# Sears

OWNERS MANUAL

MODEL NO. 315,10721

CAUTION: Read Rules for Safe Operation and Instructions Carefully



# **CRAFTSMAN**°

SCROLLER, SAW
DOUBLE INSULATED
5/8 INCH STROKE VARIABLE SPEED

Introduction Operation Maintenance Repair Parts



Designed exclusively for and sold only by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A. and SIMPSONS-SEARS LIMITED, Toronto, Canada

#### FULL ONE YEAR WARRANTY ON CRAFTSMAN SCROLLER SAW

If this Craftsman Scroller Saw fails to give complete satisfaction within one year from the date of purchase, RETURN IT TO THE NEAREST SEARS STORE THROUGHOUT THE UNITED STATES and Sears will replace it, free of charge.

If this scroller saw is used for commercial or rental purposes this warranty applies for only 90 days from the date of purchase.

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

SEARS, ROEBUCK AND CO. BSC 41 - 3 SEARS TOWER CHICAGO, IL 60684

## INTRODUCTION

**DOUBLE INSULATION** is a concept in safety, in electric power tools, which 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.

IMPORTANT — Servicing of a tool with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service we suggest you return the tool to your nearest Sears Store for repair. Always use original factory replacement parts when servicing.

#### **SWITCH**

The switch of your scroller saw is equipped with a "lock-on" feature for added utility. To lock on, depress the trigger and engage the lock button located on the side of the handle. To release the lock, depress the

trigger and release it. Be sure the trigger is not in the "lock-on" position before connecting to power supply.

#### VARIABLE SPEED

This saw has a variable speed control switch which delivers higher speed and higher torque with increased trigger pressure. The speed of your saw is controlled

by the amount of switch trigger depression.

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 for sawing ferrous metals, plastics and laminates. HIGH speed produces best results in sawing wood and non-ferrous metals such as aluminum which require high speeds and a maximum power.

When the tool is operated at slow speeds for extended periods of time, it may become overheated. Should this occur, run the tool without load at maximum speed for a few minutes to cool the unit.

#### RULES FOR SAFE OPERATION

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.

2. 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.

- 4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 5. AVOID DANGEROUS ENVIRONMENT. Don't use power tool in damp or wet locations or expose to rain. 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.

3. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed. 9. 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.

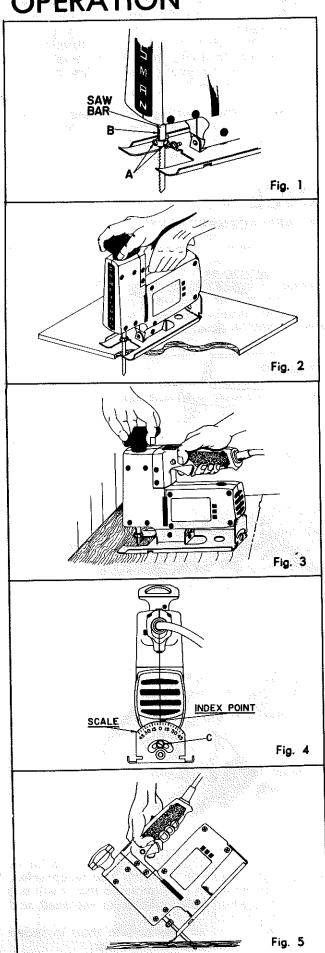
14. DON'T OVERREACH. Keep proper footing and balance at all times.

- 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.

18. AVOID ACCIDENTAL STARTING. Don't carry plugged-in tools with finger on switch. Be sure switch is off when plugging in.

- 19. OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords suitable for use outdoors and so marked.
- 20. KEEP HANDS AWAY FROM CUTTING AREA.

## **OPERATION**



#### **INSTALLING BLADES**

Disconnect saw from power supply.

1. See Figure 1. Loosen both blade screws (A) and insert saw blade as far as possible into slot (B) in

2. Tighten side blade screw securely against blade. 3. Tighten front blade screw securely against blade. NOTE: The pin in the saw bar is used only as a stop and is not designed to fit the notch of the blade shank. Craftsman sabre saw blades have a universal shank which is designed to fit all Sears sabre saws and Sears scroller sabre saws and most other brands

of sabre saws. SCROLL CUTTING

The scroller saw is designed to permit 360 degrees 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 (See Figure 2). It is designed to cut in corners and close places without the necessity of rotating and turning the complete saw (See Figure 3). It is ideal for cutting electrical outlets and switch box holes, sink and lavatory cut-outs and many

This saw is equipped with a thumb operated lock for locking the knob in four (4) positions (90 degrees apart). For scroll cutting the lock must be in the unlocked position for free rotation of saw bar. If the lock seems to stick, move the swivel knob from side to side to free the lock. Use sufficient forward pressure to permit blade to cut freely and follow the scribed line with gentle rotation of swivel knob.

