

# ASSEMBLY, OPERATING INSTRUCTIONS AND PARTS LIST FOR



Reg. Trade Mark

## HEAVY DUTY ROUTER

### MODEL NUMBER 315.25031

The Model Number will be found on a name plate located on the Commutator End Cover. Always mention the Model Number in all correspondence regarding the CRAFTSMAN ROUTER or when ordering repair parts.

### HOW TO ORDER REPAIR PARTS

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail from the mail order house which serves the territory in which you live, 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 NAME
3. The MODEL NUMBER—315.25031.
4. The NAME of item—Heavy Duty Router

### COAST TO COAST NATION-WIDE

#### SERVICE FROM SEARS

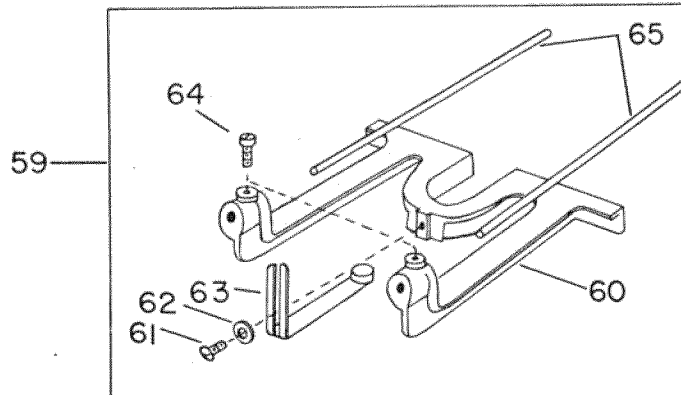
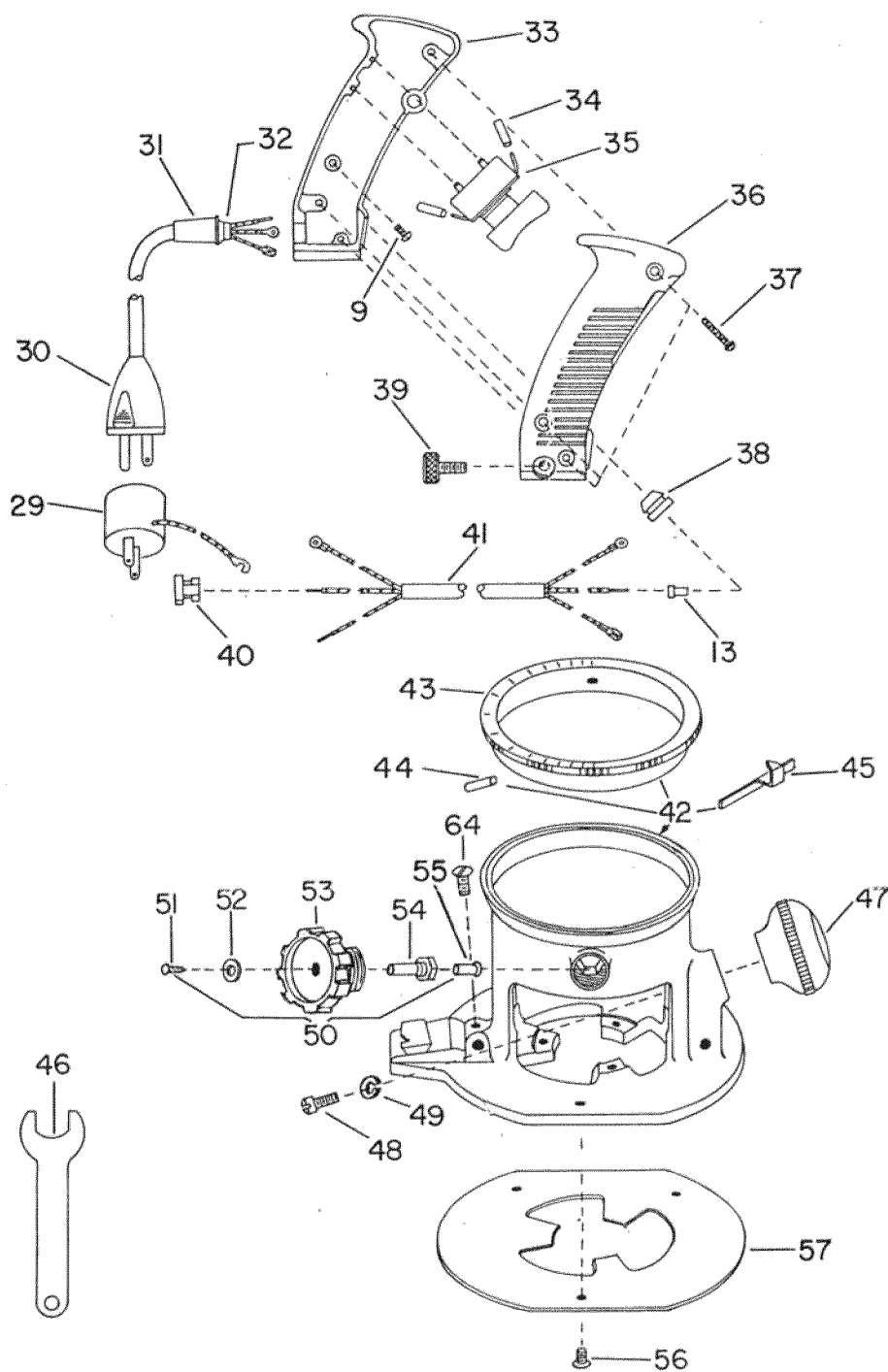
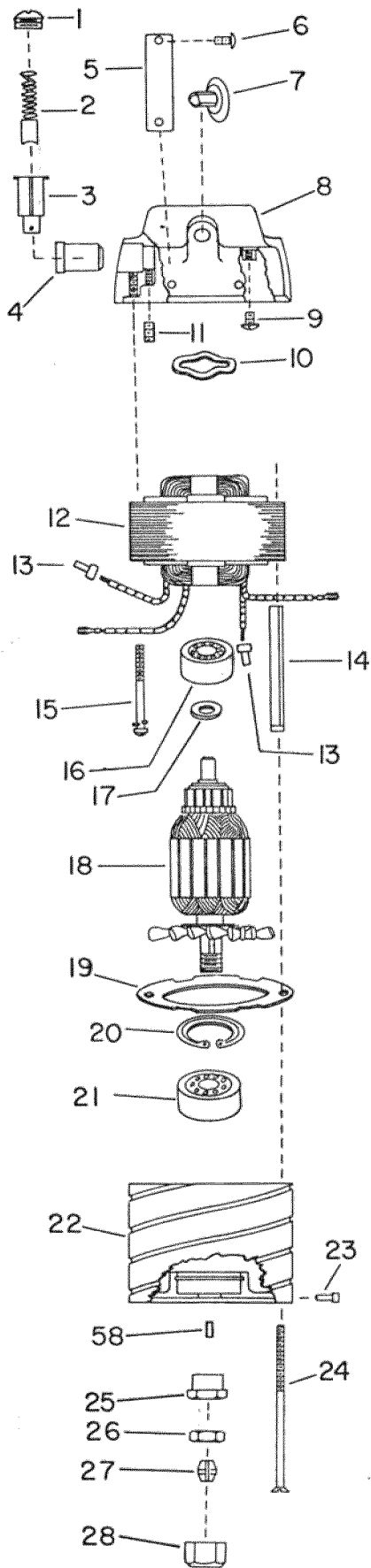
#### FOR YOUR CRAFTSMAN HEAVY DUTY ROUTER



