

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

NUMBER	ENJOY USING YOUR NEW CRAFTSMAN 3.7 CHAIN SAW TO MAKE	
THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON THE MODEL PLATE LOCATED BELOW "ON-OFF" SWITCH.		
YOU SHOULD RECORD BOTH MODEL AND SERIAL NUMBERS AND KEEP IN A SAFE PLACE FOR FUTURE REF- ERENCE.	LOG DISCS for paths, patios, steps. Simplest of all Chain Saw projects. Cut 4" thick slices from a log at least 10" in diameter. Treat with wood preservative and place on a	

firm bed of crushed rock. FIRE WOOD...

FENCES...

is self supporting.

Your National Forest Ranger may permit

removal of dead or downed timber for a modest fee -- a clean forest is less suscep-

tible to fires and disease. Quick burning

evergreens will split easily to kindle slow-

er burning hardwoods. Measure your fire-

place before you start - logs don't bend.

make good neighbors, especially the rus-

tic split rails so suggestive of the "good

old days". Use cedar or redwood, or any

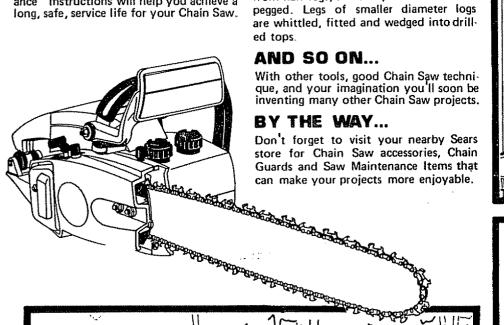
good splitting wood. Split rails with an ax and wedges, notch and fit so your fence

TABLES AND BENCHES.. from half logs, slices or planks drilled and

## **CONGRATULATIONS...**

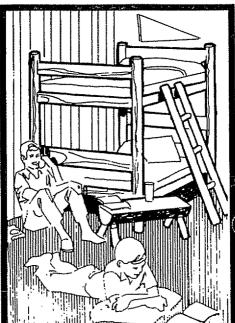
on your purchase of a Craftsman 3.7 Chain Saw. It has been designed, engineered and manufactured to give you dependability and performance. Should you experience any problem you cannot easily remedy, please contact your nearest Sears, Roebuck and Co. store. They have competent, well-trained technicians and the proper tools and parts to service or repair this unit.

Please read and retain this manual. Following the "Rules for Safe Operation", "Assembly", "Operation", and "Maintenance" instructions will help you achieve a long, safe, service life for your Chain Saw.



ji HE





# TABLE OF CONTENTS

TROUBLE REPAIR P										
MAINTEN. CHAIN	ANCE SHARF	INSTR PENIN	UCT G IN	ION: ISTR	s UC	TIC	ĴN:	s		. 9 . 9
OPERATIO	)N INS	TRUC		VS.	6		ч	.,	٠	. 5
ASSEMBL	Y INST	RUCT	ION	Ş.,	4	ň	'n	łi.	Б	. 2
RULES FC	)R SAF	E OP	ERA	TION	1	•	÷		,	. 1

FULL 90-DAY WARRANTY
ays from the date of purchase, Sears will <mark>repair any de</mark> aterial or workmanship in this gasoline <mark>chain saw at no</mark>
ain saw is used for commercial or rental purposes, the applies for only thirty days from the date of purchase
service is available by contacting the nearest Sears store Center throughout the United States.
ranty gives you specific legal rights, and you may also er rights which vary from state to state.
Sears, Roebuck and Co. Sears Tower BSC 41-3 Chicago, III. 60684

#### SPECIAL NOTE

In some states, such as California, laws covering chain saws (having internal combustion engines), when used in areas covered by forests, brush or grass (excluding residential lawns and landscaped areas), necessitate fitting the saw's muffler with an additional heat shield to reduce muffler surface temperatures. Sears offers such a shield as an optional accessory kit. Muffler Heat Shield Kit Catalog No. 32-36178 can be purchased at your Sears Service Center. Check with your state conservation or forestry department about their regulations before operating this Sears Chain Saw on any forest-covered, brush-covered or grass-covered areas. Oregon and Washington have similar requirements with respect to forest-covered lands.

# **RULES FOR SAFE OPERATION**

#### 1. KNOW YOUR SAW.

Use your Owner's Manual to become familiar with your Saw and proper cutting methods before you begin cutting.

 LIMIT YOUR SAW'S USE TO TRAINED ADULTS. Never allow children to operate your Saw or adults lacking proper instruction.

#### 3. PLAN AHEAD.

Keep onlookers and pets a safe distance away when starting or operating your Saw.

USE EYE, EAR, HEAD, HAND, AND FOOT PROTEC-TION and never wear loose clothing or jewerly.

Take time to carefully study your sawing operation, planning cuts required and clearing retreat paths. Be alert to conditions which might alter your plans as you are cutting.

#### 4. TAKE PRECAUTIONS AGAINST FIRE.

Take fire fighting equipment with you when operating the Saw in dry areas.

Handle fuel with care:

- a. Use approved gasoline and oil containers and store them away from heat or open flame, out of the reach of children.
- b. Turn the engine off and let your Saw cool before removing the fuel tank cap and refueling your Saw.
- d. Do not smoke while operating or refueling your Saw.
- d. Refuel your Saw outdoors in a clear area.
- e. Wipe your Saw clean of any spilled oil or fuel and move away from the fueling area before starting your Saw.

Never run the Saw without the muffler or muffler screen.

#### 5. RESPECT YOUR SAW.

Do not start or run Saw indoors to avoid Carbon Monoxide poisoning from exhaust gases.

When starting Saw, pick an area clear of loose gravel or flammable debris, hold Saw firmly to the ground without letting the Guide Bar touch anything, and start your Saw without assistance.

Take a position uphill of expected fall or roll of logs, then practice cutting on fallen logs before felling trees. Take special care when cutting wood that is under stress.

Don't operate your Saw when you're tired. Fight carelessness and avoid distractions.

Cut wood only.

When sawing, maintain a firm grip with both hands, thumbs opposing fingers and a secure footing. Do not saw on ladders, platforms or in any other position which might endanger your balance and thus cause loss of positive Saw control. Keep hands, body and clothing away from the moving chain.

Stop Saw Engine and wear heavy gloves when handling Saw Muffler area or Chain.

6. LOOK OUT FOR KICKBACK. When the moving chain or the tip of the guide bar is stubbed or pinched in a cut, the bar and chain can be thrown up and back or down and back with considerable force. THIS IS KICKBACK!

Avoid touching limbs or other objects with the tip of the Guide Bar while the chain is moving.

Stand slightly to the side rather than directly behind Guide Bar.

Do not reach above shoulder height or outward beyond your point of positive Saw control as you cut.

Avoid striking cement or metal, etc. buried in the wood.

Obtain full chain speed before cutting or resuming previous cut. Start cutting with front of Saw Frame against log or tree. Never use your Saw for boring.

Plan cutting to avoid situations which might cause Guide Bar to be pinched in a cut. If, however, your Saw does become pinched in a cut, STOP THE ENGINE BEFORE RE-MOVING IT.

#### 7. MAINTAIN SAW IN GOOD WORKING ORDER.

Keep your entire Saw clean of sawdust, chaff, oil or fuel and keep handles clean and dry.

Keep oil and fuel caps, bolts and screws tight.

Make all adjustments (except carburetor) with engine stopped and spark plug disconnected.

Adjust carburetor so that chain stops when throttle trigger is released.

Keep chain sharp and properly tensioned.

Stop your Saw, inspect and repair if necessary after chain strikes a foreign object.

All service other than that included in this Manual should be performed by a competent technician.

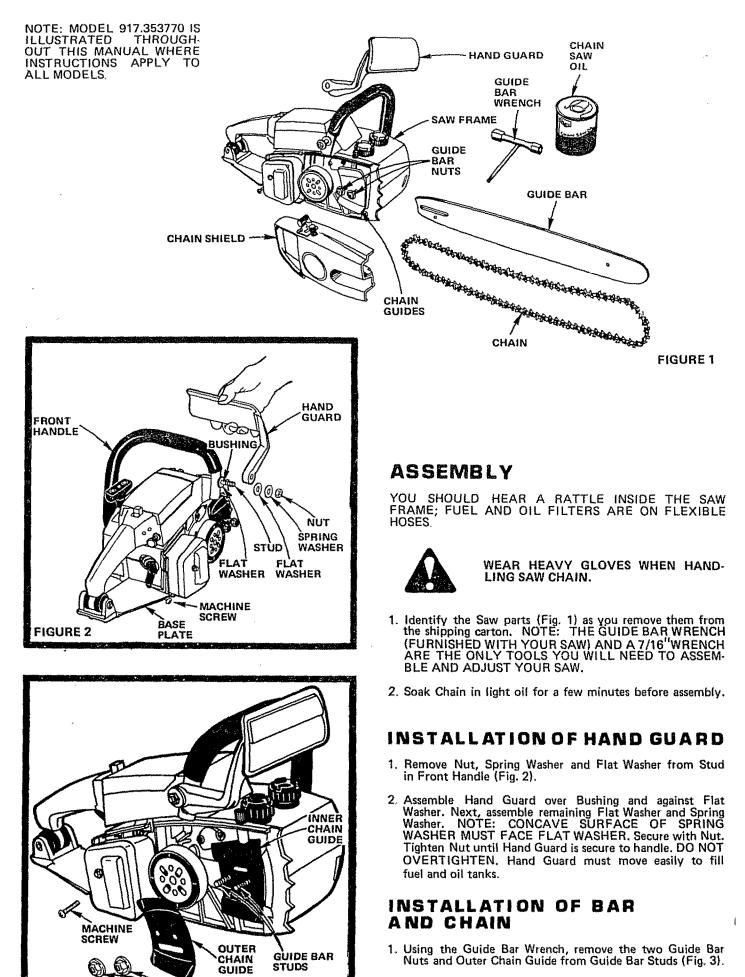
#### 8. TRANSPORT AND STORE SAFELY.

Stop your Saw engine before setting it down or carrying it to another location.

Carry stopped Saw with Guide Bar behind (preferably covered) and muffler away from your body.

Cool your Saw completely and cover Guide Bar before transporting in any vehicle.

Drain oil and fuel tank and run Saw engine to use remaining fuel, then cool completely before storing in any enclosure.

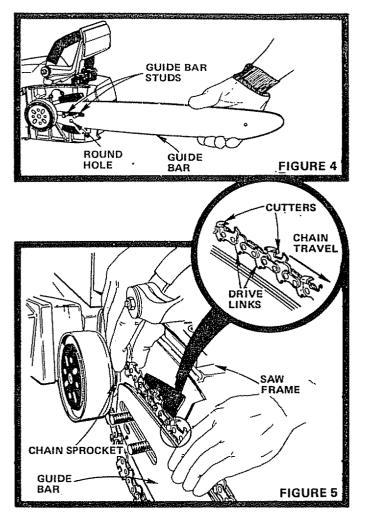


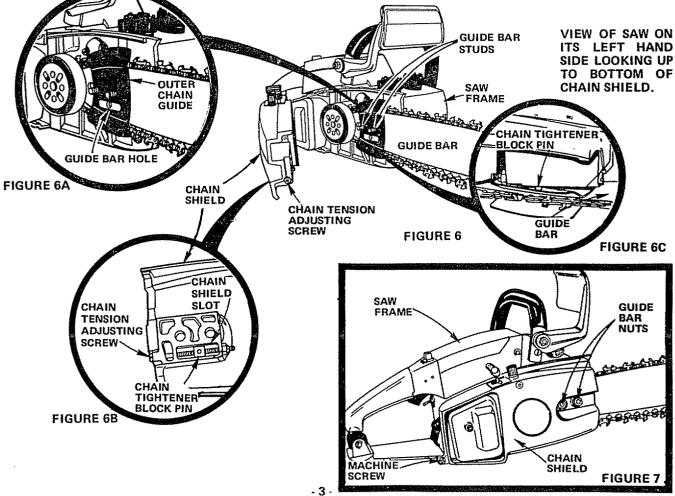
GUIDE BAR

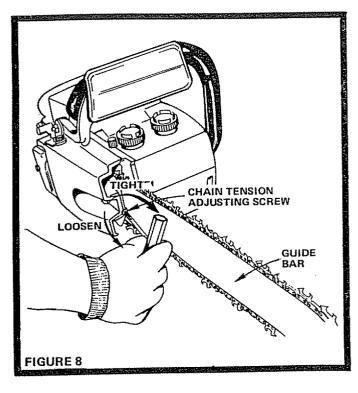
**FIGURE 3** 

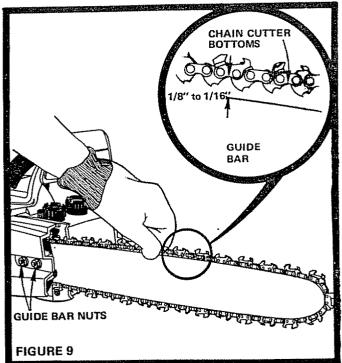
- 2. Remove Machine Screw from Base Plate (Fig. 2).
- 3. Be sure upper and lower edges of Inner Chain Guide are -2. bent TOWARD the Saw Frame (Fig. 3).

