters) away.



WARNING: Do not use trimmer head as a fastening device for the blade.



A WARNING: The blade continues to spin after the throttle is released or, engine is turned off. The coasting blade can throw objects or seriously cut if accidentally touched. Stop the blade by contacting the right hand side of the coasting blade with material already cut.



- **OPERATOR SAFETY**
- Dress properly. Always wear safety glasses or similar eye protection when operating, or performing maintenance on your unit. (Safety glasses are available.) Eye protection should be marked Z87.
- Always wear face or dust mask if operation is dusty.
- Always wear heavy, long pants, long sleeves, boots, and gloves. Wearing safety leg guards is recommended.
- Always wear foot protection. Do not go barefoot or wear sandals.
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- Secure hair above shoulder length. Secure or remove loose clothing and jewelry or clothing with loosely hanging ties, straps, tassels, etc. They can be caught in moving parts.
- Being fully covered also helps protect you from debris and pieces of toxic plants thrown by spinning line/blade.
- Stay Alert. Do not operate unit when you are tired, ill, upset or under influence of alcohol, drugs, or medication.
 Watch what you are doing; use common sense.
- Wear hearing protection.
- Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- Keep handles free of oil and fuel.
- Always use the handlebar and a properly adjusted shoulder strap with a blade (see ASSEMBLY).

UNIT/MAINTENANCE SAFETY

WARNING: Stop unit and disconnect the spark plug before performing maintenance (except carburetor adjustments).

- Look for and replace damaged or loose parts before each use. Look for and repair fuel leaks before use. Keep unit in good working condition.
- Throw away blades that are bent, warped, cracked, broken, or damaged in any other way. Replace trimmer head parts that are cracked, chipped, broken, or damaged in any other way before using the unit.
- Maintain unit according to recommended procedures. Keep blade sharp. Keep cutting line at the proper length.
- Use only Craftsman brand replacement line. Never use wire, rope, string, etc.
- Install required shield properly before using the unit. Use the metal shield for all metal blade use. Use the plastic shield for all line trimmer use.
- Use only specified blade or trimmer head; make sure it is properly installed and securely fastened.
- Never start engine with clutch shroud removed. The clutch can fly off and cause serious injury.
- Be sure blade or trimmer head stops turning when engine idles.
- Make carburetor adjustments with the lower end supported to prevent blade or trimmer line from contacting any object. Hold unit by hand; do not use the shoulder strap for support.

- Keep others away when making carburetor adjustments.
- Use only recommended Craftsman accessories and replacement parts.
- Have all maintenance and service not explained in this manual performed by your Sears Service Center.

FUEL SAFETY

- Mix and pour fuel outdoors.
- Keep away from sparks or flames.
- Do not smoke or allow smoking near fuel or the unit or while using the unit.
- Avoid spilling fuel or oil. Wipe up all fuel spills before starting engine.
- Move at least 10 feet (3 meters) away from fueling site before starting engine.
- Stop engine and allow it to cool before removing fuel cap.
- Empty the fuel tank before storing or transporting the unit. Use up fuel left in the carburetor by starting the engine and letting it run until it stops.
- Store unit and fuel in area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.
- Always store gasoline in a container approved for flammable liquids.

CUTTING SAFETY

WARNING: Inspect the area to be cut before each use. Remove objects (rocks, broken glass, nails, wire, string, etc.) which can be thrown or become entangled in the blade or trimmer head.

- Keep others including children, animals, bystanders, and helpers at least 50 feet (15 meters) away. Stop engine immediately if you are approached.
- Always keep engine on the righthand side of your body.
- Hold the unit firmly with both hands.Keep firm footing and balance. Do
- not overreach.
- Keep blade or trimmer head below waist level. Do not raise engine above your waist.
- Keep all parts of your body away from blade, trimmer head, and muffler when engine is running. A hot muffler can cause serious burns.
- Cut from your left to your right. Cutting on right side of the shield will throw debris away from the operator.
- Use only in daylight or good artificial light.
- Use only for jobs explained in this manual.
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TRANSPORTING AND STORAGE

- Stop the unit before carrying.
- Keep muffler away from your body.
 Allow the engine to cool and secure the unit before storing or transporting it in a vehicle.
- Empty the fuel tank before storing or transporting the unit. Use up fuel left in the carburetor by starting the engine and letting it run until it stops.
- Store unit so the blade or line limiter blade cannot accidentally cause injury. The unit can be hung by the shaft.

 Store unit out of reach of children. This unit is not equipped with an antivibration system and is intended for occasional use only.

SAFETY NOTICE: Exposure to vibrations through prolonged use of gasoline powered hand tools could cause blood vessel or nerve damage in the fingers, hands, and joints of people prone to circulation disorders or abnormal swellings. Prolonged use in cold weather has been linked to blood vessel damage in otherwise healthy people. If symptoms occur such as numbness, pain, loss of strength, change in skin color or texture, or loss of feeling in the fingers, hands, or joints, discontinue the use of this tool and seek medical attention. An antivibration system does not guarantee the avoidance of these problems. Users who operate power tools on a continual and regular basis must monitor closely their physical condition and the condition of this tool.

SPECIAL NOTICE: This unit is equipped with a temperature limiting muffler and spark arresting screen which meets the requirements of California Codes 4442 and 4443. All U.S. forest land and the states of California, Idaho, Maine, Minnesota, New Jersey, Oregon, and Washington require by law that many internal combustion engines be equipped with a spark arresting screen. If you operate in a locale where such regulations exist, you are legally responsible for maintaining the operating condition of these parts. Failure to do so is a violation of the law. For normal homeowner use, the muffler and spark arresting screen will not require any service. After 50 hours of use, we recommend that your muffler be serviced or replaced by your Sears Service Center.

