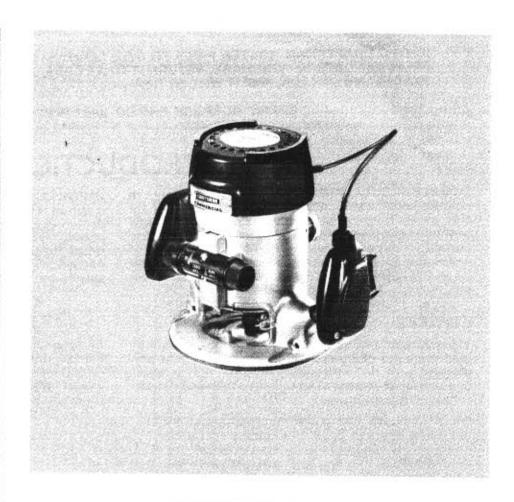
## Sears

OWNERS MANUAL

MODEL NO. 315,17380

CAUTION: Read Rules for Safe Operation and Instructions Carefully





# ROUTER DOUBLE INSULATED

Introduction Operation Maintenance Repair Parts



IF THIS CRAFTSMAN ROUTER FAILS TO GIVE COMPLETE SATISFACTION WITHIN ONE YEAR FROM THE DATE OF PURCHASE, RETURN IT TO ANY SEARS STORE THROUGHOUT THE UNITED STATES AND CANADA, AND IT WILL BE REPLACED FREE OF CHARGE.

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

## 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.

#### GENERAL

Your router is a versatile woodworking tool which will give you years of trouble-free performance. It is engineered with the professional in mind, but its ease of operation allows the amateur to produce work which is beautiful and precise.

We ask that you take a few minutes to read the fol-

lowing instructions so you can better enjoy the use of this new router. The booklet "How To Do More With Your Power Router" is packed with the tool. This booklet describes and illustrates many operations which can be performed with the Craftsman router.

#### RULES FOR SAFE OPERATION

- 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.
- 4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 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.
- STORE IDLE TOOLS. When not in use, tools should be stored in dry, high or locked-up place—out of reach of children.
- BON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
   USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy duty tool.
- 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.
- 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.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- DISCONNECT TOOLS. When not in use, before servicing; when changing attachments, blades, bits, cutters, etc.
- 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 tools with finger on switch. Be sure switch
  is off when plugging in.
- OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords suitable for use outdoors and so marked.

## **OPERATION**

#### INSTALLING/REMOVING CUTTERS

#### Disconnect Router from power supply before servicing.

- Place the router upside down on a table and insert shank of cutter to within \( \frac{1}{2} \) of bottom of collet.
- Hold the output shaft by depressing locking lever until it engages notch in lock nut. See figure 1.
- Tighten the collet nut securely with the wrench provided.
- Remove cutters by loosening collet nut enough to allow cutter to slip easily from collet.

The collet is machined to precision tolerances to fit cutters with 1/4" diameter shank size. Do not tighten the collet to hold cutters that are undersized. The result may be a bent collet which will not accept standard cutters.

#### DEPTH OF CUT ADJUSTMENTS

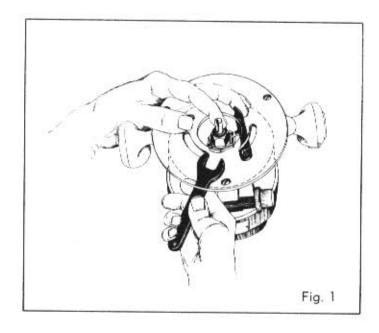
When using a small diameter cutter on soft woods, the depth of cut may be as far as the cutter will go. When larger cutters are used in hardwoods, we recommend that the cuts be made at a depth not exceeding  $\mathcal{V}_8$ " and that several passes be made to reach the required depth.