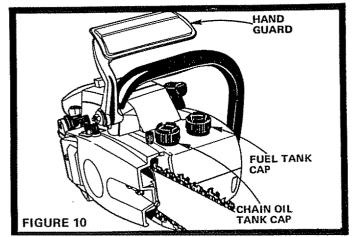
- 4. Place Guide Bar over Guide Bar Studs. NOTE:BAR GOES ON ONLY ONE WAY-NOTE CONTOUR OF BAR (FIG. 4). ALSO, THE SMALL ROUND HOLE COMPLETELY THRU THE BAR IS BELOW BAR SLOT.
- 5. Hold Guide Bar slightly away from the Saw Frame. Push Bar as far TOWARD the Chain Sprocket as it will go. Place Chain Drive Links around Chain Sprocket and in Guide Bar groove (Fig. 5). SHARP EDGES OF CUTTERS MOVE AWAY FROM THE SAW FRAME ON TOP OF THE GUIDE BAR (FIG. 5 - INSET).
- 6. Place Outer Chain Guide on Guide Bar Studs with upper and lower edges bent AWAY from the Saw Frame (Fig. 6-A).
- 7. (Fig. 6). Push Guide Bar against Saw Frame. (Fig. 6-A). Hole in Guide Bar should be centered in slot of Outer Chain Guide. It may be necessary to pull Bar forward.
- (Fig. 6-B). Center Chain Tightener Block Pin in Slot of Chain Shield. To do this, turn Chain Tension Adjusting Screw.
- 9. (Fig. 6). Place Chain Shield onto Guide Bar Studs. Holding Chain Shield to Frame, turn Saw on its side (Fig. 6-C). Chain Tightener Block Pin must be in Hole of Guide Bar, in order to tension Chain (Page 4).
- Set Saw upright (Fig. 7). Assemble Chain Shield to Saw Frame with Guide Bar Nuts. Assemble Machine Screw in rear corner of Chain Shield. NOTE: Tighten Machine Screw securely. Tighten Guide Bar Nuts FINGER TIGHT ONLY.











#### **TENSION CHAIN**

- 1 Hold end of Guide Bar up. Leave Guide Bar Nuts FINGER TIGHT ONLY. Turn Chain Tension Adjusting Screw clockwise until there is no droop or sag in the Chain (Fig. 8).
- 2. Still holding end of Guide Bar up, tighten Guide Bar Nuts securely (Fig. 9).
- 3. Test Chain tension by lifting Chain at the center of the Guide Bar. Bottoms of Cutters should raise approximately 1/8 inch above the Guide Bar (Fig. 9).
  - a. If Bottoms of Chain Cutters can be lifted more than 1/8 inch above Guide Bar, LOOSEN GUIDE BAR NUTS. Turn Chain Tension Adjusting Screw clockwise to tighten tension, TIGHTEN GUIDE BAR NUTS and test again.
  - b. If Bottoms of Chain Cutters cannot be lifted 1/16 inch above the Guide Bar, or if the Chain cannot be pulled easily around the Bar by hand, LOOSEN GUIDE BAR NUTS. Turn Chain Tension Adjusting Screw counterclockwise to loosen tension, TIGHTEN GUIDE BAR NUTS and test again.

## FILL CHAIN OIL TANK

- 1. Push Hand Guard to the rear for easier filling of Fuel and Oil Tanks (Fig. 10).
- 2. Fill Chain Oil Tank (Fig. 10) with Sears Bar and Chain Lubricant--suitable for use in any temperature. You may also use any good multi-grade automotive type oil. If used in temperatures below 0°F, thin oil with a small amount of kerosene (approximately 6 ounces per quart of oil). Tighten Cap securely. NOTE: THIS TANK IS FOR BAR AND CHAIN LUBRICATION ONLY.

## MIX FUEL AND FILL FUEL TANK



MIX SAW FUEL IN AN AREA WITH ADE-QUATE VENTILATION AND AWAY FROM HEAT OR FLAME.

- 1. Mix fuel. Prepare only enough to last for one or two days cutting.
  - a. Use fresh Regular Grade Gasoline leaded or unleaded, however, DO NOT SWITCH TO LEAD-FREE GASO-LINE IF INITIAL OPERATION USED LEADED GAS-OLINE. Do not use Premium Grade or White Gasoline. Mix in a ratio of 16 to 1 with Sears Chain Saw Engine Oil or SAE 30 non-detergent oil for 2 cycle air cooled engine fuel mixing.

Gasoline	Oil
1 gallon	8 ounces (1/2 pint)
2 gallons	16 ounces (1 pint)
2 - 1/2 gallons	20 ounces (1 - 1/4 pints)
5 gallons	40 ounces (1 quart + 1/2 pint)

- b. Pour half of the gasoline into a clean container. Add all of the oil and shake or stir vigorously. Add remainder of the gasoline and shake or stir again. When preparing fuel mixture in low temperatures, thin the oil with some of the gasoline before adding it to the gasoline. NOTE: NEVER MIX FUEL IN THE CHAIN SAW FUEL TANK.
- 2. Fill Fuel Tank (Fig. 10). NOTE: DO NOT OVERFILL ALLOW 3/4 INCH FOR EXPANSION. Tighten Cap secure ly.



## OPERATION STARTING



MOVE CHAIN SAW AT LEAST 10 FEET AWAY FROM FUELING POINT.

Make sure your Saw is fueled and Chain Oil Tank filled properly (Page 4).

Set the Automatic Oiler Metering Knob at 1 - 1/2 turns open (counterclockwise). Press Manual Oiler Pump Button several times to force oil lubrication onto Bar and Chain (Fig. 11).

Move "ON-OFF" Switch to "ON" position (Fig. 11).

Squeeze Throttle Lever and push in on Throttle Detent (Fig's. 11 and 12).

Push Compression Release Button down and back to latch in this position (Fig. 12).

Pull Choke out completely (Fig. 11).



TAKE PROPER STARTING POSITION WITH SAW ON THE GROUND (IN A DE-BRIS-FREE AREA) RIGHT FOOT IN REAR HANDLE AND LEFT HAND ON FRONT HANDLE (FIG. 13).

Pull Starter Handle slowly until a slight resistance is felt (between 2 and 4 inches) then finish the pull sharply. Repeat as necessary, holding Starter Handle as starter recoils avoiding a free 'snap'' rewind. NOTE: DO NOT PULL STARTER HANDLE MORE THAN 2 - 1/2 FEET TO AVOID CORD DAMAGE.

When Saw fires, push Choke half way in to prevent Engine "flooding".

When engine starts, squeeze Throttle Lever fully to release Throttle Detent and Compression Release Button. The Saw is now at IDLE-THE CHAIN SHOULD NOT BE MOVING.



IF CHAIN DOES MOVE WITH SAW AT IDLE, THE CARBURETOR MUST BE AD-JUSTED (PAGE 12).

Push Choke in as engine warms or as engine begins to labor from overrich mixture.



THE MUFFLER AND IMMEDIATE AREA BECOME HOT WHEN OPERATING YOUR SAW ENGINE.

### VARM ENGINE STARTING

nce the engine is warm, choking is usually not necessary to start. Choking a warm engine or over-choking a cold engine ill cause flooding.

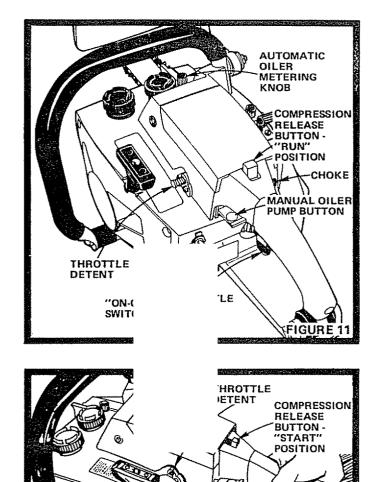
## OT FUEL STARTING

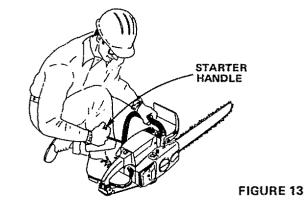
#### /APOR LOCK CONDITIONS)

hot weather (above 90°F.) if engine is difficult to restart ter refueling, or shortly after being shut-off, it may be the sult of vapor lock. This condition will be minimized by sing gasoline for the fuel mixture that has been correctly ended for the season.

this VAPOR LOCK CONDITION should occur the followg procedures will minimize engine restart problems.

- Move "ON-OFF" Switch to "ON" position (Fig. 11).
- Squeeze Throttle Lever and push in on Throttle Detent (Fig's. 11 and 12).





THROTTLE

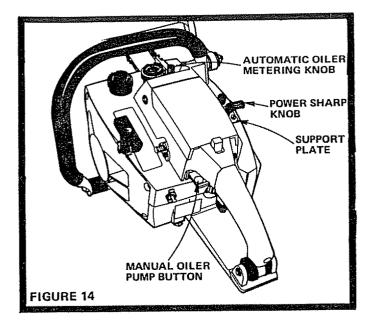
FIGURE 12

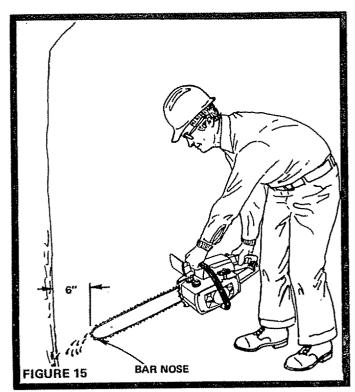
LEVER

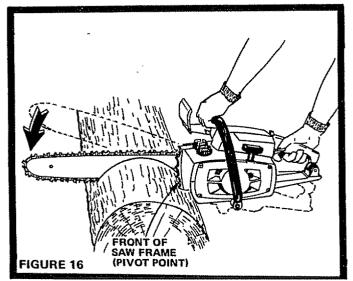
- 3. Push Compression Release Button down and back (Fig. 12).
- 4. Pull Choke out as far as it will go (Fig. 11).
- 5. Pull Starter with short, rapid movements until Engine fires. Push Choke halfway "IN" and continue starting procedure until engine runs.
- 6. Hold at full Throttle and gradually push Choke fully in. A SHORT PERIOD OF ENGINE OPERATION AT "HALF CHOKE" MAY BE REQUIRED TO CLEAR VAPOR FROM SYSTEM.

# STOPPING

-5 - Flip "ON-OFF" Switch to "OFF" position (Fig. 11).







## USING YOUR CHAIN OILING SYSTEM

- Press the Manual Oiler Pump Button often during the first few minutes of operation even if you are not cutting wood (Fig. 14).
- The Automatic Oiler Metering Knob setting at 1 1/2 turns open is for green wood; if seasoned hard wood is being cut, more oil will be required - turn Knob counterclockwise to increase oil flow (Fig. 14).
- 3. As you cut wood, especially if Saw and oil are cold, use the Manual Oiler Button to temporarily increase the amount of oil delivered to the chain. Check oil level as you cut by pressing Manual Oiler Button. Less resistance indicates Chain Oil Tank needs refilling.
- 4. Keep Chain Oil Tank full. YOU CAN EXPECT TO USE ALMOST ONE TANK OF CHAIN OIL FOR EACH TANK OF FUEL USED.

## CHECK BEFORE YOU CUT



IS THE CHAIN TENSIONED PROPERLY? A chain can hammer itself to pieces if too loose -- and burn up if too tight! (See page 4).



IS THE POWER SHARP KNOB IN STORAGE POSI-TION7 Knob should be in the far right hand position in Support Plate (Fig. 14).

ARE THE CHAIN AND BAR GETTING ENOUGH OIL? Throttle up to cutting speed for a few seconds holding Bar Nose approximately six inches from test surface. Enough oil should be thrown from chain to mark test surface (Fig. 15). Open Automatic Oiler Metering Knob farther if necessary.



