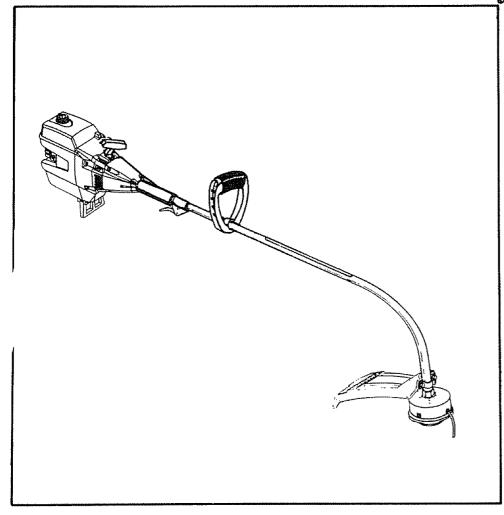
IMPORTANT MANUAL

Do Not Throw Away

SEARS

Operator's Manual

MODEL NO. 358.797121-26cc (16" Cutting Pat



Always Wear Eye Protection During Operation

SEARS / CRAFTSMAN®

26cc GAS WEEDWACKER®

A WARNING:

Read the Operator's Manual and Follow All Warnings and Safety Instructions. Failure To Do So Can Result in Serious Injury. 2 Cycle Engine

Assembly

- Operation
- Fuel Mix 40:1
- Maintenance
- Repair Parts

Sold by Sears, Roebuck and Co., Chicago, Ill. 60684 U.S.A.

ONE YEAR LIMITED WARRANTY ON CRAFTSMAN WEEKWACKER®

For One Year from date of purchase, when this Weedwacker[®] is maintained, lubricated, and tuned up according to the operating and maintenance instructions in the operator's manual. Sears will repair free of charge any defect in material or workmanship

This warranty excludes nylon line spark plug and air cleaner; which are expendable parts and become worn during normal use

If this Weedwacker® is used for commercial or rental purposes, this warranty does not apply

WARRANTY SERVICE IS AVAILABLE BY CONTACTING THE NEAREST SEARS SERVICE CENTER/DEPARTMENT IN THE UNITED STATES This warranty applies only while this product is in use in the United States

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

SEARS, ROEBUCK AND CO. DEPT. D/73ICR-W, SEARS TOWER CHICAGO, IL 60684

TABLE OF CONTENTS

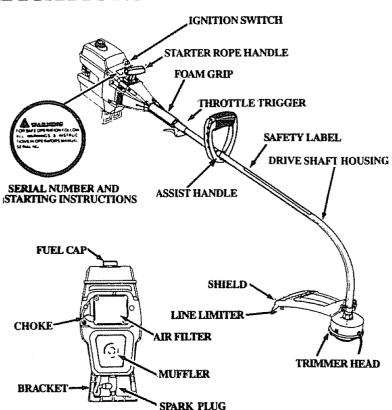
WARNINGS AND SAFETY INSTRUCTIONS 3	GENERAL MAINTENANCE
KNOW YOUR TRIMMER 6	A. Maintenance Safety
ASSEMBLY	B. Air Filter
ACCESSORIES 10	C. Starter Rope
ENGINE INFORMATION 11	D. Flexible Drive Shaft Lubrication
A. Fueling Your Engine	E Carburetor Adjustments 20
B. Pre-Operation Checks	F. Storage
C. Starting Instructions	G. Trouble Shooting Chart
D. Operating Instructions 13	REPAIR PARTS LIST
USING YOUR TRIMMER	INDEX
A. Trimmer Safety	QUICK REFERENCE PAGE
B. Trimmer Line Advance	
C. Cutting Methods	
D Line Replacement 16	

SPECIFICATIONS

ENGINE TYPE:	2-Cycle, Air-Cooled
DISPLACEMENT:	26cc
ENGINE RPM:	Operating — 7500 Idle — 2800 - 3200
IGNITION:	Solid State
CARBURETOR:	Diaphragm All Positions with adjustable fuel mixture jets
ENGINE "OFF":	Positive Switch
STARTER:	Auto Rewind
MUFFLER:	Temperature Limiting (not spark arresting; see note p.5)
CLUTCH:	Centrifugal
FUEL TANK:	17 fl. oz.
SPARK PLUG:	7I-85854 (CJ-I4)
SPARK PLUG GAP:	.025 "
MODULE AIR GAP:	.010 " / .014"
LUBRICATION:	Gasoline/Oil Mixture - 40:1 (See "Fueling Your Engine")
CUTTING LINE:	.080" Diameter Sears Laser Line®
SHAFT LENGTH:	48"

NOTE: LASER LINE® IS A REGISTERED TRADEMARK OF WHITE CONSOLIDATED INDUSTRIES, INC

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S PATENTS: 3,708,967; 3,826,068; 3,859,776; 4,035,912; 4,052,789; 4,054,992; 4,067,108; 4,104,797; 4,114,269; 4,124,938; 4,156,312; 4,156,967; 4,161,820; 4,167,812; 4,269,372; 4,286,675; 4,107,901; 4,112,653; 4,136,446; 4,168,572; 4,183,138; 4,189,833; 4,211,004; 4,211,005; 4,236,311; 4,236,312; 4,290,200; 4,362,074; 4,366,622; 4,382,356; 4,451,983; 4,483,069; 4,798,185; 4,819,742; 4,823,465; 4,825,548; 4,835,867; 4,841,929; 4,846,123; 4,852,258; DES 249,630 U.S. AND FOREIGN PATENTS PENDING



AWARNINGS AND SAFETY INSTRUCTIONS

AWARNING — THIS POWER TOOL CAN BE DANGEROUS!

This tool can cause serious injury 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 this tool. The operator is responsible for following the warnings and instructions in this manual and on the tool. Read the entire Operator's Manual before assembling and using this tool! Restrict the use of this power tool to persons who read, understand, and follow the warnings and instructions in this manual and on the tool.



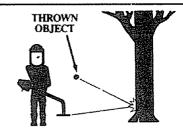




A DANGER

NEVER USE BLADES WITH THIS TOOL.

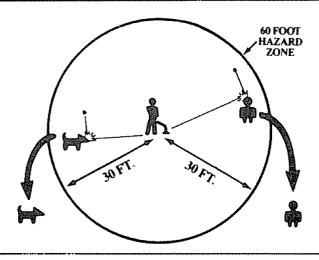
- THE BLADE CAN COME OFF AND SERIOUSLY INJURE YOU AND OTHERS.
- THIS TOOL IS DESIGNED FOR LINE TRIMMER USE ONLY.



Awarning

THE TRIMMER LINE CAN THROW OBJECTS VIOLENTLY.

- YOU CAN BE BLINDED OR INJURED.
- WEAR EYE AND LEG PROTECTION.



A WARNING

HAZARD ZONE FOR THROWN OBJECTS.

- THE TRIMMER LINE CAN THROW OBJECTS VIOLENTLY.
- OTHERS CAN BE BLINDED OR INJURED.
- KEEP PEOPLE AND ANIMALS 30 FEET AWAY.





AWARNING

READ OPERATOR'S MANUAL.

- FOLLOW ALL WARNINGS AND INSTRUCTIONS.
- FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY.

A WARNINGS AND SAFETY INSTRUCTIONS...(Continued)

A OPERATOR SAFETY

- Always wear a safety face shield or safety goggles. See "Accessories."
- 2. Keep hair, fingers, and all other parts of the body away from openings and moving parts. Always wear heavy, long pants, boots, and gloves. Do not go barefoot or wear sandals, jewelry, short pants, loose clothing, or clothing with loosely hanging straps, ties, tassels, etc. Secure hair so it is above shoulder length. Being fully covered will help protect you from pieces of toxic plants (such as poison ivy) thrown by the Trimmer Head, which could be more of a hazard than touching the plant itself.
- 3. Do not operate this tool when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- 4. Always use the assist handle. See "Assembly."
- 5. Wear hearing protection if you use this tool for more than 1½ hours per day.
- Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- 7. Keep handles free of oil and fuel.