ASSEMBLY

CARTON CONTENTS

Check carton contents against the following list.

Model 358.795820

- Brushcutter attachment
- Trimmer attachment
- Hex wrench
- Handlebar
- Bracket cover
- · Bracket cover screws (2)
- Plastic shield
- · Wing nut (screwed onto shield)
- Shoulder strap with warning
- Container of oil
- Container of line

Examine parts for damage. Do not use damaged parts.

NOTE: If you need assistance or find parts missing or damaged, call 1-800-235-5878.

It is normal for the fuel filter to rattle in the empty fuel tank.

Finding fuel or oil residue on muffler is normal due to carburetor adjustments and testing done by the manufacturer.

ASSEMBLY

WARNING: Always stop unit and disconnect spark plug before performing any assembly procedures.

A WARNING: If received assembled, repeat all steps to ensure your unit is properly assembled and all fasteners are secure.

TOOLS REQUIRED

- Hex Wrench (provided)
- Adjustable Wrench
- Phillips Screwdriver

INSTALLING ATTACHMENT

CAUTION: When installing attachment, place the unit on a flat surface for stability.

1. Loosen the coupler by turning the knob counterclockwise.



- 2. Remove shipping protector from coupler.
- 3. Remove the shaft cap from the attachment (if present).
- Position locking/release button of attachment into guide recess of coupler.
- Push the attachment into the coupler until the locking/release button snaps into the primary hole.
- 6. Before using the unit, tighten the knob securely by turning clockwise. Coupler Primary Hole



WARNING: Make sure the locking/release button is locked in the primary hole and the knob is securely tightened before operating the unit. All attachments are designed to be used in the primary hole unless otherwise stated in the applicable attachment operator's manual. Using the wrong hole could lead to serious injury or damage to the unit.



For optional attachments, see the AS-SEMBLY section of the applicable attachment operator's manual.

ATTACHING THE HANDLEBAR

DANGER: To avoid serious injury, the barrier portion of the handlebar must be installed as shown to provide a barrier between operator and the spinning blade.

- Locate the decal on the handlebar. This decal includes an arrow. Position the handlebar with the mounting bracket at the end of the arrow.
- Position the bracket cover over the handlebar. Again make sure the handlebar is at the end of the arrow.
- Insert screws and hand tighten only. Be sure the handlebar is installed correctly; then, tighten each screw securely with the hex wrench.



ASSEMBLY OF SHOULDER STRAP

WARNING: Proper shoulder strap and handlebar adjustments must be made with the engine completely stopped before using unit.

 Insert your right arm and head through the shoulder strap and allow it to rest on your left shoulder. Make sure the danger sign is on your back and the hook is to the right side of your waist.

NOTE: A one-half twist is built into the shoulder strap to allow the strap to rest flat on the shoulder.

- Adjust the strap, allowing the hook to be about 6 inches (15 cm) below the waist.
- Fasten the strap hook to the clamp located between the trigger handle and the handlebar clamp base and lift the tool to the operating position.
- Try on shoulder strap and adjust for fit and balance before starting the engine or beginning a cutting operation.

NOTE: It may be necessary to relocate the shoulder strap clamp on the shaft for proper balancing of unit. TO RELOCATE SHOULDER STRAP CLAMP:

1. Loosen and remove both clamp screws.



- 2. Place the upper shoulder strap clamp over the shaft.
- Position the lower shoulder strap clamp under the shaft and align the upper and lower clamp screw holes.



- 4. Insert two screws into the screw holes.
- Secure shoulder strap clamp by tightening screws with a hex wrench.





ASSEMBLY INFORMATION -TRIMMER HEAD



INSTALLATION OF THE TRIMMER HEAD

NOTE: Before installing the trimmer head, make sure the dust cup and retaining washer are positioned on the shaft of the gearbox. The retaining washer must be positioned with the raised section toward the gearbox.

- 1. Align hole in the dust cup with the hole in the side of the gearbox by rotating the dust cup.
- Insert a small screwdriver into aligned holes. This will keep the shaft from turning while tightening trimmer head.



NOTE: Make sure all parts are properly installed as shown in the illustration before installing the trimmer head. 3. While holding the screwdriver in

position, thread trimmer head onto the shaft by turning counterclockwise. Tighten until secure.



4. 7

ATTACHING THE PLASTIC SHIELD

WARNING: The shield must be properly installed. The shield provides partial protection from the risk of thrown objects to the operator and others and is equipped with a line limiter blade which cuts excess line to the proper length. The line limiter blade (on underside of shield) is sharp and can cut you.

- 1. Remove wing nut from shield.
- 2. Insert bracket into slot on shield.
- 3. Pivot shield until bolt passes
- through hole in bracket. 4. Tighten the wing nut securely.



ASSEMBLY INFORMATION -BRUSH BLADE



ATTACHING THE METAL SHIELD

WARNING: The metal shield must be properly installed on the tool anytime the tool is used with a blade. The forward tip of the metal shield helps to reduce the occurrence of blade thrust which can cause serious injury such as amputation to the operator or bystanders. Failure to install the shield in the position shown can result in serious injury to the operator. The length of the shield must be aligned with the length of the shaft.

1. Place the metal shield under the gearbox, and align the screw holes.



 Insert and thread the 4 mounting screws through the holes of the gearbox and the metal shield. Tighten evenly and securely with the hex wrench provided.
 INSTALLATION OF THE METAL

BLADE

WARNING: Wear protective gloves when handling or performing maintenance on the blade to avoid injury. The blade is sharp and can cut you even when it is not moving.

