

SEARS
operator's
manual

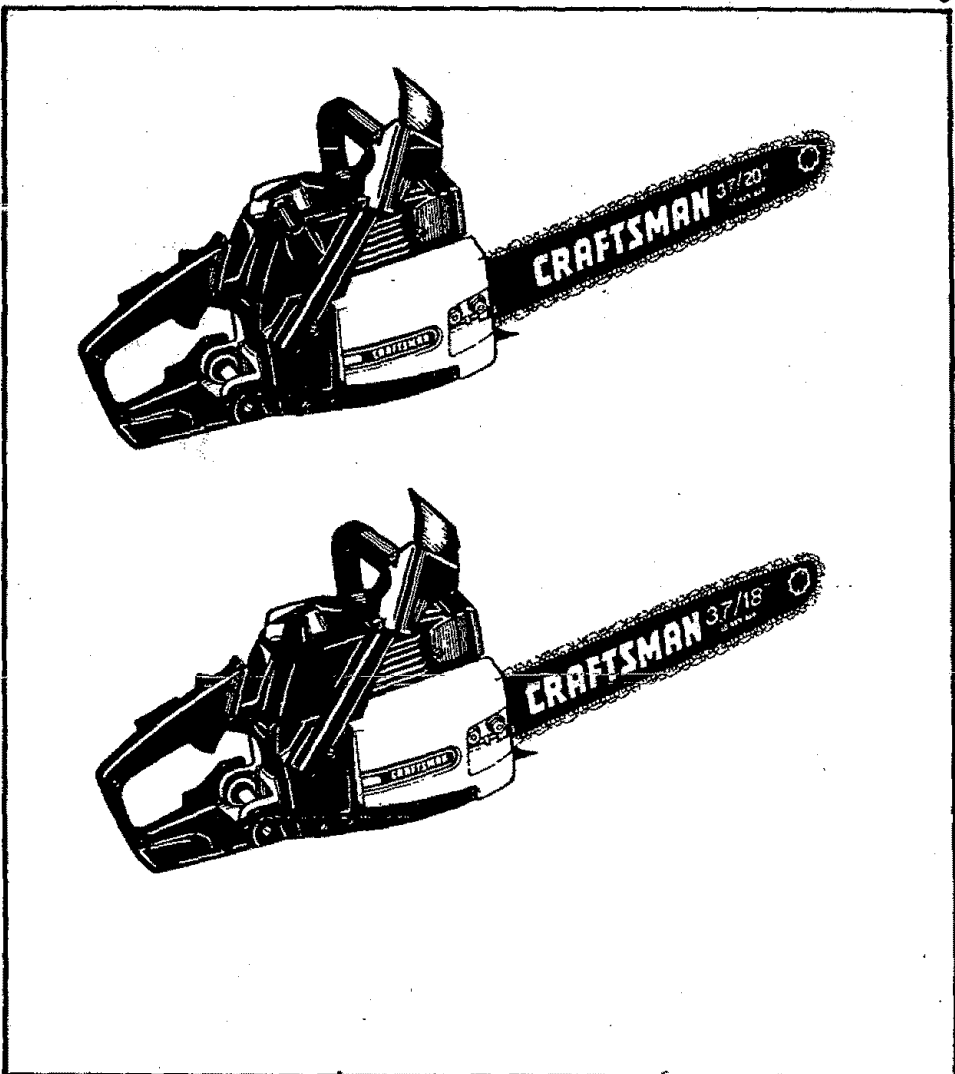
- Assembly
- Operation
- Maintenance
- Repair Parts

MODEL NO.
358.356091-3.7/20"
358.356101-3.7/18"PS



▲WARNING

This chain saw is capable of severe kickback that could result in serious injury to the user. Do not operate this saw unless you have extraordinary cutting needs, and have specialized training and experience for dealing with kickback. Chain saws with significantly reduced kickback potential are available.



SEARS CRAFTSMAN®

3.7/20" 3.7/18" PS
GASOLINE CHAIN SAWS

Record in the space provided below the Model No. and Serial No. of your saw. These numbers are located on the starting instructions decal.

Model No. _____ Serial No. _____

Retain these numbers for future reference.

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

FULL ONE YEAR WARRANTY ON GASOLINE CHAIN SAW
(Excluding Bar, Chain, Spark Plug, Air Filter and Starter Rope)

For one year from date of purchase, when you maintain, lubricate, and tune up this gasoline chain saw according to the operating and maintenance instructions in the owner's manual, Sears will repair defects in material or workmanship in this gasoline chain saw at no charge.

This warranty excludes the bar, chain, spark plug, air filter, and starter rope which are expendable parts and become worn during normal use.

If this gasoline chain saw is used for commercial or rental purposes, this warranty applies for only 30 days from date of purchase. **WARRANTY SERVICE IS AVAILABLE BY RETURNING THE CHAIN SAW TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT IN THE UNITED STATES.**

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

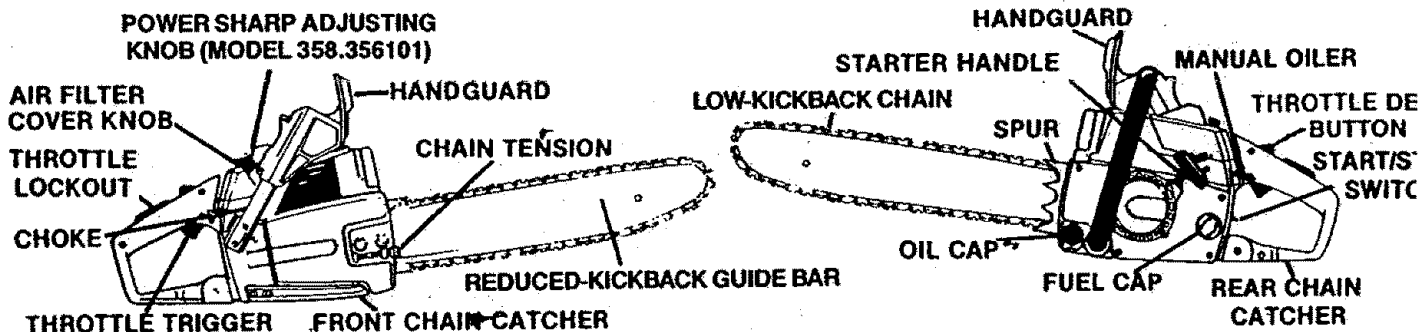
Sears, Roebuck and Co., Sears Tower, Dept. 698/731A, Chicago, IL 60684

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SPECIFICATIONS

MODEL	358.356091 (3.7/20")	358.356101 (3.7/18" P.S.)
CU. IN. DISPLACEMENT	3.7 cu. in./60 cu. cm.	3.7 cu.
GUIDE BAR - LO-KICK®	20" Sprocket Nose - Stock No. 71-30583	18" Sprocket Nose Stock No. 71-36370
CHAIN	3/8 Extended Pitch Oregon® Chrome Cutters - 70 Drive Links - Stock No. 71-36887	3/8 Extended Pitch Oregon® Power Sharp® Chrome Cutters - 66 Drive Links - Stock No. 71-36399
SPARK PLUG	Champion CJ-8Y	
SPARK PLUG GAP	.025"	
IGNITION	Solid State	
MODULE AIR GAP	.008" to .014"	
FUEL MIX	Gasoline/Oil Mixture 16:1 (see "Fueling Your Engine")	
MUFFLER	Spark Arresting / USDA Approved	
OILER SYSTEM	Automatic / Manual	
FUEL TANK CAPACITY	19 oz. 562 cu. cm.	
OIL TANK CAPACITY	12 oz. 355 cu. cm.	



SPECIAL SAFETY SECTION

GUARD AGAINST KICKBACK

Kickback is a dangerous reaction that can lead to serious injury. Do not rely only on the safety devices provided with your saw. As a chain saw user, you must take special safety precautions to help keep your cutting jobs free from accident or injury.

⚠️ KICKBACK WARNING

Kickback can occur when the moving chain contacts an object at the upper portion of the tip of the guide bar or when the wood closes in and pinches the saw chain in the cut. Contact at the upper portion of the tip of the guide bar can cause the chain to dig into the object and stop the chain for an instant. The result is a lightning fast, reverse reaction which kicks the guide bar up and back toward the operator. If the saw chain is pinched along the top of the guide bar, the guide bar can be driven rapidly back toward the operator. Either of these reactions can cause loss of saw control which can result in serious injury.

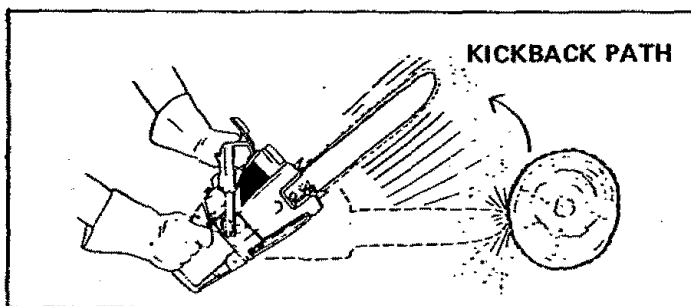


Figure 1

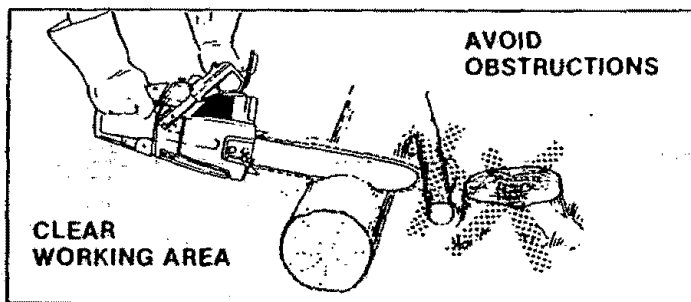


Figure 2

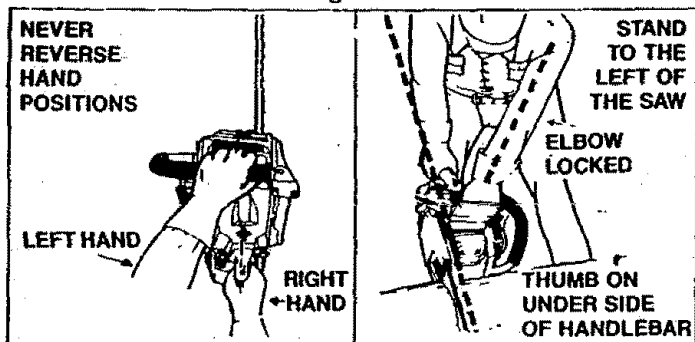


Figure 3

REDUCE THE CHANCE OF KICKBACK

1. Recognize that kickback can happen. With a basic understanding of kickback, you can reduce the element of surprise which contributes to accidents.
2. Never let the moving chain contact any object at the tip of the guide bar. Figure 1.
3. Keep the working area free from obstructions such as other trees, branches, rocks, fences, stumps, etc. Figure 2. Eliminate or avoid any obstruction that your saw chain could hit while you are cutting through a particular log or branch.
4. Keep your saw chain sharp and properly tensioned. Follow manufacturer's chain sharpening and maintenance instructions. Check tension at regular intervals with the engine stopped, never with the engine running. Make sure the bar clamp nuts are securely tightened after tensioning the chain. A loose or dull chain can increase the chance of kickback to occur.
5. Begin and continue cutting at full throttle. If the chain is moving at a slower speed, there is greater chance for kickback to occur.
6. Cut only one log at a time.
7. Use extreme caution when re-entering a previous cut.
8. Do not attempt plunge cuts.
9. Watch for shifting logs or other forces that could close a cut and pinch or fall into the chain.
10. Use only the Reduced-Kickback Guide Bar and Low-Kickback Chain specified for your saw.

MAINTAIN CONTROL

1. Keep a good firm grip on the saw with both hands when the engine is running and don't let go. Figure 3. A firm grip can neutralize kickback and help you maintain control of the saw. Keep the fingers of your left hand encircling and your left thumb under the front handlebar. Keep your right hand completely around the rear handle whether you are right handed or left handed. Keep your left arm straight with the elbow locked.
2. Position your left hand on the front handlebar so it is in a straight line with your right hand on the rear handle when making bucking cuts. Figure 3. Never reverse right and left hand positions during any type of cutting.
3. Stand with your weight evenly balanced on both feet.
4. Stand slightly to the left side of the saw, to keep your body from being in a direct line with the cutting chain. Figure 3.
5. Do not overreach. You could be drawn or thrown off balance and lose control of the saw.
6. Do not cut above shoulder height. It is difficult to maintain control of the saw above shoulder height.

SPECIAL SAFETY SECTION (continued)

⚠ WARNING

Because a chain saw is a high-speed wood-cutting tool, special safety precautions must be observed to reduce the risk of accidents. Careless or improper use can cause serious injury.

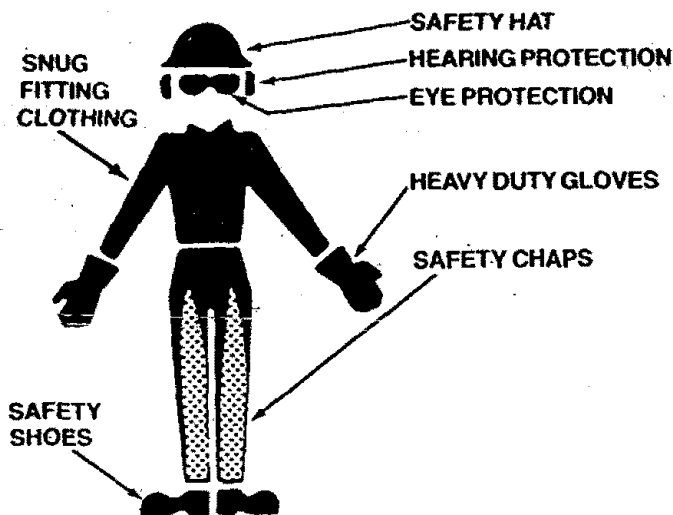


Figure 4

KNOW YOUR SAW

1. Read your Operator's Manual carefully until you completely understand and follow all safety rules and operating instructions before attempting to operate the unit.
2. Restrict the use of your saw to adult users who understand and follow the safety rules, precautions, and operating instructions in this manual.

PLAN AHEAD

1. Wear personal protective gear. Figure 4. Always use steel-toed safety footwear with non-slip soles; snug-fitting clothing; heavy-duty non-slip gloves; eye protection such as non-fogging, vented goggles or face screen; an approved safety hard hat, and sound barriers — ear plugs or mufflers to protect your hearing. Regular users should have hearing checked regularly as chain saw noise can damage hearing.
2. Keep children, bystanders, and animals out of the work area — a minimum of 30 feet (10 meters). Do not allow other people or animals to be near the chain saw when starting or operating the chain saw.
3. Do not handle or operate a chain saw when you are fatigued, ill, or upset; or if you have taken alcohol, drugs or medication. You must be in good physical condition and mentally alert. Chain saw work is strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating a chain saw.

4. Do not attempt to use your chain saw during bad weather conditions such as strong wind, rain, snow etc., or at night.
5. Plan your sawing operation carefully in advance. Do not start cutting until you have a clear work area, secure footing, and if you are felling trees, a planned retreat path.

AVOID REACTIVE FORCES

Pinch-Kickback and Pull-in occur when the chain suddenly stopped by being pinched, caught, or contacting a foreign object in the wood. This results in a reversal of the chain force used to cut wood and causes the saw to move in the opposite direction of chain rotation. Pinch-Kickback drives the saw straight back toward the operator. Pull-in pulls the saw away from the operator. Either reaction can result in loss of control and possible serious injury.

To avoid Pinch-Kickback:

1. Be extremely aware of situations or obstructions that can cause material to pinch the top of or otherwise stop the chain.
2. Do not cut more than one log at a time.
3. Do not twist the saw as the bar is withdrawn from under-cut when bucking.

To avoid Pull-in:

1. Always begin cutting with the engine at full throttle and the spur against the wood.
2. Use wedges made of plastic or wood, (never of metal) to hold the cut open.

HANDLE FUEL WITH CAUTION

1. Eliminate all sources of sparks or flame in the area where fuel is mixed, poured, or stored. There should be no smoking, open flames, or work that could cause sparks.
2. Mix and pour fuel in an outdoor area, on bare ground. Store fuel in a cool, dry, well-ventilated place; and in an approved, marked container for all fuel purposes.
3. Wipe up all spilled fuel before starting your engine.
4. Move at least 10 feet (3 meters) away from fueling site before starting the engine.
5. Do not smoke while handling fuel or while operating the saw.
6. Turn the engine off and let your saw cool in a non-combustible area, not on dry leaves, straw, paper, etc. Slowly remove the fuel tank cap and refuel the unit.
7. Store tool and fuel in an area where fuel vapors will not reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.

OPERATE YOUR SAW SAFELY

1. Do not operate a chain saw that is damaged, improperly adjusted, or not completely and securely assembled.
2. Operate the chain saw only in outdoor areas.
3. Do not operate the saw from a ladder or in a tree.
4. Position all parts of your body to the left of cut and away from the saw chain when the engine is running.
5. Cut wood only. Do not cut metal, plastics, masonry, non-wood building materials, etc. Do not use your saw to pry or shove away limbs, roots or other objects.
6. Make sure the chain will not make contact with any object while starting the engine. Never try to start the saw when the guide bar is in a cut or kerf.
7. Use extreme caution when cutting small size brush and saplings. Slender material can catch the saw chain and be whipped toward you or pull you off balance.
8. Be alert for springback when cutting a limb that is under tension so you will not be struck by the limb or saw when the tension in the wood fibers is released.
9. Do not put pressure on the saw at the end of a cut. This can cause you to lose control when the cut is completed.
10. Stop the engine before setting the saw down.