A TOOL SAFETY

- 1. Inspect entire tool before each use. Replace damaged parts. Check for fuel leaks and make sure all fasteners are in place and securely fastened.
- 2 Replace trimmer head parts that are cracked, chipped, broken, or damaged in any other way before using the tool.
- 3. Use only 080" diameter Sears Laser Line. Never use wire, rope, string, etc.
- 4 Be sure the shield is properly attached.
- 5. Use only the specified trimmer head. See "Specifications." Make sure the trimmer head is properly installed and fastened. Refer to "Assembly"
- 6. Be sure the trimmer head stops turning when engine idles. See "Carburetor Adjustments."
- 7. Make carburetor adjustments with the drive shaft housing supported to prevent the trimmer line from contacting any object. Hold the tool by hand; do not use the optional shoulder strap for support
- 8 Keep others away when making carburetor adjustments.
- Use only accessories or attachments as recommended for this tool by Sears.

A FUEL SAFETY

- Move at least 10 feet away from fueling site before starting engine.
- 2. Use a container approved for fuel.
- 3. Do not smoke or allow smoking near fuel or the tool or while using the tool.
- 4. Wipe up all fuel spills before starting engine.
- 5. Stop engine before removing fuel cap. Allow the engine to cool before refueling.
- 6. Run fuel out of the fuel system before storing the tool
- Store tool and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.

A CUTTING SAFETY

- 1. 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 trimmer head.
- Keep others including children, animals, bystanders, and helpers outside the 60 foot Hazard Zone. Stop the engine immediately if you are approached.
- 3. Always keep the engine on the right side of your body.
- 4. Hold the tool firmly with both hands.
- Do not overreach or use from unstable surfaces such as ladders, trees, steep slopes, rooftops, etc. Use extra care when cleaning on stairways Keep firm footing and balance at all times.
- 6. Keep trimmer head below waist level.
- 7. Do not raise the engine above your waist. The trimmer head can come dangerously close to your body.
- Keep all parts of your body away from the trimmer head and muffler when the engine is running.
- 9. Use only for jobs explained in this manual.

A MAINTENANCE SAFETY

- Maintain the tool according to recommended procedures.
 Keep the trimmer line at the proper length.
- 2. Never start the engine with the clutch shroud removed. The clutch can fly apart and cause serious injury.
- 3. Disconnect the spark plug before performing maintenance except for carburetor adjustments.
- 4. Make carburetor adjustments with the drive shaft housing supported to prevent the trimmer line from contacting any object. Hold the tool by hand; do not use the optional shoulder strap for support.
- 5. Keep others away when making carburetor adjustments.
- 6. Use only genuine replacement parts as recommended by Sears.

A TRANSPORTING AND STORAGE

- 1 Hand carry the tool with the engine stopped and the muffler away from your body.
- 2. Allow the engine to cool, run fuel out of the fuel system, and secure the tool before transporting in a vehicle or storing.
- Before storing the tool, use up fuel left in the fuel lines and carburetor by starting the engine and letting it run until it stops.
- Store tool and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.
- 5. Store the tool so the line limiter cannot accidentally cause injury. The tool can be hung by the drive shaft housing or by the bracket below the engine.
- 6. Store tool out of reach of children.

If situations occur which are not covered in this manual, use care and good judgement. Contact your Sears Service Center/Department if you need assistance.

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 wrists 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 wrists, discontinue the use of this tool and seek medical attention. An anti-vibration 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.

KNOW YOUR TRIMMER

A. INTRODUCTION

Your Trimmer is a versatile product designed to help you give your lawn a finished appearance.

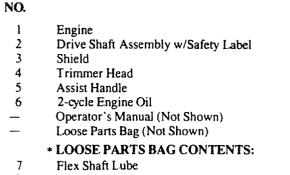
Special Features Include:

- Centrifugal Clutch
- All-Position Carburetor
- Adjustable, Cushioned Assist Handle
- Semi-Automatic Line Feed
- 16" Cutting Path

B. UNPACKING INSTRUCTIONS

- 1. Remove contents from the carton if you have not done so.
- 2. Check parts against the list below.
- 3. Examine parts for damage. Do not use damaged parts.
- 4. Notify your Sears Store immediately if a part is missing or damaged

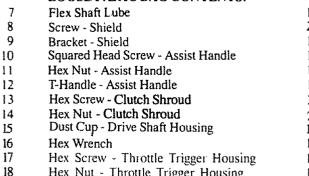
NOTE: It is normal to hear the fuel filter rattle in an empty fuel tank

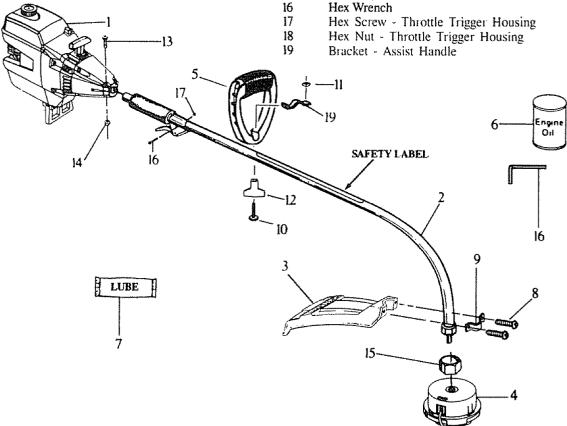


QTY.

C. CARTON CONTENTS

KEY





SPECIAL NOTICE

For users on U.S. Forest Land and in some states, including California (Public Resources Codes 4442 and 4443), Idaho, Maine, Minnesota, New Jersey, Oregon, and Washington: Certain internal combustion engines operated on forest, brush, and/or grass-covered land in the above areas are required to be equipped with a spark arrestor, maintained in effective working order, or the engine must 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 is a violation of the law. This unit is not factory-equipped with a spark arrestor; however, a spark arrestor is available as an optional part. If a spark arrestor is required in your area, contact your Sears Service Center or Parts Department for Spark Arrestor kit #952-701612.

ASSEMBLY (If tool is received assembled, repeat all steps in this section to be sure assembly is correct and is adjusted for the operator.)

A. PREPARATION

This Operator's Manual has been developed to help you assemble the tool and to provide its safe operation. It is important that you read the entire manual to become familiar with the tool before you begin assembly.

2. Tools you will need:

- a. Flathead Screwdriver.
- b. 1-1/4 inch wrench or adjustable wrench.
- c. Hex Wrench provided with tool.

1. READ YOUR OPERATOR'S MANUAL

B. ASSEMBLY STEPS

1. DRIVE SHAFT HOUSING - Figure 1

- a. Place the two Screws (from the loose parts bag) into the holes on the Clutch Shroud as shown in Figure 1.
- b. Position the Lock-Nuts (from the loose parts bag) in the hex openings in the Clutch Shroud.
- c. Tighten the Screws with the small hex wrench provided just enough to hold the hardware together while holding the Lock-Nuts with your other hand.

NOTE: Dirt on the Shaft will significantly reduce the life of the tool. If the Flexible Drive Shaft falls out of the Housing, clean, relube, then reinstall. See "Flexible Drive Shaft Lubrication" in the Maintenance section.

- d. Remove the shipping cap from the straight end of the Drive Shaft Housing. Make sure the Flexible Drive Shaft does not fall out of the Drive Shaft Housing.
- e. Align the bottom groove on the Drive Shaft Housing with the Ridge on the inner, lower wall of the Clutch Shroud opening. Turn the Arbor Shaft as necessary to align the square end of the Flexible Drive Shaft with the square inside the Clutch Shroud opening. Firmly push the Drive Shaft Housing into the Clutch Shroud until it contacts the Foam Grip or is within 1/8 inch. Figure 1.
- f. Tighten the Screws alternately with the small hex wrench until secure.

