owners manual



SCROLLER SAW DOUBLE INSULATED 3/4 INCH STROKE – VARIABLE SPEED

MODEL NO. 315.17250

Sears

CAUTION:

Read Rules for Safe Operation and Instructions Carefully

Introduction

- Operation
- Repair Parts



THIS SAFETY SEAL OF THE POWER TOOL INSTITUTE ASSURES YOU:



- 1. That the manufacturer's power tools, including the particular tool associated with the Seal, are produced in accordance with applicable Standards for Safety of Underwriters' Laboratories and American National Standards (ANSI).
- 2. That compliance with applicable safety standards is assured by independent inspection and testing conducted by Underwriters' Laboratories (UL).
- 3. That every motorized tool is inspected under power.
- That every tool has with it adequate instructions and a list of safety rules for the protection of the user.
- 5. That the tool manufacturer is a member of the Power Tool Institute and is a sponsor of the Institute's Consumer Safety Education Program.

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Designed exclusively for and sold only by SEARS, ROEBUCK AND CO.—Chicago, Illinois 60607 U.S.A and SIMPSONS-SEARS LIMITED—Toronto

FORM NO. EN-637 3-72 PRINTED IN U * A.

GUARANTEE -

CRAFTSMAN PORTABLE ELECTRIC TOOLS ARE UNCONDITIONALLY GUARANTEED FOR ONE YEAR TO GIVE COMPLETE SATISFACTION OR RETURN FOR FREE REPLACEMENT. THIS GUARANTEE SERVICE IS AVAILABLE BY SIMPLY RETURNING THE TOOL TO ANY SEARS STORE

SEARS, ROEBUCK AND CO. and SIMPSONS-SEARS LTD.

PARTS.

functional insulation have the added protection of

non-conductive sleeving or housings to complete the

SERVICING OF A TOOL WITH DOUBLE INSULA-

TION REQUIRES EXTREME CARE AND KNOWL-

EDGE OF THE SYSTEM AND SHOULD BE PER-

FORMED ONLY BY A QUALIFIED SERVICE TECH-NICIAN. FOR SERVICE WE SUGGEST YOU RE-

TURN THE TOOL TO YOUR NEAREST SEARS STORE FOR REPAIR WHICH WILL BE DONE WITH ORIGINAL FACTORY REPLACEMENT

for sawing ferrous metals, plastics and laminates.

HIGH speed produces best results in sawing wood

and non-ferrous metals such as aluminum which

AVOID RUNNING AT SLOW SPEEDS FOR EX-TENDED PERIOD OF TIME WHEN POSSIBLE. AT

SLOWER SPEEDS UNDER CONSTANT PROLONG-

ED USAGE, THE UNIT MAY BECOME OVERHEAT-

ED. SHOULD THIS OCCUR: RUN TOOL WITH NO

LOAD AT MAXIMUM SPEED TO COOL THE

UNIT. THIS WILL ACCELERATE COOLING PRO-

require high speeds and maximum power.

double insulation system.

introduction

DOUBLE INSULATION

Double Insulation is a concept in safety, replacing the standard grounded supply system, in electric power tools. The construction of a double insulated tool affords compatible protection to a properly grounded tool without the necessity for using a grounded conductor. The double insulation system eliminates the need for the usual three wire grounded power cord and grounded supply system. Wherever there is electric current in the tool there are two complete sets of insulation to protect the user. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. The lead wires, switch, etc. with their

VARIABLE SPEED

Electronic trigger control switch delivers higher speed and higher torque with increased trigger pressure. The speed of your saw is controlled by the amount of switch trigger depression. Trigger switch is double pole for added safety and has safety release for added utility. Trigger depression disengages locking mechanism.

The following guidelines may be used in determining correct speed for various applications: LOW speed is ideal for starting cuts, sawing ceramics, as well as other applications where minimum speed and power is required. MEDIUM speed is suitable

RULES FOR SAFE OPERATION



CESS.