WARNING: Do not use any blades, or fastening hardware other than the washers and nuts shown in the following illustrations. Replacement parts must be purchased at Sears and installed as shown below. Failure to use proper parts can cause the blade to fly off and seriously hurt you or others. **NOTE:** The dust cup and retaining washer are located on the gearbox shaft and not in the parts bag. All other fasteners mentioned in the following assembly steps are in the parts bag.

- Remove the retaining washer from the threaded shaft of the gearbox. Leave the dust cup on the shaft.
- 2. Install the blade and the retaining washer over the threaded shaft.
- Make sure the raised part of the retaining washer is facing the gearbox and the raised area fits into the hole in the center of the blade.
- Slide the blade and retaining washer onto the shaft of the gearbox. NOTE: When installing brush blade, ensure side of blade with decal is facing gearbox and points of blade will rotate counterclockwise (see illustration).



8-POINT BLADE

DECAL SIDE OF BLADE MUST FACE GEARBOX

- Place the cupped washer onto the shaft. Make sure the cupped side of the washer is toward the blade.
- 6. Install the blade nut by threading onto the shaft counterclockwise.



NOTE: Make sure all parts are in place as illustrated, and the blade is sandwiched between the dust cup and the retaining washer. There should be no space between the blade and the dust cup or the retaining washer.

- Align hole in dust cup with hole in side of gearbox by rotating the blade.
- Insert a small screwdriver into aligned holes. This will keep the shaft from turning while tightening the blade nut.



- 9. Tighten blade nut firmly with a wrench while holding screwdriver in position.
- 10. Remove the screwdriver.
- Turn blade by hand. If the blade binds against the shield, or appears to be uneven, the blade is not centered, and you must reinstall.

NOTE: To remove blade, insert screwdriver into aligned holes. Unthread the nut and remove parts. Be sure to store parts and instructions for future use.



OPERATION

KNOW YOUR BRUSHWACKER

READ THIS OPERATOR'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR UNIT. Compare the illustrations with your unit to familiarize yourself with the location of the various controls and adjustments. Save this manual for future reference.



ON/OFF SWITCH

The ON/OFF SWITCH is used to stop the engine. Move the switch to the OFF position to stop the engine.

PRIMER BULB

The PRIMER BULB removes air from the carburetor and fuel lines and fills them with fuel. This allows you to start the engine with fewer pulls on the starter rope. Activate the primer bulb by pressing it and allowing it to return to its original form.

BEFORE STARTING ENGINE

WARNING: Be sure to read the fuel information in the safety rules before you begin. If you do not understand the safety rules, do not attempt to fuel your unit. Call 1-800-235-5878.

FUELING ENGINE

WARNING: Remove fuel cap slowly when refueling.

This engine is certified to operate on unleaded gasoline. Before operation, gasoline must be mixed with a good quality synthetic 2-cycle air-cooled engine oil. We recommend Craftsman brand synthetic oil. Mix gasoline and oil at a ratio of 40:1. A 40:1 ratio is obtained by mixing 3.2 ounces of oil with 1 gallon of unleaded gasoline. In-

START LEVER

The START LEVER helps to supply fuel to the engine to aid in starting. Activate the starting system by moving the start lever to the START position. DO NOT squeeze the throttle trigger until the engine has started and runs. After the engine starts, allow the engine to warm-up 5 seconds, then fully squeeze the throttle trigger to deactivate the starting system (start lever returns to RUN position).

COUPLER

The COUPLER enables optional attachments to be installed on the unit.

cluded with this brushcutter is a 3.2 ounce container of oil. Pour the entire contents of this container into 1 gallon of gasoline to achieve the proper fuel mixture. DO NOT USE automotive oil or marine oil. These oils will cause engine damage. When mixing fuel, follow instructions printed on container. Once oil is added to gasoline, shake container momentarily to assure that the fuel is thoroughly mixed. Always read and follow the safety rules relating to fuel before fueling your unit.

IMPORTANT

Alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.



To avoid engine problems, empty the fuel system before storage for 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season.

Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

See the STORAGE section for additional information.

HOW TO STOP YOUR UNIT

- · Release the throttle trigger.
- Move the ON/OFF switch to the OFF position.



ON/OFF Switch HOW TO START YOUR UNIT

WARNING: Avoid any contact with the muffler. A hot muffler can cause serious burns.



STARTING A COLD ENGINE

NOTE: DO NOT squeeze the throttle trigger until the engine has started and runs.

- 1. Set unit on a flat surface.
- Move ON/OFF switch to the ON position.
- Slowly press the primer bulb 6 times.
- Move the start lever to the START position.



Muffler

 This unit has the Sim-pul[™] starting system. You do not have to pull the starter rope handle sharply or briskly. Pull starter rope handle with a controlled and steady motion until engine starts and runs.

 Allow unit to run for 5 seconds, then fully squeeze the throttle trigger to disengage the starting system (start lever returns to RUN position).

STARTING A WARM ENGINE

- Move ON/OFF switch to the ON position.
- Squeeze and hold the throttle trigger. Keep throttle trigger fully squeezed until engine runs smoothly.
- Pull starter rope handle with a controlled and steady motion while squeezing throttle trigger until engine starts and runs.

NOTE: Normally, the warm starting procedure can be used within 5–10 minutes after the unit is turned off. If the unit sits for more than 10 minutes without being used, it will be necessary to start the unit by following the steps under STARTING A COLD EN-GINE or following the starting instruction steps shown on the unit.