MAINTAIN YOUR SAW IN GOOD WORKING ORDER

1. Have all chain saw service performed by your Sears Service Center with the exception of the items listed in the maintenance section of this manual. For example, if improper tools are used to remove or hold the flywheel when servicing the clutch, structural damage to the flywheel can occur and cause the flywheel to burst.
2. Keep fuel and oil caps, screws and fasteners securely tightened.
3. Keep the handles dry, clean, and free of oil or fuel mixture.
4. Make certain the saw chain stops moving when the throttle trigger is released. For correction, refer to page 24 for carburetor idle adjustment instructions.
5. Stop the saw if the chain strikes a foreign object. Inspect the unit and repair or replace parts as necessary.
6. Disconnect the spark plug before performing any maintenance except for carburetor adjustments.
7. Never modify your saw in any way. Use only attachments supplied or specifically recommended by the manufacturer.
8. Always replace the handguard immediately if it becomes damaged, or broken or is otherwise removed.
9. Keep vibration isolators in good condition. Periodically inspect isolators for tears, rips or separation of the rubber portion from the metal mountings. Have your Sears Service Center replace the isolators if worn or damaged, if vibration increases or if mounts develop an out of round or swollen shape from exposure to gasoline and/or oil. It is recommended that all isolators be replaced when a failure to one occurs.

CARRY AND STORE YOUR SAW SAFELY

1. Hand carry the unit with the engine stopped, the Muffler away from your body, and the Guide Bar and Chain to the rear covered preferably with a scabbard.
2. Before transporting in any vehicle or storing in any enclosure, allow your saw to cool completely, cover the bar and chain and properly secure to avoid turnover, fuel spillage or damage.
3. Empty the fuel tank before storing the tool. Use up fuel left in the carburetor by starting the engine and letting the engine run until it stops.
4. Store in a dry area out of the reach of children and away from where fuel vapors can reach sparks or an open flame from hot water heaters, furnaces, etc.

SAVE THESE INSTRUCTIONS

NOTE: Exposure to vibrations through prolonged use of chain saws may produce Whitefinger disease (Raynaud's phenomenon). This phenomenon reduces the hand's ability to feel and regulate temperature, produces numbness and burning sensations and can cause nerve and circulation damage and tissue necrosis.

An anti-vibration system designed to reduce engine vibration is recommended for those using chain saws on a regular or sustained basis and is provided on this saw. However, an antivibration system does not guarantee the avoidance of Whitefinger disease. Continual and regular users must monitor closely their use of chain saws and physical condition.

Notice: Refer to the Code of Federal Regulations, Section 1910.266(5); 2.5.1 of American National Standard Safety Requirements for Pulpwood Logging, ANSI 03.1-1978; and relevant state safety codes when using a chain saw for logging purposes.

KNOW YOUR CHAIN SAW

A. INTRODUCTION

- Your saw has been designed with safety in mind and includes the following features as standard equipment:
 - Reduced-Kickback Guide Bar
 - Low-Kickback Chain
 - Spark Arrestor
 - Temperature Limiting Muffler
 - Handguards
 - Counter-Vibe® Anti-Vibration System

⚠ WARNING

The following features are included on your saw to help reduce the hazard of kickback, however, such features will not totally eliminate this dangerous reaction. As a chain saw user, do not rely only on safety devices. You must follow all safety precautions, instructions and maintenance in this manual to help avoid kickback and other forces which can result in serious injury.

B. KICKBACK SAFETY FEATURES

- **Reduced-Kickback Guide Bar**, designed with a small radius tip which reduces the size of the kickback danger zone on the bar tip. Figure 5. A Reduced-Kickback Guide Bar is one which has been demonstrated to significantly reduce the number and seriousness of kickbacks when tested in accordance with the safety requirements for gasoline powered chain saws as set by the American National Standards Institute, Inc., Standard B175.1-1985.
- **Low-Kickback Chain**, designed with a contoured depth gauge and guard link which deflect the kickback force and allow wood to gradually ride into the cutter. Figure 5. Low-Kickback Saw Chain is chain which has met the kickback performance requirements of ANSI B175.1 when tested on a representative sample of chain saws below 3.8 cubic inch displacement specified in ANSI B175.1-1985. (American National Standard for Power Tools - Gasoline Powered Chain Saws - Safety Requirements).
- **Handguard**, designed to reduce the chance of your left hand contacting the chain if your hand slips off the front handlebar.
- **Position of front and rear handlebars**, designed with distance between handles and "in line" with each other. The spread and "in line" position of the handlebars work together to give balance and resistance in controlling the saw if kickback occurs.

⚠ WARNING

Do not operate the chain saw unless the safety devices or their specified replacements are properly installed and maintained according to the instructions in this manual. Do not use any other guide bar and chain combination that is not equivalent to the original equipment or not certified to comply with ANSI B175.1-1985. Failure to follow these instructions can result in serious injury.

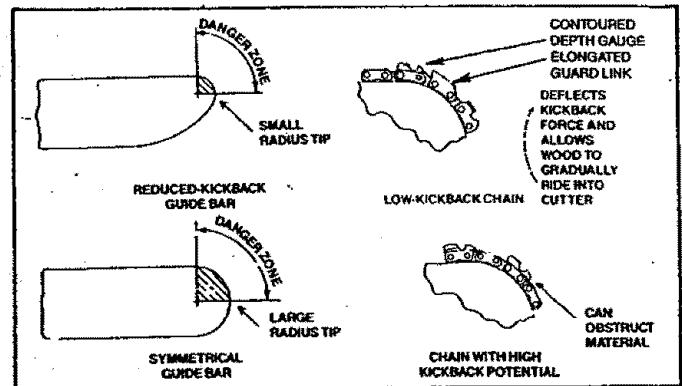


Figure 5

C. STATE AND LOCAL REQUIREMENTS.

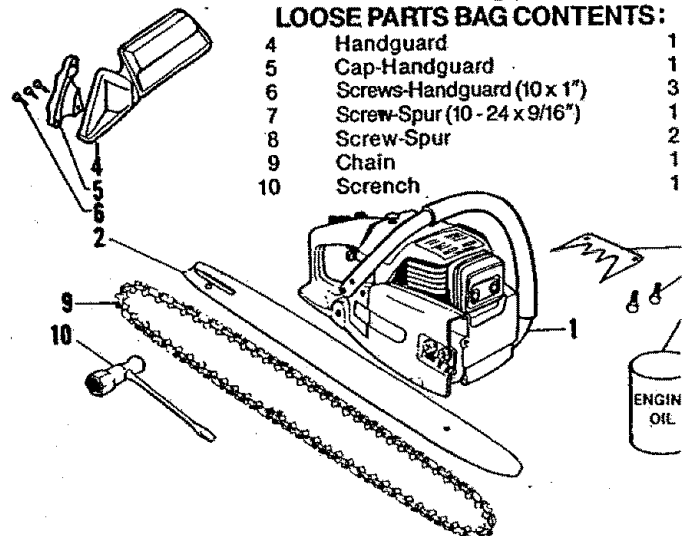
Your saw is equipped with a temperature limiting muffler and spark arresting screen which meets the requirements of California Codes 4442 and 4443. All U.S. forest land and the states of California, Maine, Washington and Oregon require many internal combustion engines to be equipped with a spark arrestor screen by law. If you operate a chain saw in a state or 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. See "Spark Arrestor" for maintenance.

D. CARTON CONTENTS

1. Remove contents from the carton if you have not done so.
2. Check the contents against the list below.
3. Examine the items 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.

Key No.	CARTON CONTENTS:	Qty
1	Powerhead	1
2	Guide Bar	1
3	8 oz. can, 2-Cycle Engine Oil	1
—	Operator's Manual (not shown)	1
—	Loose Parts Bag (not shown)	1
LOOSE PARTS BAG CONTENTS:		
4	Handguard	1
5	Cap-Handguard	1
6	Screws-Handguard (10 x 1")	3
7	Screw-Spur (10 - 24 x 9/16")	1
8	Screw-Spur	2
9	Chain	1
10	Scrench	1



PREPARING YOUR SAW FOR USE

A. GETTING READY

1. READ YOUR OPERATOR'S MANUAL CAREFULLY.

Your Operator's Manual has been developed to help you prepare your saw for use and to understand its safe operation. It is important that you read your manual completely to become familiar with the unit *before* you begin assembly.

2. HAVE THE FOLLOWING AVAILABLE:

- Protective gloves
- Approved, marked fuel container
- One gallon regular unleaded gasoline.
- 8 oz. (1/2 pt.), 2-cycle, engine oil provided with your unit.
- Bar and Chain Lubricant
- Scrench**— provided with your unit. The long end of the tool can be used as a slotted screwdriver. The small pipe end can be used as a socket wrench. The larger pipe end can be used to remove the spark plug.
- Phillips Screwdriver

B. ATTACHING THE HANDGUARD

The Handguard is a protective device designed to reduce the chance of your left hand contacting the chain if your hand slips off the front handlebar.

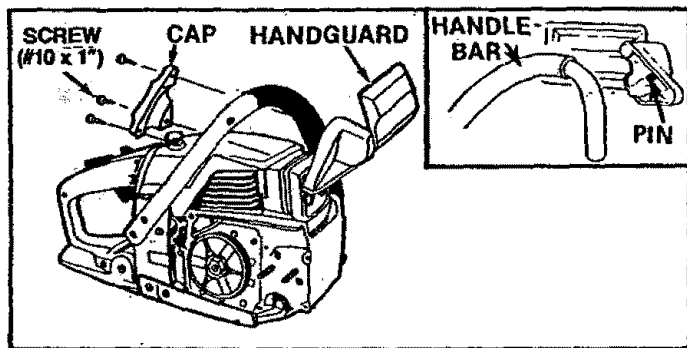


Figure 6

⚠ WARNING

Do not use the saw without the handguard in place. Always replace the handguard immediately if it becomes damaged, broken or is otherwise removed.

- Lift and carry the chain saw by the handlebar, *not* by the handguard.
- Keep the handguard securely fastened at all times. Check the handguard screws each time the saw is used.

To install:

1. Align the Handguard and Handguard Cap around the handlebar as shown in Figure 6.
2. Fit the mounting pin on the Handguard into the hole in the handlebar. Figure 6.
3. Insert the 3 mounting screws into the 3 holes on the Handguard Cap.
4. Turn each screw with a Phillips screwdriver a little at a time clockwise, until the Handguard Cap and Handguard meet and there is no gap between the two parts.

C. ATTACHING THE SPUR

The spur is a special piece of equipment designed to assist the cutting operation. When assembled to the saw, the spur will dig into the tree or log and:

- relieve contact pressure adding ease to the sawing operation.
- allow the saw to be more easily rotated or pivoted into the cut.

To install:

1. Remove Bar Clamp Nuts, Bar Clamp Housing and Guide Bar Plates.
2. Align the spur over the two holes on the bar clamp side of the saw. Figure 7.
3. Insert the two screws and tighten evenly and securely.

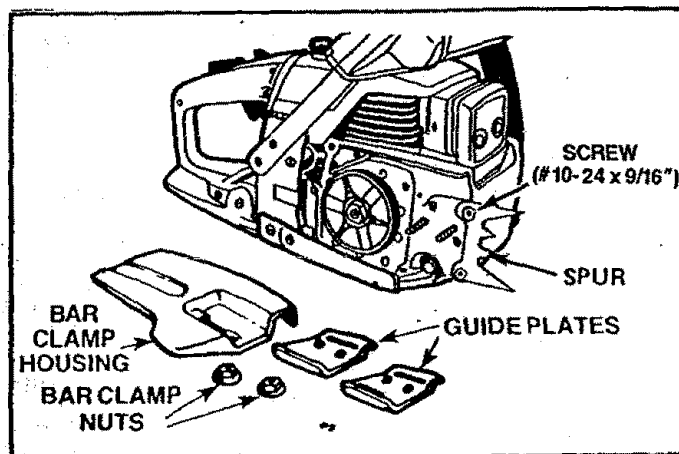


Figure 7

D. ATTACHING THE BAR AND CHAIN

CAUTION: Wear protective gloves when handling or operating your saw. The chain is sharp and can cut you even when it is not moving!

- Your saw is equipped with a Reduced-Kickback Guide Bar and a Low-Kickback Chain.
- Use only the Reduced-Kickback Guide Bar and Low-Kickback Chain specified for your chain saw model, when replacing these parts. See "Specifications."

WARNING
Do not start engine without guide bar and chain completely assembled. Otherwise, the clutch can come off and serious injury can result.

1. Install the Inner Guide Plate (has two slots) over the bar mounting studs,

NOTE: Be sure the Inner Guide Plate curves or flanges toward the saw frame away from the Guide Bar. Figure 9 .

2. Mount the Guide Bar with the slotted end over the bar mounting studs. Figure 10.

NOTE: Be sure the Guide Bar is positioned with the round hole below the large slot.

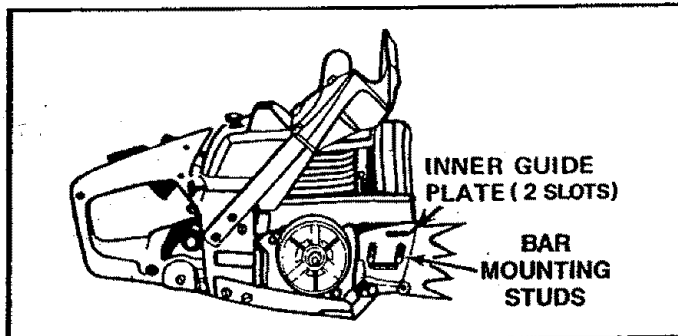


Figure 8

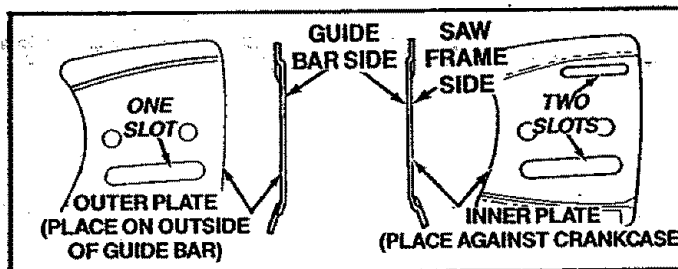


Figure 9

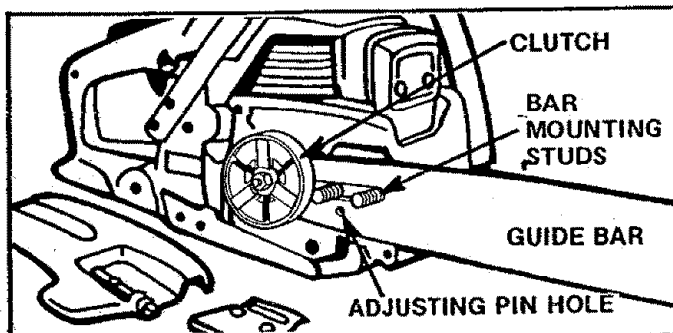


Figure 10

3. Hold chain with cutters facing as shown in Figure 11.
4. Place chain over and behind the clutch drum onto the sprocket.
5. Slide Guide Bar to the rear of the saw as far as possible.
NOTE: It may be necessary to thread the adjusting pin in or out for the guide bar to align properly.
6. Fit the bottom of the drive links between the teeth in the sprocket.
7. Start at the top of the bar and fit the chain drive links into the groove around the Guide Bar. Figure 11.
8. Pull the Guide Bar forward until the chain is snug in the guide bar groove. Figure 12.
9. Install the outer guide plate (one slot). Figure 9 and 12.
10. Slide the Bar Clamp Housing over the mounting studs and fit the bar adjusting pin (Figure 13) into the adjusting pin hole in the Guide Bar. Figure 12.
11. Replace the Bar Mounting Nuts and tighten finger tight *only*. Tighten Bar Mounting nuts after chain is tensioned.
NOTE: Thread the bar adjusting pin (Figure 13, 14) in or out as necessary to fit the adjusting pin in the hole in the guide bar (Figure 10)
12. Follow instructions in the "Chain Tension" section.

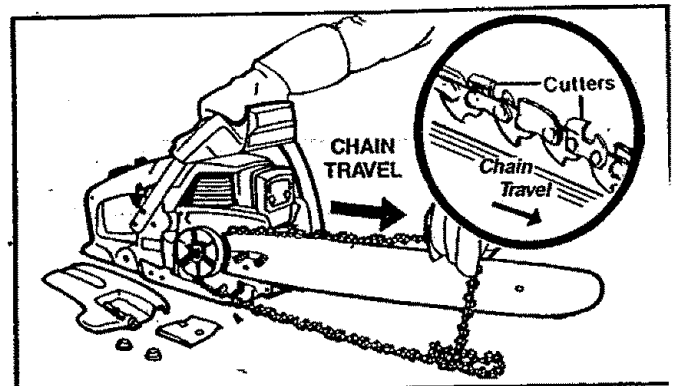


Figure 11

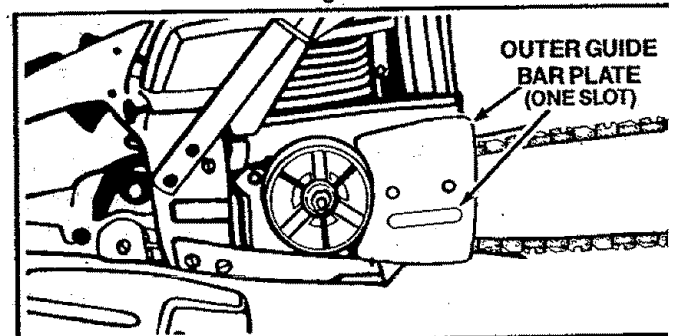


Figure 12

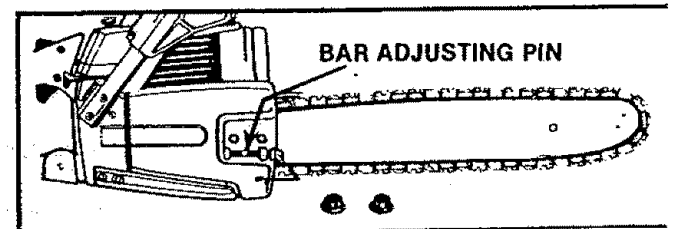


Figure 13

E. CHAIN TENSION

- **Correct chain tension is very important:**
 - a loose chain will wear the bar and itself.
 - a loose chain can jump off the bar while you are cutting.
 - a tight chain can damage the saw and/or break.
- **The chain stretches during use, especially when new. Check tension:**
 - each time the saw is used
 - more frequently when the chain is new
 - as the chain warms up to normal operating temperature

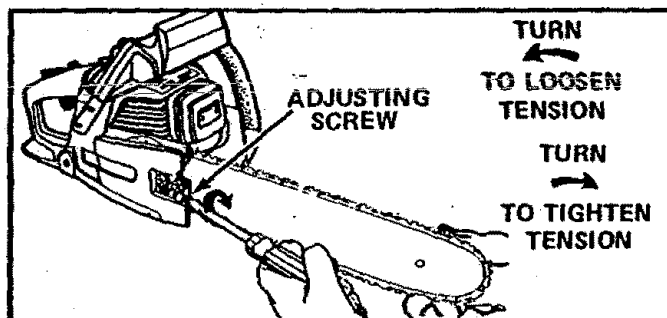


Figure 14

● Chain tensioning procedure:

1. Hold the tip of the Guide Bar up and turn the Adjusting Screw just until the chain does not sag beneath the Guide Bar. Figure 14.