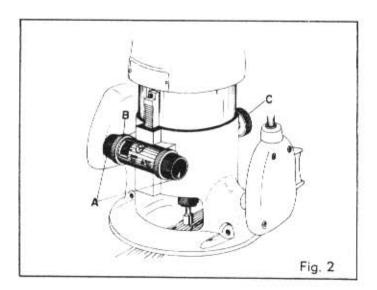
## Disconnect router from power supply before adjusting for depth of cut.

- Place the router on a flat surface and loosen the lock knob (C). See figure 2.
- Turn the height adjusting knob (A) until tip of router bit touches surface.
- 3. Adjust the indicator knob (B) to "O".
- Position the router so that the bit can extend below the base for desired depth setting.
- Turn height adjusting knob slightly past desired depth setting, then back to the exact setting. The distance the cutter moves can be read on the scale. Each mark indicates 1/64 inch change in setting.

#### INSTALLING EYESHIELD

A clear plastic eyeshield is provided for eye protection. It is designed to fit the opening of the router base just below the adjustment knobs. To install, squeeze the





shield at each end so that the two tabs fit into the opening, then release.

## **MAINTENANCE**

WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS.

#### PROPER CARE OF CUTTERS

Get faster more accurate cutting results by keeping cutters clean and sharp. Remove any accumulated pitch and gum from cutters with kerosene.

When sharpening a cutter, sharpen only the inside of the cutting edge. Never grind the outside diameter. Be sure when sharpening the end of a cutter to grind the clearance angle the same as originally ground.

A cutter sharpening kit (cat. #25169) is available from Sears Catalog Order or Retail Store.



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.

#### BRUSH REPLACEMENT

Periodically check 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 the unit. Replacement of these inexpensive parts when necessary will keep your router operating more efficiently and prolong the life of the motor.

Replacement of worn-out brushes is considered normal operating maintenance and is not covered by warranty.

- 1. Disconnect router from power supply.
- Depress switch trigger and lock it in its "on" position.
- Remove the three screws which secure router end cap and lift end cap off. See Fig. 3.
- Unscrew brush cap and remove brush assembly from its holder.
- Insert new brush assembly into holder making sure that the curvature of the brush matches the curvature of the motor to which it fits, and that it moves freely in the holder.
- 6. Replace brush caps, end cap, and screws.
- Make sure switch trigger is in its "off" position before connecting the tool to power supply

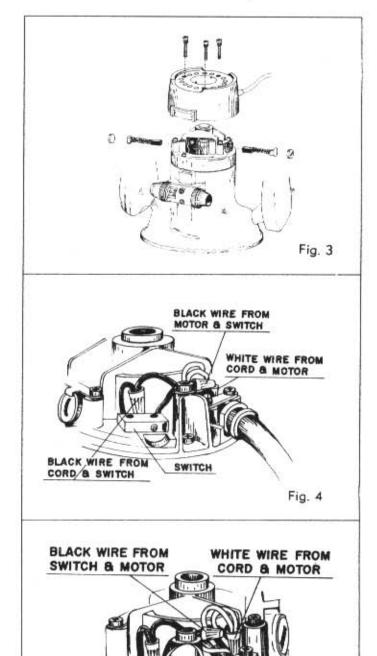
#### SWITCH REPLACEMENT

#### Disconnect router from power supply before servicing.

- Remove end cap as described above.
- Lift the switch off the two locating pins and unscrew the two wire connectors from the switch wires. See Fig. 4. Note locations of all wiring and how each connection is made to the switch. Connections and wiring position must be identical when installing the new switch.
- Connect the wiring to the replacement switch. Make the connections by holding the two bare leads side by side and tightening the wire connector over them.
- Arrange the wiring so that it will not contact moving parts of the motor or be pinched when the end cap is replaced.
- Place the switch in its proper position. Make sure switch trigger is depressed and locked in "on" position and replace end cap and screws.
- Make sure switch is off before connecting to power supply.