STARTING A FLOODED ENGINE

Flooded engines can be started by placing the ON/OFF switch in the ON position. Move the start lever to the RUN position and fully squeeze throttle trigger. Pull the starter handle repeatedly while squeezing throttle trigger until engine starts and runs. This could require pulling the starter handle many times, depending on how badly the unit is flooded.

If the unit still doesn't start, refer to TROUBLESHOOTING TABLE or call 1-800-235-5878.

CRAFTSMAN[®] CONVERTIBLE™ FEATURE

This model is equipped with a coupler which enables optional attachments to be installed. The optional attachments are:

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44
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WARNING: Always stop unit and disconnect spark plug before removing or installing attachments.

REMOVING ATTACHMENTS

CAUTION: When removing or installing attachments, place the unit on a flat surface for stability.



1. Loosen the coupler by turning the knob counterclockwise.



2. Press and hold the locking/release button.



 While securely holding the engine and upper shaft, pull the attachment straight out of the coupler.

INSTALLING OPTIONAL ATTACH-MENTS

- 1. Remove the shaft cap from the attachment (if present).
- Position locking/release button of attachment into guide recess of coupler.
- Push the attachment into the coupler until the locking/release button snaps into the primary hole.
- Before using the unit, tighten the knob securely by turning clockwise.



A WARNING: Make sure the locking/release button is locked in the primary hole and the knob is securely tightened before operating the unit. All attachments are designed to be used in the primary hole unless otherwise stated in the applicable attachment operator's manual. Using the wrong hole could lead to serious injury or damage to the unit.



OPERATING INSTRUCTIONS To maximize operating efficiency, do not run the engine for longer than 1 minute at a time at full throttle. OPERATING POSITION



Cut only from your left to your right.

When operating unit, clip shoulder strap onto clamp, stand as shown and check for the following:

- Wear eye protection, hearing protection and heavy clothing.
- Extend your left arm and hold handlebar grip with your left hand.
- Hold throttle grip with your right hand with finger on throttle trigger.
- Hold unit so that engine is below waist level.
- Keep shoulder strap pad centered on your left shoulder and danger sign centered on your back.
- Maintain full weight of tool on your left shoulder.
- Cut only from your left to your right to ensure debris is thrown away from you. Without bending over, keep the blade or trimmer head near and parallel to the ground and not crowded into material being cut.

OPERATING INSTRUCTIONS FOR USE WITH TRIMMER HEAD

WARNING: Always wear eye protection. Never lean over the trimmer head. Rocks or debris can ricochet or



be thrown into eyes and face and cause blindness or other serious injury. Before trimming, bring engine to a speed sufficient to cut material to be trimmed.

Do not run the engine at a higher speed than necessary. The cutting line will cut efficiently when the engine is run at less than full throttle. At lower speeds, there is less engine noise and vibration. The cutting line will last longer and will be less likely to "weld" onto the spool. Always release the throttle trigger and

allow the engine to return to idle speed when not cutting. HOW TO STOP YOUR UNIT

 Release the throttle trigger. Move ON/OFF switch to the OFF position.

CUTTING METHODS

AWARNING: Use minimum speed and do not crowd the line when cutting around hard objects (rock, gravel, fence posts, etc.), which can damage the trimmer head, become entangled in the line, or be thrown causing a serious hazard.

The tip of the line does the cutting. You will achieve the best performance and minimum line wear by not crowding the line into the cutting area. The right and wrong ways are shown below.







- The line will easily remove grass and weeds from around walls, fences, trees and flower beds, but it also can cut the tender bark of trees or shrubs and scar fences.
- · For trimming or scalping, use less than full throttle to increase line life and decrease head wear, especially: During light duty cutting.
 - · Near objects around which the line can wrap such as small posts, trees or fence wire.

TRIMMING - Hold the bottom of the trimmer head about 3 inches (8 cm) above the ground and at an angle. Allow only the tip of the line to make contact with vegetation. Do not force trimmer line into work area.



SCALPING - The scalping technique removes unwanted vegetation down to the ground. Hold the bottom of the trimmer head about 3 inches (8 cm) above the ground and at an angle. Allow the tip of the line to strike the ground around trees, posts, monuments, etc. This technique increases line wear.



MOWING - Your trimmer is ideal for mowing in places conventional lawn mowers cannot reach. In the mowing position, keep the line parallel to the ground. Avoid pressing the head into the ground as this can scalp the ground and damage the tool.



SWEEPING - The fanning action of the rotating line can be used to blow away loose debris from an area. Keep the line parallel to and above the area surface and swing the tool from side to side.





OPERATING INSTRUCTIONS FOR USE WITH BRUSH BLADE

- Blade Thrust is a reaction that only occurs when using a bladed unit. This reaction can cause serious injury such as amputation. Carefully study this section. It is important that you understand what causes blade thrust, how you can reduce the chance of its occurring, and how you can remain in control of unit if blade thrust occurs.
- WHAT CAUSES BLADE THRUST -Blade Thrust can occur when the spinning blade contacts an object that it does not cut. This contact causes the blade to stop for an instant and then suddenly move or "thrust" away from the object that was hit. The "thrusting" reaction can be violent enough to cause the operator to be propelled in any direction and lose control of the unit. The uncontrolled unit can cause serious injury if the blade contacts the operator or others.
- WHEN BLADE THRUST OCCURS

 Blade Thrust can occur without warning if the blade snags, stalls, or binds. This is more likely to occur in areas where it is difficult to see the material being cut. By using the unit properly, the occurrence of blade thrust will be reduced and the operator will be less likely to lose control.



