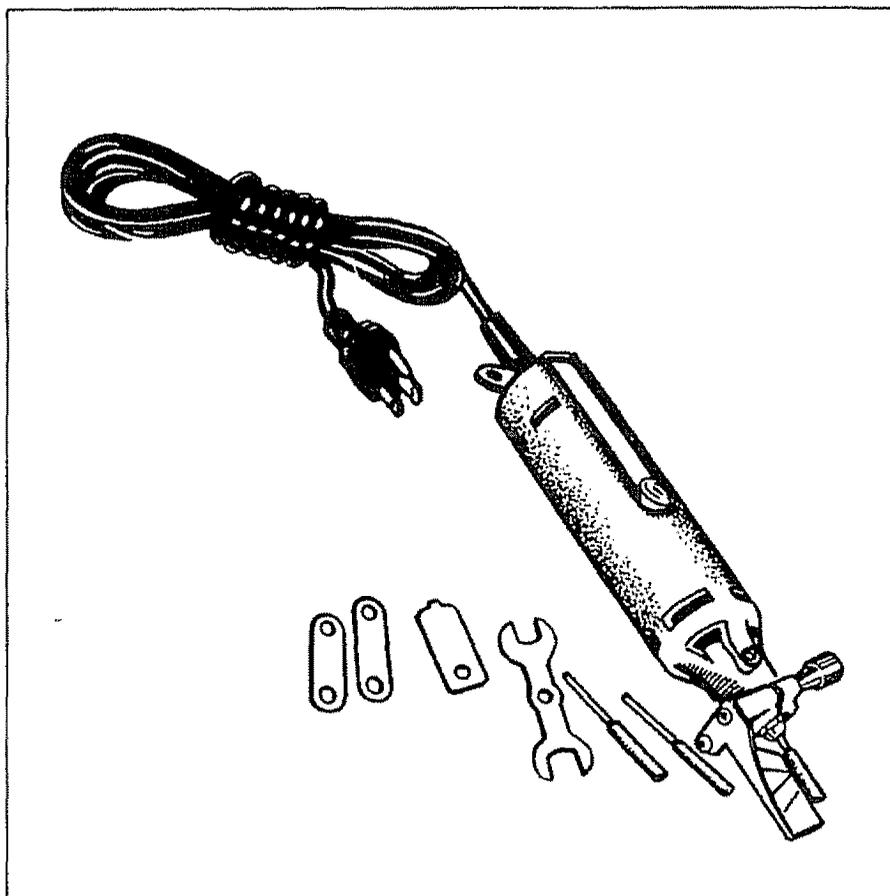


Sears

OWNERS
MANUAL

MODEL NO.
572.36578

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully



CRAFTSMAN[®]

115 VOLT A.C. SAW CHAIN SHARPENER

Introduction
Assembly
Operation
Maintenance
Repair Parts

FULL ONE YEAR WARRANTY ON CRAFTSMAN SAW CHAIN SHARPENER

For one year from the date of purchase, Sears will replace this Craftsman Saw Chain Sharpener, free of charge, if it fails to work properly.

WARRANTY SERVICE IS AVAILABLE BY RETURNING THE CRAFTSMAN SAW CHAIN SHARPENER TO THE NEAREST SEARS STORE 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 & CO.
SEARS TOWER
DEPT. 698/731A
CHICAGO, IL 60684

INTRODUCTION

WE SUGGEST YOU TAKE A FEW MINUTES TO READ THE INSTRUCTIONS CONTAINED IN THIS MANUAL BEFORE USING YOUR CRAFTSMAN SAW CHAIN SHARPENER. THIS WILL HELP YOU OBTAIN THE FULL BENEFITS OF THE QUALITY AND CONVENIENCE BUILT INTO THE TOOL.

RULES FOR SAFE OPERATION

WARNING

When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

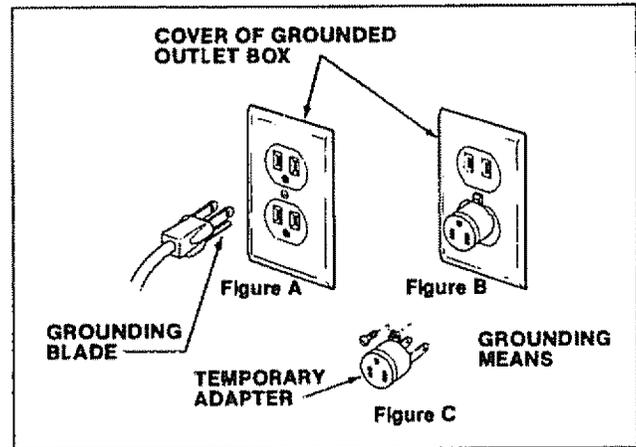
READ AND SAVE ALL THE FOLLOWING INSTRUCTIONS

1. **KEEP WORK AREA CLEAN** — Cluttered areas and benches invite injuries.
2. **AVOID DANGEROUS ENVIRONMENT** — Don't expose tools to rain. Don't use power tools in damp or wet locations. Don't use power tools in the presence of flammable liquids or gases. Avoid chemical or corrosive environments. Keep work area well lit.
3. **GUARD AGAINST ELECTRIC SHOCK** — Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
4. **KEEP CHILDREN AWAY** — Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
5. **STORE IDLE TOOLS** — When not in use, tools should be stored in dry, and high or locked-up place-out of reach of children.
6. **DON'T FORCE TOOL** — It will do the job better and safer at the rate for which it was intended.
7. **USE RIGHT TOOL** — Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended - for example - don't use circular saw for cutting tree limbs or logs.
8. **DRESS PROPERLY** — Do not wear loose clothing or jewelry. They can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear gloves to prevent cutting your fingers when touching or rotating chain. Wear protective hair covering to contain long hair.
9. **USE SAFETY GLASSES** — Also use face or dust mask if cutting operation is dusty.
10. **DON'T ABUSE CORD** — Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
11. **SECURE WORK** — Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. **DON'T OVER-REACH** — Keep proper footing and balance at all times.
13. **MAINTAIN TOOLS WITH CARE** — Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
14. **DISCONNECT TOOLS** — When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
15. **REMOVE ADJUSTING KEYS AND WRENCHES** — Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. **AVOID UNINTENTIONAL STARTING** — Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. **OUTDOOR USE EXTENSION CORDS** — When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT** — Watch what you are doing. Use common sense. Do not operate tool when you are tired. Don't use power tools after taking drugs, alcohol or medications.
19. **CHECK FOR DAMAGED PARTS** — Before further use of the tool, check for damaged parts. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A part that is damaged should be properly repaired or replaced by an authorized service center before further use of the tool. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.