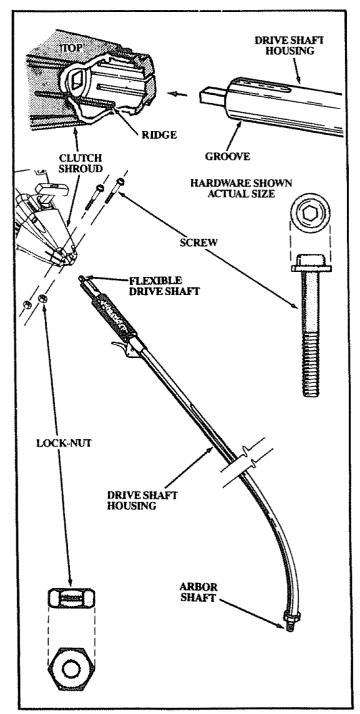


Figure 1

2. THROTTLE CABLE - Figures 2, 3, 4 & 5

CAUTION: Do not kink the throttle cable.

- a. Slide the Throttle Trigger Housing away from the Foam Grip.
 - NOTE: Before performing step "b", push the barrel end of the throttle cable into the sheath until the barrel contacts the sheath. Figure 2 (inset).
- b. Insert the Throttle Cable through the tunnel in the Foam Grip until the end of the Cable extends at least 2 inches beyond the Grip. Figure 2.
- c Hold the Trigger away from the Drive Shaft Housing and insert the barrel end of the Throttle Cable into the round opening in the Trigger as shown in Figure 2.
 - NOTE: When inserting the barrel end of the Throttle Cable into the round opening in the Trigger, make sure that the barrel is completely inserted and the Throttle Cable is located in the split in the Arm. Figure 4.
- d. Push the Trigger back into the Housing while guiding the Cable through the split in the arm. (Figure 3.) Guide the arm into the Foam Grip tunnel while replacing the Throttle Trigger Housing flush against the Grip.
- e. Hold Trigger against the Foam Grip while inserting the Screw and Nut. Figure 5. See Caution below.

CAUTION: Do not overtighten the screw. Make sure the trigger will move freely. There must be at least 1/8" free play in the trigger. Figure 5. Make sure the trigger will move freely so the engine can fully return to idle when the trigger is released. The trimmer head must not turn at idle speed to avoid serious injury to the operator and others.

3. ASSIST HANDLE - Figures 6 & 7

- a. Insert the end of the Drive Shaft Housing through the Assist Handle. Figure 6 (inset).
- b. Align the Assist handle between the Safety Label and the Throttle Trigger Housing. Seat the Drive Shaft Housing in the groove in the Assist Handle Figure 6.
- c. Insert the tab on the Assist Handle Bracket into the slot on the Assist Handle. Figure 6. Then, lay the Assist Handle Bracket into position over the Drive Shaft Housing.
- d. Drop the threaded end of the square-head T-Handle Screw through the opening in the top of the T-Handle Figure 7.
- e. Pull on the threaded end of the Screw to bring the square head of the Screw past the pin inside the T-handle Figure 7.
- f. Insert the Screw up through the hole in the Assist Handle and then through the Assist Handle Bracket. Figure 6.

CAUTION: When adjusting the Assist Handle for comfort, be sure that the Assist Handle remains between Engine and Safety Label on Drive Shaft Housing. Figure 6.

> h. Adjust Assist Handle up or down the Shaft Housing for comfort.

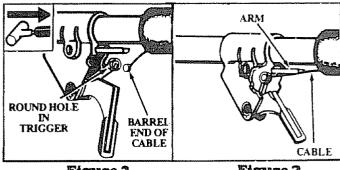
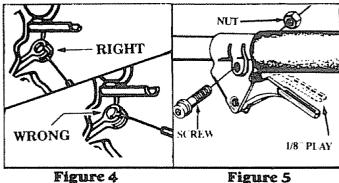


Figure 3 Figure 2



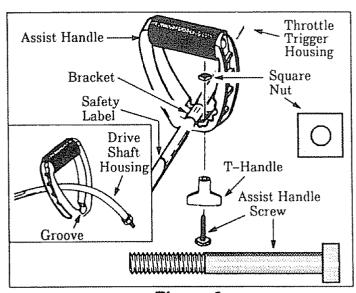


Figure 6

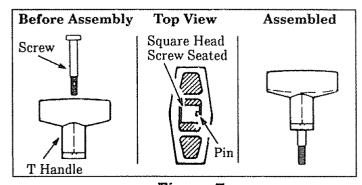


Figure 7

4. TRIMMER HEAD — Figures 8 & 9

- a. Place the Dust Cup on the Drive Shaft Housing over the hex nut that is assembled on the Arbor Shaft, Figure 8 (inset).
- b Thread the Trimmer Head onto the Arbor Shaft in a clockwise direction. Hand tighten firmly against the Dust Cup. Figure 7
- c. Hold the Dust Cup with a Wrench to keep the Arbor Shaft from turning and tighten head securely. Figure 8.

NOTE: Unless Trimmer Head is tightened adequately, it can unthread when engine is started or stopped. If this situation occurs, reinstall Trimmer Head and tighten more securely.

d Press the Tap Button and pull a minimum of 4 inches of Line from the Trimmer Head. Figure 9. Approximately 2 inches of line can be advanced each time the Tap Button is pressed.

NOTE: To remove Trimmer Head, hold Dust Cup with a wrench and unthread Trimmer Head.



A WARNING

Failure to install the shield in the position shown in Figures 8 and 11 can result in serious injury to the operator. The length of the shield must be aligned with the length of the drive shaft housing. Direct the widest part of the shield toward the engine.

CAUTION: The Line Limiter (on the underside of the shield) is sharp and can cut you.

- a. Match the Key (Raised area) on the Shield with the Keyway ("V" slot) on the Drive Shaft Housing. Figure 10 (inset).
- b. Rest the bottom of the Shield on top of the shoulder of the Drive Shaft Housing above the Dust Cup.

NOTE: The bottom of the Shield must rest on top of the shoulder of the Drive Shaft Housing

c. Install the Shield retaining Bracket and Screws as shown in Figure 10.

NOTE: It is easier to start the Screws with a screwdriver and finish tightening with a 3/8" wrench.

d. Tighten the Screws evenly and securely.

NOTE: A small space may be left between the Bracket and the Shield when hardware is fully tightened

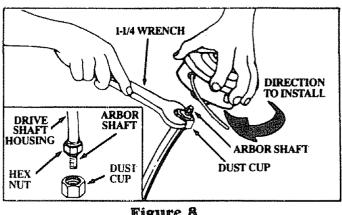


Figure 8

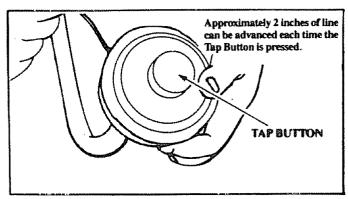


Figure 9

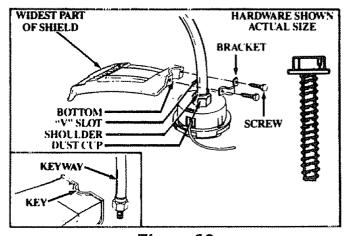


Figure 10

6. OPERATING POSITION — Figure 11

- a. Before starting the Engine, stand as shown in Figure 11 and check for the following:
 - 1). Left arm fully extended, hand holding Assist Handle.
 - 2). Right arm slightly bent, hand holding the Foam Grip, fingers on Throttle Trigger.
 - 3). Engine below waist level.
 - 4). Weight of tool evenly distributed between arms.
 - 5) Without operator bending over, the Trimmer Head is near and parallel to the ground and easily contacts the material to be cut.
- b. Adjust the Assist Handle up or down the Drive Shaft Housing (but above the Safety Label) to a comfortable position.
- 1). Loosen the T-Handle by hand, adjust Assist Handle. Retighten T-Handle by hand *only*.
- 2). Rotate the Assist Handle from left to right if it is necessary to tilt the angle of the Trimmer Head (when cutting a large, sloped area such as a ditch bank).



Figure 11

ACCESSORIES

The following accessories are available through Sears Retail Stores, Catalog Outlets, or Service Centers.