SEARS, ROEBUCK AND CO. and SIMPSONS-SEARS LIMITED in Canada back up your investment with quick, expert mechanical service and genuine CRAFTSMAN replacement parts.

If and when you need repairs or service, call on us to protect your investment in this fine piece of equipment.

**SEARS, ROEBUCK AND CO.—U.S.A.  
IN CANADA, SIMPSONS-SEARS LIMITED**



## PARTS LIST

MODEL NUMBER 315.25031

CRAFTSMAN

HEAVY DUTY ROUTER

ALWAYS MENTION MODEL NUMBER WHEN COMMUNICATING WITH US REGARDING THIS TOOL

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

1. The PART NUMBER
2. The PART NAME
3. The MODEL NUMBER—315.25031
4. The NAME of item—Heavy Duty Router

Key No.	Part No.	Description	Quan.	Key No.	Part No.	Description	Quan.
1	1-730383-00	Brush Cap	2	36	4-886185-02	Handle Plate with Insert	1
2	2-730352-00	Brush Assembled (Replace in Pairs)	2	37	1-940049-04	Screw (8x3/4 Fil. Hd. T.F.)	3
3	2-730373-00	Brush Tube	2	38	1-886144-01	Strain Relief Bushing	1
4	2-730384-00	Brush Holder	2	39	1-886188-00	Handle Locking Screw	1
5	1-621321-00	Name Plate	1	40	1-888493-01	Strain Relief Bushing	1
6	1-795247-06	Name Plate Drive Screw	2	41	1-886146-02	Cord (Handle to Motor)	1
7	1-888660-00	Button Plug	1	42	3-621581-01	Router Base (Includes Key Nos. 43, 44 and 45)	1
8	4-620677-01	Commutator End Cover	1	43	3-886131-01	Adjusting Ring (Furnished with Key No. 42)	1
9	1-930993-01	Screw (6-32x5/16 Pan Hd.)	2	44	1-706392-00	Adjusting Ring Retaining Pin (Furnished with Key No. 42)	3
10	1-729765-00	Ball Bearing Loading Spring	1	45	2-886163-00	Adjusting Ring Indicator (Furnished with Key No. 42)	1
11	1-930687-02	Set Screw (8-32x3/16 Hex Socket Headless)	2	46	1-886162-00	Wrench	2
12	3-620697-02	Field Core Wound	1	47	1-886164-02	Handle Knob	1
13	1-887915-02	Connector (Substitute: *Wire Nut for #18 Wire)	3	48	1-876368-11	Screw (1/4-20x5/8 Fil. Hd.)	1
14	1-893999-00	Screw Insulation	2	49	1-703473-06	Lock Washer	1
15	1-940046-04	Screw with Lock Washer (10-32x2 Fil. Hd.)	2	50	2-621426-00	Motor Locking Screw Complete	1
16	1-886132-801	Ball Bearing	1	51	1-795247-25	Motor Locking Drive Screw	1
17	1-703776-35	Washer	1	52	1-701511-01	Motor Locking Screw Washer	1
18	2-620698-02	Armature	1	53	1-620695-00	Motor Locking Screw with Plug	1
19	1-886145-00	Fan Baffle	1	54	1-621415-00	Motor Locking Screw Stud	1
20	1-912171-801	Bearing Retaining Ring	1	55	1-706820-00	Motor Locking Screw Plug	1
21	1-621007-01	Ball Bearing	1	56	1-930980-02	*Screw (10-32x5/16 Ft. Hd.)	3
22	4-620672-01	Pulley End Cover	1	57	3-621549-00	Sub Base	1
23	1-886161-00	Guide Pin	1	58	1-621129-00	Square Key	1
24	1-930980-22	*Screw (10-32x4 Ft. Hd.)	2	59	**Cat. No. 9-25153	Edge Guide and Contour Finger, consisting of:	1
25	1-620673-00	Collar	1	60	4-886337-01	Edge Guide	1
26	1-621092-01	Jam Nut	1	61	1-930517-75	*Screw (1/4-20x1/2 Rd. Hd.)	1
27	1-620675-00	Collet	1	62	1-931744-55	Washer	1
28	1-620674-00	Nut	1	63	1-886361-00	Contour Finger Complete	1
29	1-706875-00	Adapter (Not Supplied with Canadian Tools)	1	64	1-930330-06	Screw (10-32 x 3/8 Fil. Hd.)	4
30	2-706213-00	Cord with Plug Complete (Includes Key Nos. 31 and 32)	1	65	1-886165-00	Guide Rod	2
31	1-829714-01	Cord Sleeve	1		EN216	Instruction Sheet	1
32	1-886179-00	Strain Relief	1		4-63		
33	4-886184-01	Handle	1				
34	1-981476-01	Insulation Tubing	1				
35	2-886085-00	Switch	2				

\*Standard Hardware Item, May Be Purchased Locally.

\*\*Key No. 59 not included with all models—May be purchased separately as Catalog No. 9-25153.

For Illustration — See Page 2

Page 3

# OPERATING INSTRUCTIONS

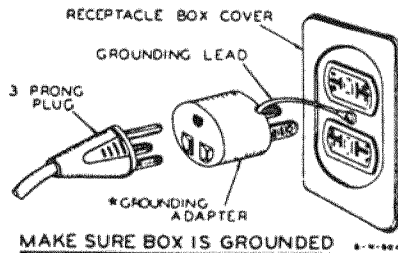
## HEAVY DUTY ROUTER

### CUSTOMER'S DO'S AND DONT'S

1. **DO** make sure voltage supply is 110-120 volts A.C. or D.C. before router is plugged in.
2. **DO** be sure tool is properly grounded especially if you are on a damp floor or ground.
3. **DO** blow out air passages occasionally to keep unit clean to insure a cool running unit.
4. **DO** check bits and cutters periodically for tightness.
5. **DO** keep collet clean.
6. **DO** replace brushes in pairs when worn to about  $\frac{1}{4}$ " in length.
1. **DON'T** leave the power cord connected to the power supply when installing or changing cutters.
2. **DON'T** overload router to the point where speed is drastically reduced. Overloading causes overheating and possible burnouts.
3. **DON'T** use dull knives or cutters since they will not produce good work and will cause overloading.
4. **DON'T** use two wire extension cord.
5. **DON'T** pick the tool up by the power cord.
6. **DON'T** jerk the power cord to remove the plug from the socket.