- 1. KNOW YOUR POWER TOOL Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
- GROUND ALL TOOLS UNLESS DOUBLE-INSULATED. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If adapter is used to accommodate two-prong receptacle, the adapter wire must be attached to a known ground. (Usually the screw securing receptacle cover plate). Never remove third prong. 3
- KEEP GUARDS IN PLACE and in working order.
- KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents. 5
- AVOID DANGEROUS ENVIRONMENT. Don't use power tool in damp or wet locations. And keep work area well lit. 6
- KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area. 7
- STORE IDLE TOOLS. When not in use, tools should be stored in dry, high or locked-up place-out of reach of children. 8
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed. Q
- USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy duty tool. 10.
- WEAR PROPER APPAREL. No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors. 11.
- USE SAFETY GLASSES with most tools. Also face or dust mask if cutting operation is dusty. 12.
- DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges 13.
- 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. DON'T OVERREACH. Keep proper footing and balance at all times. 14. 15.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories. 16.
- DISCONNECT TOOLS. When not in use, before servicing: when changing attachments, blades, bits, cutters, etc. 17
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on. AVOID ACCIDENTAL STARTING. Don't carry plugged in tool with finger on switch. 18
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CUSTOMER INSTRUCTIONS

- **DO** read thoroughly ASSEMBLY, OPERATING IN-STRUCTIONS AND PARTS LIST before beginning operation of your SCROLLER SAW. **DO** be sure the voltage of the power supply agrees 1.
- 2. with the dataplate marking on the unit.
- 3. **DO** use only specified replacement parts.
- 4.
- **DO** use goggles when cutting any metal. **DO** be sure switch is in "OFF" position before con-5. necting tool to power supply.
- 6 DO replace both brushes when either is worn to about Mininch in length.

CAUTION



DON'T begin operation of your SCROLLER SAW before reading thoroughly ASSEMBLY, OPERAT-ING INSTRUCTIONS AND PARTS LIST.

2. DON'T lift tool from work with motor running. This can cause the surface of the work to be marred and may break blades.

3. DON'T leave the line cord plug connected to the power supply while making tool adjustments or changing motor brushes.

The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before commencing power tool operation. We recommend Wide Vision Safety Mask for use over spectacles, or standard safety glasses . . . available at Sears retail or catalog stores.

AVOID USE OF ALL SOLVENTS WHEN CLEANING PLASTIC PARTS, USE CLEAN CLOTHS AND WIPE PARTS AS MUCH AS POSSIBLE TO REMOVE DIRT, CARBON DUST, ETC. MOST PLASTICS ARE SUSCEPT-IBLE TO VARIOUS TYPES OF COMMERCIAL SOLVENTS AND MAY BE DAMAGED BY THE USE OF THESE SOLVENTS.

THIS PRODUCT, or any electrical product, requires extreme care when service repairs are made. A dangerous electrical hazard can be created by tampering with the electrical or insulating systems or in the replacement or substitution of repair parts. Repairs should be made only by a qualified technician. If service is required we suggest you return the tool to your nearest Sears store for approved service with original factory replacement parts.

WHEN ELECTRIC TOOLS ARE USED ON FIBER-GLASS boats, sports cars, etc. it has been found that they are subject to accelerated wear and possible premature failure, as the fiberglass chips and grindings are highly abrasive to bearings, brushes, commutator, etc. Consequently it is not recommended that this tool be used for continuous production work on any fiberglass material. During any use on fiberglass it is extremely important that the tool is cleaned frequently by blowing with an air jet.

EXTENSION CORDS-The use of any Extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table below to determine the MIN-IMUM wire size (A.W.G.) Extension Cord.

Extension C	ord Length	Wire Size	A.W.G.

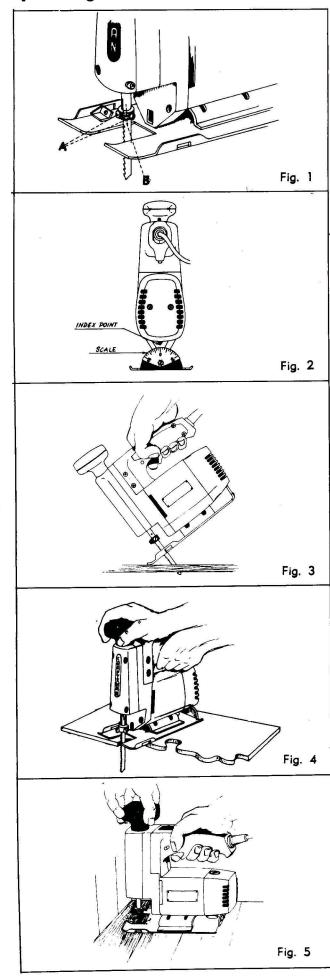
25-100 Feet

16

Extension cords suitable for use with your Scroller Saw are available at your nearest Sears Catalog Order or Retail Store.