DO NOT ALLOW BAR NOSE TO TOUCH TEST SURFACE.



ARE "ALL SYSTEMS GO"? If your Saw isn't performing properly please check our handy "Trouble Shooting" section on pages 16 and 17.

## USING GOOD SAWING TECHNIQUE

Practice cutting a few limbs or small logs to get the "feel" of your Saw using Good Sawing Technique.



USE A FIRM GRIP (THUMBS OPPOSING FINGERS) WITH LEFT HAND ON FRONT HANDLE AND RIGHT HAND ON REAR HANDLE. KEEP A SECURE BALANCED FOOTING TO THE LEFT OF THE SAW AND DON'T OVERREACH (FIG. 16).

- 1. Squeeze Throttle Lever fully before starting the chain into wood. The chain will cut more efficiently with engine at top speed.
- Start cutting with the front of Saw Frame against the loc or tree and pivot as you cut so that the Bar Nose enters the cut last (Fig. 16).
- 3. Allow the Chain to cut for you and hold Saw so that the Chain runs free in the opening cut. You need not rock the Saw back and forth in the cut or use great force. If you do use excessive force to cut, damage to the bar, chain, or engine may result.
- Keep Saw chain at cutting speed until Bar is completely free of cut, then release Throttle Lever to idle engine while planning next cut.

\*

## USING GOOD TREE FELLING TECHNIQUE



SAFE WORKING PROCEDURE IS A YOUR FIRST LINE OF DEFENSE TO-PREVENTING ACCIDENTS. WARD

- 1. SIZE UP THE TREE.
  - a. Determine natural felling direction . . -- toward the direction of natural lean.

    - -- toward the side with more or heavier branches. -- (if heavily leaved) with the direction of the wind.
  - b. Avoid felling a tree
    - -- if it shows signs of rot which may make felling unpredictable.
    - if it's natural felling direction must be changed to avoid obstacles.
    - -- if hanging dead limbs ("widow makers") cannot be removed before felling.
    - if wind is strong or gusty. ---
- 2. PLAN YOUR ESCAPE ROUTE. Choose a route back and to one side of the direction of tree fall (Fig. 17). You should plan a route that will place you at least twenty feet from the stump at the time the tree hits the ground.
- 3. CLEAR THE BRUSH AND DEBRIS from around the tree and along your escape route. Examine tree in cutting area and remove dirt or foreign material which might dull or break the chain as you cut.

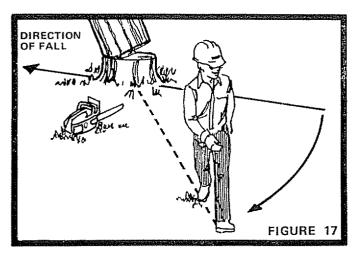
#### 4. FELL THE TREE.

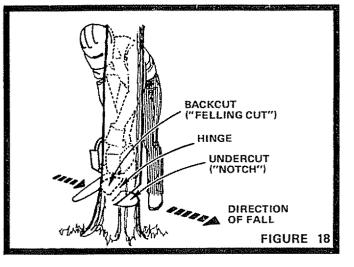
- a. Undercut ("notch") the tree on the side of natural fall (Fig. 18).
  - Make the first cut horizontally 1/3 the tree diameter at a comfortable working height.
  - Finish the undercut with sloping cut to meet but not cross the first.
- Clean out the undercut wood. b. Backcut ("felling cut") the tree opposite the notch (Fig. 18).
  - Make the horizontal felling cut opposite the side of natural fall, at least 2 inches above the horizontal undercut.
  - For trees larger than bar length make two felling cuts pivoting bar nose in last, in on one side, then pivoting in from the other to complete the cut (Fig. 19).
  - Some trees may need to be pushed into the undercut. Drive wedges into the backcut, stopping often to drive wedges tight but taking care not to place them where they will interfere with cutting or direction of fall. Use plastic or wood wedges so that they cannot dull saw chain if accidentally hit.
  - DO NOT CUT COMPLETELY THROUGH TO THE UNDERCUT. Leave at least a 2 inch hinge to hold and guide the tree down in the direction you planned and keep the tree from snapping off the stump. Make sure to keep the hinge a uniform thickness to prevent the tree from pivoting on the stump.
- 5. ESCAPE. As your backcut nears the undercut, watch the treetop and the cut for signs of movement. Be alert -- as soon as the tree starts to move, pull your saw from the tree, turn it off, put it down, and move away quickly on your escape route. If your saw is pinched in the backcut -don't wait until the falling tree frees it. Shut if off and leave it!

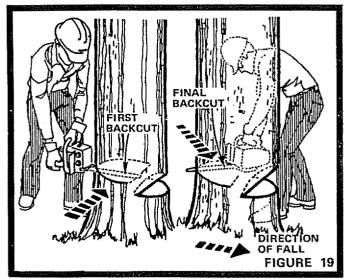


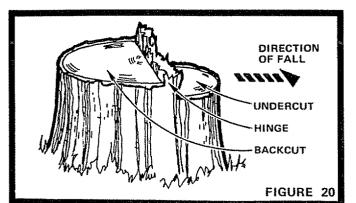
# BE ALERT TO CONDITIONS WHICH MIGHT ALTER YOUR PLANNED ES-CAPE ROUTE AND WATCH WHERE YOU **ARE GOING!**

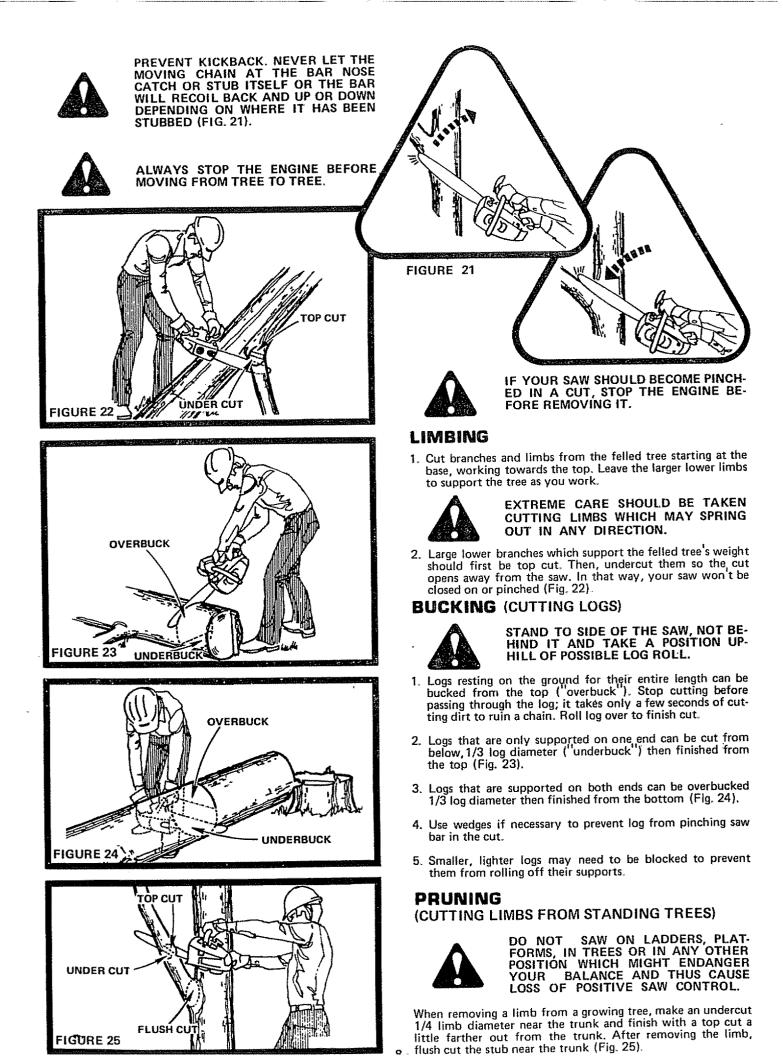
- 6. STUDY THE STUMP. Improve your felling technique by analyzing your work (Fig. 20).
  - a. Did the undercuts meet without crossing?
  - b. Was the backcut horizontal, parallel to the undercut and at least 2 inches above it?
  - c. Was the hinge at least 2 inches thick and of uniform thickness?











# MAINTENANCE General



ALL CHAIN SAW SERVICE, OTHER THAN THE ITEMS LISTED IN THE OWNER'S MANUAL MAINTENANCE IN-STRUCTIONS, SHOULD BE PERFORMED BY COMPETENT CHAIN SAW SERVICE PERSONNEL.



WITH THE EXCEPTION OF POWER SHARPENING AND CARBURETOR AD-JUSTING, DISCONNECT SPARK PLUG WIRE AND LET SAW COOL BEFORE MAKING ADJUSTMENTS OR REPAIR.

A good maintenance program of regular inspection and care will increase the life and maintain the performance of your Saw.

Each working day, check Nuts, Screws and Wires, tightening any that are loose and replacing those that are worn or damaged.

NOTE: WHEN REPLACING FASTENERS USE A THREAD ADHESIVE, SUCH AS "THREAD LOCK", 'LOCTITE SEALANT", ETC. AVAILABLE AT YOUR SEARS SER-VICE CENTER.

## GUIDE BAR AND CHAIN

Service life of your Bar and Chain will be greatly increased by proper Saw use--correct Chain Tension (page 4), Lubrication (page 6) and regular maintenance--Sharpening, Bar Deburring, etc.

#### **CHAIN SHARPENING**

If wood chips are becoming increasingly smaller as you cut, from normal wear or accidental running Chain in dirt or sand, your Chain may need sharpening. Check Chain for sharpness or damage after every refueling and sharpen perhaps every third or fourth refueling; more often when cutting seasoned hard wood or frozen wood.

#### CUTTER TOP PLATE POWER SHARPENING (MODEL 917.353770 & 917.353771 ONLY)



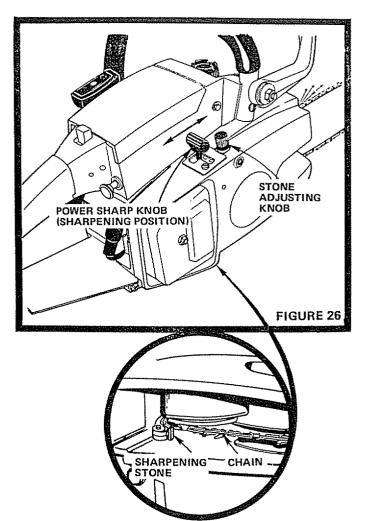
MAKE SURE INSIDE CHAIN SHIELD AND POWER SHARP PARTS ARE FREE OF PACKED SAWDUST AND WOOD CHIPS.

- Tension Chain slightly tighter than normal cutting tension but still able to be pulled easily around the Guide Bar (page 4).
- Place Power Sharp Knob in Sharpening position (Fig. 26). NOTE: To make operation smoother and easier, lift Power Sharp Knob slightly.
- 3. Set Stone Adjusting Knob (Fig. 26).
  - a. Move Sharpening Stone away from chain by turning Stone Adjusting Knob clockwise as far in as possible.
    b. Move Stone closer to chain by turning Stone Adjusting
  - Knob 1 click at a time counterclockwise.
     c. Test proper Stone position by pulling chain around bar
  - c. Test proper Stone position by pulling chain around bar with gloved hand. Leave Stone Adjusting Knob at the setting reached when chain first touches Sharpening Stone (Fig. 26 - Inset).
- 4. Start Saw and throttle up to cutting speed.

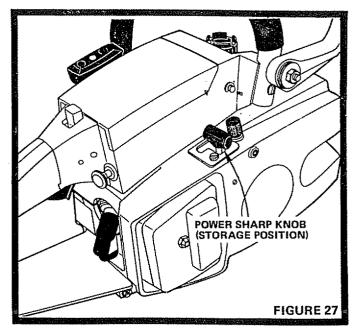


KEEP A FIRM GRIP AND AVOID GUIDE BAR AND CHAIN AREA.

- 5. Leave Saw on ground in the debris free starting area. Move Power Sharp Knob up and back (full range-Fig. 26) rapidly several times. This will sharpen Cutters on both sides of Chain and maintain a flat surface on the Sharpening Stone. SPARKS WILL FLY AS CUTTERS ARE SHARPENED.
- 6. NORMAL CHAIN SHARPENING TAKES ONLY A FEW SECONDS. Stop Saw Engine to inspect Chain visually. Edges of Cutter Top Plate will look clean and sharp and, sighting down the Chain, Cutter Tops will be flat, parallel with each other and perpendicular to the Guide Bar.