GROUNDING INSTRUCTIONS

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a three-conductor cord and three-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. Your unit is for use on less than 150 volts, and it has a plug like that shown in Figure A. An adapter, Figures B and C, is available for connecting Figure A plugs to two-prong receptacles. The green-colored rigid ear, lug, etc., must be connected to a permanent ground such as a properly grounded outlet box. Adapters are not allowed in Canada by the Canadian electrical code.

Use only three-wire extension cords which have three-prong grounding-type plugs and three-pole receptacles which accept the tool's plug. Replace or repair damaged or worn cords immediately.



REPLACEMENT PARTS—When servicing use only identical replacement parts.

POWER SUPPLY—Tool operates on 115V, AC, 60-Hz.

READ AND SAVE ALL THE PRECEEDING INSTRUCTIONS

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SHARPENED CUTTER EXAMPLES	9
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IMPORTANT OPERATING INSTRUCTIONS - Read before using Chain Saw Sharpener

Check to see that the carton contains the following items illustrated on pages 4 and 5.

One Chuck Cap - Part Number 660113
One Collet - Part Number 480
One Chuck Wrench - Part Number 500045
Two Spacers
One Guide Gauge
Three Grinding Stones -
Part Numbers 36581, 82 & 83
Sharpener - Part Number 36578

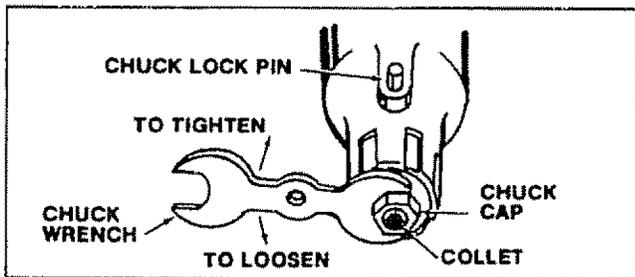
IMPORTANT: If any of these parts are missing, please **IMMEDIATELY** notify the Sears retail or catalog store from which you purchased the sharpener so corrective action can be taken as quickly as possible.

Read this manual carefully. It will help you use your tool correctly and help you select the correct accessory for your job.

Your Craftsman Saw Chain Sharpener will sharpen nearly all popular sizes of chain if you follow these simple instructions.

ALWAYS UNPLUG TOOL BEFORE CHANGING GRINDING STONES OR SERVICING YOUR TOOL.

CHUCK—Consists of a chuck cap and collet. To loosen, first unplug the sharpener from the power supply, then depress the chuck lock pin and rotate the shaft by hand until the lock pin engages the shaft preventing further rotation. *NOTE: Do not depress pin while the tool is running.* With the lock pin depressed, use the chuck wrench to loosen the chuck cap. Insert shank of grinding stone into collet. With the lock pin depressed, tighten the chuck cap with the wrench until the shank is gripped by the collet. Avoid excessive tightening of the chuck cap.



CAUTION—Any servicing of this tool (including brush replacement) should be performed by an authorized Sears service representative.

MAINTENANCE—The brushes in this tool are self-limiting. This means that when the brushes are worn out, they stop making contact with the commutator and the tool will stop running. This is done to eliminate the possibility of a piece of the brush and/or the spring getting loose inside the tool when the brushes are worn out.

Just prior to the tool stopping it will start to run sporadically, it will lose power and it may run at a reduced speed and make unusual noises.

BALANCING GRINDING STONES—It is important that all grinding stones be in good balance (much the same as the tires on your automobile). To true up or balance a grinding stone, slightly loosen chuck cap and give the grinding stone or collet a $\frac{1}{4}$ turn. Retighten chuck cap and run the tool. You should be able to tell by the sound and feel if your grinding stone is running in balance. Continue adjusting in this fashion until best balance is achieved.

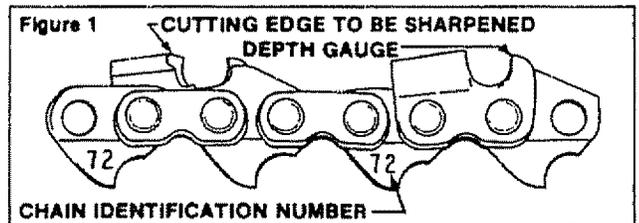
BEARINGS—Your tool is equipped with oil impregnated sleeve bearings. Under normal use not more than 2 drops of SAE No. 5 or lighter, non-detergent oil can be added to each oil hole for each 100 hours of use.

STONE DIAMETER—Do not use grinding stones other than the 3 listed in the chain identification chart.

SAFETY—Protect your eyes when grinding with the tool . . . always wear an approved type of safety glasses.

ADJUSTING SHARPENER

1. First, determine the type or pitch of chain on your saw. Most chains are marked with a number on the drive link, see Figure 1. If your chain is not marked, refer to your Chain Saw Owners Manual for the recommended chain number.



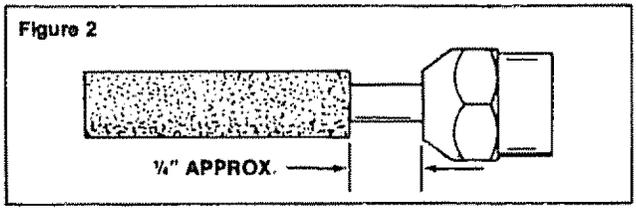
2. Refer to chart for the correct grinding stone. Many chains in use in the U.S. today are Oregon® chains so you may find your chain number in the Oregon® column rather than the column under your chain saw manufacturer.