NOTE: Turn screw clockwise to tighten tension. Turn screw counterclockwise to loosen tension.

2. Check the tension by lifting the chain from the Guide Bar at the center of the bar. Figure 15.
3. Continue turning the Adjusting Screw until the tension is correct.
4. Hold the tip of the Guide Bar up and securely tighten the Bar Clamp Nuts with the Srench.
5. Recheck tension. See Figure 15.

- **Chain tension is correct when the chain:**
 - can be lifted about 1/8" from the Guide Bar at a point near the middle of the bar, and
 - will move freely around the bar.

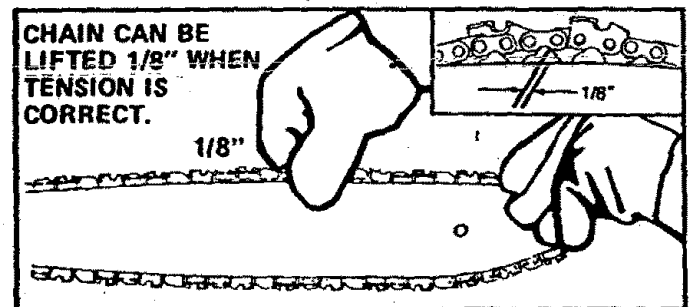


Figure 15

F. 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 engine.
- f. Move at least 10 feet away from fueling site before starting engine.
- g. Stop engine before removing fuel cap.
- h. Empty the fuel tank before storing the tool. It is recommended that the fuel tank be emptied after each use. If fuel is left in tank, store so fuel will not leak.
- i. 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 chain saw is powered by a two-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 you use the recommended mixture of gasoline and oil.

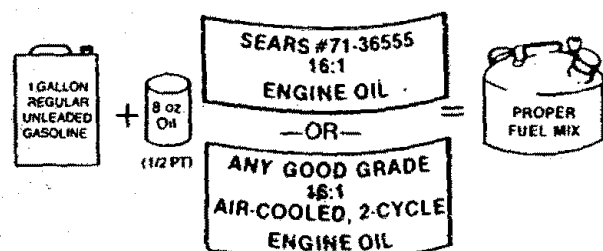
- Gasoline must be clean and not over two months old. After a short period of time, gasoline begins to chemically break down and will form compounds that can cause hard starting and damage in 2-cycle engines.

- 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 will cause the engine to overheat and seize.

- Mix the fuel thoroughly in a container since gasoline and oil do not readily combine. Do not try to mix fuel directly in the fuel tank.

3. USE THE FOLLOWING ONLY:



4. DO NOT USE:

- **BIA Oil (Boating Institute of America)**

— Does not have proper additives for air-cooled, 2-cycle engines and can cause damage.

- **AUTOMOTIVE OIL —**

— Does not have proper additives for 2-cycle engines and can cause damage.

5. HOW TO MIX FUEL AND FILL TANK

- Pour 1/2 gallon of regular unleaded gasoline into an approved, marked container. *Do not try to mix oil and gasoline directly in the fuel tank.*
- Add entire measure of engine oil.

- Cover container tightly and shake for one minute.
- Slowly remove fuel container cover.
- Add remainder of gasoline.
- Cover container tightly and shake again.
- Slowly remove fuel container cover.
- Slowly remove fuel cap. See Figure 16 for location.
- Fill the tank using a spout or funnel.
- Reinstall the fuel cap securely.

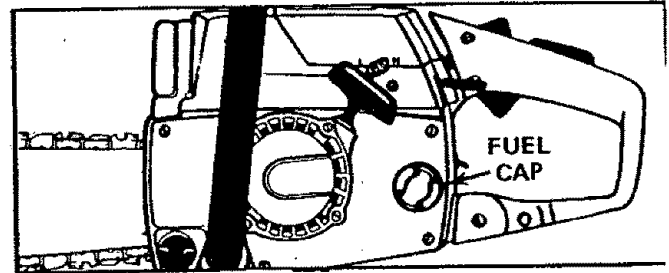


Figure 16

G. BAR AND CHAIN LUBRICANT

- The guide bar and cutting chain require continuous lubrication in order to remain in operating condition. Lubrication is provided by the automatic oiler system when the oil tank is kept filled.
 - Lack of lubricant will quickly ruin the bar and chain.
 - Too little lubricant will cause overheating shown by smoke coming from the chain and/or discoloration of the guide bar rails.
- Use Sears Bar and Chain Lubricant #71-36554 - 1 qt. or #71-36556 - 1 gal. or clean SAE 30W oil.
- In freezing weather, oil will thicken, making it necessary to thin bar and chain oil with a small amount of Diesel Fuel #1 or Kerosene. Bar and chain lubricant must be free flowing for the oil system to pump enough oil for adequate lubrication.

1. USE THE FOLLOWING:

- 30°F or above — Lubricant — undiluted.
30°F - 0°F — 95% lubricant to 5% Diesel Fuel # 1 or Kerosene.
Below 0°F — 90% lubricant to 10% Diesel Fuel #1 or Kerosene.

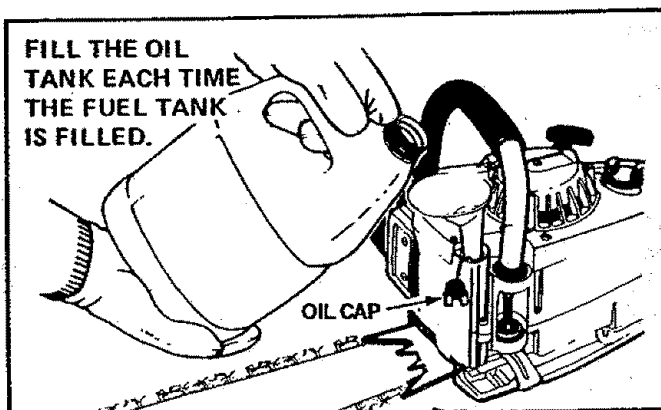


Figure 17

2. HOW TO FILL THE OIL TANK

- Stop the engine.
- Turn saw on its side with oil cap up. Figure 17.
- Loosen cap slowly and wait for pressure in the tank to be released before removing the cap.
- Fill the oil tank.
- Replace the oil cap securely.

3. ADJUSTING THE AUTOMATIC OILER

The adjusting screw located at the bottom of the saw on the crankcase next to the bar clamp can be adjusted with the screwdriver end of the srench provided with your saw.

- To increase the oil flow, turn the adjusting screw counterclockwise ←.
- To decrease the oil flow, turn the adjusting screw clockwise →.

NOTE: The automatic oiler can deliver more oil than is required during certain types of cutting such as pruning or debranching which require the saw to be operated at a high RPM for a long time period. To avoid running out of chain oil before running out of fuel, check the oil tank periodically. Be sure to readjust the oiler before returning to types of cutting that require greater lubrication.

4. IMPORTANT POINTS TO REMEMBER

- Prime the oil pump on a new saw or a saw that has been unused for an extended period of time. Pump the manual oiler slowly several times. Start the engine and allow the chain to run. Stop the engine and check for an even flow of oil on the chain. Repeat this procedure until oil is visible on the chain.
- Fill the oil tank each time you refill the fuel tank to ensure there will be sufficient oil for the chain whenever you start and run the saw.
- The saw will use about 1/2 tank of chain oil for each tank of fuel mixture. If less oil is used, check for a plugged oil hole in the guide bar.
- It is normal for a small amount of oil to appear under the saw after the engine stops. This is due to oil draining from the bar and chain when not in use.

USING YOUR SAW

A. CONTROL DEVICES

Understanding the control devices on your saw is an important part of learning how to properly and safely operate the unit. Figure 18.

1. The Ignition Switch is a toggle switch which is moved up for the "Start" position and moved down for the "Stop" position.
2. The two-position Choke helps to start the saw by controlling the air flow to the fuel system.
3. The Throttle accelerates and controls the speed of the engine.
4. The Throttle Lock is a control feature which prevents the Trigger from becoming accidentally engaged. The Throttle Lock must be pressed before the Trigger can be activated.
5. The Throttle Detent Button holds the Throttle Lock and Trigger in position while the engine is being started. Release the Throttle Detent Button after the engine is started by lightly squeezing the trigger.

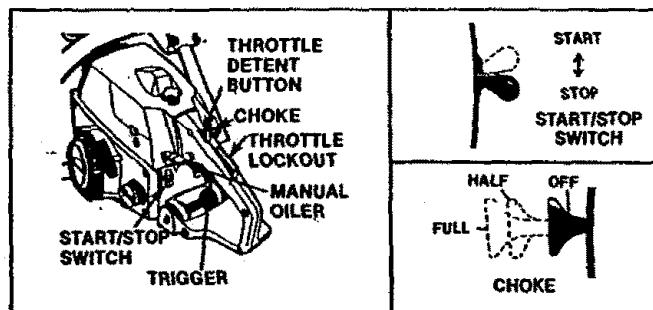


Figure 18

6. The Manual Oiler is placed to be operated by your right thumb. Use the manual oiler to supplement the automatic oiler:
 - during a long felling cut
 - when cutting into a log or tree which is greater in diameter than the length of the guide bar.
 - anytime oil is desired.

B. STARTING INSTRUCTIONS

⚠ WARNING

Always wear gloves; safety footwear; snug-fitting clothing; and eye, hearing, and head protection devices when operating a chain saw.

1. BASIC PROCEDURE

- a. Set the saw on flat ground making certain the saw chain is free to turn without contacting any object. Figure 19. Pump the manual oiler slowly 6 - 8 times.
- b. Move start/stop switch to the "Start" position.
- c. Push down on the throttle lock-out, squeeze the trigger, press and hold down the throttle detent button, then slowly release the trigger.
- d. Adjust choke according to "Starting Procedure for Varying Conditions"; this page.
- e. Hold front handlebar with left hand & place right foot through rear handle to stabilize saw. Figure 19.
- f. Pull starter rope quickly, with your right hand.
- g. Squeeze throttle to release the throttle lock allowing engine to idle.
- h. Accelerate the engine and allow the chain to run. Stop engine and check for an even flow of oil on the chain. Repeat procedure until oil is visible on the chain.

⚠ WARNING

The chain must not move when the engine runs at idle speed. Refer to "Carburetor Adjustments," for correction.

- i. Stop engine by moving the start/stop switch to the "STOP" position. Figure 18.



Figure 19

2. STARTING PROCEDURE FOR VARYING CONDITIONS

NOTE: Be sure to follow "1. Basic Procedure," as described on this page.

a. COLD ENGINE:

- 1.) Pull choke to full choke position. Figure 18.
- 2.) Pull starter rope until engine attempts to run.
- 3.) Push choke until half position is felt. Figure 18.
- 4.) Pull starter rope until engine runs.
- 5.) After 5 second warm up, push choke to the off position. Figure 18.

⚠ WARNING

Avoid bodily contact with the muffler when starting or using a warm engine to avoid serious burns.

b. WARM ENGINE:

- 1.) Leave choke at the off position. Figure 18.
- 2.) Pull starter rope until engine runs.

c. REFUELED WARM ENGINE AFTER RUNNING OUT OF FUEL:

- 1.) Pull choke to full choke position. Figure 18.
- 2.) Pull starter rope until engine attempts to run.
- 3.) Push choke to the off position. Figure 18.
- 4.) Pull starter rope until engine runs.

3. IMPORTANT POINTS TO REMEMBER

- a. When pulling the starter rope, do not use the full extent of the rope as this can cause the rope to break. Do not let the starter rope snap back. Hold the handle and let the rope rewind slowly.
- b. If engine floods, let the unit set for a few minutes, then repeat starting procedure using the half-choke position.
- c. For cold weather starting, allow engine to warm up (1-2 min.) at the half-choke position, then move choke to the closed position. Do not cut with the choke at the "full" or "half" position.

USING THE POWER SHARP® SYSTEM (MODEL 358.356101)

Model 358.356101 is equipped with a Power Sharp® System that will perform approximately 80% of the sharpening necessary for the saw chain. The Power Sharp® System utilizes a built-in grinding stone to sharpen the cutter top plates and set depth gauges. As the built-in sharpener is used, the cutter side plates gradually will be altered. About every 3rd to 5th time the Power Sharp® System is used, hand filing is required to correct the cutter side plates and depth gauges.

- Sharpen the saw chain when:
 - wood chips become small and powdery. Wood chips made by the chain should be about the size of the teeth of the chain.
 - saw cuts to one side.
 - saw has to be forced through the cut.

CAUTION: Always wear gloves when handling the chain. The chain can be sharp enough to cut you, even when it is too dull to cut wood.

- Always replace the sharpening stone when
 - sparks are no longer seen at full adjustment
 - only 1/4 inch of stone is remaining
 - stone has become cracked or damaged.
 - a new chain is installed. The used stone will be worn to the shape of the old chain and can cause excessive wear to a new chain. Replacement chain comes supplied with Stone Cartridge Replacement #69099. Refer to "Replace or Remove the Stone and Carrier Assembly" in this section.
- Always remove the sharpening stone if a conventional chain is substituted for the Power Sharp® Chain. See instructions for removing the Stone Cartridge in this section. Use replacement chain #71-3638. Follow "Chain Sharpening" in the Maintenance section.

A. AUTOMATIC SHARPENING

1. Stop the engine.
2. Place the saw on a solid, flat surface and make sure that the chain will not contact any object.
3. Adjust the chain with correct tension. Refer to "Chain Tension."

IMPORTANT: The chain *must* be tensioned correctly for proper sharpening to occur.

4. Start the engine and operate at half to three-quarters throttle during Steps "5 through 8".

NOTE: Saw *must* be running at half to three-quarters throttle *before* knob is pressed.

5. Push the Power Sharp® Knob down slowly until fully pressed down. Figure 20.

NOTE: If stone should contact chain before knob is fully pressed down, release knob and turn knob counterclockwise until condition does not exist. Repeat Step "5" again.

6. Turn knob slowly clockwise until sparks can be seen as shown in Figure 20.

NOTE: Proper sharpening occurs when a light flow of sparks is seen. Improper sharpening is shown by a heavy flow of sparks or no sparks.

7. Release knob and turn *one* additional "click" clockwise.

NOTE: It is important to turn the knob only one "click" each time the knob is pressed. More turns will result in making the chain dull instead of sharp.

8. Press knob firmly against chain and hold for 10-15 seconds or until sparks can no longer be seen.

9. Release knob and stop the engine.

10. Inspect chain cutters.

NOTE: A properly sharpened cutter will show grinding marks across its entire width. Figure 21. If cutters do not appear sharp or burrs are seen on the top front of the cutters, repeat Steps "7-8".

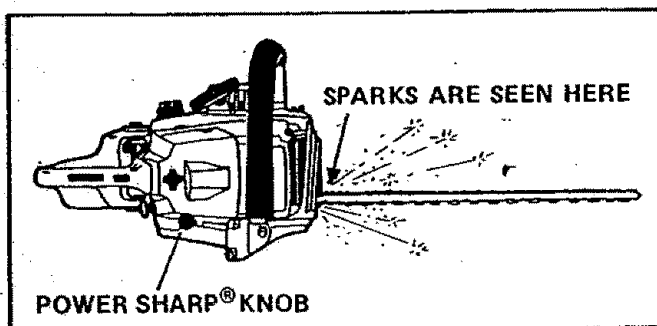


Figure 20

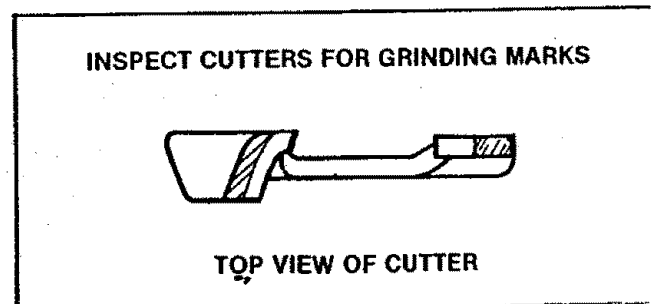


Figure 21

B. HAND FILING

Sharpen the side plates and depth gauges by hand after every 3rd to 5th time the Power Sharp® System is used.

