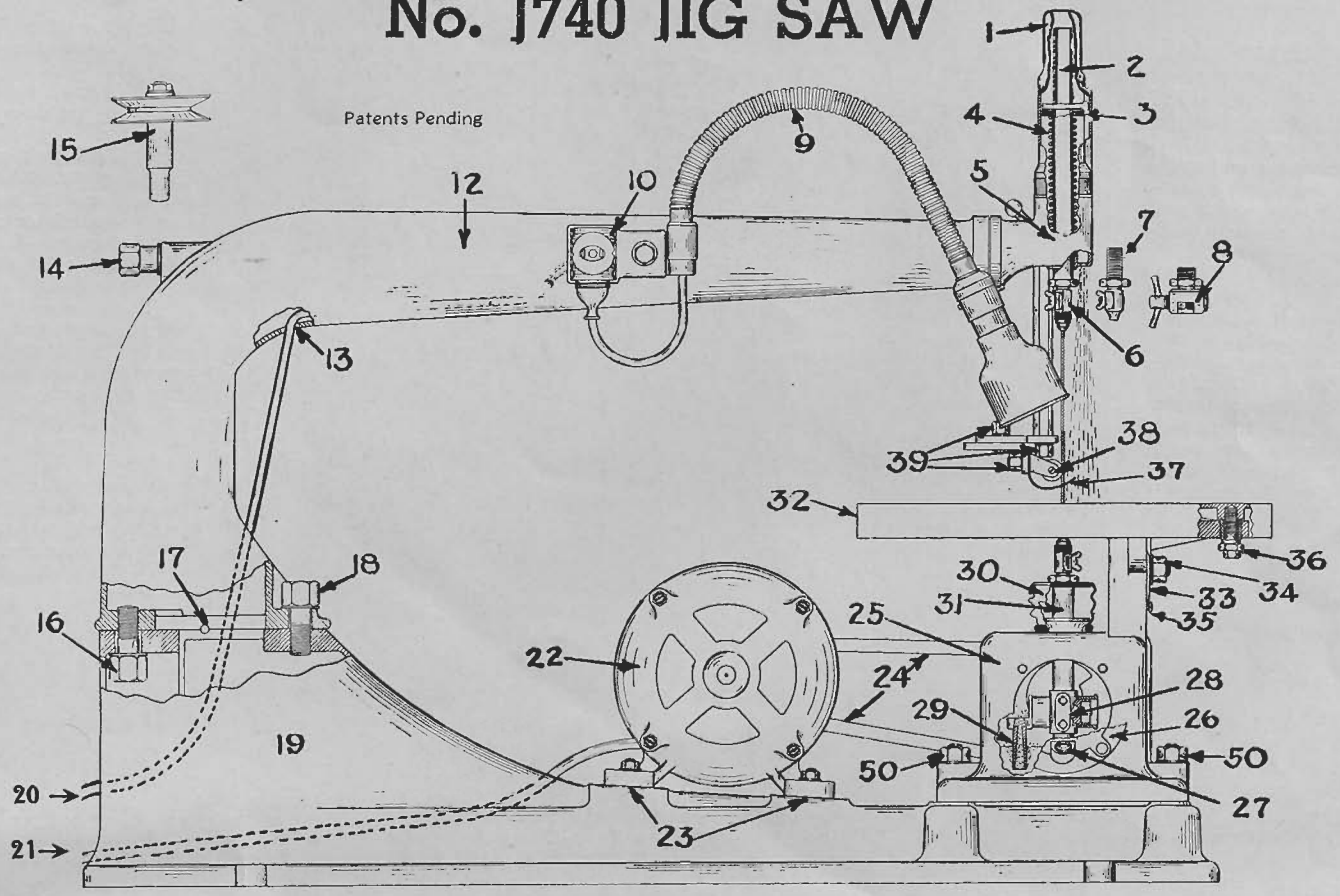
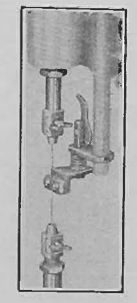
DRIVER
No. J740 JIG SAW