VIEW FROM BOTTOM OF SAW ON ITS LEFT HAND SIDE



- a. If Cutter abrasion is not completely removed, turn Stone Adjusting Knob counterclockwise one click at a time and resharpen.
- b. If Cutter Tops are not flat and perpendicular to the Bar rotate or replace Sharpening Stone (page 11).
- 7. Place Power Sharp Knob in storage position (Fig. 27). Retension Chain for cutting (page 4).
- 8. Stone Adjusting Knob may need to be readjusted (counterclockwise 1 click) for succeeding sharpenings.

- 9 -

#### CUTTER SIDE PLATE FILING (MODEL 917.353770 & 917.353771 ONLY)

File Cutter Side Plates (Fig. 28) after every third to fifth Top Plate sharpening.

Tension Chain so it is snug, won't wobble on the bar. Use a chain filing vise if one is available.

- 1. Place 5/32 File and Holder on Cutter Top Plate and Depth Gauge. Line up Guide Mark Parallel to Guide Bar (Fig. 29). Keep File Holder firmly level (perpendicular to Guide Bar) (Fig. 30).
- Make a light pressure file stroke from inside toward outside of Cutters. Take care not to nick Cutters on return stroke. Use a few file strokes for each Cutter on one side of Chain then move to the other side of the Guide Bar to file opposing Cutters. Rotate the File in its Holder occasionally to even File wear.

Measure Side Plate projection it should be 1/32 inch (Fig. 31).

#### CUTTER DEPTH GAUGE FILING (MODEL 917.353770 & 917.353771 ONLY)

Depth Gauges are lowered as Cutter Top Plates are power sharpened. Use a Flat File to round off the front corner, maintaining original shape (Fig. 32).

Re-tension Chain for cutting (page 4).

#### CUTTER TOP & SIDE PLATE FILING (MODEL 917.353730 & 917.353731 ONLY)

Tension Chain so it is snug, won't wobble on the bar. Use a chain filing vise if one is available.

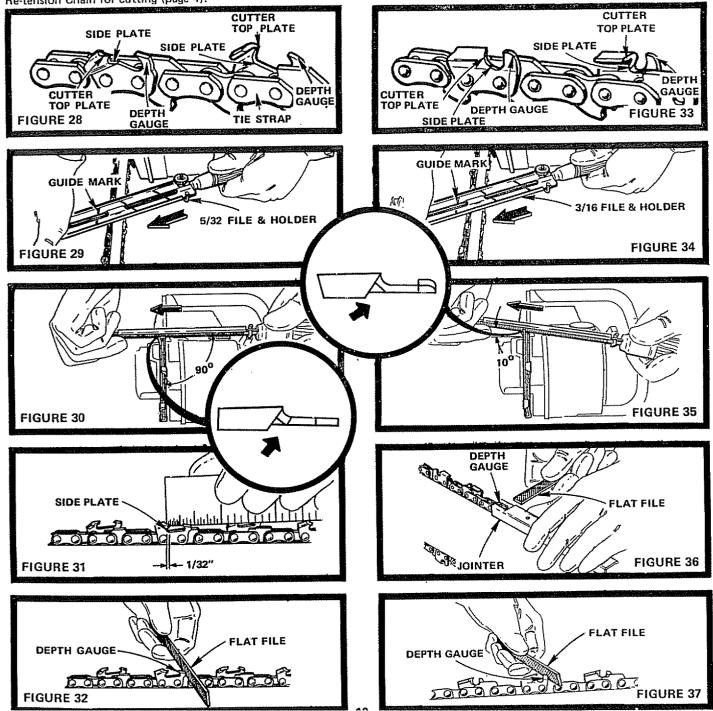
- Place 3/16 inch File and Holder on Cutter Top Plate and Depth Gauge (Fig. 33). Line up Guide Mark parallel to Guide Bar (Fig. 34). Keep File Holder Handle firmly angled down 10<sup>o</sup> from Guide Bar perpendicular (Fig. 35).
- 2. Make a light pressure file stroke from inside toward outside of Cutters. Take care not to nick Cutters on return stroke. Use a few file strokes for each Cutter on one side of Chain then move to the other side of the Guide Bar to file opposing Cutters. Rotate the File in its Holder occasionally to even File wear.

#### CUTTER DEPTH GAUGE FILING (MODEL 917.353730 & 917.353731 ONLY)

File Cutter Depth Gauges after every third or fourth Top and Side Plate sharpening.

1. Place Jointer on Chain. If Depth Gauge projects above Jointer, file it level with Flat File (Fig. 36).

2. Round off front corner to maintain original shape (Fig. 37). Re-tension Chain for cutting (page 4).



#### POWER SHARP STONE ROTATION (MODEL 917.353770 & 917.353771 ONLY)

Reverse the Power Sharp Stone to even Stone wear, perhaps every third or fourth sharpening, as needed. An unevenly worn Power Sharp Stone may sharpen Chain on an angle. Cutter Tops will not look flat when sighted down the Guide Bar, Chain will stumble through wood when cutting or cut slanted.

- 1. Remove Guide Bar Nuts and Screw in rear of Chain Shield (Fig. 7). Remove Chain Shield.
- Loosen Stone Retaining Screw to slide Power Sharp Stone from Arctuating Arm (Fig. 38).
- 3. Turn Stone end for end, slide it on Arctuating Arm, reposition and tighten Retaining Screw.
- 4. Reassemble Saw and re-tension Chain (pages 3 and 4).

#### **GUIDE BAR REPAIR**

)

- Chain Cutter and Link bottoms riding on Guide Bar Rails will normally roll some Bar Material to the outside of the Rails especially in actual cutting area of Guide Bar. These "burrs" should be removed as they form or they will chip away during use taking more Bar material with them. Check Bar for burrs at each Chain sharpening (Fig. 39).
  - a. Remove Guide Bar Nuts, Screw in rear of Chain Shield, Chain Shield and Outer Chain Guide. Loosen Chain Tension, remove Chain and Guide Bar.
  - b. Move your gloved hand across the flat of the Guide Bar to feel burrs and remove them with a Flat File. Rounding outside Rail edges will retard further burr formation (Fig. 40).
  - c. Reassemble Saw and re-tension Chain (pages 3 and 4).

NOTE: YOUR GUIDE BAR IS SPECIAL "LO-KICK" TYPE AND CAN ONLY BE ASSEMBLED IN ONE POSI-TION.

- When new or newly sharpened Chain makes slanted cuts, sometimes badly enough to prevent completion of cuts through large diameter logs, check for Guide Bar wear or damage.
  - a. File uneven Rail top wear flat, perpendicular to Guide Bar (Fig. 39).
  - b. Hammer worn, open Rails closer together to restore correct Chain Groove-between .052 and .060 inch (Fig. 39). NOTE: MAKE SURE CHAIN RUNS EASILY IN CORRECTED CHAIN GROOVE BEFORE REASSEM-BLY.
  - c. A badly bent Guide Bar or Rails worn low enough to allow Chain Drive Links to ride on the Chain Groove bottom must be professionally serviced or replaced.

#### CHAIN REPLACEMENT

Normal Chain sharpening will eventually remove enough material to weaken Cutters and cause damage during use. Individual Cutters can be replaced and sharpened to match Chain in a Sears Service Center, however, repeated Cutter or Link breakage indicates Chain replacement is required.

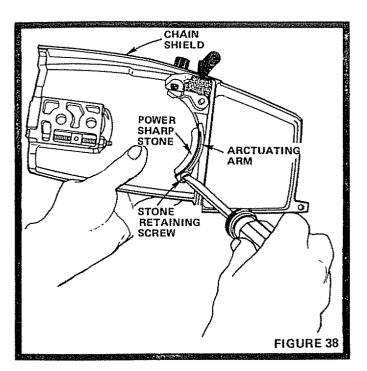
NOTE: A damaged Cutter on Top Sharp Chain (MODEL 917.353770 & 917.353771), should not be replaced by another Cutter due to the difficulty in sharpening it to match other worn Cutters. Use of a Tie Strap (Fig. 28) to replace an individual damaged Cutter will not noticeably affect the cutting ability of your chain.

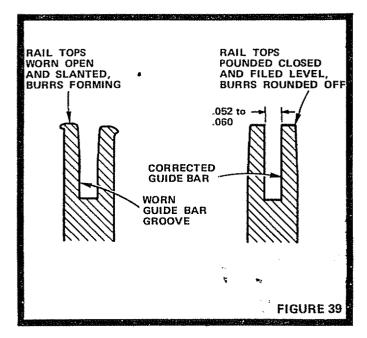
#### POWER SHARP STONE REPLACEMENT (MODEL 917.353770 & 917.353771 ONLY)

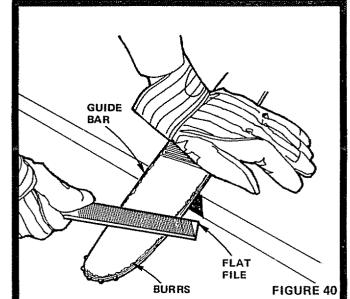
Replace Power Sharp Stone when installing new Chain (Fig. 38).

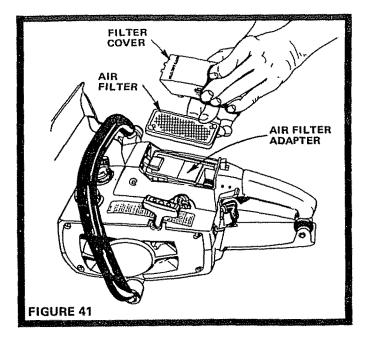
## CHAIN SPROCKET REPLACEMENT

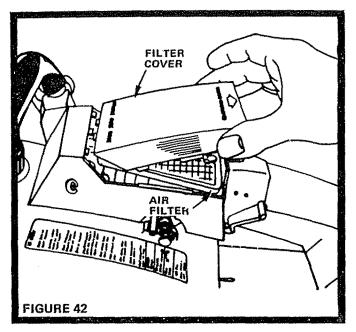
Replace worn Chain Sprocket when installing new Chain. Clutch Drum removal (page 14) is required.

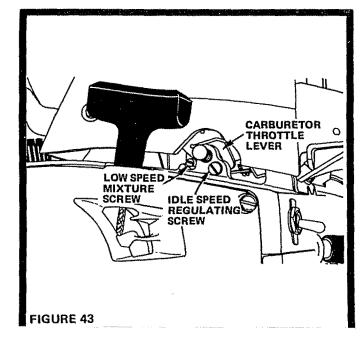












## AIR FILTER CLEANING

An accumulation of dirt and dust on your Air Filter will considerably reduce your Saw's cutting power. Clean it at least once each day, more often if sawing in extremely dusty conditions. NOTE: NEVER OPERATE SAW WITHOUT AIR FILTER.

- 1. To remove Filter Cover, squeez lower 1/3 portion of Cover and raise up as shown (Fig. 41).
- 2. Remove and clean Air Filter with compressed air or a brush. Wipe Air Filter Adapter clean (Fig. 41).
- 3. Reposition Air Filter as shown in Fig. 42.
- 4. Reassemble Filter Cover.
  - a. Insert Cover Tabs between Rear Handle Tabs (Fig. 42).
    b. Squeeze lower 1/3 portion of Cover and press down into place.

## CARBURETOR ADJUSTMENT

Your Carburetor has been adjusted at the factory for the best fuel/air mix to provide maximum Saw performance. Your Carburetor may need resetting, however, if you notice any of these conditions:

- a. Chain moves with Saw engine idle.
- b. Loss of cutting power which is not corrected by Air Filter or Muffler Screen cleaning.
- c. Saw engine dies or hesitates on acceleration.

NOTE: CARELESS ADJUSTMENTS CAN SERIOUSLY DAMAGE YOUR SAW ENGINE.

- 1. Make initial setting with Engine stopped:
  - a. Turn Idle Speed Regulating Screw out (counterclockwise); then in until Carburetor Throttle Lever just begins to move, continue moving 2 more turns.
  - b. Turn Low Speed Mixture Screw in (clockwise) until LIGHTLY seated, then turn counterclockwise 1 - 1/8 turns.
- 2. Start and warm up Engine by making one or two cuts.



RETURN SAW TO DEBRIS FREE START-ING AREA FOR CARBURETOR ADJUST-MENTS. KEEP A FIRM GRIP AND AVOID GUIDE BAR AND CHAIN AREA.