3. When you have determined the correct grinding stone for your chain from chart, assemble attachment as shown in Figure 3.

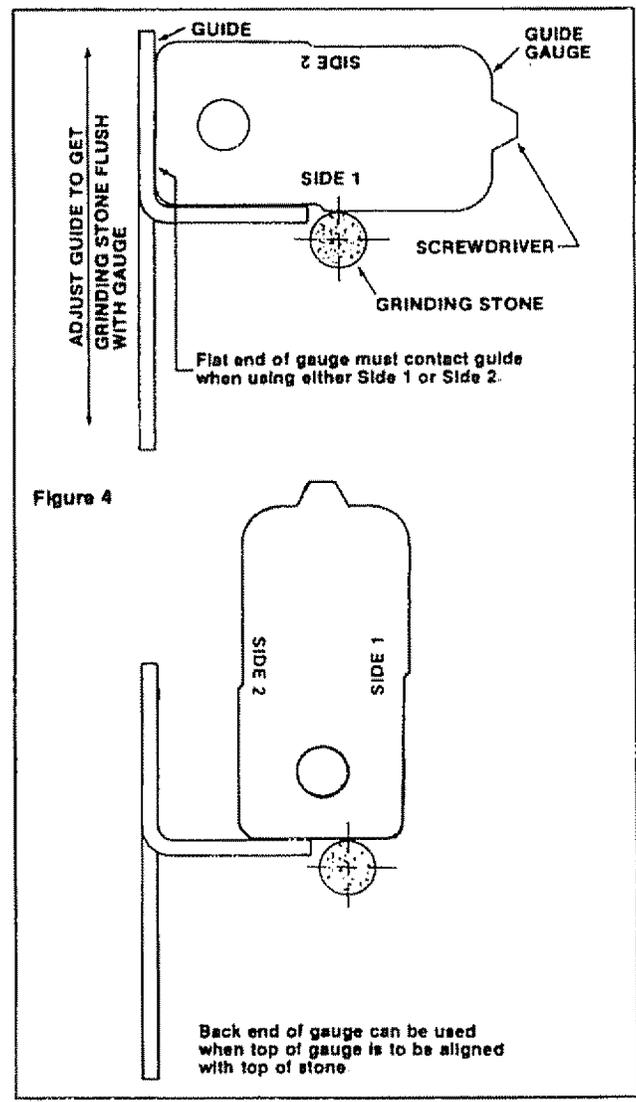
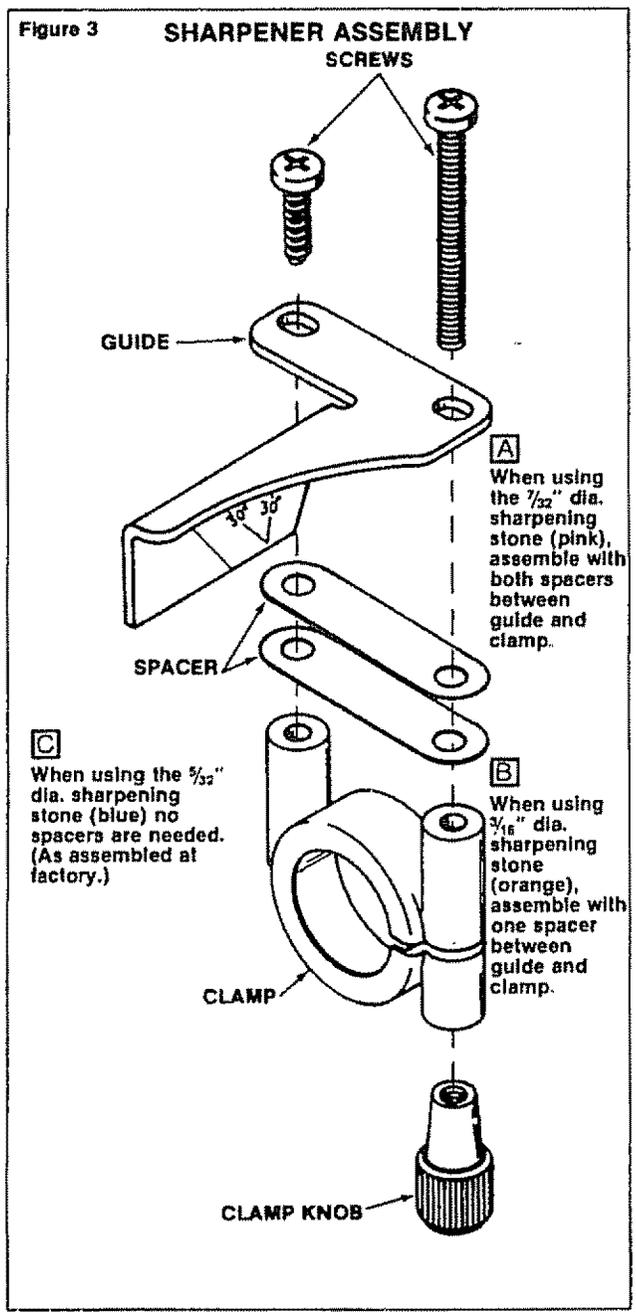
A If you use the $\frac{7}{32}$ " dia. (pink) stone, assemble **both spacers** between the guide and the clamp.

B If you use the $\frac{3}{16}$ " dia. (orange) stone, assemble with **only one** spacer between the guide and the clamp.

C If you use the $\frac{5}{32}$ " dia. (blue) stone, **no spacers** are needed.