#### CAUTION

**GROUNDING** — This tool is equipped with an Underwriters' Laboratories approved 3 prong plug for your safety. The longer prong in this plug is connected through the power cord to the tool housing.



When the plug is inserted in a properly grounded receptacle box, it will protect the user from shock, should the tool insulation for any reason fail.

If you use an extension cord with this tool, it should also be 3 wire.

Since many receptacle boxes in present construction will not have provision for 3 prong plugs, an \*adapter is included with this tool. Make sure grounding lead is firmly attached to a **grounded receptacle** box as shown above, before attempting to operate the tool.

\*(Not used in Canada).

**LUBRICATION**—The Motor Unit Ball Bearings are packed with a sufficient amount of grease for the life of the Unit when used in normal service.

**BRUSHES**—To replace Carbon Brushes (#2) Fig. 1, unscrew Brush Cap (#1) and remove old brush. Replace with new brushes (in pairs), making sure when inserting that curvature of brush will match curvature of commutator. Make sure that the brushes move freely in the holder. Replacement of these relatively inexpensive parts, when necessary, will aid in getting full power from the unit and will prolong the life of the armature.

**REPAIR SERVICE AND PARTS**—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 Mail Order or Retail Store. Please don't risk possible additional cost or damage to the tool through inexperienced repairs. Sears Servicemen are factory trained.

**GUARANTEE:** Craftsman portable electric tools are of professional quality and are manufactured under the most exacting standards by skilled craftsmen. Every tool is individually and thoroughly tested and approved before shipment.

We guarantee all Craftsman portable electric tools to be free from defects in material and workmanship. When properly used, cared for and maintained, we will repair or replace, at our option, and install, for a period of one (1) year from date of sale, as punched on your guarantee card, any part which proves, upon our examination, to be defective under normal use.

This guarantee does not cover burn-outs from low or improper voltage, or from the tool being forced or improperly used. Blades, cords, or any other parts subjected to abuse are not covered by this guarantee.

YOUR GUARANTEE CARD MUST BE PRESENTED WHEN THE TOOL IS RETURNED SHOULD YOU NEED TO AVAIL YOURSELF OF YOUR GUARANTEE RIGHTS. IF CARD IS NOT PRESENTED, ANY ADJUSTMENT WILL BE MADE AT THE DISCRETION OF THE SEARS STORE.

SEARS, ROEBUCK AND CO.