Another time saving convenience is a cord-lock offered by Sears which prevents separation of cord. Cord-lock is available at your nearest Sears Retail Store or Catalog Order House.

operating



INSTALLING BLADES—(See Fig. 1)—IMPORTANT—BE SURE POWER CORD IS DISCONNECTED FROM POWER SUPPLY. Loosen both blade screws (A) with screwdriver, and insert saw blade into slot in saw bar (B) as far as it will go.

Tighten side blade screw firmly against blade, then tighten front blade screw firmly against blade. Excessive pressure on blade during operation of the saw can break blade. In the event that this happens all saw blades, except the 10-tooth tapered back, 6" blade can be reused by loosening the two blade screws until portion left in clamp drops out, then putting the remainder of the blade back into the clamp and retightening the blade screws. It may be necessary to flatten tooth set in area to be inserted into clamp when reusing broken blade.

NOTE: THE PIN IN THE SAW BAR IS USED ONLY AS A STOP AND IS NOT DESIGNED TO FIT IN THE NOTCH OF THE BLADE SHANK. CRAFTSMAN SABRE SAW BLADES HAVE A UNIVERSAL SHANK THAT IS DESIGNED TO FIT ALL SABRE SAWS.

GENERAL CUTTING—The angle of cut on your saw may be set at any point from 0° to 45° right or left. (See Fig. 2)—IMPORTANT— BE SURE POWER CORD IS DISCONNECTED FROM POWER SUP-PLY. Setting for required angle may be accomplished by loosening base pivot screws, Key No. 17, (See parts list, page 7), and adjusting base until index mark is in line with required angle on quadrant scale. Retighten base pivot screws.

Rest the front of the base on the work and align cutting edge of blade with line on work. Move saw forward with a firm downward pressure on the base and with sufficient forward pressure to permit blade to cut freely. DO NOT FORCE. Be sure to keep base flat on work.

To make a straight cut, clamp a piece of wood or straight-edge on the work, and guide the edge of the saw against the straight-edge. When cutting against a straight edge or board, cut in one direction only across the material, don't cut half way and continue cut from the opposite end. For best results, clamp work to bench.

NOTE: BECAUSE THE TAPERED BACK BLADE, CATALOG #2876, HAS NO SET IN THE TEETH, IT SHOULD NOT BE USED WHEN USING A BOARD TO GUIDE THE SAW.

PLUNGE CUTTING—(See Fig. 3) To cut an inside hole in work, mark the line of cut clearly. Choose a convenient starting point and place the tip of the blade over that point and inside the line on the waste. Rest curved end of base on work and hold firmly in position. Pull trigger switch and with saw blade in motion, slowly tilt saw downward until tip of blade starts cutting work. After blade penetrates work, tilt saw until the blade is perpendicular to the work. Use only 7-teeth per inch blade for plunge cutting.

METAL CUTTING—Many kinds of metals can be cut with your saw. Be careful not to twist or bend the blades. DO NOT FORCE. If the blade chatters or vibrates excessively, use a finer-tooth blade. If blade teeth become filled or clogged when cutting soft metals, such as aluminum, use a coarser-tooth blade. We recommend use of kerosene when cutting most soft metals and oil when cutting steel to keep blades cool, increase cutting action, and prolong blade life. Hold the work firmly and saw close to the holding point to eliminate any vibration of the work being cut. When cutting conduit, pipe or angle iron clamp work in a vise if possible and saw close to the vise. To cut thin sheet material "sandwich" the material between hard board or plywood and clamp the layers to eliminate vibration and material tearing. In doing this, the material will be cut smoothly. Lay out your pattern or line of cut on top of the "sandwich."

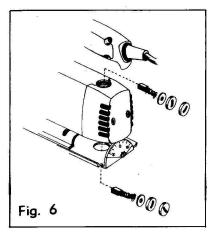
IMPORTANT—When cutting metal keep exposed portion of saw bar clean and free of metal chips by wiping frequently with an oily cloth. Use extreme caution in disposing of oily cloth after completion of job to prevent potential fire hazard.