4 Securely mount the correct grinding stone in your tool with approximately 1/4" of the shank exposed between the chuck cap and the stone, Figure 2. Using the appropriate side (see column 2 of chart) of the guide gauge furnished, check to see if the guide is properly positioned with respect to the grinding stone, see Figure 4. If it is not, use a screwdriver or the end of the guide gauge to loosen the two guide mounting screws just enough so the guide can be moved. It has elongated holes to allow for adjustment. Adjust the guide with respect to the grinding stone using the guide gauge and tighten the screws. If you should find the elongated holes do not provide enough adjustment, loosen the clamp knob and rotate the clamp a quarter of the way around the nose of the tool. Tighten the clamp knob and make the adjustment.



IMPORTANT
Use of any accessories or attachments other than those supplied by Sears may be hazardous.

CHAIN IDENTIFICATION CHART

Grinding Stone	Guide Gauge Side	Depth Gauge Setting	10° Tilt Yes or No	Sharpening Angle	Oregon®	Carlton	Homelite	McCulloch	Poulan	Sabre	Stihl	Windsor	Pitch (Ref)
3/32" Dia. Blue Cat No. 36581	1	.025	Yes	30°	25AP			SM250		16	13M	50K	.250
	*	.025	Yes	30°	33LG								.325
	*	.025	Yes	30°	34LG								.325
	*	.025	Yes	30°	35LG								.325
	1	.025	No	30°	91G		375N50	MM370	P100				.375
	1	.025	No	30°	91SG		375C50	MP370	P101	350		50R	.375
3/16" Dia. Orange Cat No. 36582	1	.025	Yes	30°	19AP								.325
	1	.025	Yes	30°	20AP	K1C				325	23M	50J	.325
	1	.025	Yes	30°	21AP							58J	.325
	2	.030	Yes	30°	76LG								.375
	2	.030	Yes	30°	77LG								.375
	2	.030	Yes	30°	78LG								.375
1/32" Dia. Pink Cat No. 36583	2	.030	Yes	35°	26			SM408					.404
	2	.030	Yes	35°	27			SM403	P27		46M		.404
	2	.030	Yes	35°	28						43M		.404
	2	.025	Yes	30°	50LP	B3LR		SPR400					.404
	*	.030	No	35°	50CP	B1SE			P50			50B	.404
	2	.025	Yes	30°	51LP			SPR408					.404
	*	.030	No	35°	51CP	B2S,E		PM408			45C	58B	.404
	2	.025	Yes	30°	52LP			SPR403			46S		.404
	*	.030	No	35°	52CP	B3S,E	40-C63	PM403	P52	240		63B	.404
	2	.025	Yes	30°	72LP	A1L		SPM370G			33S		.375
	2	.025	No	35°	72DP	A1C.E.S	38C50	PM370G		18	33M	50A	.375
	2	.025	Yes	30°	72LG								.375
	2	.025	Yes	30°	73LP	A2L		SPR378G			35S		.375
	2	.025	No	35°	73DP	A2C.E.S	38C58	PM378G		48	35M	58A	.375
	2	.025	Yes	30°	73LG								.375
	2	.025	Yes	30°	75LP	A3L		SPR373G			36S		.375
2	.025	No	35°	75DP	A3C.E.S		PM373G			36M	63A	.375	
2	.025	Yes	30°	75LG								.375	

* Top of guide to be aligned with top of stone. See Figure 4

SHARPENING CHAIN

IF YOUR SAW IS ELECTRIC, BE SURE IT IS UNPLUGGED! IF GASOLINE POWERED, BE SURE THE SWITCH IS OFF AND/OR THE SPARK PLUG LEAD IS DISCONNECTED.

Set your saw on a flat solid surface so it will not slip while you are sharpening the chain. The chain tension should be adjusted as specified in the Chain Saw Owners Manual. If it is too loose, the teeth will move, resulting in a poor sharpening job. The saw should be positioned so that you are looking at the side of the guide bar with the motor or engine to your right. Cutter teeth on the near side of the chain are

sharpened, as shown in Figure 5. The guide should be laid flat on the tooth with the proper index line aligned by eye with the guide bar. See column 5 on chart on page 6 for proper index line. Some chains are sharpened with the grinding stone held horizontally and some are sharpened with the stone tilted slightly (10°). See column 4 of chart on page 6 and Figure 7 for identification of cutter teeth and tilt angle. Two or three **light** strokes across the chain are usually enough unless the cutters have been damaged. If the cutters have been severely damaged, it may be necessary to take the chain to Sears Service Department for machine grinding. Keeping the chain saw in the same position, sharpen the teeth on the far side of the chain with the tool positioned, as

