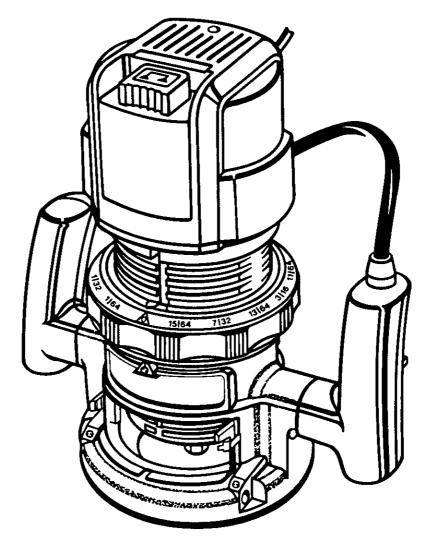
Owner's Manual

CRAFTSMAN®

ROUTER

Double Insulated

Model No. 315.275000



Save this manual for future reference



A CAUTION: Read and follow all Safety Rules and Operating Instructions before first use of this product.

Sears, Roebuck and Co., Hoffman Estates, IL 60179 USA



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WARRANTY

FULL ONE YEAR WARRANTY ON CRAFTSMAN ROUTER

If this CRAFTSMAN Router fails to give complete satisfaction within one year from the date of purchase, RETURN IT TO THE NEAREST SEARS STORE IN THE UNITED STATES, and Sears will repair it, free of

If this CRAFTSMAN Router 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., Dept. 817WA, Hoffman Estates, IL 60179

INTRODUCTION

Your router has many features for making routing operations more pleasant and enjoyable. Safety, performance and dependability have been given top priority in the design of this router making it easy to maintain and operate.



CAUTION: Carefully read through this entire owner's manual before using your new router. Pay close attention to the Rules for Safe Operation, Warnings and Cautions. If you use your router properly and only for what it is intended, you will enjoy years of safe, reliable service.



▲ Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.



WARNING:



The operation of any router can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields, available at Sears Retail Stores.

RULES FOR SAFE OPERATION

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL MEANING

A

SAFETY ALERT SYMBOL:

Indicates caution or warning. May be used in conjunction with other symbols or pictographs.



DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



WARNING: Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

NOTE: Advises you of information or instructions vital to the operation or maintenance of the equipment.

DOUBLE INSULATION

Double insulation is a concept in safety, in electric power tools, which eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from internal metal motor components with protecting insulation. Double insulated tools do not need to be grounded.



WARNING: Do not attempt to operate this tool until you have read thoroughly and understand completely all instructions, safety rules, etc. contained in this manual. Failure to comply can result in accidents involving fire, electric shock, or serious personal injury. Save owner's manual and review frequently for continuing safe operation, and instructing others who may use this tool.

READ ALL INSTRUCTIONS

- KNOW YOUR POWER TOOL. Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards related to this tool.
- GUARD AGAINST ELECTRICAL SHOCK by preventing body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
- KEEP GUARDS IN PLACE and in working order.
- KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- AVOID DANGEROUS ENVIRONMENT. Do not use power tools in damp or wet locations or expose to rain. Keep work area well lit.
- KEEP CHILDREN AND VISITORS AWAY. All visitors should wear safety glasses and be kept a safe distance from work area. Do not let visitors

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.

contact tool or extension cord.

- STORE IDLE TOOLS. When not in use, tools should be stored in a dry and high or locked-up place out of the reach of children.
- DO NOT 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. Don't use tool for purpose not intended for example don't use a circular saw for cutting tree limbs or logs.
- WEAR PROPER APPAREL. Do not wear loose clothing or jewelry that can get caught in tool's moving parts and cause personal injury. Rubber gloves and nonskid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair and keep it from being drawn into nearby air vents.
- ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses have only impact-resistant lenses; they are **not** safety glasses.
- PROTECT YOUR LUNGS. Wear a face or dust mask if the operation is dusty.
- PROTECT YOUR HEARING. Wear hearing protection during extended periods of operation.
- DO NOT ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.