GENERAL

Rest the front of the saw base on the workpiece and align cutting edge of the blade with line on workpiece. Start the saw and move it forward. Apply downward pressure to keep the saw steady and only enough forward pressure to keep the blade cutting.

Do not force the saw.

A straight cut can be made by clamping a piece of wood or straightedge to the workpiece and guiding the edge of the saw against it. Make the cut from one direction only; don't cut halfway and complete the cut from the opposite end. When making straight or miter cuts the saw bar of your scroller must be locked in position toward the direction of cut.

The cutting angle may be adjusted from zero to 45 degrees right or left. Loosen the base pivot screw (C) until base can be moved. Adjust base until index point (See Figure 4) is in line with required angle on scale, then tighten base pivot screw. The scroller mechanism must be locked in place with the cutting edge of blade facing the front or rear of tool when making angle cuts.

NOTE: Because the tapered back blade, Catalog No. 2876, has no set in the teeth, it should not be used

when using a board to guide the saw.

**PLUNGE CUTTING** 

To cut an inside hole, mark the line of cut clearly on the workpiece. Lock the saw bar in the forward cutting position. Tip the saw forward so that it rests on the front edge of the base as shown in Figure 5 with the blade inside the area to be cut out. The saw must be tilted forward enough to prevent blade striking workpiece when starting saw. Start the saw and slowly tilt the tool backward until the blade cuts through the wood. Continue tilting the saw backward until the base rests flat on work surface, then move the saw forward to complete the hole. Use only the 7-teeth per inch blade for this type of cut.

**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 or higher speed. If blade heats excessively use lower speed. If blade teeth become filled or clogged when cutting soft metals, such as aluminum, use a coarser-tooth blade or lower speed. 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.

## **MAINTENANCE**

## WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS.

**BRUSH REPLACEMENT** 

Disconnect the saw from power supply.

1. Remove brush caps with screwdriver. See Figure

 Remove fibre washers (B) by inserting a small diameter nail or similar instrument into the hole in the washer and pulling the washer out. The washers are designed to fit tightly in the brush holders to prevent twisting of brush springs when replacing brush caps.

3. Remove brushes.

 Reassemble brush with spring into tool making sure that the curvature of the brush matches curvature of the motor and that the brush moves freely in the brush holder.

5. Replace fiber washers and brush caps.

SWITCH REPLACEMENT

Disconnect saw from power supply

 Remove the five screws that secure the handle cover and carefully lift it from the tool. Note the locations of all wiring in the handle and how each connection is made to the switch. Connections and wiring position must be identical when installing the new switch. See Figure 7.

2. Remove the screw securing the switch and lift it

away from the handle.

3. Release the leads to the switch by inserting a 1/32" diameter pin or nail into each switch lead receptacle. See Figure 8.

 Make the lead connections to the new switch by pushing each lead as far as possible into the switch lead receptacles.

Arrange the wiring in the handle so that it will not be pinched when the handle cover is replaced, and secure switch in place.

6. Place the cord and bend relief in their correct locations.

7. Replace handle cover and tighten all screws securely.

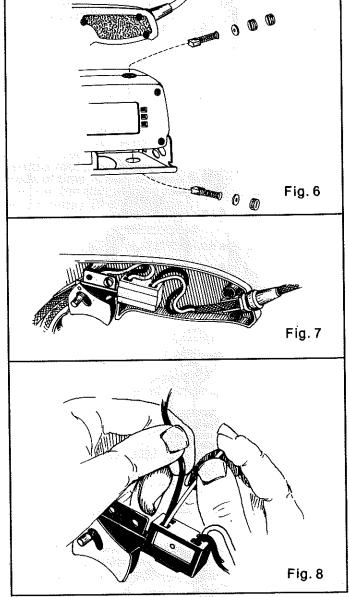
#### CORD REPLACEMENT

Disconnect saw from power supply.