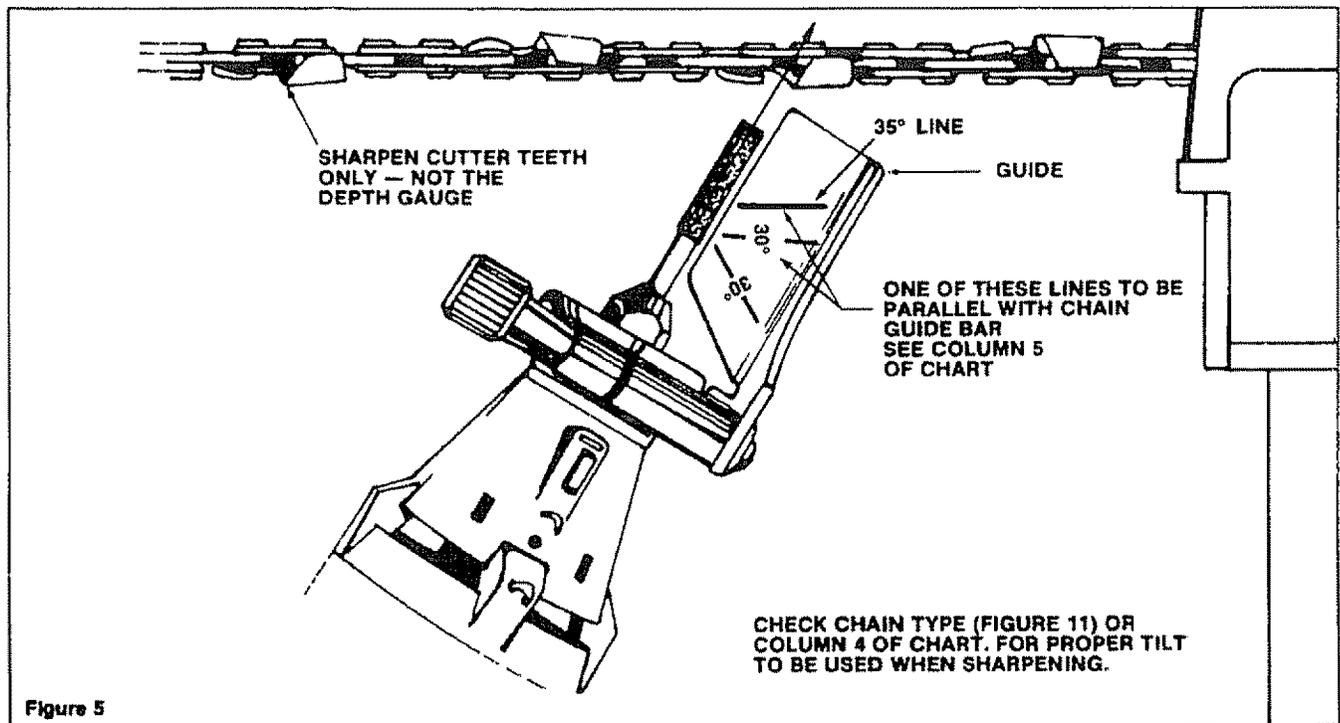


Figure 5

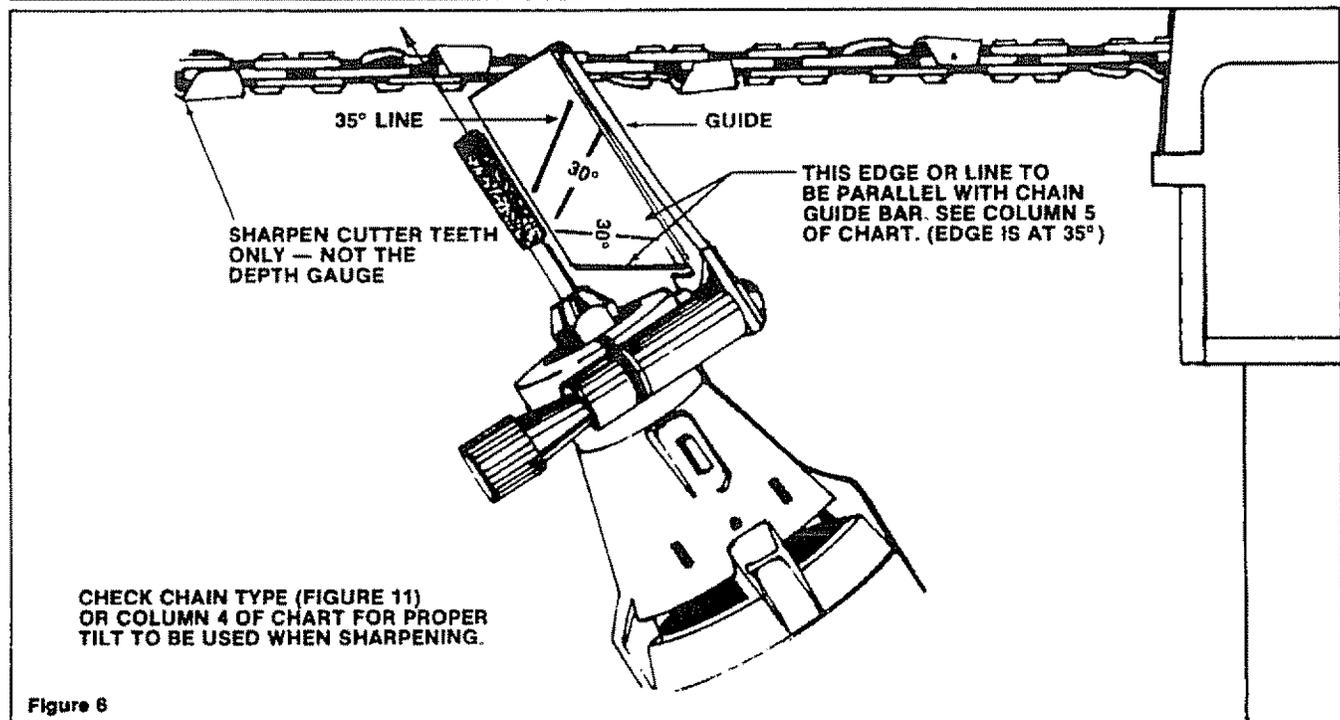


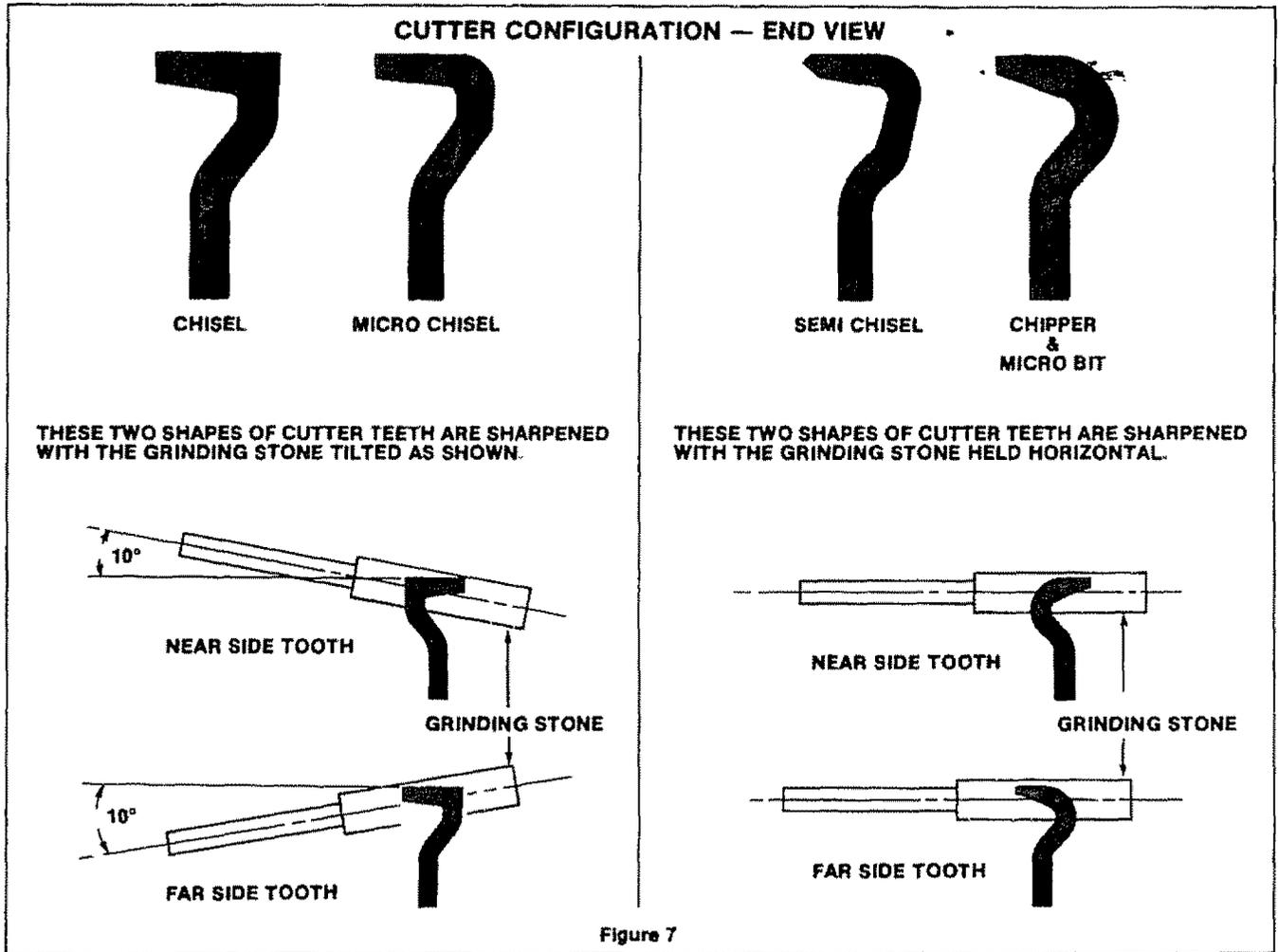
Figure 6

IF YOUR SAW IS ELECTRIC, BE SURE IT IS UNPLUGGED! IF GASOLINE POWERED, BE SURE THE SWITCH IS OFF AND/OR THE SPARK PLUG LEAD IS DISCONNECTED.

shown in Figure 6. In this position, the angular edge of the guide or other index line should be aligned with the guide bar.

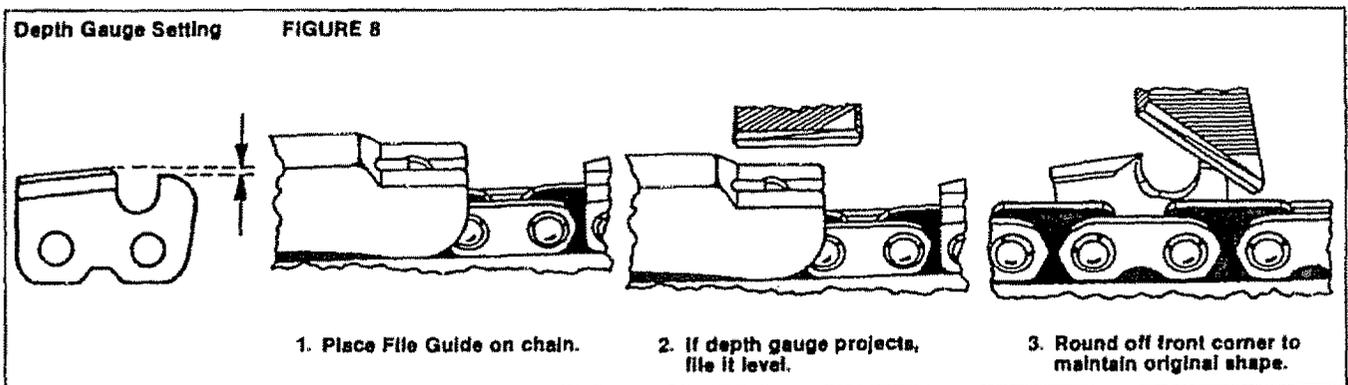
When all of the teeth on the top of the bar have been sharpened, advance the chain, using a glove or rag

to protect your hand, by pulling the chain toward the end of the bar. Repeat this until all the teeth have been sharpened. **CAUTION: IT IS IMPORTANT TO TRY TO SHARPEN ALL TEETH EQUALLY. UNEVEN TEETH MAY CAUSE EXCESSIVE WEAR TO THE BAR AND A ROUGH CUT.**



AFTER EVERY THIRD OR FOURTH SHARPENING, THE DEPTH GAUGES OF YOUR CHAIN SHOULD BE CHECKED WITH YOUR SEAR'S DOUBLE ENDED DEPTH GAUGE FILE GUIDE (CATALOG NO. 32-36557) AND FILED IF NECESSARY. ONE END OF GAUGE IS FOR .025 SETTINGS AND THE OTHER END IS FOR .030 SETTINGS. REFER TO THE CHART ON PAGE 6 FOR THE PROPER SETTING FOR YOUR CHAIN. IF FILING IS NECESSARY, FOLLOW THE PROCEDURE SHOWN IN FIGURE 8

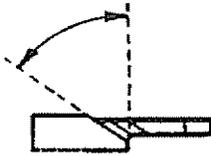
NOTE: FILE GUIDE IS **NOT** INCLUDED WITH MODEL NO. 572.36577 SAW CHAIN SHARPENER.