## INSTRUCTIONS FOR OPERATING (continued)

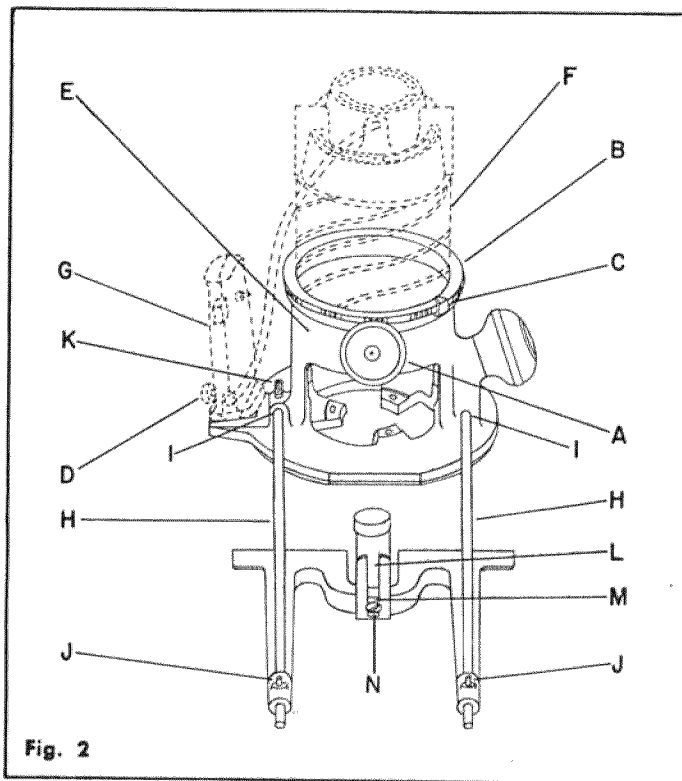


Fig. 2

**TO ASSEMBLE MOTOR UNIT TO BASE**—Align slot in adjusting ring (B), Fig. 2 with slot in base (E). Insert motor unit (F) into base, with pin located in side of motor unit engaging slot in adjusting ring. Lower motor unit in slot until it bottoms. Then turn adjusting ring in a counterclockwise rotation to further lower motor unit. Attach motor unit handle by sliding onto base dovetail and tightening locking screw (D).

**TO REMOVE MOTOR UNIT FROM BASE**—The motor may be removed by loosening motor locking screw and turning adjusting ring (B) in a clockwise direction until motor reaches its highest position. Motor may then be lifted from base. When returning motor to base, make sure that slot in adjusting ring is aligned with slot in base. The switch and handle assembly may be removed by loosening locking screw (D) Fig. 2 and sliding handle out.

**TO ATTACH SUB-BASE**—This router is supplied with a Phenolic Sub-Base (#57), Fig. 1. This base provides the router with a smooth surface for use where it is desired to keep work free from marks and scratches. Fasten to Base with three screws, (#56), Fig. 1, furnished.

**TO INSTALL CUTTERS**—Place collet (#27) into end of shaft and secure with nut (#28), leaving nut slightly loose. Insert shank of cutter all the way into collet. Hold collar (#25) and tighten nut securely with wrenches furnished.

The Collet is a precision Collet and should be kept clean to insure accurate results.

**TO ADJUST FOR DEPTH OF CUT**—Be sure that motor unit is turned off. Place the Router on a flat surface and loosen motor unit locking screw (A) Fig. 2. Turn Router adjusting ring (B) in a counterclockwise direction, lowering the motor unit until the cutter just touches the surface. Set adjusting ring indicator (C) at zero. Move router until cutter is clear of the edge of the work, then turn adjusting ring to lower cutter to desired depth according to graduations on ring. Tighten motor unit locking screw securely. Each graduation on ring equals approx. 1/64" vertical movement of cutter.

**SIZE OF CUT**—The average cut should not exceed 1/4" depth per pass when using larger cutters. In hardwoods, two or three passes should be made when using the largest cutters available. Two or three passes in hardwood are more practical than risking possible damage to the motor unit or cutter breakage through overloading.

**PROPER CARE OF CUTTERS**—The best results for fast accurate cutting are obtained by using cutters which are sharp. A properly sharpened cutter will not only prolong the life of the Router but will make the job of cutting both faster and easier.

Keep cutters clean. Avoid, if possible, running hot and smoking. Remove any accumulated pitch and gum from sides with kerosene.

If you are going to sharpen your own cutters, here is a recommended procedure. Grind only the inside of the cutting edge of cutters. When grinding cutters, it is sometimes necessary to touch up the end. Be sure, when grinding the end of Cutters, to grind the clearance angle the same as that originally furnished on the cutters. Never grind the outside diameter of cutters as they are ground on special machinery for proper clearance.

**TO ASSEMBLE EDGE GUIDE AND CONTOUR FINGER TO ROUTER**—Place arms (H) of edge guide in bosses (I) on Router. Tighten screws (J) and (K) to hold in place. Arms may be adjusted by loosening screws (K) or (J) and placing in the desired position for cutting. The contour finger is attached to the edge guide by sliding keyway (L) over key (M) on edge guide, and tightening screw (N).

**USE OF EDGE GUIDE AND CONTOUR FINGER**—Used with "CRAFTSMAN" Heavy Duty Router for shaping edges when cutters having no pilots are employed, and for making all types of cuts required to be parallel to the edge of the work. When the contour finger is attached to the edge guide, and positioned under the cutter for the desired width and depth of cut it will enable the operator to rout a uniform cut on irregularly shaped edges.

**USE OF ROUTER WITH DOVETAIL TEMPLATE**—When using the Router with the Dovetail Template always butt the rounded edge of the base, not flat edge, against the Dovetail stop to insure proper dovetail length.

# ATTACHMENTS AND ACCESSORIES

Shown below are attachments and accessories that can be used with the **HEAVY DUTY ROUTER**. These items can be purchased through your local Sears store, or nearest Sears mail order house.