1. Upper head housing cap. To inspect spring return mechanism or to alter tension of spring, unscrew and remove this cap.
2. Upper guide. To the lower end is attached the vise or chuck. The upper end has a series of slots permitting the blade tension to be increased or decreased and blades of varying lengths to be used, by simply changing the position of the key which is inserted through it. The key slides in a slot and should be kept lubricated with vaseline.
3. Leather washer. Similar in action to an air pump, it provides sufficient air for keeping the work clean. Leather washer should be kept soft with oil.
4. Return spring. Amount of tension easily varied.
5. Upper head housing. Carries bronze bearing for upper guide and is attached to arm by means of long bolt shown at 14.
6. Special self-centering blade vise for holding small blades. (Not standard equipment.) Has removable nose piece to take large blades.
7. Another type of small blade vise. Does not have self-centering feature. (Not standard equipment.)
8. Standard universal blade chuck, completely adjustable. Holds machine files, sabre saws and all sizes of blades.
9. Arm is drilled and tapped for Flexo Lamp. Another hole is drilled for feed wire, which enters at point 13.
10. Three way electric outlet, showing lamp wire attached.
12. Upper arm.
13. Feed wire from rear socket enters arm here.
14. This nut is loosened to tilt or remove jig saw head or router.
15. Pulley and eyebolt, attached to arm (with nut 14) for foot treadle feeding of router. (Not Standard Equipment.)
16. This stud locks arm in any position to which it may be swung. Does not have to be removed.
17. A steel dowel pin inserted here locates arm at normal sawing position.
18. This pivot bolt locks arm to base.
19. Base.
20. Wire from arm outlet.
21. Wire from motor.
22. Motor.
23. Slots here permit slight movement of motor for belt adjustment.
24. Slots for Endless V Belt.
25. Housing for driving mechanism. Slight movement possible by bolts located at 50.
26. Inspection cover.
27. Oil level plug. Keep filled to this level with SAE 30 oil.
28. Cross-head drive mechanism. Note counterbalance.
29. This venturii tube forces oil up on down stroke, spraying every part thoroughly.
30. Canvas boot, held in place with a coil spring keeps out dust, affording protection to moving parts.
31. Lower guide with vise.
32. Table.
33. Tilting quadrant.
34. Tilting lock nut.
35. Indicator pin.
36. Table levelling bolt. By adjusting this stud the front of table may be raised or lowered up to 5°.
37. Spring hold down.
38. Roller guide with grooves for various widths and thicknesses of blades.
39. Adjustments for swinging the guide assembly.
50. These bolts clamp driving unit to base.



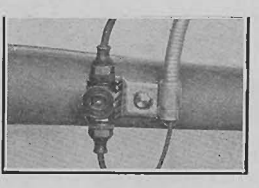
Special Vises and Hold Down

These attachments are very helpful in delicate scroll work and commercial jig saw manufacture where very small blades are used and when time is at a premium. The hold down is not intended to function as a saw guide and should be used only to hold the work down on the table.

Lubrication

Before running the machine fill the crank case to the level of the oil cup with a light-weight motor oil. No oil is shipped in the machine because of danger of spilling in transit. The oil should always be kept at this height. Use vaseline or light cup grease in spring housing of upper guide. The roller guide should be oiled occasionally at each end.