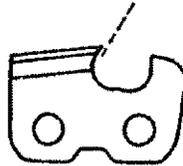
TROUBLE SHOOTING

IF YOUR SAW DOES NOT CUT AS WELL AS IT SHOULD AFTER SHARPENING OR IT DOES NOT CUT STRAIGHT, YOU MAY HAVE A WORN OR DAMAGED GUIDE BAR, A WORN SPROCKET, OR DAMAGED LINKS IN THE CHAIN. THIS CAN BE CHECKED AND REPAIRED FOR YOU AT YOUR SEARS SERVICE DEPARTMENT. HOWEVER, BEFORE DOING THIS, CHECK FOR CUTTER PROBLEMS.

SHARPENING ERRORS—IF YOUR CUTTERS LOOK LIKE THESE, RE-SHARPEN THEM.



Top plate angle not 35° — caused by holding sharpener at wrong angle.

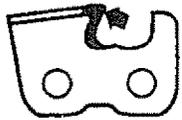
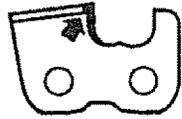


Hook in side plate— caused by pressing sharpener down too hard, or holding sharpener too low



Backslope in side plate— caused by holding sharpener too high. Chain won't feed properly; cutters wear fast at heel

Most chain problems are caused by three things: Incorrect grinding, lack of lubrication, and loose chain tension. Here are some of the most common signs to look for if your saw chain is not performing right.

CONDITION	CAUSE	RESULT	REMEDY
Hook in side plate cutting edge 	Sharpener held too low or the stone was too small.	Rough cutting. Chain grabs. Cutters dull quickly or won't hold a cutting edge.	Sharpen cutters to recommended angle. Check stone size. Hold sharpener correctly
Blunt top plate cutting angle. 	Sharpener held too high or stone was too large	Cutters cut slow. Requires extra pressure to cut. Will cause excessive wear on bottom of chain parts	Grind cutters to recommended angle. Check stone size. Hold sharpener correctly.
Top plate angle less than recommended 	Sharpener held at less than recommended angle	Slow cutting. Requires extra pressure to cut.	Grind to recommended angle
Top plate angle more than recommended 	Sharpener held at more than recommended angle	Cutting angle is very sharp, but will dull fast. Cutting action rough and erratic	Grind to recommended angle
Excessive heel wear on cutters and tie straps. 	One, or a combination of the following: Blunt top plate grinding. Forcing dull chain to cut. Forcing chain to cut frozen wood. Low depth gauges. Lack of lubrication	Heel of cutter wears off rapidly. In cold weather cracks will appear	Sharpen cutters properly. Use plenty of lubrication. Don't force chain to cut. Keep cutters sharp.
Concave wear on bottom of cutters and connecting tie straps 	Tight chain tension on hard-nose bar. Heavy undercutting or boring with hard-nose bar.	Concave wear on bottom of all parts	Use sprocket-nose bar. Reduce amount of cutting with nose or top of bar.

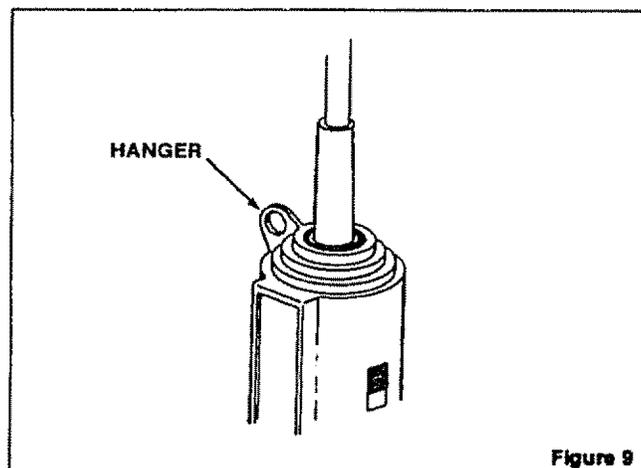
CUTTER PROBLEMS

What to do if chain cuts slow or won't hold its edge:

1. Remove chain from bar.
2. Clean chain with solvent to remove pitch and resin.
3. Compare each cutter to these pictures.

If your chain is not cutting, cuts slowly, won't hold an edge, or it cuts crooked, your problem could be caused by one or more of the following conditions:

CONDITION	CAUSE	RESULT	REMEDY
Severe damage on either side of top and/or side plates 	Cutters hit or cut material other than wood. (Possibly dirt, rock or sand.)	Chain won't cut. Chain cuts crooked if only one side has damage to the cutters	Grind damaged area out of all cutters. If only one side is damaged, grind it first. Grind other side of cutter to the same length. Reset depth gauges
Light damage on cutting edges of top and/or side plates. 	Cutters came in contact with light abrasive material.	Very slow cutting—if at all. Have to force chain to cut.	Grind damaged area out of all cutters.
Feathered top plate cutting edge. 	Sharpener held low or the stone was too small	Poor stay-sharp. Rapid dulling. Will cut fast for short time, then becomes dull.	Use proper size stone. Hold sharpener correctly.
Backslope on side plate cutting edge. 	Sharpener held too high, or the stone was too large	Cutters won't feed into wood. Slow cutting. Have to force chain to cut. Will cause excessive bottom wear	Sharpen cutters to recommended angle. Check stone size. Hold sharpener correctly.