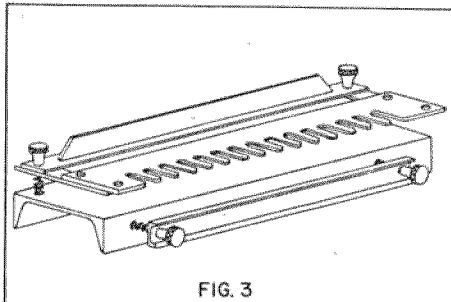


FIG. 3

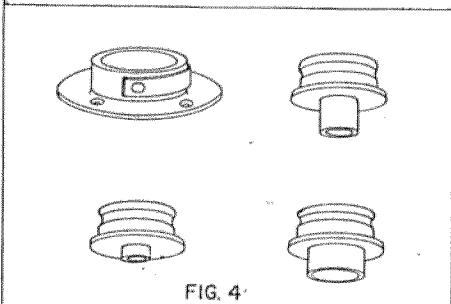


FIG. 4

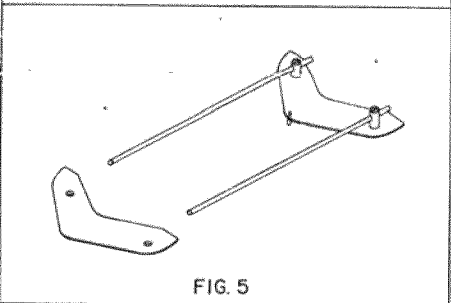


FIG. 5

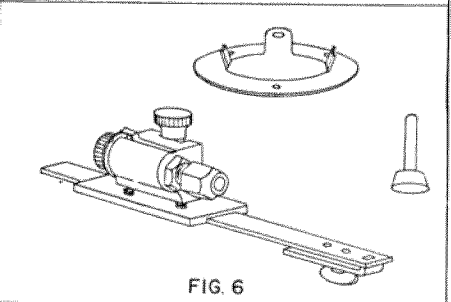


FIG. 6

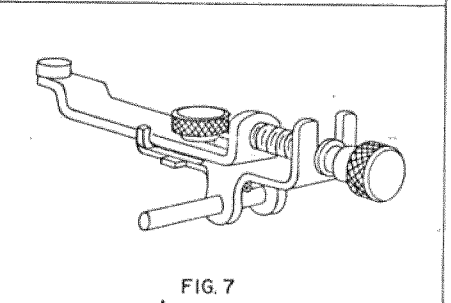


FIG. 7

**FIG. 3, DOVETAIL TEMPLATE, MODEL NO. 315.25720**—For use in conjunction with Router and Guide Bushing, Figure 4, to make dovetail joints for joining drawer sides and ends. A template is a "must" for perfect fit of drawer sides and ends.

**FIG. 4, GUIDE BUSHINGS AND ADAPTER, NO. 25059**—The Adapter attaches to the router base. Afterwards, any one of three guide bushings furnished may be snapped into place in the adapter. The bushing circumference rides against a template edge to guide the bit for cutting. Since each of the three bushings has a different diameter, three different selections of spacing between the bit and template edge are available.  $\frac{1}{2}$ " diameter bushing used with Dovetail Template (Fig. 3 above).

**FIG. 5, TRAMMEL POINT ATTACHMENT NO. 25154**—This attachment can be used with the router to cut inside circles from 2" to 26" diameter, and can also be used for fancy circular edge work.

**FIG. 6, CUTTER GRINDING ATTACHMENT, NO. 25159**—The Cutter Grinding Attachment for the router makes light work of keeping bits and cutters sharp and in good condition. **A Special grinding wheel** for use in the router chuck is included. The holding attachment has a full range of circular and angular adjustments so that you can accurately align any shape cutting edge with the grinding wheel surface. Once set up, the identical sharpening of all edges on a bit or cutter is assured.

**FIG. 7, FORMICA CUTTER ATTACHMENT, NO. 2573**—Formica, phenolics and laminates with similar bonding agents are much too hard to cut successfully with ordinary tools. This special router attachment, however, enables you to hold the thin sheets firmly for accurate cutting and edging. The special carbide tipped bit included with this attachment will clean off the stubborn edges smoothly, without chipping or ripping.

**DOOR AND JAMB BUTT HINGE TEMPLATES**—(Not Shown) Most commercially available Door Butt Hinge Templates or Kits may be used with this Router for making butt hinge seats in accurately hanging doors and shutters.

SEARS, ROEBUCK AND CO.—U.S.A.  
IN CANADA, SIMPSON-SEARS LIMITED