- 3. Release Throttle Lever to let Engine idle. If Engine stops, turn Idle Speed Regulating Screw clockwise 1/8 turn at a time as required until Engine maintains idle.
- Adjust idle speed and Low Speed Mixture to achieve smoothest engine idle without chain movement but allowing rapid acceleration.
  - a. Adjust Idle Speed Regulating Screw until Engine maintains idle speed just slower than the point at which the chain moves.
  - Adjust Low Speed Fuel Mixture Screw for fastest idle; then turn counterclockwise 1/4 turn.
  - c. Squeeze Throttle Lever. If Engine falters or hesitates on acceleration turn Low Speed Fuel Mixture Screw counterclockwise 1/16 turn at a time just enough to achieve rapid acceleration.
  - d. Chain should not rotate around bar unless throttle is squeezed. If chain does move repeat Step "A".

## STARTER REPAIR ROPE REPLACEMENT

TO CARRY OUT THE FOLLOWING STEPS, YOU WILL NEED A SCREWDRIVER.

- 1. Remove 4 screws and remove Starter Housing (Fig. 44) from Saw.
- 2. Remove broken Rope from Starter Handle and Starter Pulley. To replace a frayed Rope: a. Pull Starter Handle until several inches of Rope are ex
  - posed (Fig. 44).
  - b. Lock Starter Pulley in place with a screwdriver.
  - c. Slide Starter Handle down on Rope. Untie knot in Rope and remove Washer and Handle.
  - d. Hold Thumb on Starter Pulley and remove screwdriver to SLOWLY release Spring Tension.
  - e. Remove Rope from Pulley.
- 3. Thread new Rope into hole of Starter Handle. Place Washer on Rope and tie a secure knot in end of Rope. Position knot and Washer inside Handle.
- 4, (Fig. 45). Turn Starter Pulley clockwise 9 full turns to wind Starter Spring. Align hole in Pulley with Starter Housing Rope Channel. Lock Pulley in place with a screwdriver.
- 5. Use a lighted match to melt pulley end of Rope. Pull it thru a rag to mold an easily threaded point.
- 6. Place Rope in Housing Channel and insert into Pulley hole. Tie a secure knot in Rope, and tap with wood block into Rope Knot Cavity.
- 7. Remove screwdriver and allow Rope to slip SLOWLY thru your fingers to rewind.
- 8. Reassemble Starter Housing to Saw.

## STARTER SPRING REPLACEMENT

TO REPLACE SPRING, YOU WILL NEED A SCREWDRIVER AND A SMALL AMOUNT OF GRAPHITE.

- 1. Remove 4 screws and remove Starter Housing from Saw.
- 2. Untie Starter Rope knot at Starter Pulley (Fig. 44) and remove Rope.
- 3. Remove E-Ring and Washer from Starter Center Post (Fig. 46).
- 4. Lift out Starter Pulley and old Spring.

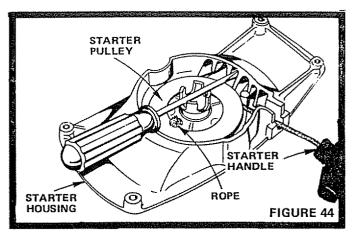


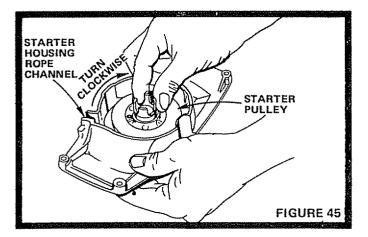
WEAR EYE AND HAND PROTECTION WHEN REPLACING WORN OR BROKEN SPRING IN CASE IT SHOULD UNCOLL AS YOU HANDLE IT. ALLOW SPRING TENSION TO BE COMPLETELY RE-LIEVED AND MAKE SURE PULLEY DISENGAGES FROM SPRING BEFORE CAREFULLY LIFTING PULLEY AND OLD SPRING FROM HOUSING.

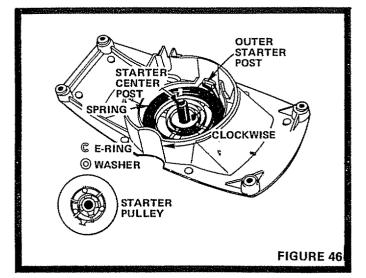
- 5. Install new Spring (Fig. 46) with loop in end of Spring over Outer Starter Post. The Spring will wind clockwise toward the center.
- 6. Apply graphite to Starter Center Post, reassemble Pulley, Washer and E-Ring.
- 7, Prewind Starter Pulley. Refer to Step 4 of "Starter Rope Replacement'
- 8. Reassemble Starter as in steps 6, 7 and 8 of "Starter Rope Replacement

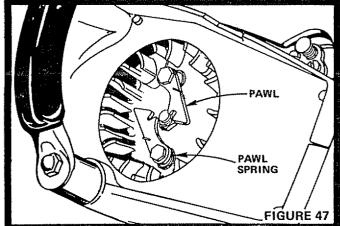
## PAWL SPRING REPLACEMENT

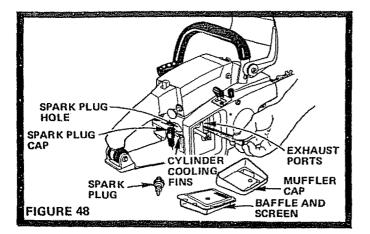
- 1. Remove 4 screws and remove Starter Housing from Saw.
- 2. Unhook Pawl Springs and slip over Pawls.
- 3. Slip new Springs over Pawls and hook as shown in Fig. 47.
- 4. Reassemble Starter Housing to Saw.

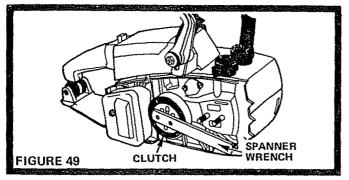


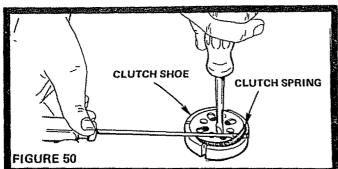


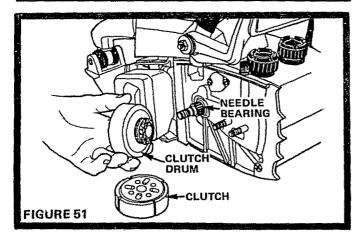












## SPARK PLUG CLEANING OR REPLACEMENT

TO CLEAN SPARK PLUG YOU WILL NEED A WIRE BRUSH OR POCKET KNIFE.

Use a wire brush or a pocket knife to clean deposits from the electrodes. Use care not to scratch or chip the ceramic section of the Spark Plug. Be careful when removing, cleaning, gapping and replacing the Spark Plug. If it is damaged it will not work properly and must be replaced. The proper gap between the Spark Plug electrodes is .025". Should it be necessary to replace the plug, use Champion CJ-6. Replace the Spark Plug each season or when suspected of being faulty. Reattach the Spark Plug Cap to Spark Plug.

## COOLING FIN CLEANING

A 3/8" WRENCH IS REQUIRED TO REMOVE MUFFLER.

Check air flow over the engine cylinder. If restricted by debris, remove Muffler and clean engine and Cylinder Cooling Fins (Fig. 48). Compressed air can be used. Replace Muffler.

## EXHAUST PORT & MUFFLER SCREEN CLEANING

Remove carbon deposits from cylinder, exhaust ports and Muffler Screen each season or as required.

TO CARRY OUT THE FOLLOWING STEPS YOU WILL NEED: A WIRE BRUSH, 3/8" WRENCH AND A HARD-WOOD STICK.

- 1. Remove Muffler Cap, Baffle and Screen. Lift Spark Plug Cap and remove Spark Plug (Fig. 48).
- 2. Pull Starter Rope to position piston below exhaust holes. Use a HARDWOOD STICK to scrape carbon deposits from exhaust ports and surrounding exhaust chamber.
- 3. Blow out loosened carbon by pulling Starter Rope several times.
- 4. Use wire brush to clean Muffler Screen. Replace whenever breaks in Screen are noted.
- 5. Reassemble Spark Plug and Spark Plug Cap, Baffle and Screen and Muffler Cap.

WARNING TO PURCHASERS OF INTERNAL COMBUS-TION ENGINE EQUIPMENT MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA.

The California law effective January 1, 1974 prohibits the use of any devices or equipment on any forest covered, brush covered, or grass covered land without providing or maintaining in effective order, a Spark Arrestor attached to the exhaust system. The equipment which you purchased DOES include such a Spark Arrestor. It is a violation of law, however, to use it unless it is maintained in effective working order.

## CLUTCH SHOE & SPRING REPLACEMENT

YOU WILL NEED A SPANNER WRENCH (FIG. 49) FOR CLUTCH REMOVAL. ORDER PART NUMBER 632A9A FROM YOUR NEAREST SEARS SERVICE CENTER.

Your Chain Saw has a centrifugal Clutch. It is designed to engage chain as engine speed increases. Slip or disengage chain as engine speed decreases in a heavy cutting situation or with Throttle Lever released. If Clutch slippage is excessive so that full engine power cannot be utilized, replace Clutch Shoes. If Clutch does not disengage chain movement, when Throttle Lever is released, replace Clutch Springs.

- 1. Remove Chain Shield, Outer Chain Guide, Bar and Chain and Inner Chain Guide from Saw.
- 2. Remove Spark Plug Cap and Spark Plug (Fig. 48). Tie a knot in a nylon cord (such as a Starter Rope). Drop knotted end of rope into cylinder so engine will not go past top dead center.
- 3. Place Spanner Wrench in Clutch and turn clockwise to unscrew Clutch from Engine Shaft (Fig. 49).
- 4. Remove Clutch from Drum. Use small screwdrivers to pry Clutch Shoes out to remove Clutch Springs (Fig. 50).
- 5. Replace worn Clutch Shoes and Springs. We suggest Clutch Shoes and Springs be replaced at the same time.
- 6. Apply a THIN coat of lithium grease to Clutch Drum Needle Bearing (Fig. 51). NOTE: AVOID USING TOO MUCH GREASE ON NEEDLE BEARING; GREASY CLUTCH SHOES WILL CAUSE CLUTCH SLIPPAGE.

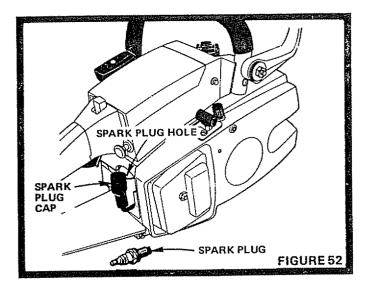
- 14 - 7. Reassemble Saw.

# STORAGE

Never store your Chain Saw for over 30 days without performing the following procedures:

- 1. Drain oil and fuel tanks in a safe area.
- Start Saw and run at idle speed until the engine stops. This will remove most of the fuel from the fuel system.
- 3. Remove the Spark Plug and pour a teaspoonful of oil through the spark plug hole into the combustion chamber (Fig. 52). Pull the starter rope slowly several times to distribute the oil throughout the engine. Replace the Spark Plug tightly and pull rope until resistance is felt, closing intake and exhaust ports.
- 4. Remove and clean the Bar and Chain (use gloves when handling chain).
- 5. Store the Chain in a container with oil covering chain.
- 6. Apply a heavy film of oil over the entire Bar including the groove for the chain. Wrap bar in heavy paper, cloth or plastic.
- 7. Clean the outside surfaces of the saw.
- 8. Cover the saw with a protective cloth or plastic and store the saw and bar in a dry place. Always store away from possible source of ignition such as furnaces heaters, etc.

Sears, Roebuck and Co. reserves the right to make any changes in design or improvements without imposing any obligation to install the same upon its items heretofore manufactured.