#### CORD REPLACEMENT

- Disconnect tool from power supply and remove end cap.
- Remove the two screws and cord clamping plate. See Figure 5.
- Note locations of leads and how each of the connections is made. The white lead of the supply cord must be connected to the white lead of motor and the black lead must connect to the black lead of switch when new cord is installed.
- 4. Remove the wire connectors.



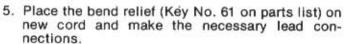


Fig. 5

Locate the bend relief in its intended position and allow the end of the cord to extend far enough inside tool to be clamped by the cord clamping plate.

SWITCH

BLACK WIRE FROM

CORD & SWITCH

#### CORD REPLACEMENT (Cont.)

- Replace cord clamping plate and tighten its two screws securely.
- Position switch in its nest and arrange all wiring so that it will not contact motor parts or be pinched by end cap.
- 9. Replace end cap and screws.

#### LUBRICATION

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.

#### GENERAL

Only the parts shown outside Section A on page six are intended to be replaced by the customer. Parts listed in Section A 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.

The clamp bar (Key No. 36 on parts list) assures smooth elevation of the motor with the motor unit unclamped in the base. It is pre-set at the factory to provide light pressure against the motor housing. The pressure holds the motor unit in place, unclamped, yet allows depth adjustments to be made easily.

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, commutators, 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.

After prolonged use the clamp bar may wear slightly and allow the motor unit to move too easily. To adjust the pressure, loosen the two hex nuts (Key Nos. 35) and tighten the two set screws (Key Nos. 71). Check for ease of depth adjustment and tighten the hex nuts.

#### **EXTENSION CORDS**

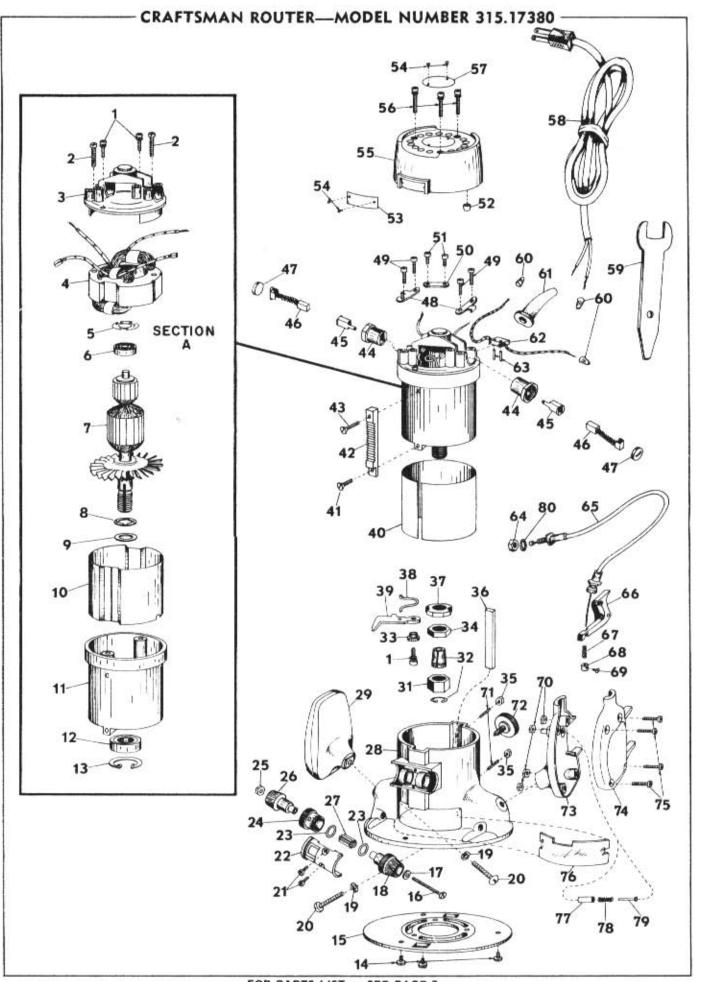
The use of any extension cord will cause some loss of power. To keep the loss to a minimum and to prevent tool overheating, follow the recommended cord sizes on the chart at right. When tool is used outdoors, use only extension cords suitable for outdoor use and so marked. Extension cords are available at Sears Catalog Order or Retail Stores.