Handy Outlets



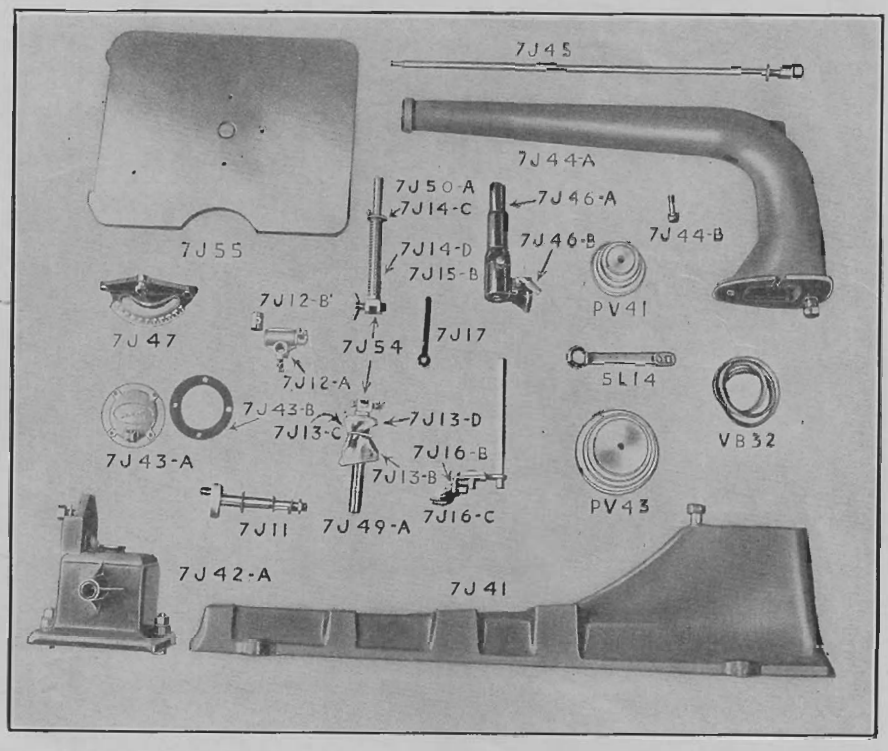
Two convenient three way electric outlets are available. One is located on the arm and is used for feeding the Flexo lamp and router motor. The other is mounted on the bench top at rear end of base and carries the feed wire for the arm outlet and the jig saw motor.

The wire leading from the lamp socket or wall outlet to the base outlet should be attached to the screws inside the outlet. A plug connection should not be made at this point. The motor wire runs from this outlet outside the box casting to the motor. The other wire enters the frame (19)at hole in rear, goes up through frame and into arm at (13).

PARTS LISTING

Motor Requirements

The ⅓ H.P. 1750 R.P.M. motor is ideal for driving the Jig Saw. A ¼ H.P. motor will operate the machine very successfully although it will not stand as much overload as the ⅓ H.P. The ½ H.P. 3500 R.P.M. motor is too high speed for a direct drive although it can be used if a speed-reducing countertershaft or jackshaft is installed between motor and jig saw to provide correct operating speeds for the various operations. Operating speeds: 644, 926, 1295, 1750 R.P.M.



Attaching Blades

First turn the jig saw pulley until the lower vise is at the top position. Then, insert the blade in the lower vise with the teeth of the blade pointing down, and clamp tightly. After the bottom end is secured, insert a punch or screwdriver through the hole in the top of the spring housing cap and depress the shaft about 3/16". Next insert the upper end of the blade in the upper vise and the blade is ready for use.

CAUTION

Do not use any pulley on the motor or jig saw, except the one supplied with this machine.

Catalog No.	Description	Price
7J41	Base	$6.50
7J42-A	Main Housing	2.50
*7J42-B	Main Housing Base Cover	.50
*7J42-C	Base Cover Gasket	.25
*7J42-D	Bronze Bushings (Vertical Shaft—2 used)	.15
*7J42-E	Bronze Bushings (Crankshaft)	.20
*7J42-F	Bronze Bushings (Crankshaft)	.20
7J43-A	Main Housing Side Cover	1.00
7J43-B	Side Cover Gasket	.25
*7J43-C	Oil Plug	.15
7J44-A	Arm with Bolts	3.00
7J44-B	Pin	.25
7J45	Tie Rod	1.50
7J46-A	Spring Housing	1.25
7J15-B	Spring Housing Cup	.50
7J15-C	Spring Housing Set Screws (2 used)	.10
7J46-B	Male Clamping Screw	.10
*7J15-E	Bronze Bearing	.15
7J47	Table Bracket and Quadrant	1.50
7J55A	Table	2.50
7J11	Crankshaft	2.00
7J12-A	Crosshead	1.50

Catalog No.	Description	Price
7J12-B	Piston	.50
7J49-A	Lower Guide Rod	1.00
7J13-B	Cotton Boot	.25
7J13-C	Coiled Spring Boot Retainer	.10
7J13-D	Special Boot Washer	.10
7J50-A	Upper Guide Rod	1.00
7J14-B	Retaining Pin	.10
7J14-C	Leather Washer	.15
*7J53-A	Roller Guide Rod	.50
7J14-D	Coil Spring	.25
7J16-B	Roller Guide and Bracket	.75
7J16-C	Spring Steel Foot	.15
7J17	Wrench	.50
7J54	Set of 2 Vises	1.10
5L14	Box Wrench	.50
VB32	Special V Belt	.60
PV43	Special 4 Step V Pulley	.85
PV41	Special 4 Step Motor Pulley	.55
PA6	Puzzle Hold Down	1.10
PA7	Set of 2 Puzzle Vises	1.10
5J14B	Guide Clip	.25
7J51	Ripping Guide	1.50
7J52	Ripping Guide Carriage Bar	.75

* Not illustrated.