SCROLL CUTTING—(See Figs. 4 & 5) Your Scroller Saw is designed to permit 360° swivel of the saw blade by rotating the contoured top swivel knob. This feature makes it ideally suited for making fancy cuts and scallops with radii as small as 3/16 inch. It is designed to cut in corners and close places without the necessity of rotating and turning the complete saw (See Fig. 5). It is ideal for cutting electrical outlet and switch box holes, sink and lavatory cut-outs and many other uses.

The saw is equipped with a thumb operated lock for locking the knob in four (4) positions (90° apart). The indicator on front of swivel knob indicates direction of blade cutting edge. For scroll cutting the lock must be in the unlocked position for free rotation of saw bar. Use sufficient forward pressure to permit blade to cut freely and follow the scribed line with gentle rotation of swivel knob.

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CRAFTSMAN SCROLLER SAW-MODEL NUMBER 315.17250



1.0

BRUSH REPLACEMENT—Periodically check the brushes for wear and replace both brushes when either is worn to about ¼ inch in length. To check length of brushes they must be removed from tool (see instructions below). Replacement of these relatively inexpensive parts, when necessary, will keep your tool operating more efficiently and prolong the life of the motor.

IMPORTANT—BE SURE POWER CORD IS DISCONNECTED FROM POWER SUPPLY. To replace carbon brushes (See Fig. 6) unscrew brush cap. Key No. 23, (See parts list, page 7). Remove washer, Key No. 62 and old brush, Key No. 24. Reassemble new brush and spring making sure that curvature of brush matches curvature of the surface of the motor to which it is mated and that the brush moves freely in holder. Replace washers and caps. Be sure that brush caps are tight.

LUBRICATION—All of the bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions, therefore, no further lubrication is required.

BLADE SELECTION—To obtain the best performance from your saw it is important to select a specific blade for the particular application and type of material you wish to cut. By doing this you will get a smoother faster cut and prolong blade life. Replacement blades for this saw are available from your nearest Sears retail store or catalog order house. Order by model number of saw and number of teeth per inch of blades required. Use chart below to determine correct blade for any cutting job.

IDEALLY SUITED FOR:	Teeth Per Inch	Blade Length	Speed	
Steel Rods, Pipe, Sheet Steel, etc.	32	3	LOW	
Rubber, Leather, Tile, Cardboard, Wallboard	Knife	3	HIGH	
All Purpose—Wood, Steel, Non-Ferrous Metals (1/8" or thicker)	14	31/2	MEDIUM	
Tree Branches, Logs, Wall Partitions, etc.	7	6	MEDIUM	
* Soft Wood (1x4's, 2x4's Plaster Board). Ripping	7	31/2	HIGH	
Flush Cutting	7	31/2	MEDIUM	
* Kromedge® Scroller Blade Specially for Intricate Scroll Cuts	10	3	HIGH	
Deep Angle Cuts for 1 Inch Stroke Sabre Saws	3	6	MEDIUM	
Hardwood, Wallboard, General Crosscutting (NOT PLYWOOD)	10	31/2	HIGH	
Finish Cuts In Plywood, Veneer To 1½" Thick. Tapered Back	10	3	HIGH	
* All Non-Ferrous Metals (Brass, Copper, Aluminum, etc.)	24	3	HIGH	