Extension Cord Length	Wire Size A.W.G.				
25-50 Feet	16				
50-75 Feet	14				
75-100 Feet	12				

## THE FOLLOWING RECOMMENDED ACCESSORIES ARE CURRENT AND WERE AVAILABLE AT THE TIME THIS MANUAL WAS PRINTED.

½-inch Dovetail Template (9 2571) ¼-inch Finger Template (9 2574) Butt Hinge Template (9 2575) Butt Hinge Template (9 2563C) Laminated Plastic Trimmer (9 25732) Light Attachment (9 25176) Carrying Case (9 1455) Template Guide Bushings (9 25069)
Adjustable Edge Guide (9 25172)
Rout-A-Form Pantograph (9 25183)
Template Set (9 25182)
Sharpening Kit (9 25169)
Trammel Point (9 25174)
Adjustable Edge Guide with Contour
Finger (9 25173)

Janying	Case (g	1400)					ringer (	9 20173)			
COMBI- NATION PANEL CUTTER	VEINING BITS	V-GROOVE CHAMFER		COMBI- NATION STRAIGHT, BEVEL CUTTER	HINGE MORTISING BIT	DOVETAIL CUTTER BITS	RABBET BIT	OGEE 3/16" 25585	COVE BIT 25572-3/8" 25571-1/2" #25576-3/8" #25575-1/2"	BEAD QUARTER- ROUND BITS	ARBORS 2589
	Ŋ	8	25528-1/16" 2552-1/8" 25521-1/4"	FOR FORMICA #2541	A	A	1/4,5/16,	<b>1</b>		25563-1/4"	8
2554-1/4"	25598 - I/I6" 2559 - I/8" 25592 - 3/I6" 25593 - 7/32" 25594 - 3/4"	2557-1/2"	25522-3/8" 25523-1/2" 25529-3/4" *25524-1/4" *25525-5/16" *25526-3/6" *25527-1/2"	VENEER CUTTER STRAIGHT ≠25413 BEVEL ≠25412	1/2" 2555	2553-i/4" 25531-i/2"	3/8" 25581 +25582	ROMAN O 5/32" 25587	45° CHAMFER BIT 25589	25562-3/8" 25561-1/2" *25566-3/8" *25565-1/2"	WITH 2 BALL BEARINGS (I/2 8.5/8") 25895
			420021-172		* CA	RBIDE TIPP	ED BITS				



FOR PARTS LIST — SEE PAGE 7

#### CRAFTSMAN ROUTER-MODEL NUMBER 315,17380

The Model Number will be found on a plate attached to the End Cap. Always mention the Model Number in all correspondence regarding your ROUTER or when ordering repair parts.

#### SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS

### PARTS LIST

Key F	le. Part Na.	Description Quan	.	Key No.	Part No.	Description Q
1	1-940038-804	Screw (#8-32 x 5/8 Fil. Hd.)	3 .	1 1-7	03428-10	*Screw (#8-32 x 3/8 Flat Hd.)
2	1-714096-807	Screw (#10-16 x 1 Fil. Hd.)	2		06532-01	Gear Rack
3	3-606904-04	Top Bearing Plate	ALC: THE RESERVE OF		03428-25	*Screw (#8-32 x 1/2 Flat Hd.)
8		(Includes Key No. 63) .	0.0		24197-01	Brush Holder
4	3-606529-02	Field Core Complete	200		24196-01	Brush Tube
5	1-621463-02	Loading Spring	20 1		24203-03	Brush Assembly
6	1-740943-01	Ball Bearing (Hoover	24 H G		24198-01	
"A"		7038L1AC2)			06512-02	Brush Cap Brush Holder Clamp
7	2-606492-01	Armature Complete	350		16445-01	
8	1-623880-01	Retaining Ring	1 1	1-0	10443-01	Screw (#8-32 x 5/8 Fil. Hd.
9	1-623881-01	Cupped Washer	1 1	0 1-6	16287-01	T.C.)
10	3-606575-01	Field Insulating Sleeve			16445-04	Cord Clamping Plate
11	3-606484-03	Motor Housing	1 1 8	1-0	10443-04	Screw (#8-32 x 1/2 Fil. Hd.
12	1-615972-01	Ball Bearing (Hoover	- 1 La	2 1-60	0/570 01	_ T.C.)
12	1-013972-01				06579-01	Bumper
13	1-912171-801	993LO3AC2)	10.00		16185-01	Logoplate
14	1-623863-01	Retaining Ring *Screw (#10-32 x 1/4 Pan Hd.)			95247-06	Drive Screw
15	3-606681-01				06488-03	End Cap
16	1-703768-802	Sub-Base	200		40038-805	Screw (#8-32 x 7/8 Fil. Hd.)
17	1-621721-03	*Screw (#6-32 x 2 Rd. Hd.)	45		07293-01	Dataplate
18	3-606535-01	Washer		8 2-6	14703-03	Cord
10	3-000333-01	Height Adjusting Knob-	2.5		23813-03	Wrench
19	1-703473-32	Right		0 1-62	23173-01	Wire Connector (For #16
20	1-930517-11	Lock Washer	2			and/or #18 Wire)
21	1-622931-02	*Screw (1/4-20 x 7/8 Rd Hd.)	2 6		13651-01	Bend Relief
22	3-607409-01	Screw (#6-32 x 1/4 Fil. Hd.)			06583-01	Switch
23	1-623808-01	Height Indicator Cover	100		15818-04	Pin
24	3-606533-01	"O" Ring			07406-01	*Hex Nut (5/16-18)
25	1-623281-02	Indicator Knob	40 8		06580-01	Control Cable
26		*Hex Nut (#6-32)	333		06576-01	Trigger
20	3-606536-01	Height Adjusting Knob-	- 20		06573-01	Spring
27	2 404524 01	Left	41. 27		06588-02	Collar
28	2-606534-01	Height Adjusting Pinion			03769-05	*Screw (#4-40 x 1/4 Rd. Hd.)
29	4-606468-03	Base			23281-01	*Hex Nut (#8-32)
	2-606586-01	Handle Assembly	!   7	1 1-72	26676-02	*Set Screw (#8-32 x 7/16
31	1-606489-04	Collet Nut	1			Hex Socket Headless) .
32	6-610662-00	Collet with Retaining Ring		100000000000000000000000000000000000000	06508-03	Lock Knob
33	1-623795-02	Spacer		3 4-60	06566-02	Power Handle (Includes Key
34	1-623794-02	Jam Nut	1	ne 020.69		Nos. 77, 78 and 79)
35	1-706404-07	"Hex Nut (#8-32)	72		06567-01	Power Handle Cover
36	2-606525-01	Clamp Bar		. 120 m 100 m 100 m	26693-01	Screw (#8-32 x 5/8 Fil. Hd.)
37	1-623793-01	Lock Nut			06688-01	Eye Shield
38	1-623797-01	Spring			06571-01	Lock Button
39	2-623796-02	Locking Lever			06574-01	Spring .
40	2-623804-01	Housing Skirt			6572-01	Rivet
			8		1555-39	Lock Washer
				EN-	704	Instruction Sheet

"A"—Parts listed in this assembly are shown in the exploded view as Key Numbers 1 through 13 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".

<sup>&#</sup>x27;Standard Hardware Item—May Be Purchased Locally