ITEM	STOCK NO.
Safety Face Shield	9-18613
Safety Goggles	9-1859
2-Cycle Engine Oil	
Spark Plug	71-85854
Replacement Trimmer Head (available only through Sears Service Centers)	71-85800
Replacement .080" Dia. Nylon Trimmer Line	
400 ft	71-85778
— 200 ft	71-85608
- 100 ft	71-85771
Replacement Spool with Line	71-85811
Shoulder Strap Kit	71-85783
Flex Shaft Lube	
Spark Arrestor Kit	
Operator's Manual	

*Available through your SEARS SERVICE CENTER/CATALOGUE.

ENGINE INFORMATION

A. FUELING YOUR ENGINE

1. FUEL SAFETY

- a. Use only recommended fuel mixtures.
- b. **Mix and pour fuel outdoors** and where there are no sparks or flames.
- c. Use a container approved for fuel.
- d. **Do not smoke or allow smoking** near fuel or the tool or while using the tool.
- e. Wipe up all fuel spills before starting the engine.
- f. Move at least 10 feet away from fueling site before starting engine.
- g. Stop engine before removing fuel cap. Allow the engine to cool before refueling.
- h. **Before storing tool**, use up fuel left in carburetor and fuel lines by starting engine and letting it run until it stops.
- Store tool and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc

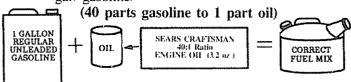
2. FUEL MIXTURE

- Your tool is powered by a 2-cycle engine which requires a fuel mixture of regular unleaded gasoline and a high quality engine oil specially made for 2-cycle, air cooled engines.
 - The internal design of the 2-cycle engine requires lubrication of moving parts. Lubrication is provided when the recommended mixture of gasoline and oil is used.
- Genuine Sears 2-cycle engine oil mixed at 40:1 is strongly recommended for the protection of your unit. Extensive engineering tests have proven that Sears 2-cycle engine oil resists break-down at operating temperatures common to 2-cycle engines, resulting in dependable performance and longer engine life.
- Gasoline must be clean and not over two months old. After a short period of time, gasoline will chemically break down and form compounds that cause hard starting and damage in 2-cycle engines.
- The correct measure of gasoline to oil is very important. Too much oil in the mixture will foul the spark plug.

CAUTION: Too little oil or incorrect oil will cause the engine to overheat and seize.

3. USE THE FOLLOWING ONLY:

- 3.2 oz. 40:1, 2-cycle air cooled engine oil to 1 gal. gasoline OR
- 8 oz. 40:1, 2-cycle air cooled engine oil to 2.5 gal. gasoline.



SEARS 2-cycle air cooled engine oil mixed at 40:1 is strongly recommended.

If SEARS 2-cycle air cooled engine oil is not available, use a good quality, 2-cycle air cooled engine oil mixed at a ratio of 16:1 (8 oz. oil to 1 gallon gasoline).

4. DO NOT USE:

- NMMA Oil National Marine Manufacturers Association (formerly BIA)
 - Does not have proper additives for 2-cycle, aircooled engines and can cause engine damage.
- AUTOMOTIVE OIL
 - Does not have proper additives for 2-cycle, aircooled engines and can cause engine damage.

CAUTION

Experience indicates that 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, do not leave fuel in the unit when storing for 30 days or longer. Start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See the "Storage" section for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage can occur.

NOTE: If you do not want to remove the fuel from your unit, SEARS CRAFTSMAN Fuel Stabilizer (#71-33500) may be added to fuel left in the tank to minimize gum deposits and acids. If the tank is almost empty, mix stabilizer with fresh fuel in a separate container and add to the tank.

5. HOW TO MIX FUEL AND FILL TANK

- a. Pour the proper measure of engine oil into an approved, marked container. Do not mix gasoline and oil directly in the fuel tank.
- b. Using a spout or funnel, fill the tank with regular unleaded gasoline.
- c. Reinstall the fuel cap securely.

NOTE: If fuel is already in the fuel container, add the proper measure of engine oil. Then, close the container tightly and shake it momentarily.

B. PRE-OPERATION CHECKS

A WARNING

Review all Warnings and Safety Instructions in this manual.

Before operating your tool, always:

- 1. Inspect the entire tool before each use. Replace damaged parts. Check for fuel leaks and make sure all fasteners are in place and securely fastened.
- 2. Replace trimmer head parts that are cracked, chipped, broken, or damaged in any other way before using this tool.
- 3. Use only .080" diameter Sears Laser Line. Never use wire, rope, string, etc.
- 4. Use only with the shield properly attached.

- Use only the specified trimmer head. See "Specifications." Make sure the trimmer head is properly installed and securely fastened. Refer to "Assembly."
- 6. Be sure trimmer head stops turning when engine idles. See "Carburetor Adjustments."
- 7. Make carburetor adjustments with the drive shaft housing supported to prevent the trimmer line from contacting any object. Hold the tool by hand. Do not use the optional shoulder strap for support.
- 8. Keep others away when making carburetor adjustments.
- 9. Use only accessories or attachments as recommended by Sears for this tool.
- 10. Clean the air filter if dirty before operating the tool. Refer to "Specifications," for air filter location.

C. STARTING INSTRUCTIONS (For location of controls, refer to "Specifications.")

1. Before starting the engine.

- a. Fuel engine. Move at least 10 feet away from fueling site.
- b. Extend 4-6 inches of Line from Trimmer Head.

A WARNING

The trimmer head will turn as soon as the engine starts.

- c. Rest Engine and Shield on ground, supporting Trimmer Head off the ground away from trees, bushes, onlookers, etc. Figure 12.
- d. If using optional Shoulder Strap, place Shoulder Strap on your shoulder. Start engine before clipping Shoulder Strap to the tool.

2. For a Cold Engine:

- a. Move Ignition Switch to "on." Figure 13.
- b. Move Choke to "full" position. Figure 14.
- c. Grasp Foam Grip and squeeze Throttle Trigger fully. Keep Throttle Trigger fully squeezed until engine runs smoothly (through step "g").
- d. Pull Starter Rope sharply until engine attempts to run, but no more than 8 pulls at full choke to avoid flooding the engine. The engine "attempt to run" may be hard to hear. The operator must listen carefully. After 8 pulls, proceed to step "e" even if engine has not attempted to run.
- e. Move Choke to "half" position. Figure 14.
- f. Pull Starter Rope sharply until engine attempts to run, but no more than 5 pulls. NOTE: If engine has not started after 5 pulls, repeat

steps "a" through "f."

g. Allow engine to run 5 seconds, then move Choke to "off" position. Figure 9. Keep Throttle Trigger fully squeezed until engine runs smoothly.

NOTE: If engine dies with Choke at "off" position, repeat steps "e" through "g."

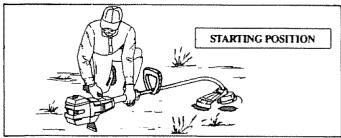


Figure 12

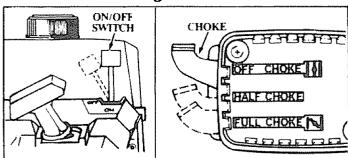


Figure 13

Figure 14

A WARNING

Avoid any bodily contact with the muffler when starting a warm engine. A hot muffler can cause serious burns.

3. For a Warm Engine:

- a. Move Ignition Switch to "on." Figure 13.
- b. Move Choke to "half" position. Figure 14.
- c. Grasp Foam Grip and squeeze Throttle Trigger fully. Keep Throttle Trigger fully squeezed until engine runs smoothly.
- d. Pull Starter Rope sharply until engine runs, but no more than 5 pulls.
 - NOTE: If engine does not run after 5 pulls, it is probably flooded. Wait a few minutes and repeat procedure with Choke at "off" position. Figure 14.
- e. Move Choke to "off" position. Figure 14. Keep Trigger fully squeezed until engine runs smoothly.

4. For a Warm Engine (After Running Out of Fuel):

- a. Refuel engine. Move 10 feet away from the fueling site.
- b. Move Ignition Switch to "on." Figure 13.
- c. Move Choke to "full" position. Figure 14.
- d. Grasp Foam Grip and squeeze Throttle Trigger fully. Keep Throttle Trigger fully squeezed until engine runs smoothly.
- e. Pull Starter Rope sharply until engine attempts to run, but no more than 5 pulls.