* Included With Tool

ACCESSORIES ADD VERSATILITY





SAW TABLE



EROLLER SAW-MODEL NUMBER 315.17250



Buy Craftsman Shop Tested Accessories

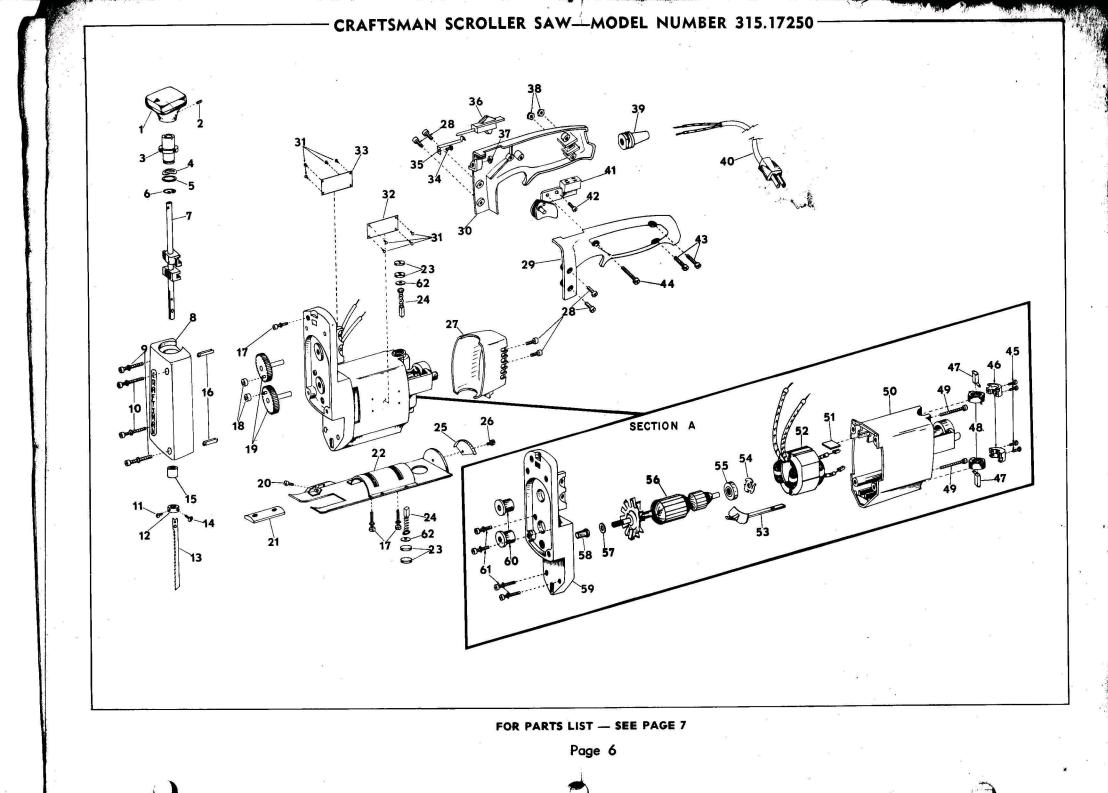


BLADE HOLDER



AVAILABLE AT YOUR NEAREST SEARS RETAIL STORE OR CATALOG OFFICE

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CRAFTSMAN SCROLLER SAW-MODEL NUMBER 315.17250

The Model Number will be found on a plate attached to the motor housing. Always mention the Model Number in all correspondence regarding your **SCROLLER SAW** or when ordering **re**pair parts.

SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS

PARTS LIST

Key	5			1 Key			
No.		Description	Quan.	No.	Part No.	Description	Quan.
1	2-606107-01	Knob Complete	. 1	32	2-606450-01	Nameplate	. 1
2	1-726676-01	*Set Screw (#8-32 x 1/4 Hex Socket Head	less) 1	33	2-606589-01	Dataplate	. 1
3	3-606283-01	Saw Bar Bushing	. 1	34	1-616968-02	*Screw (#6-20 x 1⁄4 Pan Hd. T.C.) .	. 1
4	1-622347-13	Spring Washer	. 1	35	2-606119-01	Lock Spring 🧭	. 1
5	1-706239-824	Washer	. 1	36	2-606229-02	Lock Button	. 1
6	1-622167-59	Retaining Ring	. 1	37	1-709863-804	*Square Nut (#8-32)	. 1 .
7	2-606613-01	Saw Bar Complete		38	1-623281-01	*Lock Nut (#8-32)	. 2
8	2-606282-01	Gear Housing Cover with Bearing		39	2-622824-01	Bend Relief	. 1
		(Includes Key Nos. 15 and 16) .	. 1	40	2-614703-01	Cord	. 1
9	1-940038-819	Screw (#8-32 x 1-1/8 Fil. Hd.) .	. 2	41	2-606260-01	Switch	. 1
10	1-940038-802	Screw (#8-32 x 1 Fil. Hd.) .	. 2	42	1-940049-33	Screw (#8-18 x 3/8 Fil. Hd. T.F.) .	. 1
11	1-613931-02	*Screw (#8-32 x 3/16 Rd. Hd.) .	. 1	43	1-614658-06	*Screw (#8-32 x 5⁄8 Pan Hd.) .	. 2
12	1-613933-03	Saw Blade Clamp with Screw		44	1-726693-04	Screw (#8-32 x 7/8 Fil. Hd.)	
		(Includes Key Nos. 11 and 14) .	. 1	45	1-616968-03	*Screw (#6-20 x 5⁄8 Pan Hd. T.C.) .	
13	* *	**Saw Blade		46	2-606285-01	Brush Tube Retainer	
14	1-613931-01	*Screw (#8-32 x 3⁄8 Rd. Hd.) .	. 1	47	2-606210-01	Brush Tube	. 2
15	1-621115-00	Sleeve Bearing		48	2-606103-01	Brush Cap Holder	. 2
16	1-941401-812	Roll Pin		49	1-714096-801	Screw (#10-16 x 1-1/2 Fil. Hd. T.F.) .	
17	1-940038-32	Screw (#8-32 x 5⁄8 Fil. Hd.)		50	3-606202-03	Motor Housing	
18	1-616055-01	Cross Slide Roller	. 2	51	1-606300-01	Barrier	· .
19	1-606278-01	Gear with Pins	. 2	52	3-606172-02	Field Core Complete	. 1
20	1-703768-801	*Screw (#6-32 x 1⁄2 Rd. Hd.)		"A" 53	2-607269-01	Strip Nut and Air Baffle Assembly	· .
21	2-606206-01	Quadrant Clamp Bar	. 1	54	1-621463-03	Loading Spring	, j
22	3-606204-02	Base Complete	. 1	55	1-740943-01	Ball Bearing (Hoover 7038L1AC2)	. 1
23	1-614008-01	Brush Cap	. 4	56	2-606914-01	Armature Complete	
24	1-606209-01	Brush with Spring	. 2	57	1-703429-818	Washer	
25	2-606160-01	Quadrant	.]	58	1-623313-01	Flange Bearing	. 1
26	1-622739-01	Quadrant *Screw (#6-32 x 3/16 Pan Hd.)	.]	59	3-606201-05	Gear Housing with Bearings	ĩ
27	4-606203-01	End Cover	. 1			(Includes-Key Nos. 58 and 60) .	. 2
28	1-614658-10	*Screw (#8-32 x 3⁄8 Pan Hd.)		60	1-614712-02	Flonge Bearing	. 2
29	4-606200-01	Handle Cover	. Ţ	61	1-940038-804 1-706382-813	Sorew (#8-32 x 5⁄8 Fil. Hd.)	
30	4-606199-01	Handle		02	EN-637	Washer	. ∠
31	1-795247-06	Drive Screw	. 8	12	E14-03/	instruction sneet	
				and again			

"A"—Parts listed in this assembly are shown in the exploded view as Key Numbers 45 through 62 and represent an important part of the Double Insulated Safety System. To avoid the possibility of alteration or damage to the Safety System, service requiring these parts should be performed by a qualified service technician. Service required on these parts should be performed by your nearest Sears Electric Motor Shop. Contact your nearest Catalog Order House or Retail Store for servicing of any parts shown in Section "A".

*Standard Hardware Item-May Be Purchased Locally

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**Complete Assortment Available At Your Nearest Catalog Order House or Retail Store

. allider Hickory

FOR ILLUSTRATION - SEE PAGE 6

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	-	



owners manual

CRAFTSMAN REG. TRADEMARK

SCROLLER SAW

DOUBLE INSULATED

3/4 INCH STROKE - VARIABLE SPEED

MODEL NO.

315.17250

HOW TO ORDER REPAIR PARTS

SEARS SERVICE IS AT YOUR SERVICE WHEREVER YOU LIVE OR MOVE IN THE U.S.A. The Model Number will be found on the plate attached to the motor housing. Always mention the Model Number when requesting service or repair parts for your Scroller Saw.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. and SIMPSONS-SEARS LIMITED. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

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

- 1. The PART NUMBER
- 2. The PART DESCRIPTION
- 3. The MODEL NUMBER-315.17250
- 4. The NAME of ITEM-SCROLLER SAW

All fine tools, on occasion, may require service or the replacement of parts due to wear from normal use. To prolong the life of your tool when repairs are needed, call on your nearest Sears Catalog Order or Retail Store. Please do not risk possible electrical hazards, additional cost or damage to the tool through inexperienced repairs.

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.

SEARS, ROEBUCK AND CO.—Chicago, Illinois 60607 U.S.A. and SIMPSONS-SEARS LIMITED—Toronto