1. Remove handle cover as described above.

2. Remove switch from handle and disconnect the supply cord leads from the switch.

3. Remove the bend relief from old supply cord and place it on the new one.



4. Push each lead of the new supply cord as far as possible into the proper switch lead receptacles.

5. Arrange the wiring in the handle so that it will not be pinched when handle cover is replaced and secure the switch in place.

6. Place the bend relief and cord in their intended locations and replace handle cover.

#### **GENERAL**

### WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS.

Only the parts shown on parts list, page seven, are intended to be repaired or replaced by the customer. All other parts represent an important part of the double insulation system and should be serviced only by a qualified service technician.

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.

When electric tools are used on fiberglass 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 con-

tinuous 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.

All 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.

Forcing the saw may overheat the motor and break saw blades. Broken blades can be re-used by loosening the blade screws until portion left in clamp drops out, then putting the remainder of the blade back into the clamp and re-tightening the blade screws. It may be necessary to flatten tooth set in area to be inserted into clamp when using broken blades.

**BLADE AND SPEED SELECTION**—To obtain the best performance from your saw it is important to select a specific blade and speed 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 or catalog order store.

Cat. No.	IDEALLY SUITED FOR:	Teeth Per Inch	Blade Length	Speed
9 28701	Steel Rods, Pipe, Sheet Steel, etc.	32	3	HIGH
9 2873	Rubber, Leather, Tile, Cardboard, Wallboard	Knife	3	HIGH
9 2874	All Purpose—Wood, Steel, Non-Ferrous Metals (1/4" or thicker)	14	31/2	MEDIUM
9 2875	Tree Branches, Logs, Wall Partitions, etc.	7	6	MEDIUM
28711	Soft Wood (1x4's, 2x4's Plaster Board). Ripping	. 7	31/2	HIGH
9 2877	Flush Cutting	<b>7</b>	31/2	MEDIUM
28781	Kromedge® Scroller Blade Specially for Intricate Scroll Cuts	10	3	HIGH
28712	Hardwood, Wallboard, General Crosscutting (NOT PLYWOOD)	10	31/2	HIGH
2876	Finish Cuts In Plywood, Veneer To 1½" Thick. Tapered Back	: 10	3	HIGH
28702	All Non-Ferrous Metals (Brass, Copper, Aluminum, etc.)	24	3	HIGH
9 28761	Super Fine Finishing Blade for All Woods	20	3	HIGH

Attach-Lite ( 9 25176)

Blade Holder (9 2871)

Carrying Case ( 9 1452)

Cord Lock ( 9 2595)

THE ABOVE RECOMMENDED ACCESSORIES WERE AVAILABLE AT THE TIME THIS MANUAL WAS PRINTED.

CAUTION: The use of attachments or accessories not listed above might be hazardous.