- f. Move Choke to "off" position. Figure 14.
- g. Pull Starter Rope until engine runs, but no more than 5 pulls. Keep Trigger fully squeezed until engine runs smoothly.

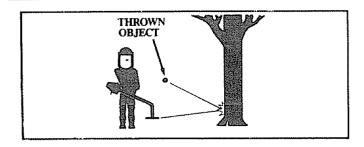
NOTE: If engine has not started, pull Starter Rope 5 more pulls. If engine still does not run, it is probably flooded. Wait a few minutes and repeat procedure with Choke at "off" position. Figure 14.

D. OPERATING INSTRUCTIONS

- 1. Before entering the material to be cut, bring the engine to cutting speed by squeezing the throttle trigger.
 - a. 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 trimmer line will last longer and will be less likely to "weld" onto the spool.
 - b. If the Trimmer Head does not turn when the engine is accelerated, make sure the Drive Shaft Housing is properly seated in the Engine Shroud Refer to "Assembly-Drive Shaft Housing."

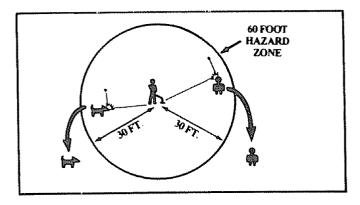
- 2. Always release the Throttle Trigger and allow the engine to return to idle speed when not cutting.
- 3. Make sure the Trimmer Head stops turning when the Throttle Trigger is released and the engine runs at idle speed. For correction, refer to "Carburetor Adjustments."
- 4. To stop the engine:
 - a Release the Throttle Trigger.
 - b. Move Ignition Switch to the "OFF" position. Figure 13.

USING YOUR TRIMMER



AWARNING - THROWS OBJECTS

The rapidly moving line causes objects to be thrown violently. The shield will not provide complete protection to the operator or others. The operator must wear a safety face shield or goggles. Always wear heavy, long pants and boots. Keep others at least 30 feet away.



AWARNING - HAZARD ZONE

This tool will throw objects and cut. Keep others including children, animals, bystanders, and helpers at least 30 feet away from the operator and tool. Stop the engine if you are approached.



Trimmer Head #71-85800 Use Only Genuine Replacement Parts

A WARNING — DAMAGED TRIMMER HEAD

Trimmer head parts that are chipped, cracked, broken, or damaged in any other way can fly apart and cause serious injury. Do not use. Throw damaged parts away. Replace damaged parts before using the tool.

A. TRIMMER SAFETY

1. OPERATOR

- a. Always wear a safety face shield or goggles. See "Accessories."
- b. Keep hair, fingers, and all other parts of the body away from openings and moving parts. Always wear heavy, long pants, boots, and gloves. Do not go barefoot or wear sandals, jewelry, short pants, loose clothing, or clothing with loosely hanging straps, ties, tassels, etc. Secure hair so it is above shoulder length. Being fully covered will help protect you from pieces of toxic plants (such as poison ivy) thrown by the Trimmer Head, which could be more of a hazard than touching the plant itself
- c. Do not operate this tool when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- d. Do not swing the tool with such force that you are in danger of losing your balance.
- e. Never start or run the engine inside a closed room or building.
- f. Keep handles free of oil and fuel.

2. TOOL

- a Inspect the entire tool before each use. Replace damaged parts Check for fuel leaks and make sure all fasteners are in place and securely fastened
- b Use only .080" diameter Sears Laser Line. Never use wire, rope, string, etc.
- c. Be sure the shield is properly attached.
- d Make sure the trimmer head is properly installed and securely fastened. Refer to "Assembly"

- e. Be sure the trimmer head stops turning when the engine idles. See "Carburetor Adjustments."
- f. Make carburetor adjustments with the drive shaft housing supported to prevent the trimmer line from contacting any object. Hold the tool with your hand. Do not use the optional shoulder strap for support.
- g. Keep others away when making carburetor adjustments.
- h. Use only accessories or attachments recommended for this tool by Sears.

3. CUTTING

- a 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 trimmer head
- b. Always keep the engine on the right side of your body.
- c. Hold the tool firmly with both hands.
- d Keep firm footing and balance. Do not over-reach
- e Keep the trimmer head below waist level.
- f Do not raise the engine above your waist.
- g Keep all parts of your body away from the trimmer line and muffler when the engine is running.
- h Use only for jobs explained in this manual.

B. TRIMMER LINE ADVANCE

- The line will advance approximately 2 inches each time the bottom of the trimmer head is tapped on the ground with the engine running at full throttle.
- The most efficient line length is the maximum length allowed by the line limiter.
- Always keep the shield in place when the tool is being operated.

To advance line:

- 1. Operate the engine at full throttle
- 2. Hold trimmer head parallel to and above the grassy area.
- 3. Lightly tap the bottom of the trimmer head on the ground one time. See Figure 15. Approximately 2 inches of line will be advanced with each tap.

<u>NOTE</u>: If the line is worn down to two inches or less, more than one tap will be required to obtain the most efficient line length.

NOTE: Scalping can occur when tapping the bottom of the trimmer head on the ground. To avoid scalping in critical locations, tap the bottom of the trimmer head in an inconspicuous area when advancing the trimmer line.

Awarning

Use only .080" diameter Sears Laser Line. Do not use other materials such as rope, wire, string, etc. Wire can break during cutting and become a dangerous missile.

NOTE: Always tap the trimmer head on a grassy area. Tapping on surfaces such as concrete or asphalt can cause excessive wear to the trimmer head.

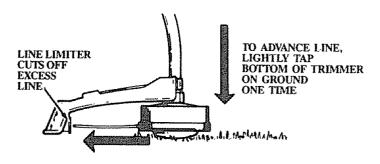


Figure 15

C. CUTTING METHODS

- The tip of the line does the cutting. Allow the line to trim at its own pace. You will achieve better results by not crowding the line into the cutting area. The right and wrong ways are shown in Figure 16.
- 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. To help avoid damage to vegetation or trees with tender bark, shorten line to 4-5 inches and use less than full throttle.
- The line will wear faster and will need to be advanced more frequently when you are cutting against rocks, bricks, concrete, metal fences, etc., than when cutting against trees or wooden fences.
- For trimming or scalping, use less than full throttle to increase line life and decrease head wear:
 - during light duty cutting.
 - next to rocks, bricks, concrete, metal fences, etc.
- For mowing or sweeping, use full throttle for a good clean job.
- Avoid letting the trimmer head continuously contact the ground during normal cutting. Constant contact will cause trimmer head damage and premature wear

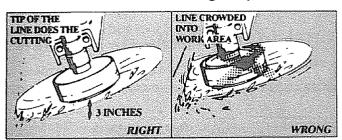


Figure 16

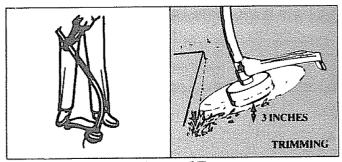


Figure 17

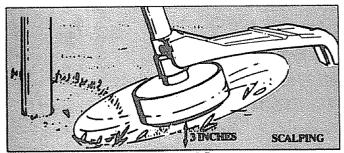


Figure 18

Awarning

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.

1. TRIMMING - Figure 17

Hold the tap button about 3 inches above the ground and tilt the trimmer head at an angle. Allow the tip of the line to do the cutting. Do not force the trimmer line into the work area.

2. SCALPING — Figure 18

The scalping technique removes unwanted vegetation. Hold the tap button about 3 inches above the ground and tilt the trimmer head at an angle. Allow the tip of the line to strike the ground around trees, posts, monuments, etc. This technique increases line wear:

3. MOWING - Figure 19

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.

4. SWEEPING - Figure 20

The fanning action of the rotating line can be used for a quick and easy clean up. Keep the line parallel to and above the surfaces being swept and move the tool from side to side.