Items Required:

Gloves	flat file
5/32" dia. file holder	vise
	screwdriver

NOTE: If abrasive materials such as rocks, nails, sand or dirt are contacted by the chain, the side plates should be checked more often. Damage to the cutters caused by abrasive materials usually results in discoloration spots where the chrome has been worn away. Cutter side plates should be filed until these spots are removed.

1. Stop the engine.
2. Adjust the chain for proper tension, See "Chain Tension."
3. Clamp the bar in a vise to hold the chain steady. Do not clamp the chain.

NOTE: Work at the midpoint of the bar, moving the chain forward with a screwdriver as each cutter is filed.

4. Support the square rod on the file holder (with 5/32" round file) on cutter top plate. Figure 22.
5. Hold the file holder lever (90°) with the 22° guide mark parallel to guide bar. Figure 23.
6. File from inside toward outside of cutter in one direction only — 2 or 3 strokes per side plate edge should be enough. Figure 24.

NOTE: Avoid hitting the top edge of the cutters when filing the side plate.

7. Maintain a 1/32" side plate projection. Figure 25.
8. File all side plates on one side of the chain, then move to the other side of bar and file remaining side plates.
9. File depth gauges according to instructions on page 18.

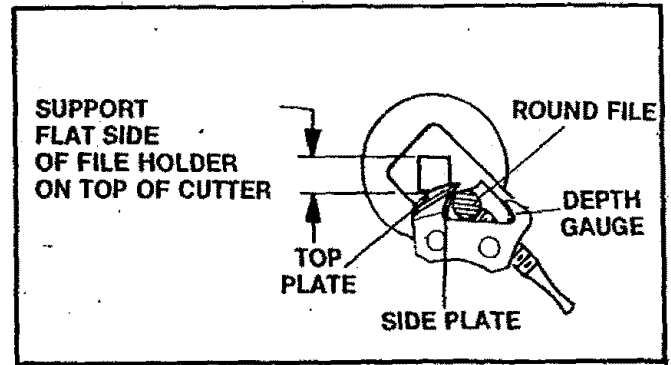


Figure 22

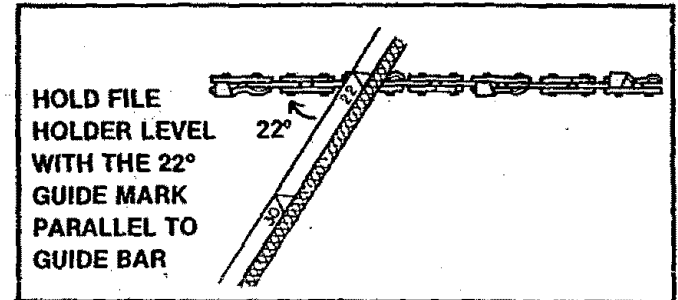


Figure 23

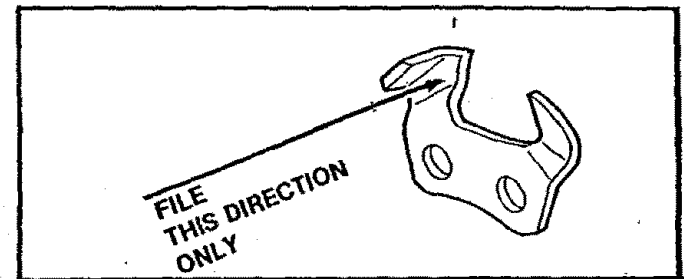


Figure 24

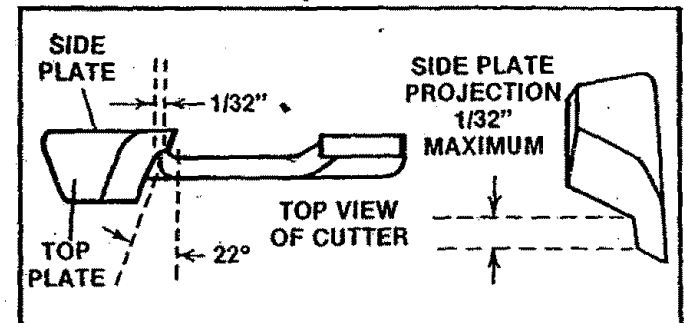


Figure 25

C. REPLACE OR REMOVE THE STONE AND CARRIER ASSEMBLY

1. Remove Carburetor Cover and Bar Clamp Housing.
2. Remove the two screws which hold cartridge assembly to crankcase. Figure 26.
3. Discard old assembly.
4. Install new cartridge assembly.

NOTE: Be careful not to let the Slide Button fall out.

5. Reinstall Carburetor Cover and Bar Clamp Housing.

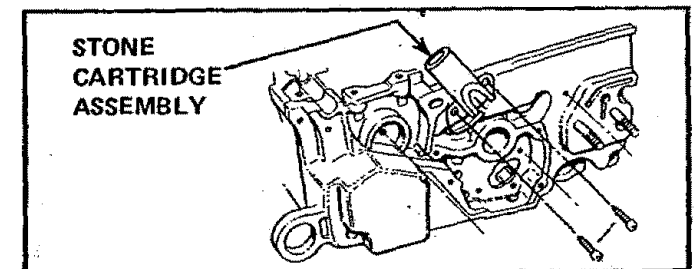


Figure 26

TYPES OF CUTTING

A. BASIC CUTTING TECHNIQUE

1. IMPORTANT POINTS.

- Cut wood only.** Do not cut metal, plastics, masonry, non-wood building materials, etc. Do not use your saw to pry or shove away limbs, roots or other objects.
- Stop the saw if the chain strikes a foreign object.** Inspect the unit and repair or replace parts as necessary.
- Keep the chain out of dirt and sand.** Even a small amount of dirt will quickly dull a chain and thus, increase the possibility of kickback.

▲ KICKBACK WARNING

Kickback can occur when the moving chain contacts an object at the upper portion of the tip of the guide bar or when the wood closes in and pinches the saw chain in the cut. Contact at the upper portion of the tip of the guide bar can cause the chain to dig into the object and stop the chain for an instant. The result is a lightning fast, reverse reaction which kicks the guide bar up and back toward the operator. If the saw chain is pinched along the top of the guide bar, the guide bar can be driven rapidly back toward the operator. Either of these reactions can cause loss of saw control which can result in serious injury.

2. UNDERSTAND REACTIVE FORCES

Pinch-Kickback and Pull-In occur when the chain is suddenly stopped by being pinched, caught, or by contacting a foreign object in the wood. This results in a reversal of the chain force used to cut wood and causes the saw to move in the opposite direction of chain rotation. Either reaction can result in loss of control and possible serious injury.

• Pinch-Kickback

—occurs when the chain, on top of the bar is suddenly stopped when the top of the bar is used for cutting.
—rapidly drives the saw straight back toward the operator.

• Pull-In —

—can occur when the chain on the bottom of the bar is suddenly stopped.
—pulls the saw rapidly forward.

B. TREE FELLING TECHNIQUES

1. PLAN YOUR SAWING OPERATION CAREFULLY IN ADVANCE

- Clear the work area.** You need a clear area all around the tree where you can have secure footing.
- Study the natural conditions that can cause the tree to fall in a particular direction:**
 - 1.) The **WIND** direction and speed.
 - 2.) The **LEAN** of the tree.
 - 3.) **WEIGHTED** with **BRANCHES** on one side.
 - 4.) Surrounding **TREES** and **OBSTACLES**.
- Look for decay and rot.** If the trunk is rotted, it could snap and fall toward the operator.

3. PROCEDURE

Practice cutting a few small logs using the following technique to get the "feel" of using your saw before you begin a major sawing operation.

- Accelerate the engine to full throttle just before entering the cut** by squeezing the throttle trigger.
- Begin cutting with the spur against the log.** Figure 27.
- Keep the engine at full throttle the entire time you are cutting.**
- Allow the chain to cut for you; exert only light downward pressure.** If you force the cut, damage to the bar, chain, or engine can result.
- Release the throttle trigger as soon as the cut is completed,** allowing the engine to idle. If you run the saw at full throttle without a cutting load, unnecessary wear can occur to the chain, bar, and engine.
- Do not put pressure on the saw at the end of the cut** to avoid losing control when the cut is complete.
- Stop the engine before setting the saw down after cutting.**

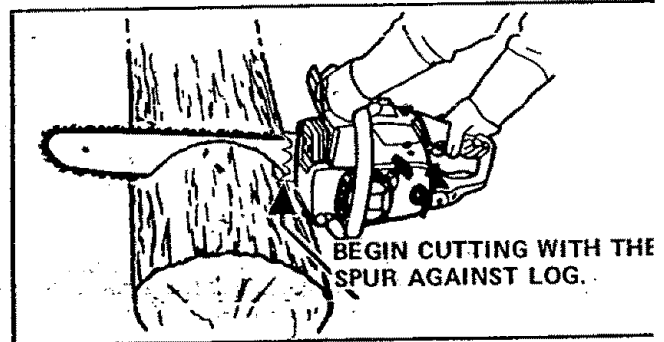


Figure 27

- Check for broken or dead branches** which could fall on you while cutting.
- Make sure there is enough room for the tree fall.** Maintain a distance of 2½ tree lengths from the nearest person or other objects. Engine noise can drown out warning call.
- Remove dirt, stones, loose bark, nail staples, and wire** from the tree where cuts are to be made.
- Plan to stand on the up-hill side** when cutting on a slope.
- Plan a clear retreat path** to the rear at diagonal to the line of fall. Figure 28.

2. FELLING SMALL TREES — LESS THAN 6" IN DIAMETER

- a. If you know the direction of fall:
 - 1.) Make a single felling cut on the side away from the direction of fall.
 - 2.) Cut all the way through.
 - 3.) Stop the saw, put it down, and get away quickly on your planned retreat path.
- b. If you are not sure which way the tree will fall, use the notch method described for felling large trees.

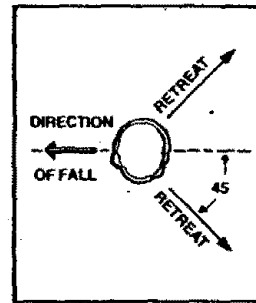


Figure 28

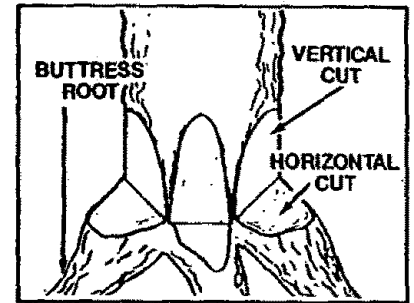


Figure 29

⚠ WARNING

DO NOT CUT:

- near electrical wires or buildings.
- if you do not know the direction of tree fall.
- at night since you will not be able to see well.
- during bad weather — strong wind, snow, rain, etc.

3. FELLING LARGE TREES — 6" DIAMETER OR MORE

The notch method is used to cut large trees. A notch is cut on the side of the tree in the desired direction of fall. After a felling cut is made on the opposite side of the tree, the tree will tend to fall into the notch.

NOTE: If the tree has large buttress roots, remove before making the notch. Cut into the buttresses vertically, then horizontally. Figure 29.

- a. Make the notch cut. Figure 30.
 - 1.) Cut the bottom of the notch first, through 1/3 of the diameter of the tree.
 - 2.) Complete the notch by making the slant cut.
 - 3.) Remove the notch of wood.
- b. Make the felling cut on the opposite side of the notch about 2" higher than the bottom of the notch.
- c. Leave enough uncut wood between the felling cut and the notch to form a hinge. Figure 31.

NOTE: The hinge helps to keep the tree from twisting and falling in the wrong direction.

- d. Use a wedge if there is any chance that the tree will not fall in the desired direction.

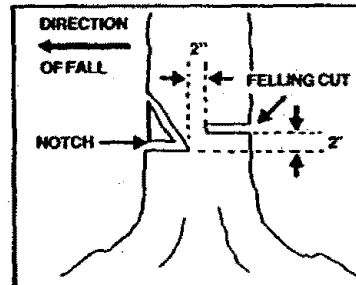


Figure 30

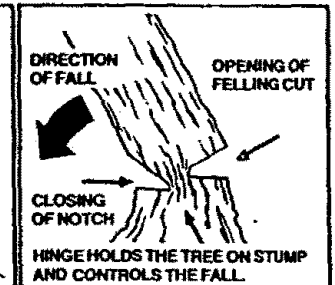


Figure 31

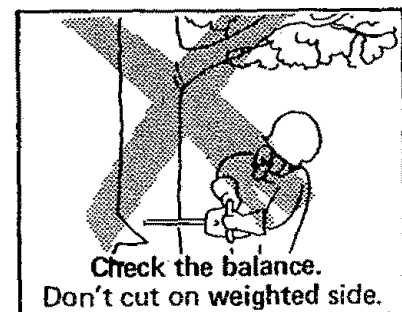
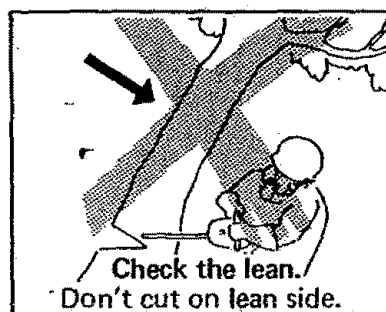
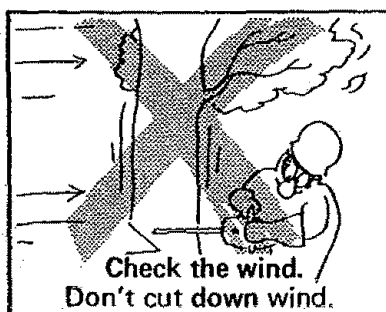
⚠ WARNING

Stay on the uphill side of the terrain to avoid the tree rolling or sliding downhill after it is felled.

NOTE: Before the felling cut is complete, drive wedges to open up the cut when necessary to control the direction of fall. Use wood or plastic wedges but *never* metal, to avoid kickback and chain damage.

- e. Be alert for signs that the tree is ready to fall:
 - 1.) cracking sounds
 - 2.) widening of the felling cut
 - 3.) movement in the upper branches.
- f. As the tree starts to fall, *stop the saw; put it down, and get away quickly on your planned retreat path.*
- g. Be extremely cautious with partially fallen trees that may be poorly supported. When a tree doesn't fall completely, set the saw aside and pull down the tree with a cable winch, block and tackle or tractor. To avoid injury do not cut down a partially fallen tree with your saw.

DON'T PUT YOURSELF IN THESE POSITIONS



C. BUCKING

Bucking is the term used for cutting a fallen tree to the desired log size.

1. IMPORTANT POINTS

- Cut only one log at a time.
- Cut shattered wood very carefully. Sharp pieces of wood could be flung toward the operator.
- Use a sawhorse to cut small logs. Never allow another person to hold the log while cutting and never hold the log with your leg or foot.
- Give special attention to logs under strain to prevent the saw from pinching. Make the first cut on the pressure side to relieve the stress on the log. Figure 32.
- Do not cut in an area where logs, limbs and roots are tangled such as in a blown down area. Drag the logs into a clear area before cutting by pulling out exposed and cleared logs first.
- Make the first bucking cut 1/3 of the way through the log and finish with a 2/3 cut on the opposite side. As the log is being cut, it will tend to bend. The saw can become pinched or hung in the log if you make the first cut deeper than 1/3 of the diameter of the log.

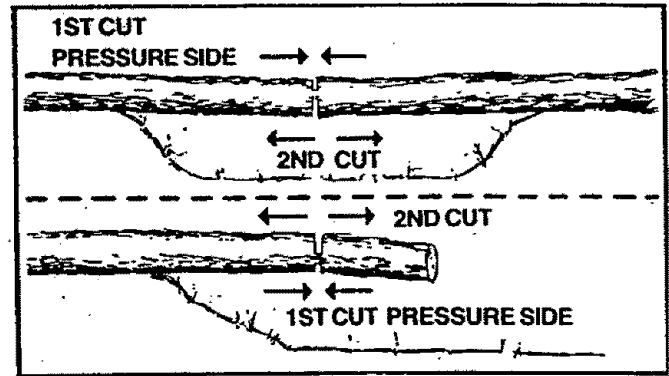


Figure 32

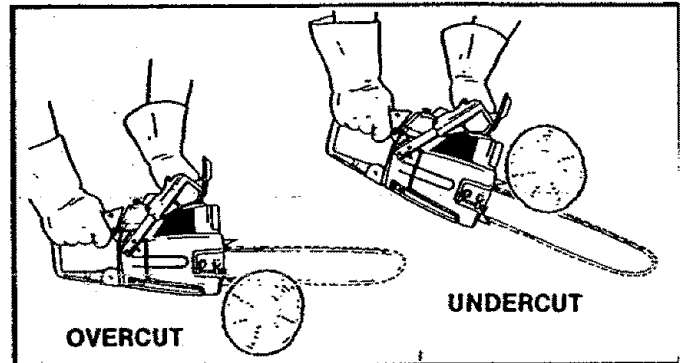


Figure 33

2. TYPES OF CUTTING USED Figure 33.

- **Overcutting** — begin on the top side of the log with the spur against the log; exert light pressure downward.
- **Undercutting** — begin on the under side of the log with the top of the saw against the log; exert light pressure upward. During undercutting, the saw will tend to push back at you. Be prepared for this reaction and hold the saw firmly to maintain control.