Be Sure the Saw Travels in Line

Very often in shipping and handling, adjustments made at the factory become altered. Before starting to saw, check the blade to see that it travels straight and true. The upper and lower vises should be exactly in line. If they are out of true laterally, that is, from side to side, shift the main housing 7J42-A from side to side as required. If misalignment is to the front or rear this is easily corrected by sliding the main assembly forward or backward on the base.

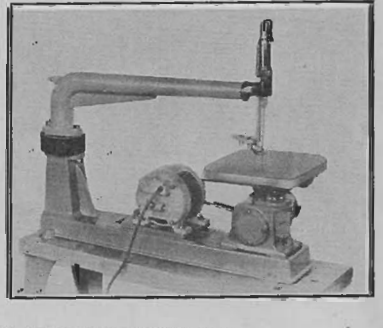
Proper Blade To Use

One thing to remember is that it is advisable to use as heavy a blade as possible for the type of work you are doing. For puzzle work, of course, the fine blades are necessary to insure close-fitting pieces. Also if the work consists of many short turns it is wise to use a narrow blade so there will be less binding.

In sawing wood the type of blade to use is the one that gets best results. This can be determined by a little experimentation. For metal, bakelite, bone, hard rubber and similar substances the finer blades are used. With all these materials use a blade with teeth spacing below the thickness of the material to be sawed, otherwise with coarse teeth the saw is likely to catch in the work.

Fret saw blades have wide spaced teeth and no set and are for sawing wood, aluminum, lead or other soft substances that have a tendency to gum or clog the teeth of finer blades.

These Attachments Bring the Older Model Up To Date



A machined cast iron block is available for the older model jig saw which, when inserted between the arm and base, increases the capacity of cut 2" and permits the arm to be swung over to one side for dovetailing with the high speed router. Longer bolts for attaching block are supplied with it to replace those which belong on the jig saw.

The new type, longer head with improved spring tensioning mechanism is also available for the former model. With this head, blades of practically any length may be used, and the spring tension may be varied to accommodate blades of all weights.