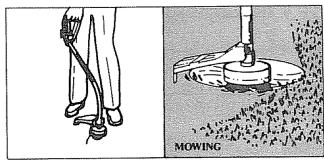


Figure 19

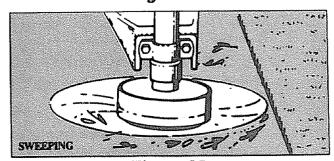


Figure 20

D. LINE REPLACEMENT

For proper line feed:

Use only genuine Sears pre-wound spools and .080" diameter Sears Laser Line. Use of other spools or line can result in excessive breakage, line welding and improper line feed.

- Pre-wound spools offer the most convenient method for replacing line as well as optimum performance.
- Always clean dirt and debris from the spool and hub when performing any type maintenance.

1. Installing New Spool with Line

- a Hold the Trimmer Head as shown in Figure 21. Press the Lock Tab and turn Lock Ring as shown in Figure 21.
- b. Remove the Lock Ring and Spool. Figure 22.
- Clean dirt and debris from all parts. Inspect all Trimmer Head parts for damage. Replace damaged parts.

A WARNING

Trimmer head parts that are chipped, cracked, broken, or damaged in any other way can fly apart and cause serious injury. Do not use. Replace damaged parts before using the tool.

- d. Insert the end of the Line in the Line Exit Hole as shown in Figure 23. Place Spool in Hub. Make sure the Trimmer Line is not caught between the rim of the Spool and the Hub.
- e. Align the Lock Ring over the three Catches on the Hub. Push the Lock Ring down on the Hub and turn as directed in Figure 21.
- f. Check to make sure all three Catches (Figure 22) and the Lock Tab (Figure 23) are properly fastened as shown in Figure 24. Then test the Lock Ring by trying to turn it counterclockwise.

WARNING

All three catches must be fastened and the lock tab latched onto the lock ring. If installed incorrectly, the lock ring can fly off and become a dangerous missile.

- g. Pull on the Line to change the Spool from the locked position to the operating position. Figure 25.
- h. Obtain correct line length by pressing Tap Button(Figure 25) and pulling on the Line again.

NOTE: Each time the Tap Button is pressed, approximately 2 inches of Line can be pulled from the Trimmer Head. Figure 25.

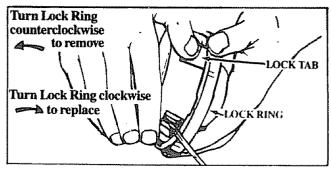


Figure 21

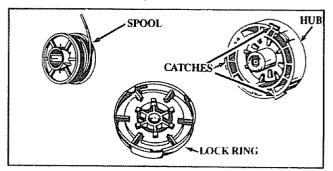


Figure 22

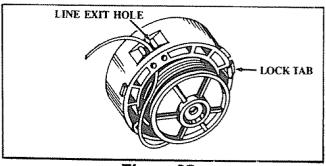


Figure 23

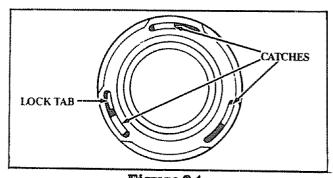


Figure 24

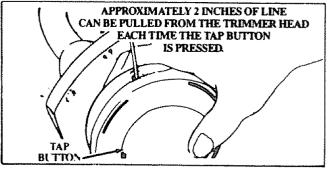


Figure 25

2. Installing Line on Spool.

a. To replace the Line on existing Spool:

- 1.) Follow "Installing Spool w/Line," steps "a-c." and remove any Line remaining on the Spool.
- 2.) Use a 40 foot length of .080" diameter Sears Laser Line
- 3.) Insert 1/16 to 1/8 inch of the end of the Line through the hole in the inner rim of the Spool. Figure 26. Allow no more than 1/8 inch of Line to extend beyond the rim to avoid interference with the tapping action.
- 4.) Wrap the Line firmly and evenly onto Spool in a clockwise direction as shown by arrow on Spool. Figure 26
 - **NOTE:** The Line must be wrapped firmly and evenly for proper line feed
- 5.) Follow "Installing Spool w/Line," steps "d-h."

b. If the Line breaks off or backs up in the Trimmer Head, follow "Installing Spool w/Line," steps "a-c." Pull slack in Line until the Line is tightly wound on Spool, leaving 4-6 inches of extended Line. Continue with steps "d-h."

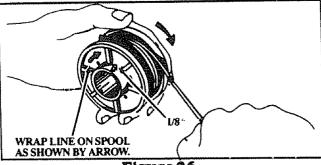


Figure 26

NOTES

GENERAL MAINTENANCE

A. MAINTENANCE SAFETY

- Maintain the tool according to recommended procedures. Keep the trimmer line at the proper length
- Never start the engine with the clutch shroud removed. The clutch can fly apart and cause serious injury.
- 3. Disconnect the spark plug before performing maintenance except for carburetor adjustments.
- 4. Make carburetor adjustments with the drive shaft housing supported to prevent the trimmer line from contacting any object. Hold the tool with your hand. Do not use the optional shoulder strap for support.
- 5. Keep others away when making carburetor adjustments.

- 6. Be sure the trimmer head stops turning when engine idles. See "Carburetor Adjustments."
- 7. Use only .080" diameter Sears Laser Line. Never use wire, rope, string, etc.
- 8. Replace trimmer head parts that are cracked, chipped, broken, or damaged in any other way before using the tool.
- 9. Use only genuine replacement parts as recommended by Sears.
- Inspect entire tool. Replace damaged parts. Check for fuel leaks. Make sure all fasteners are in place and securely fastened.

B. AIR FILTER

A dirty air filter decreases the life and performance of the engine and increases fuel consumption.

Clean the Air Filter:

- Always after 5 tanks of fuel or 5 hours of operation, whichever is less.
- More frequently in dusty conditions.
- 1. Loosen the two screws on the Air Filter Cover enough to remove the cover from the engine. Figure 27.
- 2. Remove the Air Filter from the Cover. Figure 28.

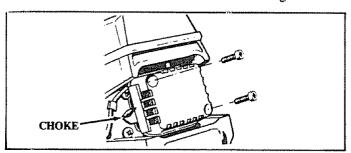


Figure 27

- 3. Wash Filter in soap and water.
- 4. Squeeze Filter dry and replace in Cover.

CAUTION: Do not clean the air filter in gasoline or other flammable solvent to avoid creating a fire hazard.

5 Reinstall the Air Filter Cover, making sure the Choke exit slot (Figure 28) is placed over the Choke Lever.

CAUTION: Fit air filter into the corners of the housing to keep dust from entering the engine and causing engine damage. Figure 28.

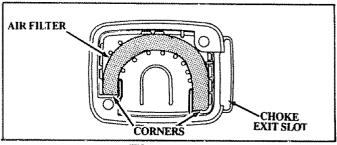


Figure 28

C. STARTER ROPE

A DANGER

Never start the engine with the clutch shroud removed. The clutch will fly apart and cause serious injury.

Awarning

Do not remove the retaining tab and screw to remove pulley. The spring beneath the pulley is under tension and can fly out causing serious injury. If any part of the pulley housing assembly is damaged other than the rope, do not use the tool. Take it to your Sears Service Center.

- 1. Disconnect Spark Plug Wire. Figure 29.
- 2. Remove the Screw and Nut in the Throttle Trigger Housing as shown in Figure 5. Hold the Throttle Trigger away from Drive Shaft Housing and remove Throttle Cable from Trigger. Pull Cable out of Foam Grip tunnel.
- 3. Remove the four Clutch Shroud Screws (Figure 29) with the small hex wrench provided.
- 4. Separate the Clutch Shroud from the Engine. Figure 30.

A DANGER

Use only a hand tool to remove the clutch. Do not use any type of motorized tool or strike the clutch in any way. Otherwise, the clutch will fly apart and cause serious injury.

5. Hold the "Flats" of the Clutch with an adjustable wrench as shown in Figures 30 and 31 (inset). Remove the Nut counterclockwise with a 3/8" socket wrench.

NOTE: Clutch will slide off the crankshaft intact. *Do not disassemble clutch*.