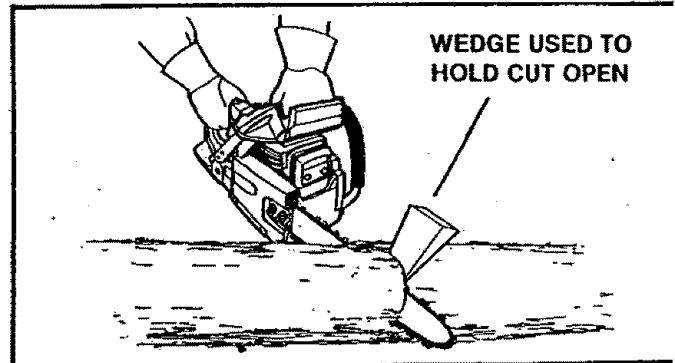


Figure 34

WARNING
Never turn the saw upside down to undercut. The saw cannot be controlled in this position.

WARNING
If saw becomes pinched or hung in a log, don't try to force it out. You can lose control of the saw resulting in injury and/or damage to the saw. Stop the saw, drive a wedge of plastic or wood into the cut until the saw can be removed easily. Figure 34. Restart the saw and carefully reenter the cut. To avoid kickback and chain damage, do not use a metal wedge. Do not attempt to restart your saw when it is pinched or hung in a log.

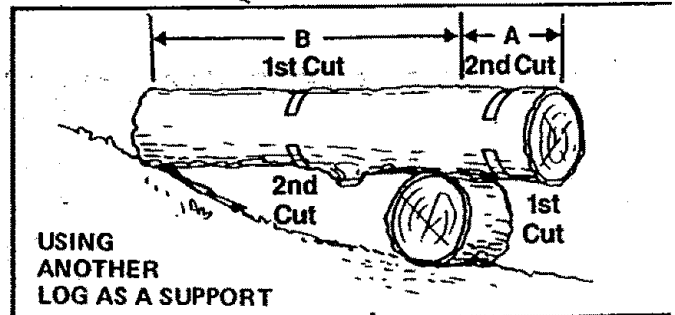


Figure 35

3. BUCKING— WITHOUT A SUPPORT

- Overcut with a 1/3 diameter cut.
- Roll log over and finish with an overcut.

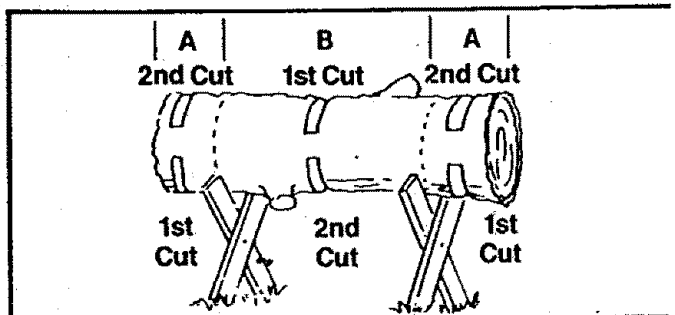


Figure 36

4. BUCKING — USING ANOTHER LOG AS A SUPPORT (Figure 35):

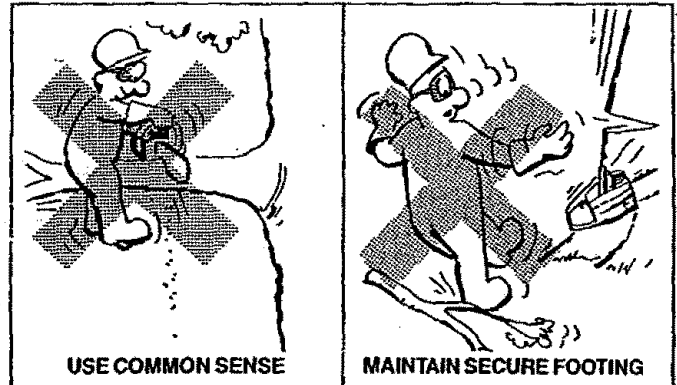
- a. In area A:
 - 1.) Undercut 1/3 of the way through the log.
 - 2.) Finish with an overcut.
- b. In area B:
 - 1.) Overcut, 1/3 of the way through the log.
 - 2.) Finish with an undercut.

5. BUCKING — USING A STAND (Figure 36):

- a. In area A:
 - 1.) Undercut 1/3 of the way through the log.
 - 2.) Finish with an overcut.
- b. In area B:
 - 1.) Overcut 1/3 of the way through the log.
 - 2.) Finish with an undercut.

⚠ WARNING

Do not stand on the log being cut. Any portion can roll causing loss of footing and control.



D. DEBRANCHING AND PRUNING

- Work slowly, keeping both hands on the saw with a firm grip. Maintain secure footing and balance.
- Watch out for springpoles. Use extreme caution when cutting small size limbs. Slender material can catch the saw chain and be whipped toward you or pull you off balance.
- Be alert for springback. Watch out for branches that are bent or under pressure as you are cutting to avoid being struck by the branch or the saw when the tension in the wood fibers is released.
- Keep a clear work area. Frequently clear branches out of the way to avoid tripping over them.

⚠ WARNING

Never climb into a tree to debranch or prune. Do not stand on ladders, platforms, a log or in any position which can cause you to lose your balance or control of the saw.

2. PRUNING

- a. Limit pruning to limbs shoulder height or below. Do not cut if branches are higher than your shoulder. Get a professional to do the job.
- b. Refer to Figure 38 for the pruning technique.
 - 1.) Undercut 1/3 of the way through the limb near the trunk of the tree.
 - 2.) Finish with an overcut farther out from the trunk.
 - 3.) Keep out of the way of the falling limb.
 - 4.) Cut the stump flush near the trunk of the tree.

⚠ WARNING

Be alert for and guard against kickback. Do not allow the moving chain to contact any other branches or objects at the nose of the guide bar when debranching or pruning. Allowing such contact can result in serious injury.

1. DEBRANCHING

- a. Always debranch a tree *after* it is cut down. Only then can debranching be done safely and properly.
- b. Leave the larger lower limbs to support the tree as you work.
- c. Start at the base of the felled tree and work towards the top, cutting branches and limbs. Remove small limbs with one cut. Figure 37.
- d. Keep the tree between you and the chain. Cut from the side of the tree opposite the branch you are cutting.
- e. Remove larger, supporting branches with the 1/3, 2/3 cutting techniques described in the bucking section.
- f. Always use an overcut to cut small and freely hanging limbs. Undercutting can cause limbs to fall and pinch the saw.

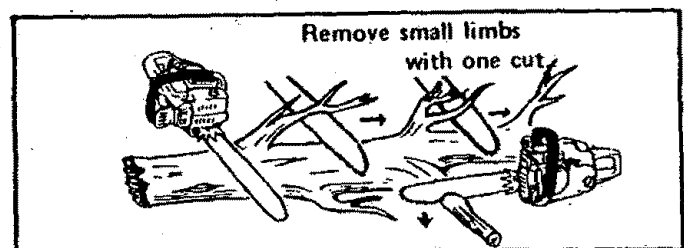


Figure 37

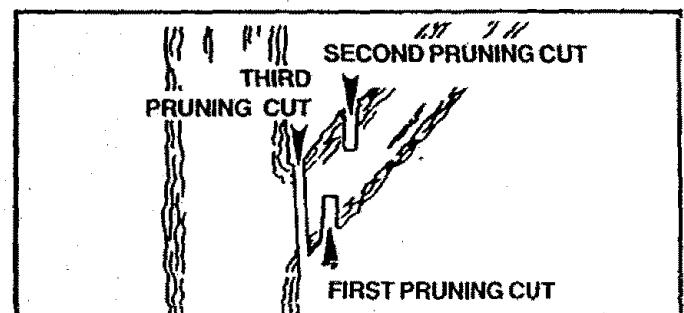


Figure 38

MAINTENANCE

A good maintenance program of regular inspection and care will increase the service life and help to maintain the safety and performance of your saw.

- Make all adjustments or repairs (except carburetor adjustments) with:
 - spark plug wire disconnected
 - engine cool as opposed to a unit that has just been run.

- Check the saw for loose bolts, screws, nuts, and fittings on a regular basis. Loose fasteners can cause an unsafe condition as well as damage to your saw.

⚠ WARNING

Have all chain saw service with the exception of the items listed in the maintenance section of this manual performed by your Sears Service Center.

A. GUIDE BAR AND CHAIN

Increase the service life of your Guide Bar and Chain by:

- Using the saw properly and as recommended in this manual.
- Maintaining correct Chain Tension. See "Chain Tension".
- Proper lubrication. See "Bar and Chain Lubricant".
- Regular maintenance as described in this section.

1. CHAIN MAINTENANCE

- Sharpen the chain when:
 - wood chips are small and powdery. Wood chips made by the saw chain should be about the size of the teeth of the chain.
 - saw has to be forced through the cut.
 - saw cuts to one side.

CAUTION: Always wear gloves when handling the chain. The chain is sharp enough to cut you even though it is too dull to cut wood.

a. SHARPENING INSTRUCTIONS

Items required:

Gloves	Medium Flat File
7/32" dia. file	Depth Gauge Tool
6" file holder	Vise

- 1.) Stop engine and disconnect spark plug.
- 2.) Adjust the chain for proper tension. See "Chain Tension".
- 3.) Work at the midpoint of the bar, moving the chain forward by hand as each cutter is filed.
- 4.) Sharpen cutters.
 - a.) Position flat side of file holder (with 7/32" round file) on cutter top plate and depth gauge. Figure 39.
 - b.) Hold the file holder level with the 30° guide mark parallel to the center of the chain. Figure 40.
 - c.) File from inside toward outside of cutter, straight across, on forward stroke only. Use 2 or 3 strokes per cutting edge. Figure 40.
 - d.) Keep all cutters the same length. Figure 41.
 - e.) File enough to remove any damage to cutting edge (side & top plate) of cutter. Figure 41.
 - f.) File 72SG chain to meet specifications shown in Figure 42.

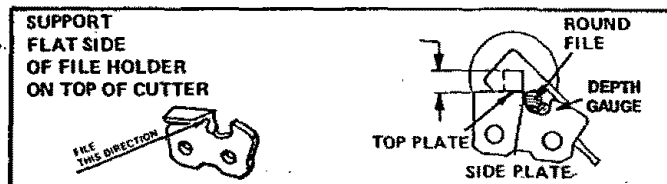


Figure 39

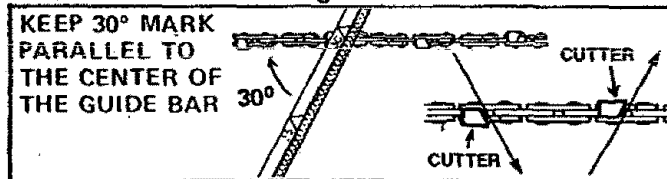


Figure 40

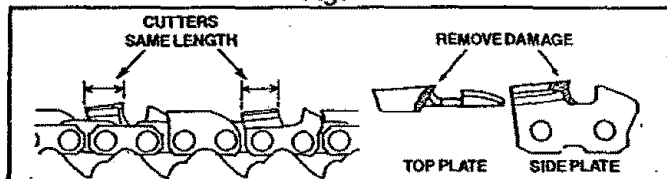


Figure 41

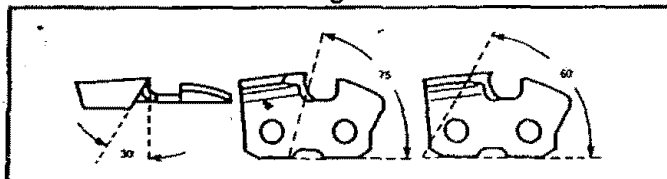


Figure 42

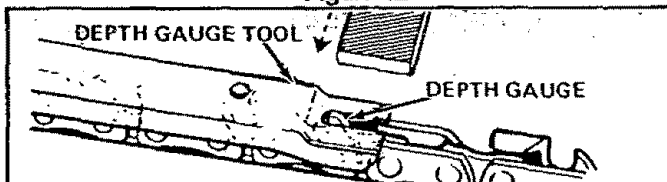


Figure 43

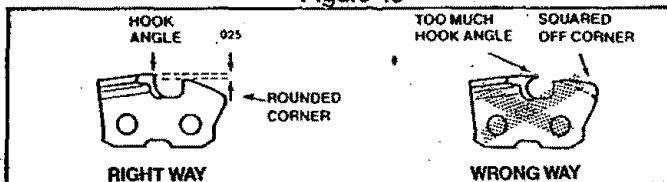


Figure 44

⚠ WARNING

Maintain the proper hook angle according to the manufacturer's specification for the chain you are using. Improper hook angle will increase the chance of kickback which can result in serious injury. Figure 42 & 44

5.) Correct Depth Gauges

- a.) Place depth gauge tool (Catalog No. 71-36557) over each cutter depth gauge. Figure 43.
- b.) File level with the flat file if depth gauge is higher than the depth gauge tool.
- c.) Maintain rounded front corner of depth gauge with a flat file. Figure 44.

NOTE: The very top of the depth gauge should be flat with the front half rounded off with a flat file.

⚠ WARNING

Depth gauge tool is required to insure proper depth gauge. Filing the depth gauge too deep will increase the chance of kickback which can result in serious injury.

b. CHAIN REPLACEMENT

- 1.) Use only the Low-Kick Chain specified for your saw in "Specifications" for replacement chain.
- 2.) Replace the chain when cutters or links break.
- 3.) See your Sears Service Center to replace and sharpen individual cutters for matching your chain.
- 4.) Always have a worn sprocket replaced by your Sears Service Center when installing a new chain to avoid excessive wear to the chain.

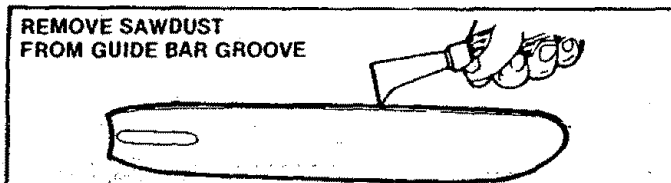


Figure 45

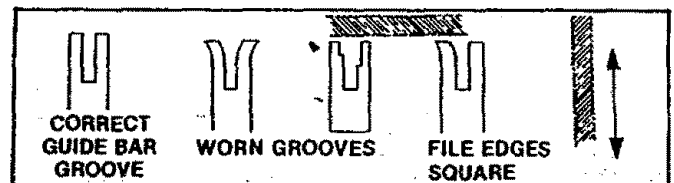


Figure 46

B. SPARK ARRESTOR

- Carbon deposits build up on the spark arrestor, as the saw is used and must be removed to avoid creating a fire hazard or causing engine damage.
- Replace the spark arrestor if breaks occur.
- Keep the spark arrestor clean at all times.
Clean:
 - as required
 - at least once for each 25-30 hours of operation.

Items required:
wire brush, 3/8" wrench

2. GUIDE BAR MAINTENANCE

- Conditions which can require guide bar maintenance:
 - saw cuts to one side
 - saw has to be forced through a cut
 - inadequate oil supply to bar and chain.
- Check the condition of the guide bar each time the chain is sharpened. A worn guide bar will damage the chain and make cutting more difficult.
- Replace the guide bar when:
 - the inside groove of the guide bar rails is worn.
 - the guide bar is bent or cracked.
- Use only the Reduced-Kickback Guide Bar specified for your saw in "Specifications" for replacement.
 - a. Remove the guide bar to service.
 - b. Clean oil holes at least once for each five hours of operation.
 - c. Remove sawdust from the guide bar groove periodically with a putty knife or a wire. Figure 45.
 - d. Remove burrs by filing the side edges of the guide bar grooves square with a flat file. Figure 46.
 - e. Restore square edges to an uneven rail top by filing with a flat file. Figure 39.

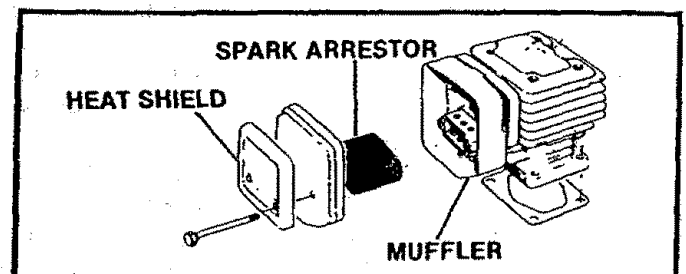



Figure 47

- a. Disconnect the spark plug wire.
- b. Remove the heat shield. Figure 36.
- c. Remove the screen from the diffuser.
- d. Clean the screen with a wire brush or replace if breaks are found.
- e. Reassemble parts.

C. STARTER ROPE

- Replace a starter rope that breaks.



WARNING

Always wear eye protection when servicing the starter rope. The recoil spring beneath the pulley is under tension. If the spring pops out serious injury can result.

NOTE: The recoil spring, located beneath the pulley, is under tension. If spring pops out, it will require considerable time and effort to reinstall. For this reason, you may want to let your Sears Service Center handle this repair. If you do try to repair the starter rope and the recoil spring pops out, take the unit to your Sears Service Center.

1. Remove the four screws on the side of the fan housing. Figure 48.

NOTE: Notice the different lengths of the screws and their proper locations while removing the screws.

2. Remove the fan housing.
3. If the starter rope is not broken, release the spring tension by pulling about 12 inches of rope from the pulley and catch the rope in the notch as shown. Figure 49.

NOTE: The tension on the starter spring will be released if the rope has broken.