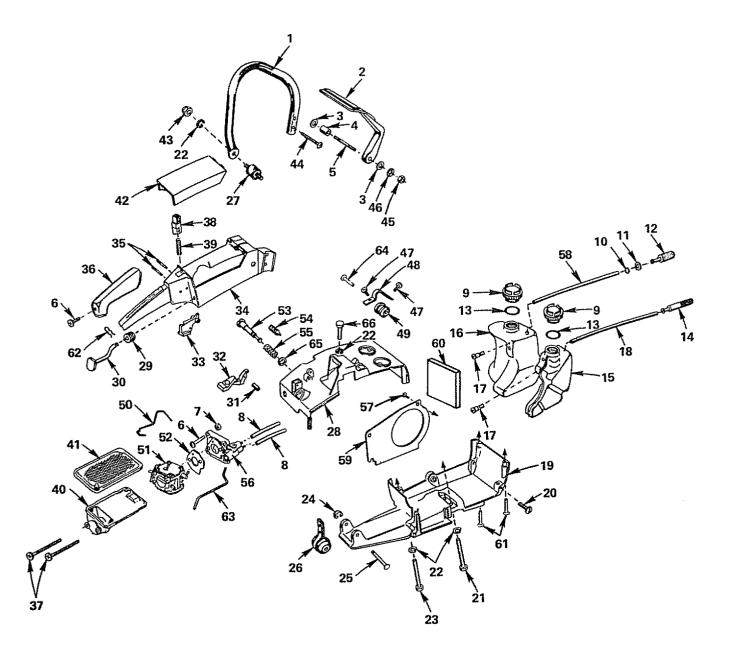
# TROUBLE SHOOTING

POSSIBLE CAUSE AND CHECK	POSSIBLE REMEDY
STARTER ROPE WILL NOT REWIND Broken Starter Spring/Not enough Preload (9 turns)	Replace, page 13
STARTER DOES NOT ENGAGE FLYWHEEL. Broken Pawl Spring Broken Pawls or Pins	Replace, page 13 Replace
ENGINE DIFFICULT OR WILL NOT START	Fill Fuel Tank, page 4
Fuel Tank empty Compression Release Button not in Starting Position	Follow Starting Procedure, page 5
Throttle Detent not holding Throttle open. CHECK: Carburetor linkage with Detent in Starting Position,	Repair or replace Detent
Carburetor Throttle should be 1/4 to 1/2 open	Contract Contract
Solid State weak. CHECK: Remove Spark Plug, reattach Plug Wire, hold Plug against engine and pull starter	Contact your nearest Sears Service Center.
rope (a strong white spark should jump across plug	
points - weak Solid State produces a short red spark) Solid State grounded. CHECK: Wire from Solid State to	Wrap Wire with electrical tape or replace
"ON-OFF" Switch for bare spots. Carburetor misadjusted	Follow Carburetor Adjusting Procedure, page 12
Engine flooded.	Follow Starting Procedure, page 5 WITHOUT USING CHOKE
Engine is mildly vapor locked, operating in hot weather	Follow Starting Instructions, page 5, then after starting WITH CHOKE OUT RUN SAW AT FULL THROTTLE FOR A
	FEW SECONDS BEFORE PUSHING CHOKE IN AND
Engine is severely vapor locked	ALLOWING SAW TO IDLE ALLOW SAW TO COOL COMPLETELY, then follow Starting
Broken Reed Valve	Instructions, page 5 Contact your nearest Sears Service Center
Broken Reed Valve	Contact your nearest deals dervice conter
CARBURETOR FLOODS Carburetor misadjusted	Follow Carburetor Adjusting Procedure, page 12
Damaged Carburetor Diaphragm	Replace
Leaking Gasket Leaking Inlet Needle Seat	Replace Replace
ENGINE WILL NOT IDLE	
Carburetor misadjusted	Follow Carburetor Adjusting Procedure, page 12
Carburetor Diaphragm leaking Carburetor Inlet Seat Gasket leaking	Replace Diaphragm Contact your nearest Sears Service Center
Crankshaft seals leaking	Replace seals
Cylinder scored or compression low Reeds leaking or broken	Contact your nearest Sears Service Center Contact your nearest Sears Service Center
ENGINE WILL NOT ACCELERATE Carburetor misadjusted	Follow Carburetor Adjusting Procedure, page 12
Dirty Air Filter	Clean Air Filter or replace, page 12
Spark Plug fouled or Solid State weak Carbon build-up	Clean Spark Plug and regap or replace, page 14 Clean Exhaust Port and Muffler Screen, page 14
Carburetor Diaphragm Cover loose or Diaphragm Gasket	Tighten cover or replace Diaphragm
leaking Broken Reed Valve	Contact your nearest Sears Service Center
ENGINE LACKS POWER OR DIES IN THE CUT	
Dirty Air Filter	Clean Air Filter or replace, page 12
Carbon build-up Low compression. CHECK: Compression pressure tests	Clean Exhaust Port and Muffler Screen, page 14 Contact your nearest Sears Service Department
below 80PSI or lessened engine resistance to pulling	
starter rope	
ENGINE KNOCKS	Contract work Prove Coursian Day
Worn Connecting Rod or Bearings. CHECK: Remove Starter, rotate Flywheel quickly back and forth. (Slight	Contact your nearest Sears Service Department
play is normal, however, worn Rod or Bearings allow	
considerable play and audible click)	

# TROUBLE SHOOTING CONTINUED

	POSSIBLE REMEDY
POSSIBLE CAUSE AND CHECK	
ENGINE BACKFIRES OR MISFIRES Fuel Mix improper or contaminated Spark Plug fouled Solid State intermittently shorting. CHECK: loose or bare wires or loose assemblies Defective Pyramid Reed Assembly	Drain tank and refill with freshly mixed fuel, page 4 Clean Spark Plug and regap or replace, page 14 Tighten assemblies, wrap wires Replace
CHAIN TURNS WHEN ENGINE IS IDLING Carburetor misadjusted Clutch Springs broken or weak Clutch Bearing seized or dry	Follow Carburetor Adjustment Instructions, page 12 Replace Clutch Springs, page 14 Lubricate or replace
CHAIN WILL NOT TURN WHEN THROTTLE LEVER IS SQUEEZ Chain tensioned too tight Guide Bar Rails pinched Clutch slipping Carburetor misadjusted Sprocket Nose Bearing seized	ZED Follow Chain Tensioning Instructions, page 4 Repair Guide Bar or replace, page 11 Replace Clutch Shoes, page 14 Follow Carburetor Adjustment Instructions, page 12 Replace Guide Bar
CHAIN STOPS WITHIN A CUT Chain cutter tops not filed flat Guide Bar burred or bent or rails uneven Clutch slipping excessively	File Chain correctly or rotate or replace sharpening stone (917.353770 & 917.353771 ONLY) pages 9 - 11 Repair Guide Bar or replace, page 11 Replace Clutch Shoes, page 14
CHAIN CUTS UNSATISFACTORILY OR PULLS QUICKLY Cutters dull, improperly sharpened, Depth Gauges too high Chain tension too tight or loose Chain contact with dirt, sand, or frozen wood	Follow Chain Sharpening Instructions, pages 9 - 11 Follow Chain Tensioning Instructions, page 4 Resharpen chain, pages 9 - 11
CHAIN OPERATES ROUGHLY, CHATTERS OR GRABS Chain tension too loose Cutters not properly sharpened Worn Chain Sprocket Chain rivet bearing wear due to use in dirt or sand or inad- equate chain oiling Several cutters damaged through striking buried foreign material	Follow Chain Tensioning Instructions, page 4 Follow Chain Sharpening Instructions, pages 9 - 11 Replace, page 11 Replace Chain Contact your nearest Sears Center for Cutter replacement
CUT TENDS TO SLANT Improper use Bent, worn or burred Guide Bar Improper Chain sharpening, depth gauge lowering or stone rotation (917.353770 & 917.353771 ONLY)	Hold and guide Saw properly, page 6 Repair or replace, page 11 Follow Chain Sharpening and Power, Sharp, Maintenance, pages 9 - 11
CHAIN BREAKAGE Maintain proper Chain tension Guide Bar Rails pinched Cutting frozen wood	Follow Chain Tensioning Instructions, page 4 Repair Guide Bar or replace, page 11 Keep Chain very sharp, pages 9 - 11
CHAIN JUMPS OFF Chain tension too loose Worn Guide Bar Broken Chain Side Link Worn Chain Sprocket	Follow Chain Tensioning Instructions, page 4 Replace Contact your nearest Sears Service Center for Chain repair Replace, page 11
GUIDE BAR CHIPPED ON EDGES Applying excessive pressure to cut Improper Guide Bar Maintenance Improper Chain Lubrication. CHECK: page 6	Keep chain sharp, pages 9 - 11 Remove burrs as they form, page 11 Keep oil tank full, oil lines open and Manual Oiler operational page 4
MANUAL OIL PUMP DOES NOT PUMP OIL Clogged Oil Pump Clogged Oil Line Clogged Oil Filter	Replace Blow out with compressed air Replace

SEARS 3.7 CHAIN SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771 MAIN FRAME



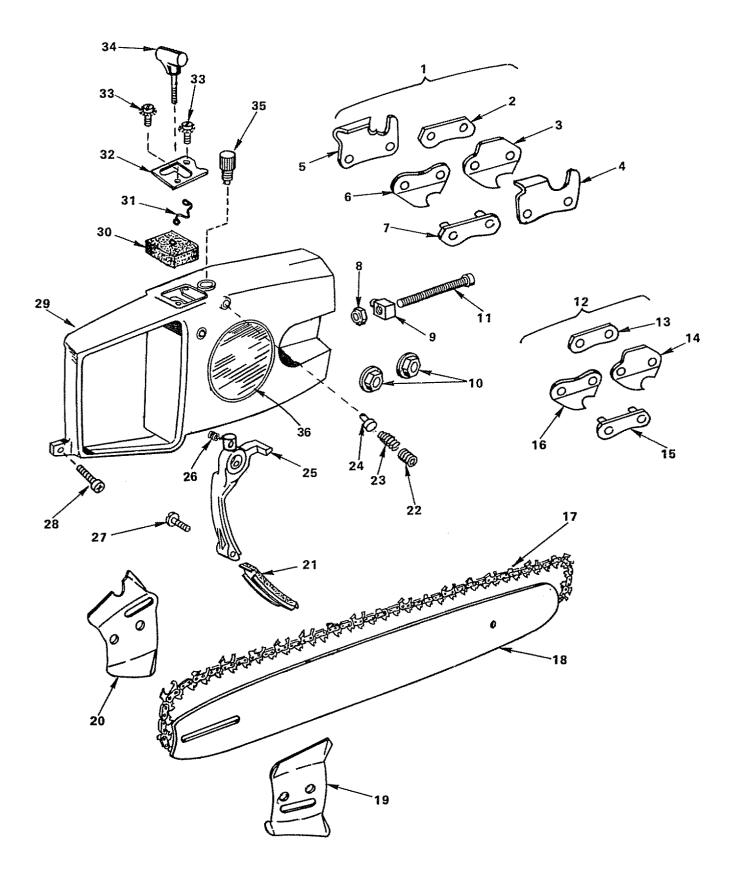
SEARS 3.7 CHAIN SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771

#### MAIN FRAME

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	9957 R	Front Handle	37	3376P	Machine Screw, Pan Hd. Phillips
2	771J	Hand Guard			No. 10 - 24 x 3 Gr. 5
3	1608P	Washer 3/8 x 7/8 x 14 Ga. Black Oxide	38	832J	Compression Release Button
4	772J	Bushing	39	2022J	Spring
5	1 <u>487</u>	Stud	40	9917R	Air Filter Adapter
6	3375P)	Machine Screw, Pan Hd. Phillips	41	9918R	Air Filter
Ŭ		No. 10 - 24 x 3/4 Gr. 5	42	9919R	Air Filter Cover
7	STD541410		43	564P	High Crown Acorn Nut 1/4 - 20
8	4735R	Hose	44	3315P	Screw, Phillips Oval Hd. Machine
9	9972R				No. 10 - 24 x 1 - 1/8 Gr. 5
10	9283H	Cap "O" Ring	45	584P	Hex Locknut 1/4 - 20
11	STD551012		46	773J	Spring Washer
12	9057H	Fuel Filter	47	5564P	Screw, Pan Hd. Phillips No. 10 - 24 x
13	6167H	"O" Ring			1/2 Type T
14	9991R	Oil Filter	48	2J	Hold Down Clip
15	676A5	Oil Tank Assembly (Inc. Key No <sup>1</sup> s.	49	6806R	Rubber Mount
	0707.0	14, 17 and 18)	50	5J	Throttle Link
16	643A55	Fuel Tank Assembly (Inc. Key No's.	51		Carburetor
10	0101.00	10, 12, 17 and 58)		12J	(917.353730 and 917.353770 ONLY)
17	9078H	Check Valve		829J	(917.353731 and 917.353771 ONLY)
18	5254R	Hose	52	9094H	Gasket
19	676A19	Base Plate Assembly (Inc. Key No's.	53	9999R	Throttle Detent Pin
10	Cororio	23 and 24)	54	8J	Idle Adjustment Screw
20	3317P	Machine Screw, Pan Flex Hd. Slotted	55	1J	Spring
	00171	1/4 - 20 x 3/4 Gr. 5	56	676A3	Carburetor Adapter and Oil Pump
21	STD522508	*Bolt, Hex Hd. 1/4 - 20 x 7/8 Gr. 5			Assembly
22	STD551125		57	5532P	Screw, Pan Hd. Slotted No. 6 - 32 x
23	(3374P)	Bolt, Hex Hd. 1/4 - 20 x 2 - 5/8 Gr. 5			5/16 Type 23
24	9052H		58	5255R	Hose
25	876J	Pin	59	16J	Baffle Plate-Air Flow
26	676A20	Rear Mount Assembly	60	5200R	Heat Barrier
27	9567R	Rubber Mount	61	5609P	Screw, Fil. Hd. Cross Recess
28	643A54	Top Cover Assembly			No. 8 - 18 x 1 Type BT
29	9099H	Grommet	62	1392J	Cotter External Hair Pin
30	6J	Choke Control	63	4J	Oil Pump Rod 👘
31	507H	Roll Pin	64	877.1	Pin
32	1555.	Oil Pump Lever	65	5019P	Pin "E" Ring
33	9881R	Throttle Lever	66	STD522507	*Bolt, Hex Hd. 1/4 - 20 x 3/4 Gr. 5
34	676A21	Rear Handle Assembly (Inc. Key No's.		9557R	Warranty Label
- 1		29, 33, 35, 38 and 39)		776J	Instruction Decal
35	765J	Pin	7-7-7-66	(779J)	Owners Manual
36	9889R	Rear Handle Grip			
		·		*STANDARD	HARDWAREPURCHASE LOCALLY