- 6. Remove the Beveled Washer, Clutch, and Large Flat Washer. Figure 31.
- 7. Remove the Pulley Housing from the Engine. Figure 31.
- 8. Remove Rope Retention Screw. Remove any remaining rope.
- 9. Hold Pulley Housing as shown in Figure 32. Hand turn the Pulley clockwise as far as it will go. Then, turn the Pulley counterclockwise until the Pulley Notch is aligned with the Housing Notch next to the Retaining Tab and Screw. Figure 32. Next, turn the Pulley one complete turn counterclockwise until the notches are aligned again.
- 10. Insert the small hex wrench into the hole formed by the Notches to hold the Pulley in position. Figure 32 (inset).
- 11. Use a 42" length of replacement Rope.
- 12. Move away 10 feet (3 meters) from the fuel tank with the replacement Rope. Use a match and melt both ends of the Rope to prevent fraying.

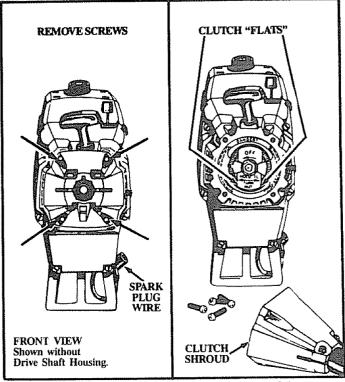




Figure 30

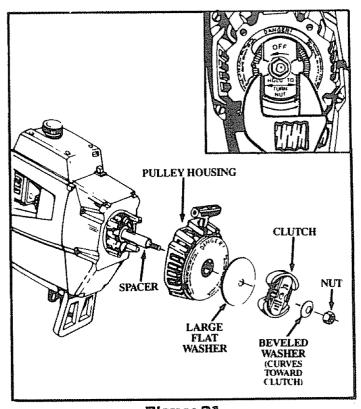


Figure 31

- 13. Pull the melted ends through a thick, clean rag while the Rope is still hot to obtain smooth, pointed ends.
- 14. Insert one end of the Rope through the Handle and secure with a knot.
- 15. Insert the other end of the Rope through the Rope Exit Hole, into the inside of the Housing, into the Pulley, and up through the Pulley Hole. See Inset, Figure 32.
- 16. Wrap Rope counterclockwise around the Pulley Ratchet and tuck loose end under Rope where it comes out of the Pulley Hole. Leave a 1-inch tail laying flat on top of the Pulley between the Retainer Rib and the rope Retention Screw/Post. Figure 32.
- Reinstall the Rope Retention Screw into the retention post. Tighten until snug.
 NOTE: Do not overtighten the Screw. Overtightening the screw can cause the threads in the screw post to strip out.
- 18. Hold Rope taut at Rope Exit Hole so it will not move and remove hex wrench.
- 19 Slowly feed rope into the Pulley Housing.
- 20. Make sure Spacer is in place as shown in Figure 31, then reverse steps to re-assemble.

CAUTION: When reinstalling the clutch, tighten the nut just until the beveled washer is flattened against the clutch. Over or under tightening the nut can cause engine damage.

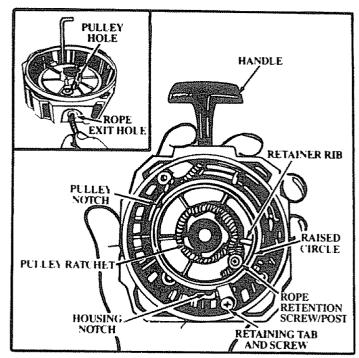


Figure 32

D. FLEXIBLE DRIVE SHAFT LUBRICATION

- Lubricate the Flexible Drive Shaft:
 - After each ten (10) hours of operation.
 - Before operating if the unit has been stored for 90 days or longer.
- Use Flex Shaft Lube Part No. 530-030102.

<u>NOTE:</u> A tube of "Flex Shaft Lube" has been supplied with your unit to be used after the first 10 hours of operation.

• Use the following procedure for best results:

AWARNING

If engine has just been operated, avoid touching the muffler. A hot muffler can cause serious burns.

CAUTION: Lay the Flexible Drive Shaft on a clean surface. Avoid laying the shaft on the floor, ground, or on any surface that may have dirt or debris. Even after wiping the shaft, grease residue can pick up dirt particles that can cause damage or premature failure.

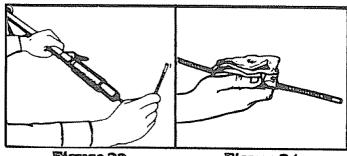


Figure 33

Figure 34

CAUTION: Take care to avoid injuring your hands and fingers with broken wires when checking for damage or wiping the flexible drive shaft. A cloth will not prevent the broken wires from puncturing or tearing your skin.

- 1. Remove the Screw and Nut in the Trottle Trigger Housing as shown in Figure 5.
- 2. Hold the Trigger away from the Drive Shaft Housing and remove the barrel end of the Cable from the Trigger as shown in Figure 3.

CAUTION: Do not kink the cable.

- 3. Pull the Cable from the tunnel in the Foam Grip.
- 4. Loosen (but do not remove) the Hex Screws in the Clutch Shroud. Figure 1. Remove the Drive Shaft Housing from the Clutch Shroud.
- 5. Remove the Flexible Drive Shaft from the Drive Shaft Housing as shown in Figure 33.
- Check the Flexible Drive Shaft for broken wires, twists, or kinks. Replace if damage is found.
- 7. Using a clean cloth, wipe the surface of the Flexible Drive Shaft thoroughly to remove any old grease. Figure 34.
- 8. Apply a uniform coat of lube to the entire surface of the Flexible Drive Shaft.
- 9. Inject the remaining contents of the tube into the top of the Drive Shaft Housing.
- 10 Replace Flexible Drive Shaft in the Drive Shaft Housing.
- 11. Follow the instructions in "Assembly" to reinstall the Throttle Cable and the Drive Shaft Housing.

E. CARBURETOR ADJUSTMENTS

This is a complicated task. It is important to follow insturctions in sequence as indicated.

AWARNING

Make carburetor adjustments with the drive shaft housing supported to prevent trimmer line from contacting any object. Hold the tool with your hand. Do not use the optional shoulder strap for support.

AWARNING

Keep others away when making carburetor adjustments.

AWARNING

Serious injury to the operator and others can occur if the carburetor is not properly adjusted.

- Poor engine performance can be a result of other causes such as dirty air filter, carbon build-up on muffler outlets, etc. See "Trouble Shooting Chart" before proceeding with carburetor adjustments.
- The carburetor has been carefully adjusted at the factory. However, the operator must be sure that adjustments are made when any of the conditions occur as mentioned in "Trouble Shooting Suggestions" below.
- Very small adjustments can affect engine performance. It is important to turn the screw a very small amount per adjustment and test performance before making further adjustments. Each adjustment should be no more than the width of the slot in the adjusting screws

1. TROUBLE SHOOTING SUGGESTIONS

- Engine will not continue to run at idle position. See "b." Idle Speed Adjustment" and "e. Low Speed Mixture Adjustment."
- Trimmer Head continues to spin when the engine idles. See "b. Idle Speed Adjustment" and "d. Deceleration Check."
- Engine dies or hesitates when it should accelerate. See "c. Acceleration Check."
- Loss of cutting power which cannot be corrected by cleaning the air filter. See "f. High Speed Mixture Adjustment."
- Engine does not return to idle from full throttle within 2 seconds. See "d. Deceleration Check."
- Engine will not run. See "Trouble Shooting Chart." Then, if the carburetor requires adjustment, begin with"2. Basic Carburetor Settings."

Awarning

The trimmer line will be spinning during most of this procedure. Wear your protective equipment and observe all safety instructions.

2. Basic Carburetor Settings

NOTE: In most cases, your engine can be made to run properly with minor carburetor adjustments. Refer to "Trouble Shooting Suggestions" for the condition you are experiencing and follow the instructions. The basic carburetor settings are provided in case they are required.

- a. Turn the Low Speed Mixture Screw and the High Speed Mixture Screw (Figure 35) clockwise just until they stop. Do not turn the screws until they are tight as damage to the needle seats can occur.
- b Turn the Low Speed Mixture and High Speed Mixture Screws one full turn counterclockwise.
- c. Follow instructions "a. Preparation," through "f. High Speed Mixture Adjustment."