4. Turn the pulley counterclockwise until the spring tension is released. Figure 49.
5. Remove the pulley screw in the center of the pulley. Figure 50.
6. Lift the pulley *carefully* while gently twisting it counterclockwise, and remove the old rope.
7. Move away from the fuel tank and melt the end of the new rope to go into the pulley.
8. Allow the melted end to drip once; then while the rope is still hot, pull the melted end through a clean rag to obtain a smooth, pointed end.
9. Insert one end of the rope through the handle and secure with a knot. Leave 3/16" pigtail behind knot. Figure 49 (inset).
10. Feed the rope through the housing and the round starter hole. Figure 50.
11. Guide rope inside pulley, then through the topside pulley hole by pushing the rope from the underside hole with a small round object such as a Phillips screwdriver. See insert, Figure 50.
12. Wrap rope counterclockwise around pulley ratchet and tuck loose end back under rope leaving a 3/8-1/2 inch tail. Pull tightly around ratchet. Figure 50.
13. Rewind all the rope onto the pulley, turning counterclockwise

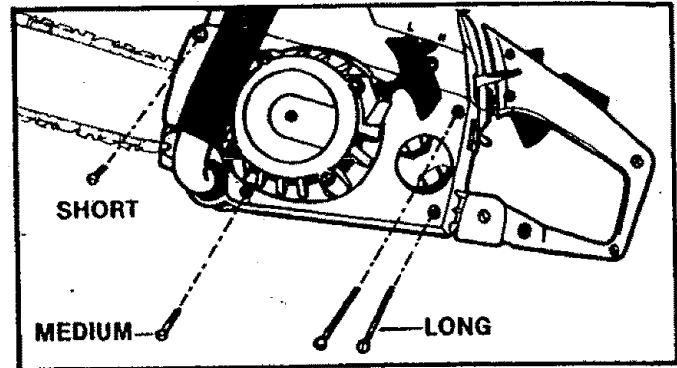


Figure 48

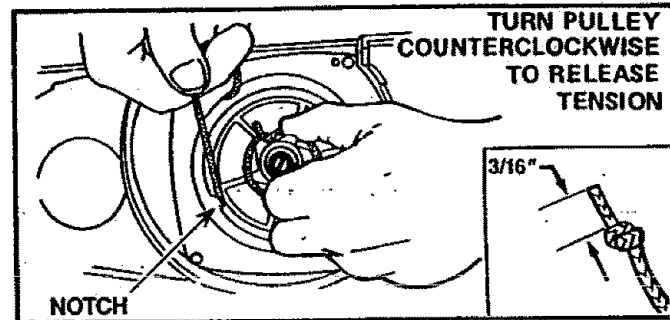


Figure 49

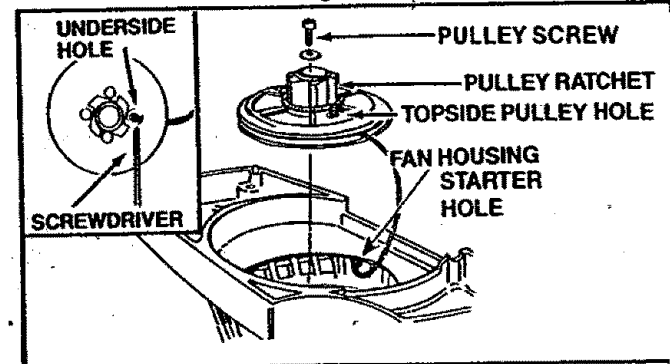


Figure 50

14. Set the pulley into the housing; push it down and engage the spring.
15. Replace and tighten the pulley screw.
16. Pull out 12 inches of rope and catch the rope in the notch in the pulley. Figure 51.
17. Turn the pulley 3 complete turns clockwise winding up the spring.
18. Hold the pulley and pull the starter rope the full extent of length and let the rope wind slowly.
19. Replace fan housing with the four screws in their proper location.

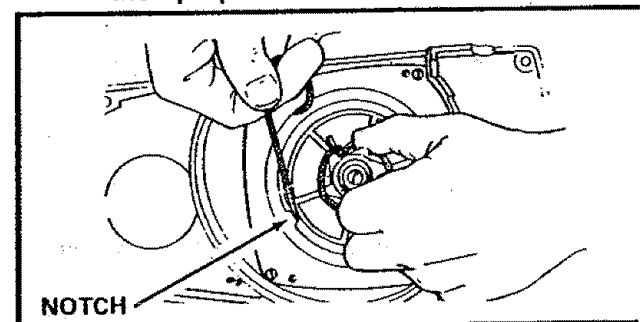


Figure 51

D. CARBURETOR ADJUSTMENTS

- The carburetor has been adjusted at the factory for sea level conditions. Adjustments may become necessary if the unit is used at significantly higher altitudes or if you notice any of the following conditions.

NOTE: Be sure to properly prepare the saw as described in "1. Preparation" below, before making any adjustments.

- Chain moves when the engine runs at idle speed. See "2. Idle Speed Adjustment."
- Saw will not idle. See "2. Idle Speed Adjustment" and "3. Low Speed Mixture Adjustment."
- Loss of cutting power which is not corrected by air filter cleaning. "See "5. High Speed Mixture Adjustment."
- Engine dies or hesitates when it should accelerate. See "4. Acceleration Adjustment."

CAUTION: Permanent damage will occur to any 2-cycle engine if incorrect carburetor adjustments are made.

- If the unit will not operate properly after making these adjustments, take the unit to your Sears Service Center.

⚠ WARNING

The chain may be moving during most of this procedure. Wear your protective gear and observe all safety precautions.

1. PREPARATION

- Stop engine.
- Use a fresh fuel mixture with proper gasoline/oil ratio. See "Fueling Your Engine".
- Place the saw on a solid, flat surface and make sure the chain will not contact any object.
- Locate the three (3) carburetor adjusting screw openings to the right of the air filter cover. Figure 52.
- Start the engine and allow engine to idle 3 minutes to warm up. *The engine must be at operating temperature for proper adjustments to be made.*

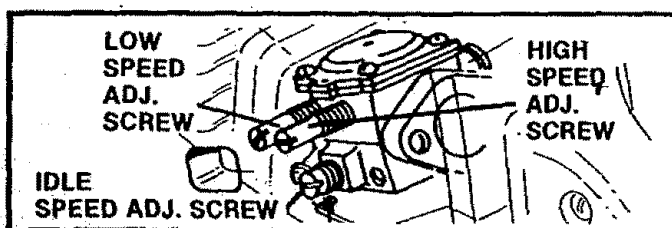


Figure 52

2. IDLE SPEED ADJUSTMENT

- Allow engine to idle.
- Adjust **Idle Speed Screw** until engine continues to run without stalling and without the chain moving.
 - Turn screw **clockwise** ➔ to increase engine speed if engine stalls or dies.
 - Turn screw **counterclockwise** ⬅ to slow engine down and/or to keep the chain from turning.
- No further adjustments are necessary if the chain does not move at idle speed and if performance is satisfactory.

⚠ WARNING

Recheck idle speed after each adjustment below. The chain must not move at idle speed to avoid serious injury.

3. LOW SPEED MIXTURE ADJUSTMENT

- Allow engine to idle.
- Turn the **Low Speed Mixture Screw** slowly clockwise ➔ until the RPM starts to drop. Note the position.
- Turn the **Low Speed Mixture Screw** counterclockwise ⬅ until the RPM speeds up and starts to drop again. Note the position.
- Set the **Low Speed Mixture Screw** at the midpoint between the two positions.

4. ACCELERATION ADJUSTMENT

If engine dies or hesitates instead of accelerating, turn the **Low Speed Mixture Screw** 1/16 of a turn at a time counterclockwise ⬅ until you have smooth acceleration.

5. HIGH SPEED MIXTURE ADJUSTMENT

CAUTION: Adjustments as small as 1/16 of a turn can affect engine performance. It is important to turn the screw only 1/16 of a turn per adjustment and test the performance of the saw before making further adjustments.

- Make a test cut.
- Adjust the **High Speed Mixture Screw** 1/16 of a turn as follows:
 - Clockwise ➔ if saw smokes or loses power.
 - Counterclockwise ⬅ if the saw has speed out of the cut but lacks power in the cut.
- Repeat test cut.
- Continue 1/16 of a turn adjustments until the saw runs smoothly in cut.

CAUTION: A too lean high speed setting (clockwise ➔ adjustment) will cause engine damage to any 2-cycle engine from overheating and lack of lubrication. Never set the high speed mixture screw so far clockwise ➔ that you have high engine speed but lack power while cutting. An effective approach follows:

- Turn screw counterclockwise ⬅ until engine loses power while cutting.
- Then, turn screw clockwise ➔ in 1/16 of a turn increments *only until* the engine has power while cutting.

NOTE: If the unit will not operate properly after making these adjustments, take the unit to your Sears Service Center.

E. CLUTCH, DRUM AND SPROCKET

⚠ WARNING

Do not start engine without Guide Bar, Chain, and Bar Clamp Housing completely assembled. The clutch can come off without the guide bar and chain completely assembled and serious injury can result. Do not loosen and spin the clutch off the crankshaft with a power tool. The clutch shoes and drum can separate causing the clutch to violently fly apart and serious injury can result.

- Take the saw to your Sears Service Center for full clutch inspection and service after each 100 hours of operation. *It is recommended that you do not try to service the clutch or drum/sprocket yourself unless you are a competent small-engine mechanic and have the proper clutch service tools.* Proper disassembly and repair of the clutch is extremely important to the life of the engine and the safety of the operator.
- Clutch maintenance is required when:
 - the chain continues to turn while engine idles after the idle speed screw has been adjusted to its capacity.
 - slippage occurs during a cut.
 - a chattering noise occurs during cutting.

- Clean the clutch, drum/sprocket and surrounding area daily during heavy use of the saw. Check to see that the clutch drum turns freely and smoothly.
- Inspect the drum/sprocket regularly for wear. A worn sprocket will make the chain run erratically and will shorten the life of the bar and chain. Figure 53.
- Replace the drum/sprocket whenever a new chain is installed in order to gain the full life expectancy of the chain. Use the following procedure:

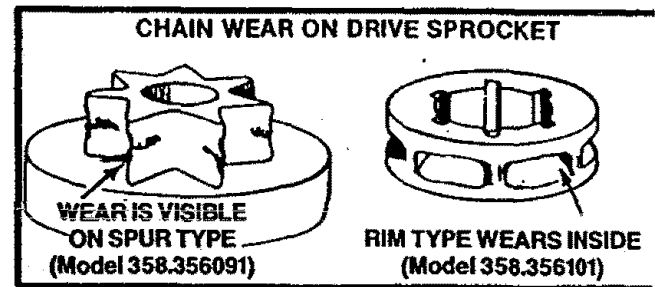


Figure 53

F. AIR FILTER

- A dirty air filter:
 - reduces cutting power
 - increases fuel consumption
- Clean the Air Filter:
 - frequently, especially under very dusty conditions.
 - always after 10 tanks of fuel mixture or 5 hours of operation whichever is less.

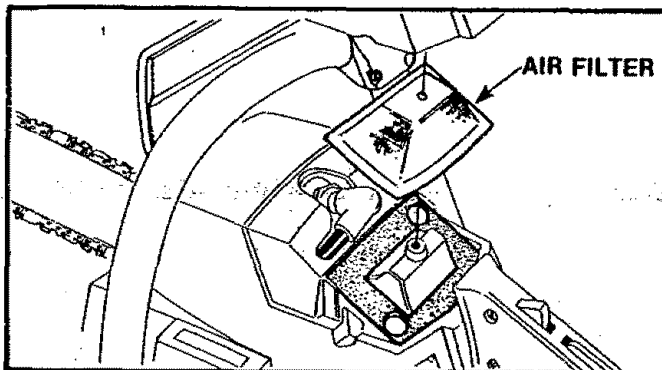


Figure 54

CAUTION: Never operate the unit without the air filter in place to avoid engine damage.

Items Required: soft bristled brush, such as a paint brush.

1. Clean off the carburetor cover and the area around it.
2. Close choke to prevent dirt from entering the carburetor.
3. Remove the carburetor cover. Figure 54.
4. Remove the air filter carefully.
5. Soak the filter in soap and water.

CAUTION: Do not use gasoline or other flammable liquid to clean the filter to avoid creating a hazard.

6. Brush away all dust and debris from the filter.
7. Allow filter to dry.
8. Brush away all debris from surfaces which were covered by the carburetor cover.
9. Replace filter and carburetor cover.

G. STORAGE

When your saw is to be stored for over 30 days, always:

1. Drain fuel tank in a safe manner. See "Fueling Your Engine — Fuel Safety."
2. Start engine and allow to run at idle speed until the engine stops.

NOTE: This will remove most of the fuel from the fuel system.

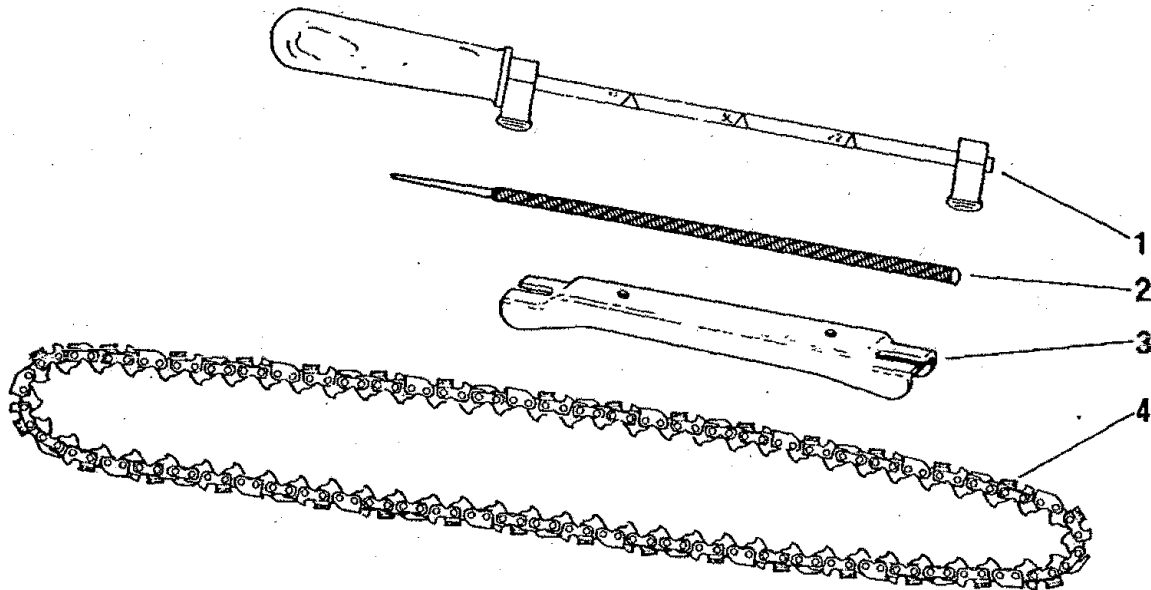
3. Drain oil tank.

CAUTION: Wear protective gloves when handling the chain. The chain is sharp and can hurt you even when it is not moving.

4. Remove, clean, and dry the bar and chain.
5. Store the chain in a container filled with oil to prevent rust.
6. Apply a coating of oil to the entire surface of the bar and wrap it in heavy paper, cloth or plastic.
7. Clean the outside surfaces of the engine.
8. Store the saw in a dry place, out of the reach of children, and away from where fuel vapors can reach open flames from hot water heater, electric motor switches, furnaces, etc.

H. MAINTENANCE ACCESSORIES

Available through your nearest Sears Store, Catalog Sales Office, or Service Center, but may not be furnished with your saw.



Key No.	Catalog No.	Description
1	71-36565	File Guide
2	71-36524	File-5/32" dia.-Twin Pack
	71-36526	File-7/32" dia.-Twin Pack
3	71-36557	Depth Gauge Tool
4	71-36867	Xtra GUARD® Chain - Oregon® (72SG-70) - 358.356091 (requires 7/32" dia. file)
	71-3639	Power Sharp® Chain - Oregon® (76PS-66) - 358.356101 (includes Stone Cartridge Ass'y.) - not shown

Catalog No.	Description
71-36407	— Spark Plug-Champion CJ-8Y
71-36627	— Carrying Case
71-36555	— 2-Cycle Engine Oil
71-36554	— Bar and Chain Lubricant (gallon size)
71-36556	— Bar and Chain Lubricant (quart size)
71-36370	— Lo-Kick® Guide Bar - 18" - 358.356101 (not shown)
71-30583	— Lo-Kick® Guide Bar - 20" - 358.356091 (not shown)