- Cut only grass, weeds, and woody brush up to 1/2 inch (1 cm) in diameter with the brush blade. Do not let the blade contact material it cannot cut such as stumps, rocks, fences, metal, etc., or clusters of hard, woody brush having a diameter greater than 1/2 inch (1 cm).
- A dull blade is likely to snag and thrust. Ensure that the blade is

sharp. Replacement blades are available at Sears.

- Cut only at full throttle. The blade will have maximum cutting power and is less likely to bind or stall.
- "Feed" the blade deliberately and not too rapidly. The blade can thrust away if it is fed too rapidly.
- Cut only from your left to your right. Cutting on right side of the shield will throw debris away from the operator.
- Use the shoulder strap and keep a firm grip on the unit with both hands.
 A properly adjusted shoulder strap will support the weight of the unit, freeing your arms and hands to control and guide the cutting motion.
- Keep feet comfortably spread apart and braced for a possible sudden, rapid thrust of unit. Do not overreach. Keep firm footing and balance.
- Keep blade below waist level; it will be easier to maintain control of unit.
- Do not raise the engine above your waist as the blade can come dangerously close to your body.
- Do not swing unit with such force that you are in danger of losing your balance.

Bring the engine to cutting speed before entering the material to be cut. Always release the throttle trigger and allow engine to return to idle speed when not cutting. The blade should not turn while the engine is running at idle. If the blade turns at idle, do not use your unit. Refer to the CARBURE-TOR ADJUSTMENT section or contact your Sears Service Center.

- Maintain good firm footing while using the unit. Do this by planting feet firmly in a comfortable apart position.
- Cut while swinging the upper part of your body from left to right.
- As you move forward to the next area to cut, be sure to maintain your balance and footing.

RECOMMENDED CUTTING POSITION

Cut using the 2 o'clock to 4 o'clock position of the blade



WARNING: The operator or others must not try to clear away cut material with the engine running or the blade turning to avoid serious injury. Stop engine and blade before removing materials wrapped around blade or shaft.

ADDITIONAL SAFETY RULES FOR OPTIONAL ATTACHMENTS

WARNING: For each optional attachment used, read entire instruction manual before use and follow all warnings and instructions in manual and on attachment.

WARNING: Ensure handlebar remains installed on upper shaft (engine end of unit) at all times.



EDGER SAFETY

WARNING: Inspect the area to be edged before each use. Remove objects (rocks, broken glass, nails, wire, etc.) which can be thrown by the blade or can wrap around the shaft.

- Blade rotates momentarily after the trigger is released. The blade can seriously cut you or others.
- Allow blade to stop before removing it from the cut.

Blade rotates momentarily after the trigger is released.

Allow blade to stop before removing it from the cut.

- Throw away blades that are bent, warped, cracked, broken or damaged in any other way. Replace parts that are cracked, chipped, or damaged before using the unit.
- Do not attempt to remove cut material nor hold material to be cut when the engine is running or when cutting blade is moving.
- Always keep the wheel and depth adjusting skid in contact with the ground.
- Ålways push the unit slowly over the ground. Stay alert for uneven sidewalks, holes in the terrain, large roots, etc.
- Always use the handlebar when using edger attachment.

BLOWER/VACUUM SAFETY

WARNING: Inspect area before starting unit. Remove all debris and hard objects such as rocks, glass, wire, etc. that can ricochet, be thrown, or otherwise cause injury or damage during operation.

- Do not set unit on any surface except a clean, hard area while engine is running. Debris such as gravel, sand, dust, grass, etc., could be picked up by the air intake and thrown out through discharge opening, damaging unit, property, or causing serious injury to bystanders or operator.
- Never place objects inside the blower tubes, vacuum tubes or blower outlet. Always direct the blowing debris away from people, animals, glass, and solid objects such as trees, automobiles, walls, etc. The force of air can cause rocks, dirt, or sticks to be thrown or to ricochet which can hurt people or animals, break glass, or cause other damage.
- Never run unit without the proper equipment attached. When using your unit as a blower, always install blower tubes.
- Check air intake opening, blower tubes or vacuum tubes frequently, always with engine stopped and spark plug disconnected. Keep vents and discharge tubes free of debris which can accumulate and restrict proper air flow.
- Never place any object in air intake opening as this could restrict proper air flow and cause damage to the unit.
- Never use for spreading chemicals, fertilizers, or other substances which may contain toxic materials.
- To avoid spreading fire, do not use near leaf or brush fires, fireplaces, barbecue pits, ashtrays, etc.

CULTIVATOR SAFETY

WARNING: Rotating tines can cause serious injury. Keep away from rotating tines. Stop the engine and disconnect the spark plug before unclogging tines or making repairs.





A WARNING: Inspect the area to be cultivated before starting the unit. Remove all debris and hard and sharp objects such as rocks, vines, branches, rope, string, etc.

- Avoid heavy contact with solid objects that might stop the tines. If heavy contact occurs, stop the engine and inspect the unit for damage.
- Never operate the cultivator without the tine cover in place and properly secured.
- Keep the tines and guard clear of debris.
- After striking a foreign object, stop the engine, disconnect the spark plug and inspect the cultivator for damage. Repair before restarting.
- Disconnect attachment from the drive engine before cleaning the tines with a hose and water to remove any build-up. Oil the tines to prevent rust.
- Always wear gloves when servicing or cleaning the tines. The tines become very sharp from use.
- Do not run unit at high speed unless cultivating.

HEDGE TRIMMER SAFETY

DANGER: RISK OF CUT; KEEP HANDS AWAY FROM BLADE - Blade moves momentarily after the trigger is released. Do not attempt to clear away cut material when the blade is in motion. Make sure the switch is in the OFF position, the spark plug wire is disconnected, and the blade has stopped moving before removing jammed material from the cutting blade. Do not grab or hold the unit by the cutting blade.