RULES FOR SAFE OPERATION (Continued)

- SECURE WORK. Use clamps or a vise to hold work. It is safer than using your hand and it frees both hands to operate tool.
- DO NOT OVERREACH. Keep proper footing and balance at all times. Do not use on a ladder or unstable support. Secure tools when working at elevated positions.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- DISCONNECT TOOLS. When not in use, before servicing, or when changing attachments, tools should be disconnected from power supply.
- 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. Do not carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
- MAKE SURE YOUR EXTENSION CORD IS IN GOOD CONDITION. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. A wire gage size (A.W.G.) of at least 14 is recommended for an extension cord 50 feet or less in length. A cord exceeding 100 feet is not recommended. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
- OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords suitable for use outdoors. Outdoor approved cords are marked with the suffix W-A, for example SJTW-A or SJOW-A.
- KEEP CUTTERS CLEAN AND SHARP. Sharp cutters minimize stalling and kickback.
- KEEP HANDS AWAY FROM ROUTING AREA. Keep hands away from cutters. Do not reach underneath work while cutter is rotating. Do not attempt to remove material while cutter is rotating.
- NEVER USE IN AN EXPLOSIVE ATMOSPHERE. Normal sparking of the motor could ignite fumes.
- INSPECT TOOL CORDS PERIODICALLY and if damaged, have repaired at your nearest Sears Repair Center. Stay constantly aware of cord location.
- INSPECT EXTENSION CORDS
 PERIODICALLY and replace if damaged.
- KEEP HANDLES DRY, CLEAN, AND FREE FROM OIL AND GREASE. Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any strong solvents to clean your tool.
- STAY ALERT AND EXERCISE CONTROL.

 Watch what you are doing and use common sense. Do not operate tool when you are tired. Do not rush.

- CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center.
- DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF. Have defective switches replaced by an authorized service center.
- INSPECT FOR and remove all nails from lumber before routing.
- DO NOT operate this tool while under the influence of drugs, alcohol, or any medication.
- POLARIZED PLUGS. To reduce the risk of electric shock, this tool has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.
- WHEN SERVICING USE ONLY IDENTICAL CRAFTSMAN REPLACEMENT PARTS.
- WHEN USING THIS ROUTER WITH A ROUTER TABLE, HELP PREVENT POSSIBLE SERIOUS INJURY BY KEEPING THE CUTTER GUARDED AT ALL TIMES. Use only router tables, with guards, that have been designed for use on routers that are of this type, size, and weight.
- DO NOT USE TOOL UNDER "BROWNOUT" OR OTHER LOW VOLTAGE CONDITIONS. Also, do not use with any device that could cause the power supply voltage to change.
- SAVE THESE INSTRUCTIONS. Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.



WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- · lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemicallytreated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

PRODUCT SPECIFICATIONS

Depth of cut 0 - 1-1/2 in. Rating 120 volts, 60 Hz, AC only

Collet 1/2 in. **Amperes**

1/4 in. Also included with packaging No load speed 25,000 RPM

Horsepower Net weight 7.8 lbs.