7J55	2" Raising Block	1.50
7J56	New Type Head	2.50

DRIVER

HIGH SPEED ROUTER FOR USE WITH JIG SAW AND FLEXIBLE SHAFT

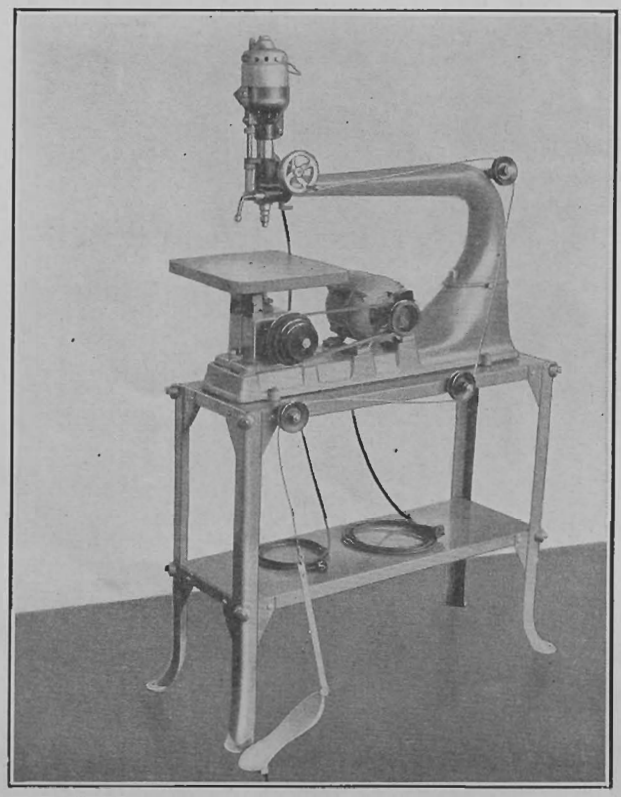
Patents Pending

Easily Converted into a Precision High Speed Router

The purchaser of the Model J740 Jig Saw soon finds that he owns a machine which may be used for a wide variety of work. In two or three minutes he can change his jig saw to a high speed router, carver, shaper, grinder, or dovetailer. By simply removing the long bolt which extends from the rear to the front of the arm, lifting off the jig saw head and replacing it with the router assembly and replacing the bolt, the changeover is accomplished.

The complete router set-up includes the router assembly with three pulleys, a steel cable and foot treadle for foot operation. This arrangement leaves both of the operator's hands free to guide or feed the work, the raising and lowering of the cutter being accomplished by means of the foot treadle. The router motor is the high speed, ball bearing, Universal type, turning at 17,000 R.P.M. It was designed especially for this work, many months being spent in perfecting it. Its horsepower rating is about ⅓. Ample forced ventilation is provided, resulting in the motor running at remarkably low temperatures. It may be used either on alternating or direct current.

Two additional SKF ball bearings carry the spindle, inside the quill, insuring unvarying accuracy over a long period of years. Diameter of threaded spindle ⅜". Three collet chucks standard equipment.



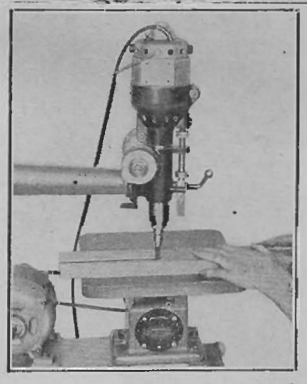
How To Shape with Jig Saw Router

Shaping is an operation where the high speed router shows its worth. Here again its high speed is productive of work of infallible quality. A large selection of cutters is available for shaping. The guard and guide assembly from the spindle shaper fits the jig saw table and is used with excellent results.

Spindle Carving

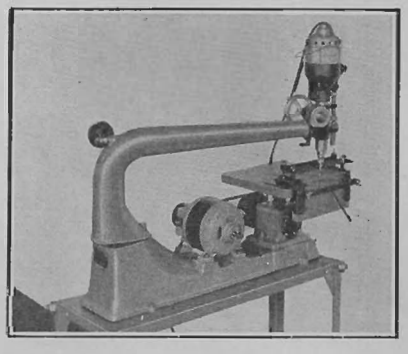
Spindle carving is accomplished with this set-up. The router assembly is swung to a position where the quill is parallel with the table and secured in that position. (A graduated scale on the router housing indicates its position.)

Then the work is held against the revolving cutter and moved about until the desired design is attained. For more detailed information see the book on "Routing."



Cutting Grooves or Dados

For cutting grooves or dados the router is remarkably efficient. Its high speed assures a smooth, even cut, and it is very easy to watch the progress of the tool. The depth gauge and stop nuts, enable the operator to maintain very great accuracy. In this installation the ripping fence proves indispensable.



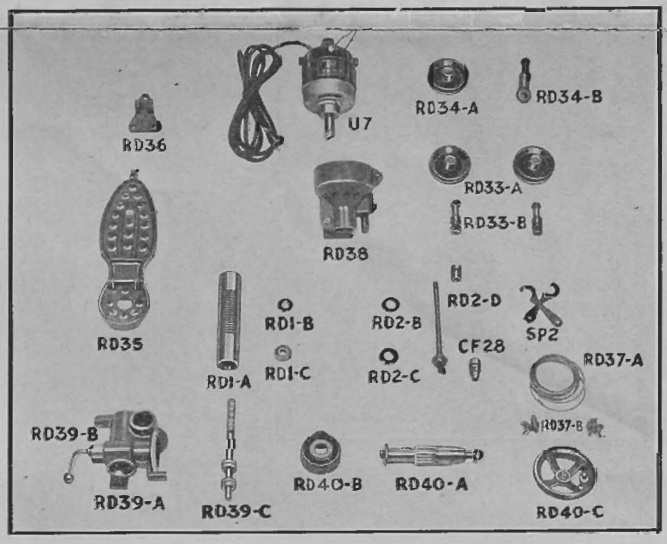
How To Set Up and Operate For Dovetailing

The high speed (17,000 R.P.M.) at which this router operates makes it ideal for cutting dovetail joints. For this work the arm is swung over to one side and the dovetail jig brought into use. After the jig is placed in position the router is swung over close to the point where it will begin to cut. The arm is then bolted tight and the work fed into the revolving router, moving it from tooth to tooth on the comb.