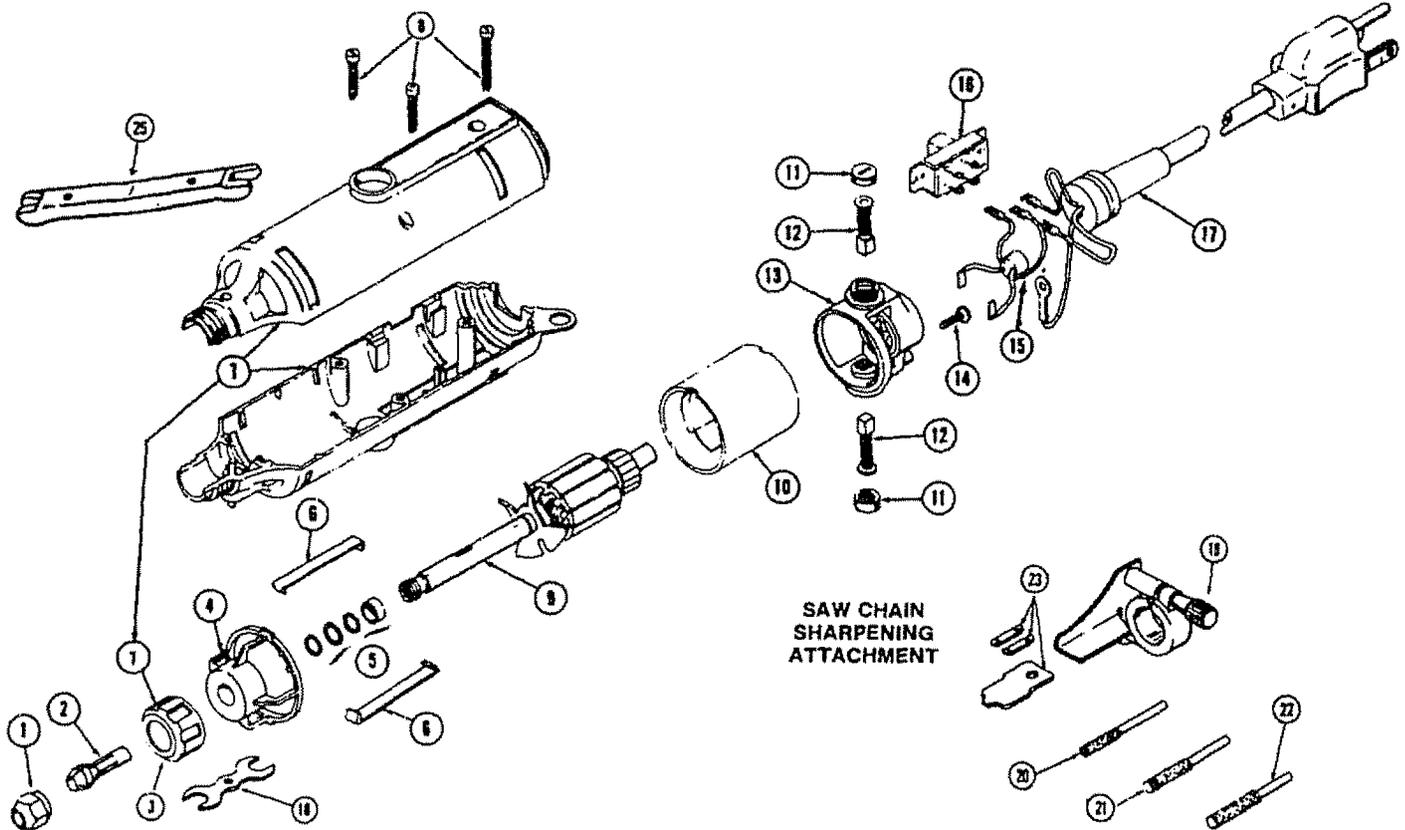
STORAGE

Your Craftsman Saw Chain Sharpener includes a hanger for convenience and ease of storage as shown in Figure 9.

CRAFTSMAN CHAIN SHARPENER — MODEL NUMBER 572.36578

The Model Number will be found on a plate attached to the Motor Housing. Always mention the Model Number in all correspondence regarding your Saw Chain Sharpener or when ordering repair parts.

SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS



Code No.	Part No.	Description
1	660113	Chuck Cap
2	480	1/8 Collet
3	660217	Housing Cap Screw
4	990136	Front Brg. Bracket (Complete)
5	990816	Thrust Washer Assortment
6	990805	Bearing Bracket Clips (Pr.)
7	990810	Housing Complete
8	990815	Housing Screws, 1 long-2 short
9	990141	Armature w/Fan
10	990112	Field w/Magnet
11	990813	Brush Cap (Pr.)
12	990827	Brushes w/Shunts (Pr.)
13	660240	Rear Brg. Bracket (Complete)

Code No.	Part No.	Description
14	298008	Ground Screw
15	990100	Rectifier Complete
16	660046	Switch
17	660014	Cord
18	500045	Wrench
19	600614	Sharpening Attachment
20	36581*	5/32" Grinding Wheel, Blue (2)
21	36582*	3/16" Grinding Wheel, Orange (2)
22	36583*	7/32" Grinding Wheel, Pink (2)
23	990869	Gage & 2 Spacers
24	380223	Owners Manual (not shown)
25	1-610542-03†	Depth Gauge Filing Guide Catalog No. 32-36557

*Replacement sharpening stones are available from your nearest Sears store or catalog outlet

†Not included with Model 572.36578 Craftsman Saw Chain Sharpener.

Sears

OWNERS
MANUAL

MODEL NO.
572.36578

HOW TO ORDER
REPAIR PARTS

CRAFTSMAN®

SAW CHAIN
SHARPENER

The model Number will be found on the plate attached to the tool. Always mention the Model Number when requesting service or repair parts for your Saw Chain Sharpener.

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

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

1. PART NUMBER
2. PART DESCRIPTION
3. MODEL NUMBER
572.36578
4. NAME of ITEM—
Electric Saw
Chain Sharpener

Your Sears merchandise takes on added value when you discover that Sears has over 2000 Service Units throughout the country.