۳

SEARS 3.7 CHAIN SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771 CUTTING AND SHARPENING

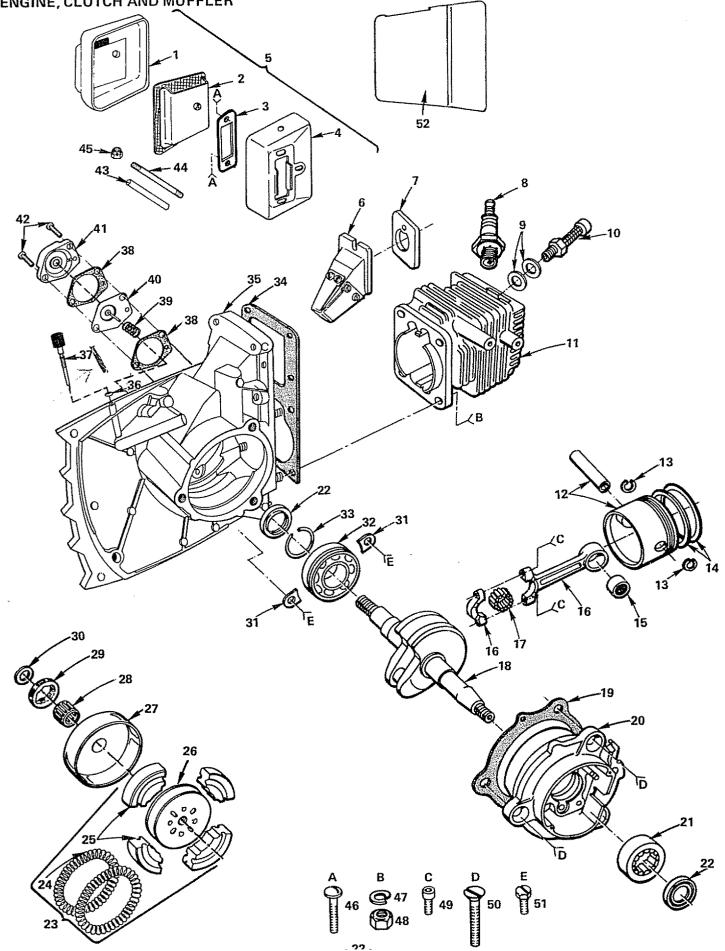


SEARS 3.7 CHAIN SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771

### CUTTING AND SHARPENING

KEY NO.	PART NO	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	24065	Chain Repair Kit (917.353730 and 917.353731 ONLY) contains:	24	690J	Detent Pin (917.353770 & 917.353771 ONLY) Detent Pin
2 3 4 5 6 7		Plain Tie Strap (Two) Guard Drive Link (One) Cutter - R.H. (One)	25	692J	Arctuate Arm (917.353770 and 917.353771 ONLY)
4 5		Cutter - L.H. (One)	26	(4541P)	Set Screw, Allen Hd. Cup Point No. 6 - 32 x 1/4
6 7 8	4058R	Drive Link (One) Preset Tie Strap (Two) Huglock Nut	27	3243P	Stone Retaining Screw (Machine Screw, Truss Hd. Slotted with Nylok
9 10	9091H 6935H	Chain Tightener Block Guide Bar Nut (Flange Nut 5/16 - 24 UNF)	28	3375P	No. 8 - 32 x 7/16) Machine Screw, Pan Hd. Phillips
11	3376P	Chain Tension Adjusting Screw (Machine Screw, Pan Hd. Phillips	29		No. 10 - 24 x 3/4 Gr. 5 Chain Shield
12	23935	No. 10 - 24 x 3 Gr. 5 Full Thd.) Chain Repair Kit (917.353770 and 917.353771 ONLY) contains:	30	9871R 643A53 687J	(917.353730 and 917.353731 ONLY) (917.353770 and 917.353771 ONLY) Foam Filler (917.353770 and
13 14		Plain Tie Strap (Two) Guard Drive Link (One)	31	689J	917.353771 ONLY) Spring Clip (917.353770 and
15 16		Preset Tie Strap (Two) Drive Link (One)	32	688J	917.353771 ONLY) Support Plate (917.353770 and 917.353771 ONLY)
17	1154J	Chain (917,353730 and 917.353731 ONLY) Sears Catalog No. 3633	33	6037P	Machine Screw, Pan Hd. Slotted - Sems No. 8 - 32 x 3/8 (917.353770
	1155J	+(917.353770 and 917.353771 ONLY) Sears Catalog No. 3636	34	• 676A17	and 917.353771 ONLY) Sharpener Knob Assembly (917.353770
<u>18</u> 19	774J 9J	Guide Bar - 18" Sears Catalog No. Chain Guide - Outer	35	1008J	and 917.353771 ONLY) Adjustment Screw (917.353770 and 917.353771 ONLY)
20 21	10J 632A146	Chain Guide - Inner Stone Assembly (917.353770	36	1085J	Decal - 3.7/18" Assembly (Key No. 21) is shipped with
22	STD502502	& 917.353771 ONLY) *Set Screw, Allen Hd. Cup Point 1/4 - 20 x 1/4 (917.353770 &		each chain	
23	8526H1	917.353771 ONLY) Spring (917.353770 & 917.353771 ONLY)		*STANDARD	HARDWAREPURCHASE LOCALLY

SEARS 3.7 SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771 ENGINE, CLUTCH AND MUFFLER



SEARS 3.7 SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771

#### ENGINE, CLUTCH AND MUFFLER

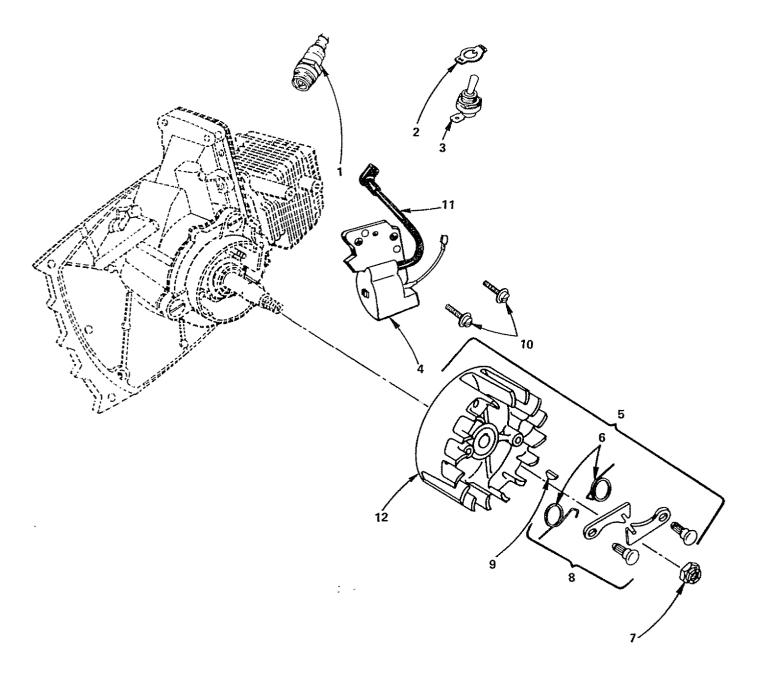
KEY NO.	PART NO	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
	643A56	Short Block Assembly - Complete Engine Not Furnished (Inc. Key No's. 11, 12, 14, 16 thru 20, 31, 32, 33, 35,	26 27	632A133 642A35	Clutch Hub and Washer Assembly Clutch Drum and Bearing (Inc. Key No. 28)
		37 thru 42, 47, 48, 50 and 51)	28	9089H	Needle Bearing
1	676A8	Muffler Cap Assembly	29	9137H	Rimmed Sprocket
	676A16	Baffle and Screen Assembly	30	9110H	Clutch Spacer
2	6317R	Muffler Support	31	9081H	Retainer Washer
2 3 4	9992R	Muffler Base	32	9062H	Ball Bearing
5	676A27	Muffler Parts (Inc. Key No's. 1, 2 & 4)	33	9065H	Round Section - Retainer Ring
5 6	643A5	Reed Plate Assembly	34	9963R	Gasket
7	9095H	Cork Gasket	35	643A49	Crankcase Assembly (Inc. Key No. 22)
8	9409H	Spark Plug	36	9213H	"O" Ring
9	1844 R	Washer	37	643A50	Metering Stem Assembly (Inc. Key No.
10	831J	Decompression Valve			36)
11	9579R	Cylinder	38	9962R	Diaphragm Gasket
12	643A12	Piston and Pin (Inc. Key No. 13)	39	9974R	Diaphragm Spring
13	9063H	Retaining Ring	40	6 <u>43</u> A43	Diaphragm Assembly
14	643A18	Piston Rings (Set of 2)	41	(1735.)	Oil Pump Cover
15	2593R	Needle Bearing - Connecting Rod	42	3387P	Machine Screw, Fil. Hd. Cr. Recess
16	643A1	Connecting Rod Assembly (Inc. Key		· · ·	No. 8 - 32 x 1/2 Gr. 5
10	0.0111	No's, 15 and C)	43	9997 R	Bushing
17	9084H	Strip of Connecting Rod Needles	44	9998 R	Muffler Stud
		(Set of 31)	45	4058R	Huglock Nut
18	9973R	Crankshaft	46	3178P	Machine Screw, Slotted Pan Flex Hd.
19	79.1	Gasket			1/4 - 20 x 5/8 Gr. 5
20	643A48	Bearing Carrier Assembly (Inc. Key No's.	47	STD551125	*Lockwasher 1/4
		21 and 22)	48	STD541125	*Hex Nut 1/4 - 28 UNF
21	8999H	Keystone Bearing	49	1136R	Cap Screw Socket Hd Special
22	8998H	Oil Seal	50	3250P	Machine Screw, Slotted Flat Hd.
23	632A137	Centrifugal Clutch (Inc. Key No's. 24,			1/4 - 20 x 11/16 Gr. 8
		25 and 26)	51	9086H1	Machine Screw, Slotted Hd Special
24	8473H1	Clutch Spring	52	676A28	Muffler Cap Assembly (See Note
25	632A183	Clutch Shoes (Set of 4)			Below)
	* - ··· · · · · · ·				

\*STANDARD HARDWARE-PURCHASE LOCALLY

NOTE: A SPECIAL MUFFLER CAP ASSEMBLY MAY BE REQUIRED BY LOCAL LAW FOR USE IN FORESTS OR BRUSH AREAS. CHECK WITH YOUR STATE CONSERVATION OR FORESTRY DEPARTMENT.