I. TROUBLE SHOOTING CHART

TROUBLE	CAUSE	REMEDY
ENGINE WILL NOT START	<ol style="list-style-type: none"> 1. Ignition Switch off. 2. Fuel tank empty. 3. Spark Plug not firing. 4. Fuel not reaching carburetor. 5. Engine flooded. 6. Compression low. 	<ol style="list-style-type: none"> 1. Move switch to "Start." 2. Fill tank with correct fuel mixture. 3. Install new plug. 4. Check for dirty fuel filter; clean. Check for kinked or split fuel line; repair or replace. 5. See Starting Instructions. 6. Contact your Sears Service Center.
ENGINE WILL NOT IDLE PROPERLY	<ol style="list-style-type: none"> 1. Idle speed set too low. 2. Idle speed set too high. 3. Low speed screw requires adjustment. 4. Crankshaft seals worn. 5. Compression low. 	<ol style="list-style-type: none"> 1. Adjust idle speed screw clockwise to increase speed. 2. Adjust idle speed screw counterclockwise to reduce speed. 3. See Carburetor Adjustments. 4. Contact your Sears Service Center. 5. Contact your Sears Service Center.
ENGINE WILL NOT ACCELERATE, LACKS POWER OR DIES IN THE CUT	<ol style="list-style-type: none"> 1. Carburetor requires adjustment. 2. Air filter is dirty. 3. Spark plug fouled. 4. Carbon build-up on exhaust ports. 5. Low Compression 	<ol style="list-style-type: none"> 1. See Carburetor Adjustments. 2. Clean or replace air filter. 3. Clean or replace Spark Plug and regap. 4. Contact your Sears Service Center. 5. Contact your Sears Service Center.
ENGINE SMOKES EXCESSIVELY	<ol style="list-style-type: none"> 1. Oil rich fuel mixture. 2. Choke partially on. 3. High speed needle requires adjustment. 4. Air filter dirty. 5. Crankcase leak. 	<ol style="list-style-type: none"> 1. Empty fuel tank and refill with correct fuel mixture. 2. Push Choke in. 3. See Carburetor Adjustments. 4. Clean or replace air filter. 5. Contact your Sears Service Center.
ENGINE RUNS HOT	<ol style="list-style-type: none"> 1. Fan housing dirty. 2. Fuel Mixture incorrect. 3. High Speed Mixture set too low. 4. Carbon build-up on spark arrestor screen. 5. Spark Plug incorrect. 6. Carbon build-up on exhaust ports. 	<ol style="list-style-type: none"> 1. Clean fan housing. 2. See Engine Fuel Mixture. 3. See Carburetor Adjustments. 4. Clean spark arrestor screen. 5. Replace with correct plug. 6. Contact your Sears Service Center.
OIL INADEQUATE FOR BAR AND CHAIN LUBRICATION	<ol style="list-style-type: none"> 1. Oil tank empty. 2. Improperly adjusted oiler. 3. Oil pump or oil filter clogged. 4. Guide bar oil hole blocked. 	<ol style="list-style-type: none"> 1. Fill oil tank. 2. Adjust oiler. 3. Contact your Sears Service Center. 4. Remove bar and clean.
CHAIN MOVES AT IDLE SPEED	<ol style="list-style-type: none"> 1. Idle speed requires adjustment. 2. Clutch requires repair. 	<ol style="list-style-type: none"> 1. See Carburetor Adjustments. 2. Contact your Sears Service Center.
CHAIN DOES NOT MOVE WHEN ENGINE IS ACCELERATED	<ol style="list-style-type: none"> 1. Chain tension too tight. 2. Carburetor requires adjustment. 3. Guide bar rails pinched. 4. Clutch slipping. 	<ol style="list-style-type: none"> 1. See Chain Tension. 2. See Carburetor Adjustments. 3. Repair or replace. 4. Contact your Sears Service Center.
CHAIN CLATTERS OR CUTS ROUGHLY	<ol style="list-style-type: none"> 1. Cutters damaged after striking foreign material. 2. Chain tension incorrect or loose. 3. Chain wear due to contact with dirt, sand or metal object in wood. 4. Sprocket worn. 5. Cutters dull, improperly sharpened; depth gauges too high. 	<ol style="list-style-type: none"> 1. Contact your Sears Service Center. 2. See Chain Tension. 3. Resharpener or replace chain. 4. Contact your Sears Service Center. 5. See Chain Sharpening Instructions.
CHAIN STOPS WITHIN THE CUT	<ol style="list-style-type: none"> 1. Chain cutter tops not filed flat. 2. Guide bar burred or bent; rail uneven. 3. Clutch slipping. 	<ol style="list-style-type: none"> 1. See Chain Sharpening Instructions. 2. Repair or replace Guide Bar. 3. Contact your Sears Service Center.
CHAIN CUTS AT AN ANGLE	<ol style="list-style-type: none"> 1. Cutters damaged on one side. 2. Chain dull on one side. 3. Guide bar bent, or worn. 	<ol style="list-style-type: none"> 1. Resharpener until all cutters have equal angles and lengths. 2. Resharpener until all cutters have equal angles and lengths. 3. Replace guide bar.
VIBRATION INCREASES	<ol style="list-style-type: none"> 1. Vibration isolators worn 2. Vibration isolators ripped, torn separated or out-of-round. 	<ol style="list-style-type: none"> 1. Contact your Sears Service Center. 2. Contact your Sears Service Center.

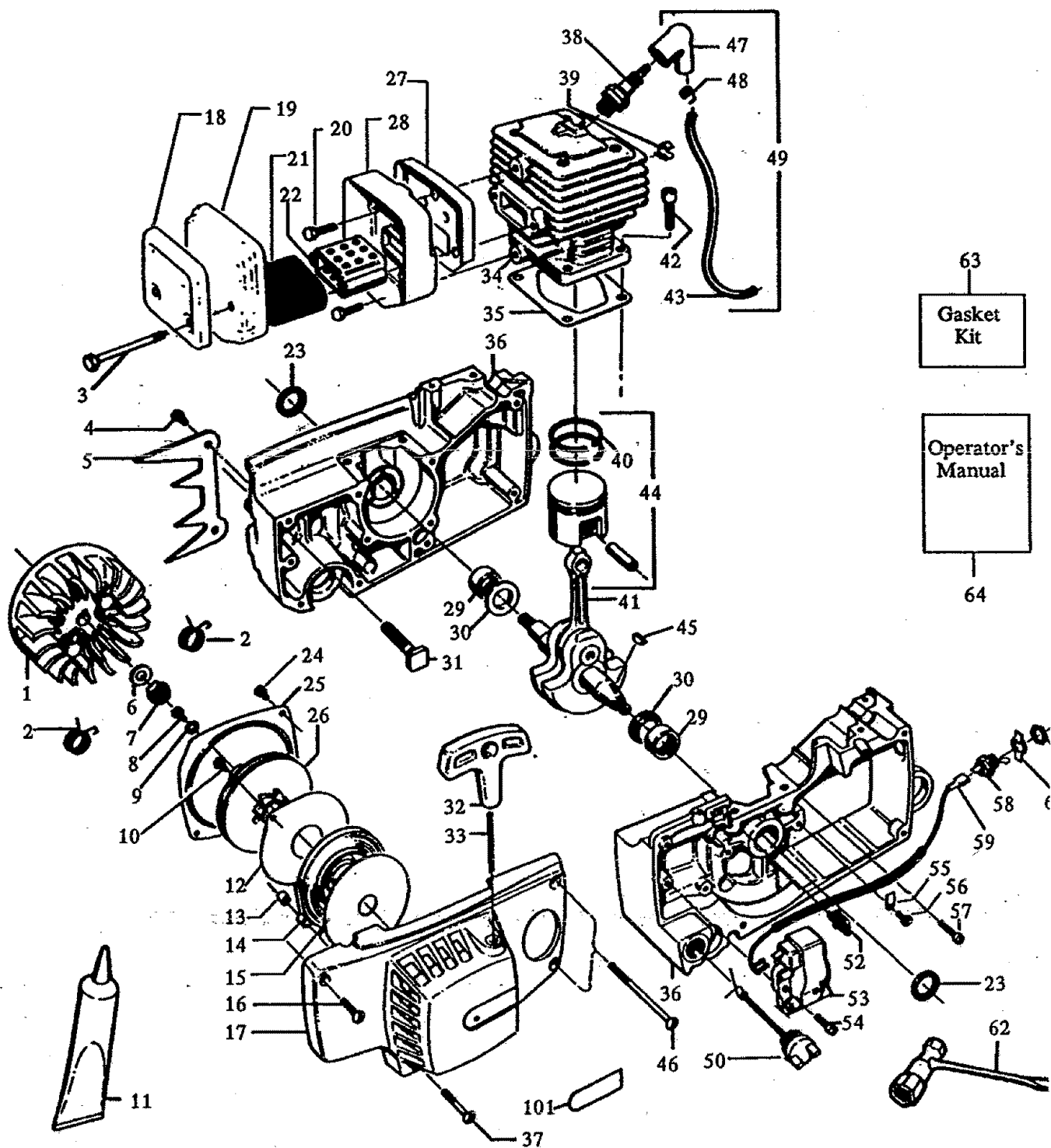
J. MAINTENANCE CHART

		before starting work	after each refueling stop or after finishing work or daily	weekly	monthly
Complete machine	Visual inspection (condition, leaks)	x		x	
	Clean		x		
Throttle trigger, safety throttle lock, stop switch	Check operation	x		x	
Filter in fuel tank	Clean Felt				x
	Replace felt -- when clogged or dirty				
Fuel tank	Clean				x
Chain oil tank	Clean				x
Chain lubrication	Check	x			
Saw chain	Inspect (sharpness, wear, damage)	x		x	
	Check chain tension	x		x	
	Sharpen -- when dull				
Guide bar	Inspect (wear, damage)	x			
	Clean when chain is removed for maintenance			x	
	Lubricate sprocket nose		x		
	Deburr			x	
	Replace -- when worn or damaged				
Chain sprocket	Check			x	
Air filter	Clean	x			
	Replace -- when worn or damaged				
Exhaust ports	Clean		x		
Cylinder fins	Clean				x
Carburetor	Check idle adjustment -- chain must not turn	x		x	
	Readjust idle -- when chain turns at idle				
Spark plug	Replace -- when fouled or damaged				
All accessible screws and nuts (not adjusting screws)	Retighten	x			
Vibration mounts	Inspect (tears, rips, separation, out-of-round)			x	
	Replace -- when worn or damaged				
Spark arrestor screen	Inspect	x			
	Replace -- when worn or damaged				

NOTES

NOTES

SEARS CHAIN SAW REPAIR PARTS—MODEL NO. 358.356091—3.7/20”
 MODEL NO. 358.356101—3.7/18”

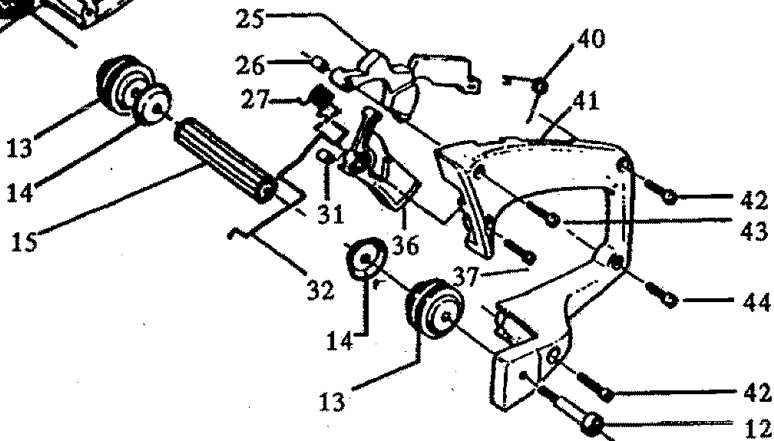
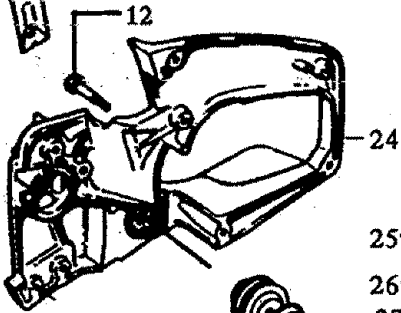
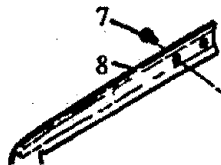
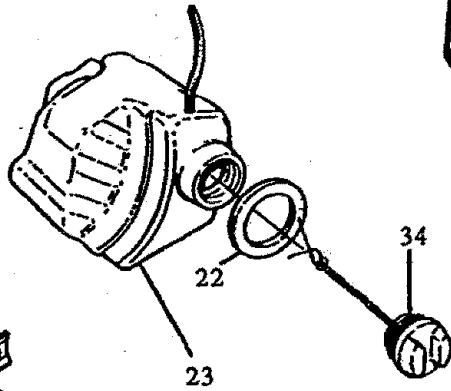
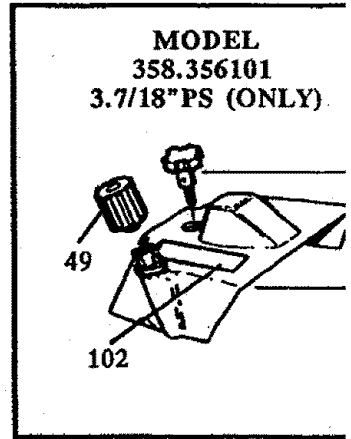
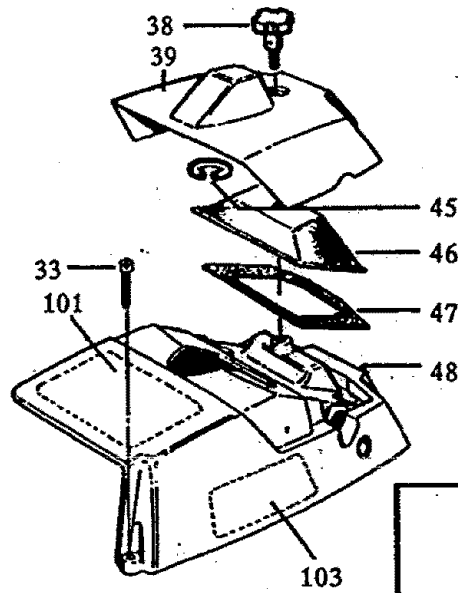
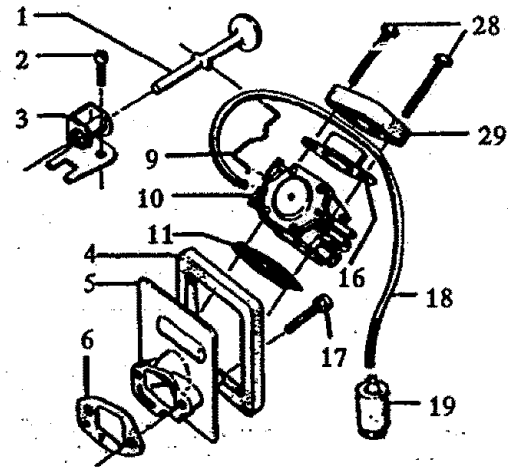


**SEARS CHAIN SAW REPAIR PARTS—MODEL NO. 358.356091—3.7/20”
MODEL NO. 358.356101—3.7/18”**

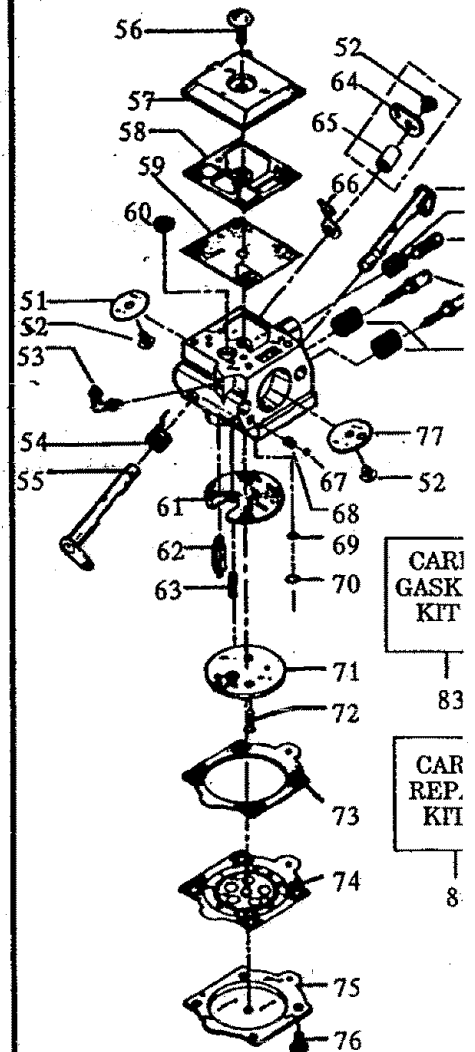
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	530-039095	Flywheel Ass'y. (Incl. #2)	37	530-015365	Screw
2	530-023817	Starter Dog Spring	38	530-030073	Spark Plug (CJ-8Y)
3	STD522525	Screw	39	530-015195	Clip
4	530-015434	Screw	40	530-025933	Piston Ring
5	530-024476	Spur	41	530-024492	Crankshaft and Rod Ass'y.
6	530-001626	Washer	42	530-001624	Screw
7	530-001722	Flywheel Nut	43	530-039096	High Tension Lead
8	530-015468	Screw	44	530-010626	Piston Ass'y. Kit (Incl. #40 and pin)
9	530-015123	Washer			
10	STD600603	Screw	45	STD580008	Flywheel Key
11	530-030054	Crankcase Sealant	46	530-015366	Screw
12	530-042066	Recoil Spring Inner Disc	47	530-039097	Spark Plug Boot
13	530-024329	Recoil Spring Bushing	48	530-039071	Spark Plug Connector
14	530-042051	Starter Recoil Spring	49	530-039102	High Tension Lead Ass'y. (Incl. #43,47, & 48)
15	530-042053	Recoil Spring Outer Disc			
16	530-015364	Screw	50	530-010444	Oil Cap Ass'y.
17	530-010720	Fan Hsg. Ass'y.	52	530-024334	High Tension Lead Clamp
18	530-024392	Muffler Shield	53	530-039093	Ignition Module (Incl. #49 & 59)
19	530-024391	Muffler Cover			
20	STD522505	Screw	54	530-015425	Screw
21	530-024385	Spark Arrestor Screen	55	530-023661	Lead Clamp
22	530-024384	Muffler Diffuser	56	STD600603	Screw
23	* 530-019097	Crankshaft Seal	57	STD511007	Screw
24	STD600603	Screw	58	530-023732	Toggle Switch
25	530-024232	Air Baffle	59	-	Switch Lead
26	530-028487	Starter Pulley		530-039099	(3/16)
27	530-024388	Muffler Back Plate		530-039115	(1/4)
28	530-024387	Muffler Body	60	530-023575	Ignition Switch Nut
29	530-032051	Crankshaft Bearings	61	530-024858	Start/Stop Plate
30	530-015354	Thrust Washers	62	530-031107	Scrench
31	530-030039	Bar Stud Replacement Kit	63	530-069190	Gasket Kit (*Indicates Contents)
32	530-042056	Starter Rope Handle			
33	530-069233	Rope Kit	64	530-066648	Operator's Manual
34	530-012067	Cylinder			
35	* 530-019129	Cylinder Gasket			
36		Crankcase Ass'y. (Incl. #23,29,31 & 50 on this page;also includes from page 31, #22,30,37,& 43)	101	530-026468	Fan Hsg. Decal
	530-010696	358.356091			
	530-010699	358.356101			