Arm Is Readily Swung To One Side

While this feature was developed primarily to facilitate the making of dovetail joints with the router, its advantages will readily be appreciated on many other occasions. Often in sabre sawing, sanding or filing the overhead arm, while not in use is in the way.

To swing the arm over, two studs are loosened and a small pin removed. The ground surfaces of arm and base assure easy action and maintained alignment.



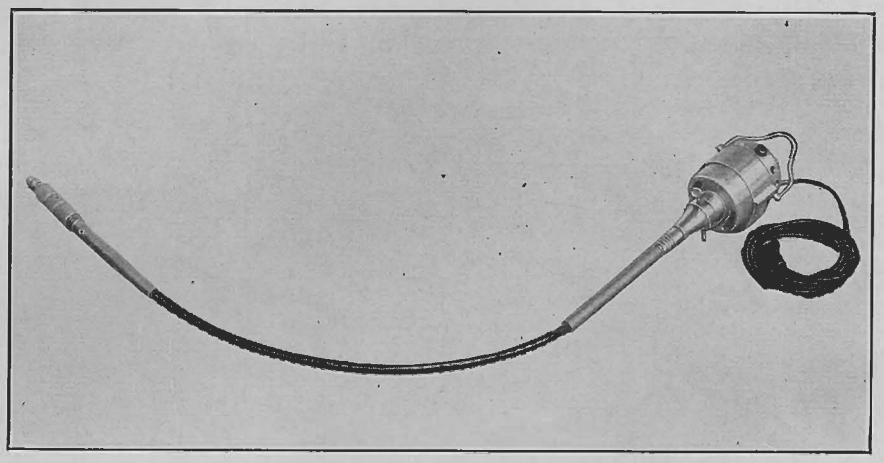
Parts Listing

Catalog No.	Description	Price
U7	Universal Motor— 17,000 R.P.M.	$14.95
RD3B	Motor Housing	2.50
RD36	Pedal Hinge Bracket	.50
RD35	Pedal	1.50
RD34A	Pulley	.50
RD34B	Pulley Bracket	.50
RD33A	Pulley (2 used) ea.	.50
RD33B	Pulley Bracket (2 used) ea.	.50
RD37A	Cable	.50
RD37B	Cable Clamps (2 used) ea.	.25
RD2A	Spindle	2.50
RD2B	Fibre Washer	.15
RD2C	Threaded Collar.	.25
RD2D	Connector Block.	.50
CF28A	Collet Chuck	.75
SP2	2 Spanner Wrenches for CF28A, ea.	.15
RD1A	Feed Rack	3.00
RD1B	Bearing Retainer Collar (2 used) ea.	.25
RD1C	SKF Ball Bearing (2 used) ea.	1.25
RD39A	Feed Rack Housing	2.50
RD39B	Clamping Bolt	.75
RD39C	Depth Gauge	1.00
RD40A	Feed Pinion	1.50
RD40B	Return Spring and Housing	.75
RD40C	Hand Wheel	1.00

DRIVER Router with Flexible Shaft

The router motor and high speed flexible shaft may be bought complete as shown at right. This outfit is ideal for carving and grinding. It is light in weight and exceedingly accurate in operation. Motor and hand piece are, of course, equipped with SKF ball bearings, two sets in each.

A hinged bracket is supplied regular equipment with the motor. Hand piece has threaded spindle 5/16" in diameter. 3 collet chucks are standard equipment taking regular accessories.