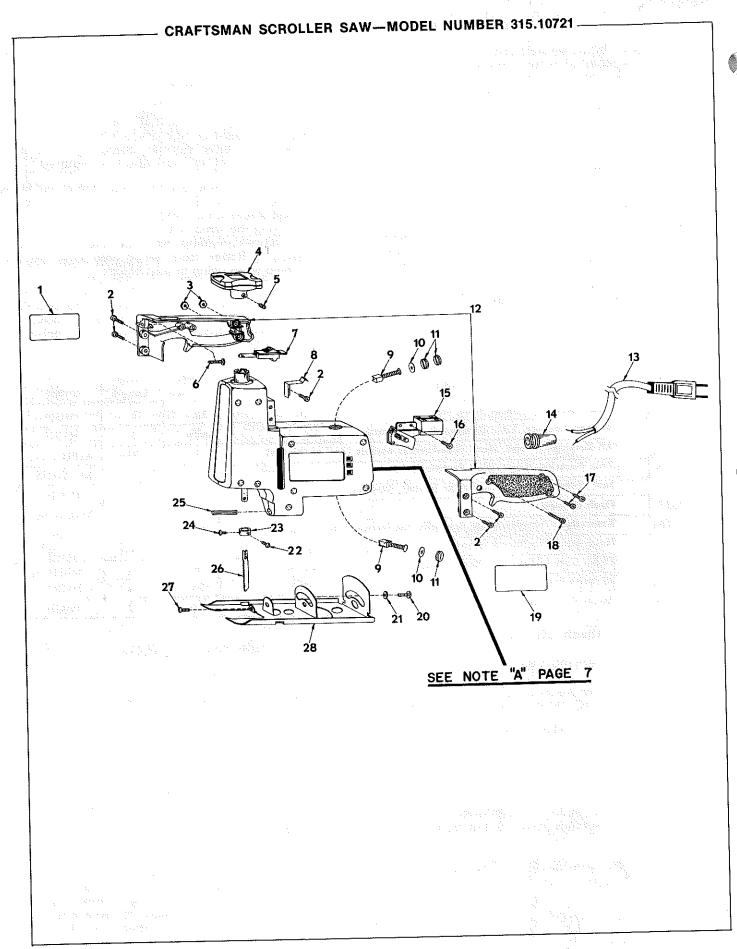
#### **EXTENSION CORDS**

The use of any extension cord will cause some loss of power. To keep the loss to a minimum and to prevent tool overheating, use minimum 16 A.W.G. wire size for extension cord lengths from 25 to 100

feet. When tool is used outdoors, use only extension cords suitable for outdoor use and so marked. Extension cords are available at Sears Catalog Order or Retail Stores.



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.



Page 6

## CRAFTSMAN SCROLLER SAW-MODEL NUMBER 315.10721

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 repair parts.

## SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS

## PARTS LIST

Key No.	Part Number	Description	Quan.
1	2-610986-01	Data Plate	·
2	1-617966-07	Screw (#8-10 x ½ Pan Hd, T.F.)	5
3	1-706404-07	*Hex Nut (#8-32) **STD541008	5
4	2-610191-01	Knob	1
5	1-930687-02	*Set Screw (#8-32 x 3/16 Hex Socket) **STD500802 .	1
6	1-617966-13	Screw (#8-10 x 7/8 Pan Hd, T.F.)	1
7	2-606229-02	Lock Button	. 1
8	2-610102-01	Lock Spring	1
9	1-610784-09	Brush with Spring	2
10	1-706382-813	Washer	2
11	1-614008-01	Brush Cap	3
12	6-610661-00	Handle and Handle Cover	1
13	2-614703-01	Cord	1
14	2-622824-01	Bend Relief	1
15	6-610929-00	Switch	1
16	1-616445-05	Screw (#8-18 x 3/8 Fil. Hd. T.C.)	
17	1-614658-06	*Screw (#8-32 x 5/8 Pan Hd.)	
18	1-616081-16	*Screw (#8-18 x 15/16 Pan Hd. T.C.)	. 183848. 611.
19	2-610515-01	Logo Plate	1
20	1-930836-801	*Screw (#10-24 x ½ Rd. Hd.)	1
21	1-931055-11	Washer	
22	1-613931-01	*Screw (#8-32 x 3/8 Rd. Hd.)	. 1
23	1-613933-03	Saw Blade Clamp (Includes Key Nos. 22 and 24)	1
24	1-613931-02	*Screw (#8-32 x 3/16 Rd. Hd.)	1
25	1-941401-10	Roll Pin	1
26	***	Saw Blade	1
27	1-703768-18	*Screw (#6-32 x ½ Rd. Hd.) **STD510603	1
28	3-610114-04 2-620263-772	Base	1

NOTE: "A" — The assembly shown represents an important part of the Double Insulated System. To avoid the possibility of alteration or damage to the System, service should be performed by your nearest Sears Electric Motor Shop/Specialty Repair Center. Contact your nearest Catalog Order or Retail Store.

<sup>\*</sup>Standard Hardware Item-May Be Purchased Locally

<sup>\*\*</sup>Available From Div. 98—Source 980.00

<sup>\*\*\*</sup> Complete Assortment Available At Your Nearest Catalog Order Or Retail Store

## Sears

OWNERS MANUAL

**SERVICE** 

MODEL NO. 315.10721

HOW TO ORDER REPAIR PARTS

# CRAFTSMAN° SCROLLER, SAW DOUBLE INSULATED 5/8 INCH STROKE VARIABLE SPEED

Now that you have purchased your Scroller Saw, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. or Simpsons-Sears Limited stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Scroller Saw will be found on the plate attached to the side of the motor housing.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PART NUMBER
- PART DESCRIPTION
- MODEL NUMBER
   315.10721
- NAME OF ITEM
   Scroller Saw

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

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

SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A. and SIMPSONS-SEARS LIMITED, Toronto, Canada