SEARS 3.7 SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771

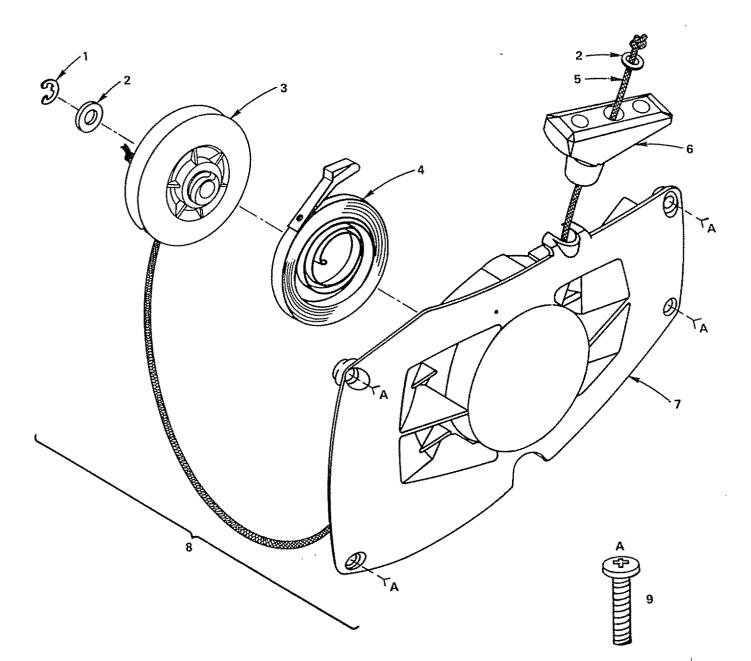
## SOLID STATE



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	9409H	Spark Plug (Champion CJ-6)	6	9072H	Torsion Spring
2	7682R	Switch Plate	7	9070H	Huglock Nut
3	833J	Ignition Switch	8	643A14	Starter Pawls and Posts with Springs
4	808J	Solid State Ignition Group			(Inc. Key No. 6)
		(Inc. Key No. 11)	9	9087H	Woodruff Key
5	643A4	Flywheel Assembly (Inc. Key No's.	10	8989H	Slotted Fil. Hd. Machine Screw
•		8 and 12)			No. 8 - 32 x 3/4
			11	9262H	High Tension Lead
			12	9404H	Flywheel

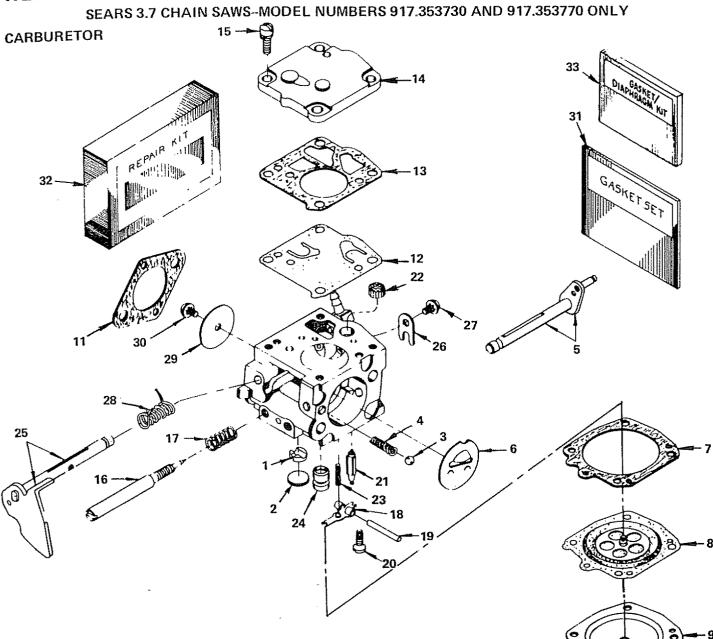
)

SEARS 3.7 SAWS--MODEL NUMBERS 917.353730, 917.353731, 917.353770 AND 917.353771 RECOIL STARTER



KEY NO	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5	9052H STD551012 1219J 9117H 9143H	E-Ring *Washer 1/4 x 9/16 x 16 Ga. Pulley, Starter Spring, Starter Rope, Starter (.156 Diameter x 42″ Long)	6 7 8 ( 9	9826R 9862B 676A2 3375P	Handle, Starter Starter Housing Starter Assembly (Inc. Key No's. 1 thru 7) Machine Screw, Pan Hd. Phillips No. 10 - 24 x 3/4 Gr. 5

\*STANDARD HARDWARE--PURCHASE LOCALLY



KEY NO,	PART NO.	DESCRIPTION	KEY NO.	PART NO.
1	014125	*Body Channel Reducer	17	008793
2	012809	*Body Channel Welch Plug (Large)	18	013395
2 3	004784	Choke Friction Ball	19	013210
4 5	008805	Choke Friction Spring	20	013269
5	017994	Choke Shaft & Lever	21	013396
6	013263	Choke Shutter	22	012727
7	013215	†Diaphragm Gasket	23	011503
8 9	013278	+Diaphragm	24	016806
9	013216	Diaphragm Cover	25	017995
10	008942	Diaphragm Cover Screw & Lockwasher	26	013219
		(4)	27	010280
11	9094H	†Gasket	28	013518
12	013652	+Fuel Pump Diaphragm	29	004119
13	013218	†Fuel Pump Gasket	30	010280
14	013167	Fuel Pump Cover	31	GS-1HS
15	011441	Fuel Pump Cover Ret. Screw &	32	RK-3HS
		Lockwasher (4)	33	DG-1HS
16	013621	Idle Mixture Screw		
			~~	

PART	DESCRIPTION
NO.	
008793	*Idle Mixture Scr
013395	*Inlet Control Le
013210	*Inlet Fulcrum Pi
013269	*Inlet Fulcrum Pi
013396	Inlet Needle
012727	*Inlet Screen
011503	*Inlet Tension Sp
016806	Main Nozzle and
017995	Throttle Shaft 8
013219	Throttle Shaft C
010280	*Throttle Shaft C
013518	*Throttle Shaft F
004119	Throttle Shutte
010280	*Throttle Shutter
GS-1HS	+Gasket Set (Inc.
RK-3HS	Repair Parts Kit
DG-1HS	*Diaphragm & G

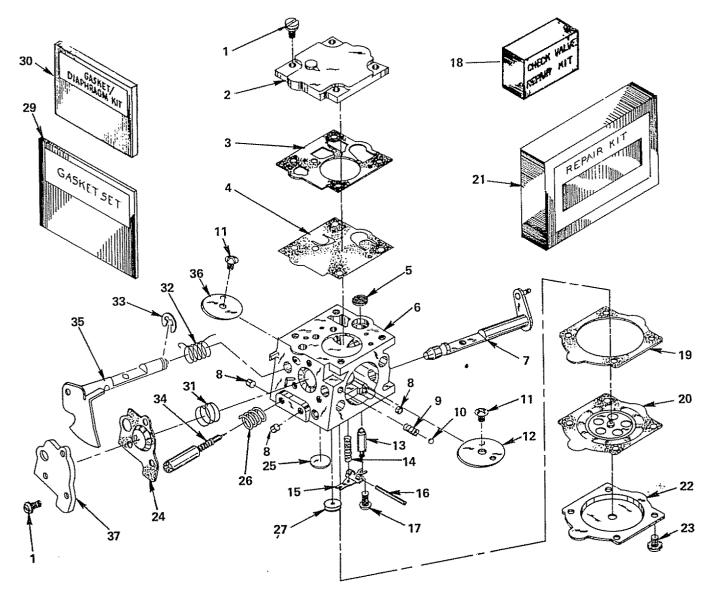
10

- Screw Spring Lever
- Pin
- Pin Ret. Screw
- Spring and Jet (.028) ft & Lever

- ft Clip ft Clip Ret. Screw ft Return Spring
- tter
- tter Screw & Lockwasher nc. Parts Marked † )
- Kit (Inc. Parts Marked \*)
- Gasket Set (Inc. Parts Marked +)

CHAIN SAW--MODEL NUMBER 917.353731 & 917.353771 ONLY

#### CARBURETOR



KEY NO.	PART NO.	DESCRIPTION	KEY NO	PART NO.	DESCRIPTION
		Screw - Cover Cover - Fuel Pump Gasket - Fuel Pump Diaphragm - Fuel Pump Screen - Fuel Inlet Body Assembly - Carburetor Choke - Shaft & Lever Assembly Plug - Cup Spring - Choke Friction Ball - Choke Friction Screw - Valve Valve - Choke Valve - Choke	21 22 23 24 25 26 27 28 29 30	325-500 21-112 96-543 95-44 88-23 98-160 112-165 96-265 92-524 350-500	Kit - Kwik (Inc. Key No's. 5, 9 - 11, 13 - 17, 24 - 26, 30 - 32 & 34) Cover - Metering Diaphragm Screw - Fuel Pump Cover Diaphragm - Acc. Pump Plug - Welch, Idle, 3/8 Spring - Needle Jet, Main Screw - Idle Adjustment Gasket - Service Set (Inc. Key No's. 3 & 19) Kit - Gasket/Diaphragm (Inc. Key No's. 3, 4, 19 & 20)
14 15 16	98-182 ··· 166-35 144-60	Spring - Metering Lever Lever - Metering Pin - Metering Lever	31 32 33	98-261 98-163 16-33	Spring - Acc. Pump Spring - Throttle Return Ring - Throttle Shaft Retainer
16 17 18 19 20	96-156 300-944 92-94 95-515	Screw - Metering Lever Pin *Kit - Check Valve Repair (Main Nozzle) Gasket - Metering Diaphragm Diaphragm - Assembly Metering	34 35 36 37	102.56	Needle - Idle Throttle - Shaft & Lever Assembly Valve - Throttle Cover - Accelerator Pump

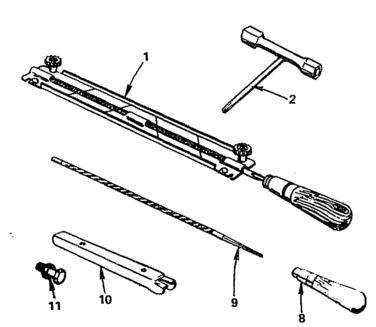
\*INCLUDES VALVE DISC CHECK AND SEAT ASSEMBLY CHECK VALVE (NOT ILLUSTRATED)

# **ACCESSORIES AND REPAIR PARTS**

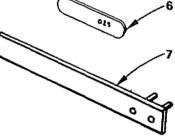
AVAILABLE THROUGH YOUR NEAREST SEARS SER-VICE OR CATALOG OUTLET.

CATALOG NO.	DESCRIPTION	CATALOG NO.	DESCRIPTION
3633 3636	Chain (917,353730 & 917,353731) (917,353770 & 917,353771)	36525	Chain File 3/16" Diameter (917.353730 & 917.353731 ONLY)
36367	Guide Bar 18" Chain File and Guide	36524	5/32 <sup>11</sup> Diameter (917.353770 & 917.353771 ONLY)
36501	3/16" Diameter (917.353730 & 917.353731 ONLY)	36609 36512	Chain Saw Case Snap - On Chain Guard
36516	5/32" Diameter (917.353770 &	36555	Craftsman Chain Saw Oil
36178	917.353771 ONLY) Muffler Heat Shield Kit	36554	Chain/Bar Lubricant

# MAINTENANCE KIT (NOT INCLUDED WITH CHAIN SAW)



CHALM 3 MO C



AVAILABLE THROUGH YOUR NEAREST SEARS SERVICE CENTER.

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	2155R	File Holder and File 3/16" Diameter (917.353730 & 917.353731 ONLY)	7 8 9	632 A9 A 6299 H	Wrench, Clutch Spanner Handle, File File
_	2160R	5/32" Diameter (917.353770 & 917.353771 ONLY)		36548	3/16" Diameter (917.353730 & 917.353731 ONLY)
2 4	780J 4001R	+Wrench +Oil, Chain Saw		4302R	5/32" Diameter (917.353770 & 917.353771 ONLY)
6	1338R	Gap Gauge .025 (For Spark Plug)	10	5674H	Depth Gauge (917.353730 & 917.353731 ONLY)
			11	648A34	Flywheel Driver

#### +INCLUDED WITH CHAIN SAW

# SERVICE NOTES



MODEL NOS. 917.353730 917.353731 917.353770 917.353771

# HOW TO ORDER REPAIR PARTS

# **MODEL NUMBER**

The Model Number will be found on the Model Plate located below "ON-OFF" Switch. Always mention the Model Number when requesting service or repair parts for your Chain Saw.

# **REPAIR PARTS**

All parts listed herein may be ordered from any SEARS, ROE-BUCK AND CO. retail or catalog store.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- THE PART NUMBER
- THE PART DESCRIPTION
- THE MODEL NUMBER
- THE NAME OF MERCHANDISE

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



# SEARS SERVICE

Your Sears merchandise takes on added value when you discover that Sears has over 2,000 Service Units throughout the country. Each is staffed by Sears-trained, professional technicians using Sears approved parts and methods.