Allow blades to stop before removing them from the cut.



WARNING: Inspect the area before starting the unit. Remove all debris and hard objects such as rocks, glass, wire, etc. that can ricochet, be thrown, or otherwise cause injury or damage during operation.

- Do not use a cutting blade that is bent, warped, cracked, broken or damaged in any other way. Have worn or damaged parts replaced by an authorized service dealer.
- Always keep unit in front of your body. Keep all parts of your body away from the cutting blade.
- Keep the cutting blade and air vents clear of debris.

POLE PRUNER SAFETY

WARNING: The reciprocating blade/ rotating chain can cause severe injury. Inspect the unit before use. Do not operate unit with a bent, cracked or dull blade or dull chain. Keep away from the blade/chain.

WARNING: The reciprocating blade/rotating chain is sharp. Do not touch. To prevent serious injury, always stop engine and ensure blade/ chain has stopped moving, disconnect spark plug, and wear gloves when changing or handling the blade or chain.

WARNING: A coasting blade/rotating chain can cause injury while it continues to move after the engine is stopped. Maintain proper control of the unit until the blade/chain has completely stopped moving. Keep hands, face and feet at a distance from all moving parts. Do not attempt to touch or stop the blade or chain when it is moving.



WARNING: Falling objects can cause severe head injury. Wear head protection when operating this unit with a pole pruner attachment.



A WARNING: To prevent serious injury, do not use more than one boom extension with a pole pruner attachment.

WARNING: Keep the pruner away from power lines or electrical wires.

- Only use for pruning limbs or branches up to 4 inches (10 cm) in diameter.
- Do not operate the unit faster than the speed needed to prune. Do not run the unit at high speed when not pruning.
- Always stop the unit when work is delayed or when walking from one cutting location to another.
- If you strike or become entangled with a foreign object, stop the engine immediately and check for damage. Have any damage repaired by an authorized service dealer before attempting further operations. Discard blades that are bent, warped, cracked or broken.
- Stop the unit immediately if you feel excessive vibration. Vibration is a sign of trouble. Inspect thoroughly for loose nuts, bolts or damage before continuing. Contact an authorized service dealer for repair or replacement of affected parts as necessary.

SNOW THROWER SAFETY

WARNING: Keep hands and feet away from the rotor when starting or running the engine. Never attempt to clear the rotor with the engine/motor running. Stop engine and disconnect spark plug before unclogging snow or debris from discharge chute or when adjusting vanes.



A WARNING: Never lean over discharge chute. Rocks or debris could be thrown into the eyes and face and cause serious injury or blindness.

WARNING: Inspect the area where the unit is to be used. Remove objects that could be thrown or damage the unit. Some objects may be hidden by fallen snow - be alert for the possibility.

- Direct material discharge away from glass enclosures, automobiles, etc.
- Do not run engine at high speed while not removing snow.
- Be attentive when using the snowthrower, and stay alert for holes in the terrain and other hidden hazards.
- Make sure the rotor will spin freely before attaching the snowthrower to the powerhead.
- If the rotor will not rotate freely due to frozen ice, thaw the unit before thoroughly before attempting to operate under power.
- · Keep the rotor clear of debris.
- Do not throw snow near other people. The snow thrower could propel small objects at high speed causing injury.
- After striking a foreign object, stop the engine, disconnect spark plug and inspect the snowthrower for damage and repair if necessary before restarting unit.
- Never operate the snowthrower near glass enclosures, automobiles and trucks.
- Never attempt to use the snowthrower on a roof.
- Never operate the snowthrower near window wells, dropoffs, etc.
- Never discharge snow onto public roads or near moving traffic.
- Clear snow from slopes by going up and down; never across. Use caution when changing directions. Never clear snow from steep slopes.
- Let snowthrower run for a few minutes after clearing snow so moving parts do not freeze.
- Look behind and use care when backing up. Exercise caution to avoid slipping or falling, especially when operating in reverse.
- Know how to stop quickly.



MAINTENANCE

MAINTENANCE SCHEDULE

WARNING: Disconnect the spark plug before performing maintenance except for carburetor adjustments.

CARE & MAINTENANCE TASK	WHEN TO PERFORM
Check for loose fasteners and parts	Before each use
Check for damaged or worn parts	Before each use
Inspect and clean unit and decals	After each use
Clean air filter	Every 5 hours of operation
Inspect muffler and spark arresting screen	Every 50 hours of operation
Replace spark plug	Yearly

GENERAL RECOMMENDATIONS

The warranty on this unit does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, the operator must maintain unit as instructed in this manual. Various adjustments will need to be made periodically to properly maintain your unit.

CHECK FOR LOOSE FASTENERS AND PARTS

Spark Plug Boot

- Air Filter
- Housing Screws
- Assist Handle Screw
- Debris Shield
- Blade Nut

CHECK FOR DAMAGED OR WORN PARTS

Contact Sears Service Center for replacement of damaged or worn parts.

- ON/OFF Switch Ensure ON/OFF switch functions properly by moving the switch to the OFF position. Make sure engine stops; then restart engine and continue.
- Fuel Tank Discontinue use of unit if fuel tank shows signs of damage or leaks.
- Debris Shield Discontinue use of unit if debris shield is damaged.
- Blade Discontinue use of unit if blade becomes damaged or worn.

INSPECT AND CLEAN UNIT AND DECALS

- After each use, inspect complete unit for loose or damaged parts. Clean the unit and decals using a damp cloth with a mild detergent.
- Wipe off unit with a clean dry cloth.