3.PROCEDURE

a. PREPARATION

- 1.) Use a fresh fuel mix. See "Fueling Your Engine."
- 2)Make sure the line extends to the length allowed by the line limiter to provide correct load on engine.
- 3.) Start the engine. Cut grass for 3 minutes to warm engine. The engine must be at operating temperature before carburetor adjustments can be performed correctly.
- 4.) Stop engine and remove air filter by pulling it out with your fingers. Refer to "Specifications" for location.

b. IDLE SPEED ADJUSTMENT

- 1.) Allow engine to idle.
- 2.) Adjust Idle Speed Screw (Figure 35) until the engine continues to run without stalling and without the trimmer head moving.
 - Turn screw clockwise to increase engine speed if the engine stalls or dies.
 - Turn screw counterclockwise to slow engine down and/or to keep trimmer head from turning.
- 3.) Follow instructions in "c. Acceleration Check" and "d. Deceleration Check."
- 4.) No further adjustments are necessary if the trimmer head does not turn at idle speed and if performance is satisfactory.

Awarning

Recheck idle speed after each adjustment. The trimmer head must not turn at idle speed to avoid serious injury to the operator and others.

c. ACCELERATION CHECK

- 1.) Allow engine to idle.
- 2.) Squeeze Trigger fully
 - a. If performance is satisfactory, proceed to "d. Deceleration Check."
 - b. If the engine does not accelerate smoothly, turn the Low Speed Mixture Screw (Figure 35) counterclockwise a small amount (no more than the width of the slot in the adjusting screw).
- 3.) Repeat step "2.)" until smooth acceleration is obtained.

NOTE: It may be necessary to repeat "b. Idle Speed Adjustment" through "c. Acceleration Check," to obtain correct adjustments.

4.) Follow instructions in "d. Deceleration Check."

d. DECELERATION CHECK

- 1.) Allow engine to idle, then squeeze Throttle Trigger fully.
- Allow engine to run at full speed for about 1 second.
- 3.) Release the Throttle Trigger to the idle position and listen to the deceleration of the engine. It must return to idle smoothly and within 1 to 2 seconds.
 - a. If performance is satisfactory, proceed to step "4.)"
 - b. If the engine slowly or erratically returns to idle or idles erratically, repeat "b. Idle Speed Adjustment" or continue through Low Speed Mixture and High Speed Mixture Adjustments to obtain proper deceleration.
- 4.) Recheck idle speed

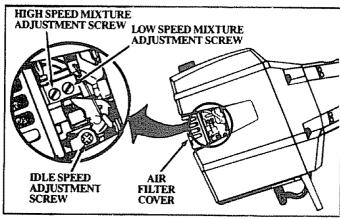


Figure 35

e. Low speed mixture adjustment

- 1.) Allow engine to idle.
- 2.) Turn the Low Speed Mixture Screw (Figure 35) slowly clockwise until the speed starts to drop. Note this position.
- 3.) Turn the Low Speed Mixture Screw counterclockwise until the speed increases and then starts to drop again. Note this position.
- 4.) Set the Low Speed Mixture Screw at the midpoint between the two positions.
- Follow instructions in "c. Acceleration Check" and "d. Deceleration Check."

f. HIGH SPEED MIXTURE ADJUSTMENT

CAUTION: Do not operate engine at full throttle for prolonged periods while making high speed adjustments as damage to the engine can occur.

- 1.) Support the drive shaft housing so the trimmer line is off the ground and will not make contact with any object.
- 2.) Allow engine to idle, then squeeze Throttle Trigger fully.

NOTE: Perform steps "3.)" through "5.)," at full throttle.

- 3) Turn High Speed Mixture Screw (Figure 35) very slowly clockwise until engine speed is reduced.
- 4.) Turn High Speed Mixture Screw very slowly counterclockwise. Stop when the engine begins to run roughly.
- 5.) Turn the screw slowly the minimum amount clockwise until the engine runs smoothly.
- 6.) Follow instructions in "c. Acceleration Check" and "d. Deceleration Check."

CAUTION: If the engine does not operate according to these instructions after repeating the adjusting steps, do not use the tool. Take it to your Sears Service Center.

g. REINSTALL AIR FILTER

Be sure filter is clean. See "Air Filter" in the Maintenance Section for instructions.

CAUTION: Fit air filter into the corners of the housing to keep dirt from entering the engine and causing engine damage. Figure 28.

F. STORAGE

A CAUTION

It is important to prevent gum deposits from forming in essential fuel system parts such as the carburetor, fuel filter, fuel hose, or fuel tank during storage. Experience indicates that 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.

- 1. Allow the engine to cool, empty the fuel system, and secure the tool before transporting or storing.
- 2. Before storing the tool, use up fuel left in the fuel lines and carburetor by starting the engine and letting it run until it stops.

NOTE: If you do not want to remove the fuel from your unit, SEARS CRAFTSMAN Fuel Stabilizer (#71-33500) may be added to fuel left in the tank to minimize gum deposits and acids. If the tank is almost empty, mix stabilizer with fresh fuel in a separate container and add to the tank.

ALWAYS FOLLOW INSTRUCTIONS ON THE STABILIZER CONTAINER THEN, RUN THE ENGINE AT LEAST 2 MINUTES AFTER STABILIZER IS ADDED TO ALLOW MIXTURE TO REACH CARBURETOR STORE UNIT IN A SAFE PLACE SEE STEPS 3-5 (this section).

- 3. Store tool and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.
- 4. Store the tool so the line limiter cannot accidentally cause injury. The tool can be hung by the drive shaft housing.
- 5. Store tool out of reach of children.

G TROUBLE SHOOTING CHART

SYMPTOM	CAUSE	REMEDY
Engine will not start or will run only for a few seconds after starting	 Fuel tank empty. Engine flooded. Spark plug not firing Fuel not reaching carburetor. Carburetor requires adjustment. None of the above. 	 Fill tank with correct fuel mixture. See "Starting Instructions." Install new plug. Clean fuel filter; inspect fuel line. See "Carburetor Adjustments." Contact your Sears Service Center.
Engine will not idle properly	 Idle speed set too fast or too slow. Low speed mixture requires adjustment Throttle trigger screw too tight. None of the above. 	 See "Carburetor Adjustments." See "Carburetor Adjustments." Loosen screw to free trigger. Contact your Sears Service Center.
Engine will not accelerate, lacks power, or dies under a load	 Air filter dirty. Spark plug fouled. Carburetor requires adjustment. Muffler outlets plugged. None of the above. 	 Clean or replace air filter. Clean or replace spark plug and regap. See "Carburetor Adjustments." Contact your Sears Service Center. Contact your Sears Service Center.
Engine smokes excessively	Air filter dirty. Fuel mixture incorrect. High speed mixture requires adjustment.	Clean or replace air filter. Refuel with correct fuel mixture. See "Carburetor Adjustments."
Engine runs hot	 Fuel mixture incorrect High speed mixture set too low (lean) Spark plug incorrect None of the above. 	 See "Fueling Your Unit." See "Carburetor Adjustments." Replace with correct plug. Contact your Sears Service Center.
Trimmer head turns at idle speed	Carburetor requires adjustment. Throttle trigger screw too tight. Clutch requires repair.	 See "Carburetor Adjustments." Loosen screw to free trigger. Contact your Sears Service Center.
Trimmer head stops under a load or does not turn when engine is accelerated	 Drive shaft broken or not engaged. Carburetor requires adjustments. Clutch requires repair. 	 Replace or see "Assembly." See "Carburetor Adjustments." Contact your Sears Service Center.
Line does not advance or breaks while cutting	 Line caught between spool and hub. Line improperly wound onto spool. Improper line size. 	 Remove cover. Check line routing. Rewind spool firmly and evenly. Replace spool.
Excessive line usage	 Improper line size. Cutting at high speed around hard objects. Crowding line against material being cut. 	 Use only .080" Sears Laser Line Reduce cutting speed aroundhardobjects Cut with tip of line.