*Indicates Contents of Gasket Kit #69190

**SEARS CHAIN SAW REPAIR PARTS—MODEL NO. 358.356091—3.7/20”
MODEL NO. 358.356101—3.7/18”**



**CARBURETOR ASSEMBLY
PART NO. 530-035094**



CARJ
GASK
KIT

83

CAR
REP.
KIT

8

**SEARS CHAIN SAW REPAIR PARTS—MODEL NO. 358.356091—3.7/20”
MODEL NO. 358.356101—3.7/18”**

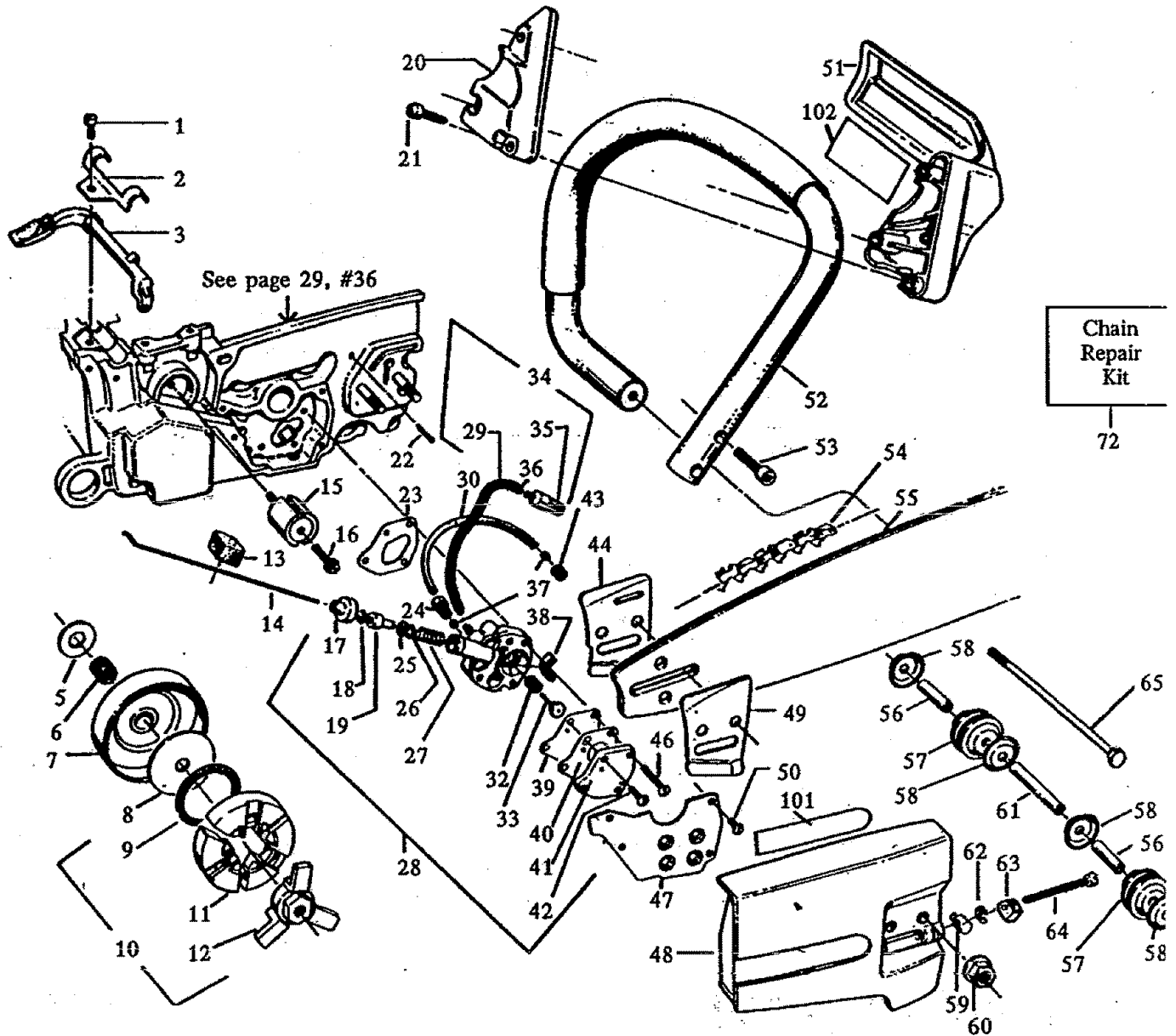
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	530-025919	Choke Rod	29	* 530-019104	Seal Adaptor
2	STD511003	Screw	31	530-032059	Bushing
3	530-010347	Bracket & Bushing Ass'y.	32	530-024699	Throttle Link
4	* 530-019107	Carb. Adaptor Seal	33	530-015168	Screw
5	530-024229	Adaptor	34	530-010331	Fuel Cap Ass'y.
6	* 530-019101	Gasket	36	530-026013	Throttle Trigger
7	530-015194	Screw	37	530-015369	Screw
8	530-012056	Handle Brace	38	530-024482	Knob
9	530-024383	Choke Wire	39	-	Carb. Cover Ass'y.
10	530-035094	Carburetor Ass'y.		530-024976	358.356091
11	* 530-019099	Gasket		530-025486	358.356101
12	530-015462	Screw	40	530-024378	Throttle Lock Spring
13	530-024373	Isolator	41	530-012054	Left Rear Handle
14	530-024376	Isolator Cup	42	530-015403	Screw
15	530-025258	Spacer	43	530-015393	Screw
16	530-024349	Carb. Seal Bracket	44	530-015608	Screw
17	530-015414	Screw	45	530-024877	Retaining Ring
18	530-069216	Line Kit	46	530-024548	Air Filter
19	530-091878	Fuel Pick-Up Ass'y.	47	530-019123	Gasket
22	* 530-019122	Seal	48	* 530-025895	Cylinder Shield
23	530-010286	Fuel Tank Ass'y. (Incl. #19 & 34)	49	530-025425	Adjusting Knob (358.356101)
24	530-012055	Right Rear Handle			
25	530-024357	Throttle Lock	101	-	Starting Instructions Decal
26	530-032053	Bushing Throttle Lock		530-026872	358.356091
27	530-025469	Trigger Spring		530-026871	358.356101
28	530-015245	Screw	102	530-025586	Sharpening Instructions Decal (358.356101)
			103	-	Replacement Bar & Chain Decal
				530-026883	358.356091
				530-026882	358.356101

*Indicates Contents of Gasket Kit, Key No. 62, p. 29.

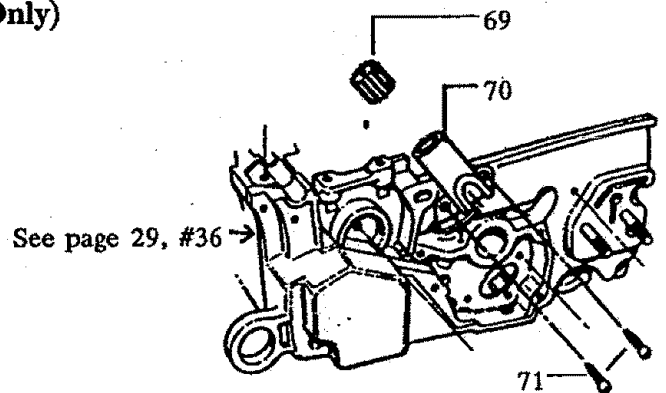
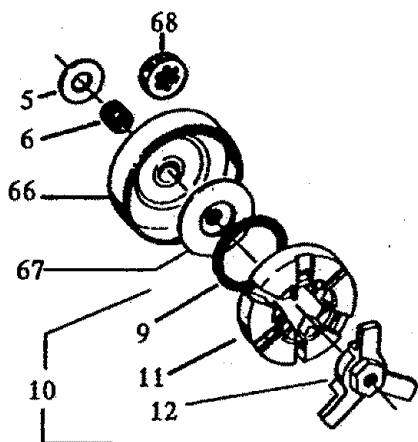
**Carburetor Assembly
Part No. 530-035094**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
51	530-035102	Throttle Valve	68	+ 530-035022	Choke Friction Spring
52	+ 530-035015	Screw	69	+ 530-035124	Check Valve Screen
53	530-035123	Fitting	70	+ 530-035096	Screen Retaining Ring
54	530-035119	Throttle Ret. Spring	71	530-035126	Circuit Plate Ass'y.
55	530-035101	Throttle Shaft Ass'y.	72	+ 530-035116	Circuit Plate Screw
56	530-035115	Screw	73	+ 530-035108	Mtrg. Diaphragm Gasket
57	530-035099	Fuel Pump Cover	74	+ 530-035114	Mtrg. Diaphragm Ass'y.
58	o 530-035109	Fuel Pump Gasket	75	530-035098	Mtrg. Diaphragm Cover
59	+ 530-035113	Fuel Diaphragm	76	+ 530-035021	Mtrg. Cover Screw Ass'y.
60	+ 530-035069	Inlet Screen	77	530-035104	Choke Valve
61	+ 530-035111	Circuit Gasket	78	530-035103	Choke Shaft Ass'y.
62	530-035106	Inlet Needle Valve	79	530-035121	Idle Screw Spring
63	+ 530-035118	Mtrg. Lever Spring	80	530-035117	Idle Adj. Screw
64	+ 530-035097	Throttle Lever (Outer)	81	530-035122	Hi & Lo Needle
65	530-035125	Throttle Lv. Bushing	82	530-035202	Mixture Needle Retainer
66	530-035105	Throttle Stop	83	530-035112	Carb. Gasket Kit (oIndicates Contents)
67	+ 530-035107	Choke Friction Ball	84	530-035127	Carb. Repair Kit (+Indicates Contents)

**SEARS CHAIN SAW REPAIR PARTS—MODEL NO. 358.356091—3.7/20”
MODEL NO. 358.356101—3.7/18”**



**MODEL 358.356101
3.7/18"PS (Only)**



**SEARS CHAIN SAW REPAIR PARTS—MODEL NO. 358.356091—3.7/20”
MODEL NO. 358.356101—3.7/18”**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	STD511003	Screw	40	* 530-019102	Gasket
2	530-024351	Bracket	41	530-025987	Pump Cover
3	530-024348	Manual Oiler Lever	42	530-015297	Screw
5	530-015357	Thrust Washer	43	530-015422	Tubing Nut
6	530-032049	Clutch Bearing	44	530-025925	Inner Guide Bar Plate
7	-	Drum & Sprocket Ass'y.	46	STD510810	Screw
	530-048069	358.356091	47	530-024399	Oiler Cover Plate
	530-048071	358.356101	48	-	Bar Clamp Hsg. Ass'y. (Incl. #59,62,63 & 64)
8	530-024465	Clutch Plate (358.356091)		530-010727	358.356091
9	530-024353	Clutch Spring		530-010741	358.356101
10	-	Clutch Ass'y. (Incl. #9,11 & 12	49	530-025924	Outer Guide Bar Plate
	530-010291	358.356091	50	STD600603	Screw
	530-010466	358.356101	51	530-024466	Handguard
11	530-024352	Shoe Clutch	52	530-022258	Handlebar Ass'y.
12	-	Clutch Spider	53	STD522510	Screw
	530-026246	358.356091	54	-	Chain
	530-025428	358.356101		71-36867	358.356091
13	* 530-023373	Oiler Rod Boot		71-3639	358.356101-Incl. #70
14	530-024347	Manual Oiler Rod	55	-	Bar
15	530-024225	Crankcase Side Isolator		71-30583	20" SN-358.356091
16	STD511005	Screw		71-36370	18" SN-358.356101
17	530-023356	Oil Pump Cap	56	530-015362	Isolator Mount Spacer
18	STD583037	Oil Pump Retainer Ring	57	530-024373	Front Handlebar Isolator
19	530-023357	Oil Pump Plunger	58	530-024376	Front Isolator Cups
20	530-024467	Handguard Cap	59	530-025044	Bar Adj. Pin
21	530-015509	Screw	60	530-015445	Flange Nut
22	530-069185	Oil Vent Replacement Kit	61	530-015361	Spacer
23	* 530-019103	Gasket	62	STD581018	E Ring Adj. Screw
24	530-002615	Oiler Tubing Nut	63	530-025414	U-Clip
25	530-019029	Oil Pump Quad Ring	64	530-015385	Screw
26	530-015418	Washer	65	530-015391	Screw
27	530-023358	Oil Pump Spring	66	530-048071	Clutch Drum & Adaptor Ass'y. - (7 Spline 3/8P)-(358.356101)
28	530-069062	Oil Pump Service Kit Auto/Manual (Incl#17, 18,19,24,25,26,27,30, 32,33,34,37,38,39, 40,41, & 42)	67	530-015484	Plate Clutch (358.356101)
29	530-024677	Oil Line Protector Spring	68	952-004746	Floating Rim Sprocket (3/8P - 7 Tooth) (358.356101)
30	530-021038	Discharge Oil Line	69	530-025421	Slide Button
32	530-023699	Diaphragm Spring	70	530-069099	Stone & Carrier Ass'y. (Incl. #69) - (358.356101)
33	530-022197	Button and Pintle Ass'y.	71	STD511005	Screw - (358.356101)
34	530-010289	Oil Line Pick-Up Ass'y. (Incl. #29,35 and 36)	72	530-052079	Chain Repair Kit (358.356101 Only) Op- tional
35	530-024676	Oil Pick-Up Line Weight	101	530-026468	Bar Clamp Hsg. Decal
36	530-021031	Oil Line	102	530-026849	Handguard Decal
37	530-002464	Sleeve - 1/8 Tubing	-	530-026550	Chain Tensioning Decal
38	530-024691	Oil Pump Vent Filter			Not Shown
39	* 530-024345	Oil Pump Diaphragm			

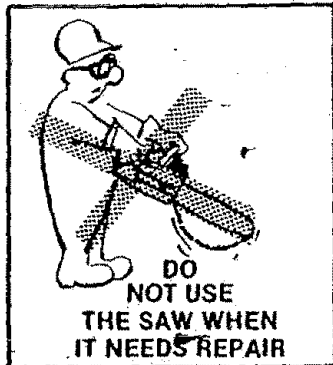
*Indicates Contents of Gasket Kit, No. 63, p.29.

NOTES

QUICK REFERENCE PAGE

**Read and follow all Safety Rules, Precautions and Operating Instructions.
Failure to do so can result in serious personal injury.**

	page
SAFETY RULES AND PRECAUTIONS	3-5
PREPARATION	3-5
1. Wear personal protective gear — gloves; safety footwear; snug fitting clothing; and eye, hearing and head protection.	
2. Check for worn, loose, missing or damaged parts and repair or replace as necessary.	
3. Check the chain for sharpness and tension.	
4. Keep children, bystanders and animals a minimum of 30 feet (10 meters) away from the work area.	
5. Plan your sawing operation carefully in advance.	
FUEL AND OIL	9-10
1. Eliminate all sources of sparks or flame where fuel is mixed, poured, or stored.	
2. Use 16 parts regular, unleaded gasoline to 1 part air-cooled, 2-cycle engine oil.	
3. Use gasoline not over 2 months old.	
4. Mix and pour fuel in an approved, marked container and in an outdoor area.	
5. Move a minimum of 10 feet (3 meters) away from fuel and fueling site before starting engine.	
6. Fill the oil tank each time the fuel tank is refueled.	
STARTING THE ENGINE	11
1. Set saw on flat ground with the saw chain free to turn without making contact with any object.	
2. Hold front handlebar with left hand and place right foot through rear handle to stabilize saw.	
3. Use less than the full extent of the rope per pull.	
4. Release the throttle detent button after engine starts, allowing engine to idle.	
OPERATING THE SAW	14
1. Cut wood only.	
2. Accelerate the engine to full throttle before entering the cut.	
3. Begin cutting with the spur up against the log.	
4. Cut only at full throttle.	
5. Release the trigger as soon as the cut is completed.	
6. Stop the engine before setting the saw down after cutting.	
MAINTENANCE	18
1. Adjust or have the carburetor adjusted if the chain moves when the engine idles.	
2. Disconnect spark plug before performing maintenance except for carburetor adjustment.	
3. Check the guide bar for wear each time the chain is sharpened.	
4. Clean the air filter frequently and always after 10 tanks of fuel mixture or 5 hours of operation, whichever is less.	
5. Clean spark arrestor at least once for each 25-30 hours of operation.	
6. Take the saw to your Sears Service Center for full clutch inspection after each 100 hours of operation.	
7. Drain fuel tank in a safe manner before storing the unit for 30 or more days.	
8. Store saw in a dry place out of the reach of children.	



SEARS operator's manual

MODEL NO.
358.356091-3.7/20"
358.356101-3.7/18"PS

How to Order Repair Parts

SEARS SERVICE

The Model Number will be found under the handle with the Serial Number. Always mention the Model Number when requesting service or repair parts for your Chain Saw.

All parts listed herein may be ordered from any Sears Service Center and most Sears Stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

1. The PART NUMBER
2. The MODEL NUMBER
358.356091-3.7/20"
358.356101-3.7/18"PS
3. The PART DESCRIPTION
4. The NAME OF ITEM —
Chain Saw

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution center for handling.



When you buy merchandise from Sears you get an extra something that nobody else can offer ... Sears Service.

Across town or across the country, Sears Service follows you, providing trustworthy competent service technicians using only Sears specified factory parts.

TOTAL-TESTED
for Quality and Dependability

- ✓ Parts are inspected to meet rigid quality control standards
- ✓ Each saw is started and tuned electronically before it's packed to insure dependability
- ✓ Another quality check: saws are randomly selected and re-inspected
- ✓ Professional woodcutters performance-test our saws under actual working conditions

Sears, Roebuck and Co., Chicago, ILL 60684 U.S.A.