CLEAN AIR FILTER

A dirty air filter decreases engine performance and increases fuel consumption and harmful emissions. Always clean after every 5 hours of operation.

- Clean the cover and the area around it to keep dirt from falling into the carburetor chamber when the cover is removed.
- 2. Remove parts by pressing button to release air filter cover.

NOTE: To avoid creating a fire hazard or producing harmful evaporative emissions, do not clean filter in gasoline or other flammable solvent.

- 3. Wash the filter in soap and water.
- Allow filter to dry.
 Beplace parts.
- Replace parts. Button



INSPECT MUFFLER AND SPARK ARRESTING SCREEN

WARNING: The muffler on this product contains chemicals known to the State of California to cause cancer. As your unit is used, carbon deposits build up on the muffler and spark arresting screen.

For normal homeowner use, however, the muffler and spark arresting screen will not require any service. After 50 hours of use, we recommend that your muffler be serviced or replaced by your Sears Service Center.



REPLACE SPARK PLUG

Replace the spark plug each year to ensure the engine starts easier and runs better. Set spark plug gap at 0.025 inch (0.6 mm). Ignition timing is fixed and nonadjustable.

- 1. Twist, then pull off spark plug boot.
- 2. Remove spark plug from cylinder and discard.
- Replace with Champion RCJ-6Y spark plug and tighten securely with a 3/4 inch (19 mm) socket wrench.
- 4. Reinstall the spark plug boot.

SERVICE AND ADJUSTMENTS

LINE REPLACEMENT

 Always use Craftsman replacement line.

Choose the line size best suited for the job at hand. Red line is designed for cutting grass and small weeds. The black colored line is designed for cutting larger weeds and light brush. **NOTE:** Before inserting new line into the holes in the cutting head, identify the proper holes. Follow directions as shown on the line glide plate.

- 1. Remove the old line and line glide plate from the cutting head.
- Clean entire surface of cutting head.
 Reinstall line glide plate (see il-
- Iustration). Align arrow with: when using medium (red) or
- 🗢 large (black) line

B when using lines with diameter smaller than medium (red) line (optional)



NOTE: Line glide plate must be reinstalled in cutting head before inserting new line.

 Insert both ends of your line through the proper holes in the side of the cutting head.



 Pull the line and make sure the line is against the hub and extended full through the positioning tunnels.



 Correctly installed line will be the same length on both ends
 BLADE REPLACEMENT

Refer to the ASSEMBLY section for blade replacement instructions and illustrations.

CARBURETOR ADJUSTMENT

WARNING: Keep others away when making idle speed adjustments. The trimmer head or blade will be spinning during most of this procedure. Wear your protective equipment and observe all safety precautions. After making adjustments, the trimmer head or blade must not move/spin at idle speed.

The carburetor has been carefully set at the factory. Adjustments may be necessary if you notice any of the following conditions:

- Engine will not idle when the throttle is released.
- The trimmer head or blade moves/ spins at idle.



Make adjustments with the unit supported so the cutting attachment is off the ground and will not make contact with any object. Hold the unit by hand while running and making adjustments. Keep all parts of your body away from the cutting attachment and muffler.

Idle Speed Adjustment

Allow engine to idle. Adjust speed until engine runs without trimmer head or blade moving or spinning (idle too fast) or engine stalling (idle speed too slow).

- Turn idle speed screw clockwise to increase engine speed if engine stalls or dies.
- Turn idle speed screw counterclockwise to decrease engine speed if trimmer head or blade moves or spins at idle.

WARNING: Recheck the idle speed after each adjustment. The trimmer head or blade must not move or spin at idle speed to avoid serious injury to the operator or others.



If you require further assistance or are unsure about performing this procedure, contact your Sears Service Center or call our customer assistance help line at 1-800-235-5878.

STORAGE

WARNING: Perform the following steps after each use:

- Allow engine to cool before storing or transporting.
- Store unit and fuel in a well ventilated area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.
- Store unit with all guards in place.
 Position unit so that any sharp object cannot accidentally cause injury.
- Store unit and fuel well out of the reach of children.

SEASONAL STORAGE

Prepare unit for storage at end of season or if it will not be used for 30 days or more.

If your unit is to be stored for a period of time:

- Clean the entire unit before lengthy storage.
- Store in a clean dry area.

• Lightly oil external metal surfaces. FUEL SYSTEM

FOEL SYSTEM Empty the fuel system before storage for 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. Under FUELING ENGINE in the OPERA-TION section of this manual, see message labeled **IMPORTANT** regarding the use of gasohol in your engine. Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to the gasoline in the fuel tank or fuel storage container. Follow the mix instructions found on stabilizer container. Run engine at least 3 minutes after adding stabilizer. Craftsman 40:1, 2-cycle engine oil (air cooled) is already blended with fuel stabilizer. If you do not use this Sears oil, you can add a fuel stabilizer to your fuel tank.

ENGINE

- Remove spark plug and pour 1 teaspoon of 40:1, 2-cycle engine oil (air cooled) through the spark plug opening. Slowly pull the starter rope 8 to 10 times to distribute oil.
- Replace spark plug with new one of recommended type and heat range.
- Clean air filter.
- Check entire unit for loose screws, nuts, and bolts. Replace any damaged, broken, or worn parts.
- At the beginning of the next season, use only fresh fuel having the proper gasoline to oil ratio.
- OTHER
- Do not store gasoline from one season to another.
- Replace your gasoline can if it starts to rust.



TROUBLESHOOTING TABLE

WARNING: Always stop unit and disconnect spark plug before performing all of the recommended remedies below except remedies that require unit to be operating.