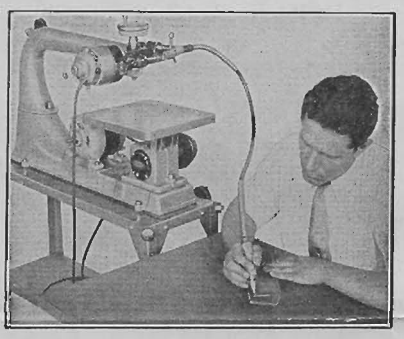
The high speed flexible shaft is also available separately. It may be attached directly to the motor shaft or to the chuck spindle of the router assembly. In either case it will be necessary to use a high speed motor coupling and adapter to complete the connection. These items are supplied only with the flexible shaft.

Grinding

Grinding with the small, shaped stones available for die and mold work, is done quickly and accurately with the flexible shaft attached to the router assembly. Expert die sinkers know the value of this extraordinary tool.

Carving with the Flexible Shaft

Here the high speed flexible shaft is attached to the router assembly, the high speed of the router enabling the operator to do accurate speedy work with the small burrs and rotary tools customarily used for these operations. In this photo a phenol-resin compound is being carved.



Carving with Flexible Shaft Unit

The motor unit may readily be detached from the router assembly by simply loosening one housing clamp bolt. Here it is, suspended overhead, with the high speed flexible shaft attached directly to it. In this photo a piece of relief carving is being completed — a job calling for high speed, flexibility of handling — and a steady hand.

COLLET CHUCKS FOR JIG SAW ROUTER

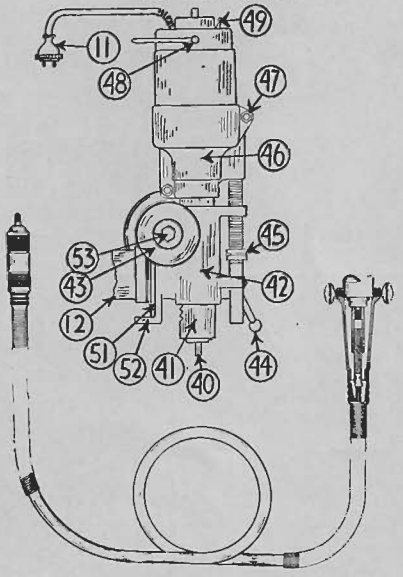
CF26A 1/8" chuck with wrench	.75
CF27A 1/4" " " "	.75
CF28A 5/16" " " "	.75

For 3/8" spindle

COLLET CHUCKS FOR HIGH SPEED FLEXIBLE SHAFT

CF26 1/8" chuck with wrench	.75
CF27 1/4" " " "	.75
CF28 5/16" " " "	.75

For 5/16" spindle

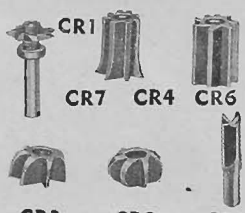


Patents Pending

Description

11. Plug for electrical outlet.
12. Upper Arm.
40. 3/8" threaded spindle for collet chuck.
41. Steel quill carrying spindle mounted on precision ball bearings, movable up and down to vary depths of cut.
42. Main router, bracket casting.
43. Spring return housing. Tension may be adjusted by loosening bolt No. 53 and turning housing clockwise for tightening and counter-clockwise for loosening.
44. Pinch bolt locks quill.
45. Depth guage with indicator and stop nuts.
46. Bracket for holding high speed motor.
47. Clamp bolt holds motor rigidly in place.
48. Hinge bracket for suspending motor when used with high speed flexible shaft.
49. On and off switch.
51. Degree of tilt of router indicated here.
52. Bracket for attaching special hold-down and guide.
53. Spring return housing bolt.

Cutters and Burrs Available For Jig Saw Router



Cutters

CR1—Liner	$1.50
CR2—Half Round	1.50
CR3—Round Nose	1.50
CR4—Hook Tool	1.50
CR5—Button Drill	1.50
CR6—Straight Face	1.50
CR7—Extension Shank for Holding Cutters (5/16" Shank)	.35

Carving Burrs (1/8" shank)

CR8	Saw ..... $ .60	CR12	Pointed ..... .60
CR9	Round ..... .60	CR13	Cylinder ..... .60
CR10	Flame ..... .60	CR20	Set of 6 Burrs 3.50
CR11	Inverted Cone .60		

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