TROUBLE	CAUSE	REMEDY
Engine will not start.	 ON/OFF switch in OFF position. Engine flooded. Fuel tank empty. Spark plug not firing. Fuel not reaching carburetor. 	 Move ON/OFF switch to the ON position. See "Starting a Flooded Engine" in Operation Section. Fill tank with correct fuel mixture. Install new spark plug. Check for dirty fuel filter; replace. Check for kinked or split fuel line;
	6. Carburetor requires adjustment.	repair or replace. 6. Contact Sears Service (see back cover).
Engine will not idle properly.	 Carburetor requires adjustment. Crankshaft seals worn. Compression low. 	 See "Carburetor Adjustment" in Service and Adjustments Section. Contact Sears Service (see back cover). Contact Sears Service (see back cover).
Engine will not accelerate, lacks power, or dies under a load.	 Air filter dirty. Spark plug fouled. Carburetor requires adjustment. Carbon build-up on muffler outlet screen. Compression low. 	 Clean or replace air filter. Clean or replace plug and regap. Contact Sears Service (see back cover). Contact Sears Service (see back cover). Contact Sears Service (see back cover).
Engine smokes excessively.	 Choke partially on. Fuel mixture incorrect. Air filter dirty. Carburetor requires adjustment. 	 Adjust choke. Empty fuel tank and refill with correct fuel mixture. Clean or replace air filter. Contact Sears Service (see back cover).
Engine runs hot.	 Fuel mixture incorrect. Spark plug incorrect. Carburetor requires adjustment. Carbon build-up on muffler outlet screen. 	 See "Fueling Engine" in Operation section. Replace with correct spark plug. Contact Sears Service (see back cover). Contact Sears Service (see back cover).

U.S. EPA / CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND **OBLIGATIONS:** The U.S. Environmental Protection Agency/California Air Resources Board and Sears, Roebuck and Co., U.S.A., are pleased to explain the emissions control system warranty on your year 2007 and later small off-road engine. In California, all small off-road engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. Sears must warrant the emission control system on your small offroad engine for the periods of time listed below provided there has been no abuse, neglect, or improper maintenance of your small off-road engine. Your emission control system includes parts such as the carburetor, the ignition system and the fuel tank (California only). Where a warrantable condition exists, Sears will repair your small offroad engine at no cost to you. Expenses covered under warranty include diagnosis, parts and labor MANUFACTURER'S WARRANTY COVERAGE: If any emissions related part on your engine (as listed under Emissions Control Warranty Parts List) is defective or a defect in the materials or workmanship of the engine causes the failure of such an emission related part, the part will be repaired or replaced by Sears. OWNER'S WAR-**RANTY RÉSPONSIBILITIES:** As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your operator's manual. Sears recommends that you retain all receipts covering maintenance on your small offroad engine, but Sears cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance. As the small off-road engine owner, you should be aware that Sears may deny you warranty coverage if your small off-road engine or a part of it has failed due to abuse, neglect, improper maintenance, unapproved modifications, or the use of parts not made or approved by the original equipment manufacturer. You are responsible for presenting your small off-road engine to a Sears authorized repair center as soon as a problem exists. Warranty repairs should be completed in a reasonable amount of

time, not to exceed 30 days. If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-469-4663. WARRANTY COM-**MENCEMENT DATE:** The warranty period begins on the date the small off-road engine is purchased LENGTH OF COVERAGE: This warranty shall be for a period of two years from the initial date of purchase WHAT IS COVERED: REPAIR OR **REPLACEMENT OF PARTS.** Repair or replacement of any warranted part will be performed at no charge to the owner at an approved Sears Service Center. If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-469-4663. WAR-RANTY PERIOD: Any warranted part which is not scheduled for replacement as required maintenance, or which is scheduled only for regular in-spection to the effect of "repair or replace as necessary" shall be warranted for 2 years. Any warranted part which is scheduled for replacement as required maintenance shall be warranted for the period of time up to the first scheduled replacement point for that part. DIAGNOSIS: The owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is defective if the diagnostic work is performed at an approved Sears Service Center. CON-SEQUENTIAL DAMAGES: Sears may be liable for damages to other engine components caused by the failure of a warranted part still under warranty. WHAT IS NOT COVERED All failures caused by abuse, neglect, or improper maintenance are not covered. ADD-ON OR MODIFIED PARTS: The use of add-on or modified parts can be grounds for disallowing a warranty claim. Sears is not liable to cover failures of warranted parts caused by the use of add-on or modified parts. HOW TO FILE A CLAIM: If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized service center or call Sears at 1-800-469-4663.

WHERE TO GET WARRANTY SER-VICE: Warranty services or repairs shall be provided at all Sears Service Centers. Call 1-800-469-4663. MAINTENANCE, REPLACEMENT AND REPAIR OF EMISSION RE-LATED PARTS: Any Sears approved replacement part used in the performance of any warranty maintenance or repair on emission related parts will be provided without charge to the owner if the part is under warranty. **EMISSION CONTROL WARRANTY**

PARTS LIST: Carburetor, Ignition System: Spark Plug (covered up to maintenance schedule), Ignition Module, Muffler including catalyst, Fuel Tank (California only). **MAINTENANCE STATEMENT:** The owner is responsible for the performance of all required maintenance as defined in the operator's manual.

The information on the product label indicates which standard your engine is certified. Example: (Year) EPA Phase 1 or Phase 2 and/or CALIFORNIA.



This engine is certified to be emissions compliant for the following use:

Moderate (50 hours)

Intermediate (125 hours)

Extended (300 hours)