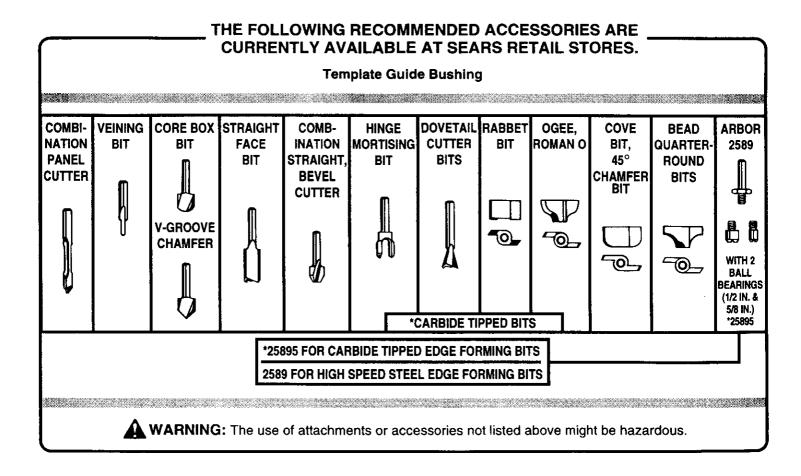
UNPACKING

Your router has been shipped completely assembled. Inspect it carefully to make sure no breakage or damage has occurred during shipping. If any parts are damaged or missing, contact your nearest Sears Retail Store to obtain replacement parts before attempting to operate router. A 1/4 in. collet assembly, 7/8 in. wrench, and Owner's Manual are included in the box.



WARNING: If any parts are missing, do not operate this tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

ACCESSORIES



FEATURES

KNOW YOUR ROUTER

See Figure 1.

Before attempting to use any tool, familiarize yourself with all operating features and safety requirements.

CHIP SHIELD

See Figure 1.

A clear plastic chip shield is installed on the front of your router for protection against flying dust and chips. The shield is designed to fit the front opening of the router base. If necessary to remove chip shield, squeeze the tabs on each end and pull outward. To replace, squeeze the tabs at each end, fit into opening, then release. For your protection, do not use router without chip shield properly in place.

LOCK-ON BUTTON

See Figure 1.

The switch of your router is equipped with a lock-on feature which is convenient when operating for extended periods of time. To lock on, depress the trigger, push in the lock button located on the side of the handle, then while holding the lock button pushed in, release the trigger. To release the lock, depress the trigger and release.

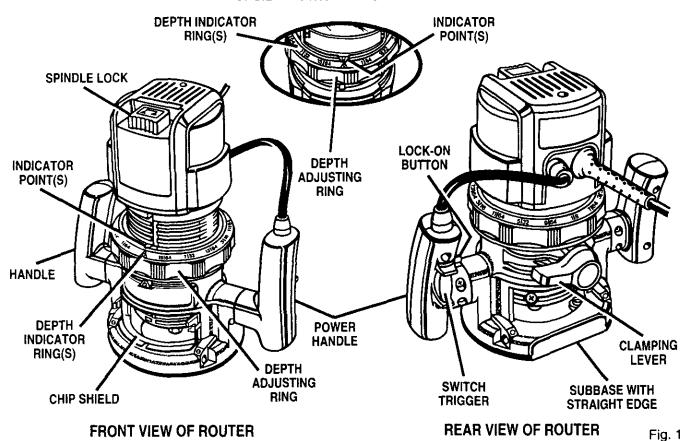
ELECTRICAL CONNECTION

Your router has a precision built electric motor. It should be connected to a power supply that is 120 volts, 60 Hz, AC only (normal household current). Do not operate this tool on direct current (DC). A substantial voltage drop will cause a loss of power and the motor will overheat. If your router does not operate when plugged into an outlet, double-check the power supply.

A

WARNING: If any parts are missing, do not operate your router until the missing parts are replaced. Failure to do so could result in possible serious personal injury

UPSIDE DOWN VIEW OF ROUTER



A

WARNING: Do not allow familiarity with your router to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

ADJUSTMENTS



WARNING: Your router should never be connected to power supply when you are assembling parts, making adjustments, installing or removing cutters, cleaning, or when not in use. Disconnecting router will prevent accidental starting that could cause serious personal injury.

INSTALLING/REMOVING CUTTERS

See Figures 2, 3 and 4.

Unplug your router.



WARNING: Failure to unplug your router could result in accidental starting causing serious injury.



WARNING: To prevent damage to the spindle or spindle lock, always allow motor to come to a complete stop before engaging spindle lock.

■ A spindle lock is located on the top of the end cap. See Figure 2. To activate lock, (1) push spindle lock in, (2) slide into lock position, then (3) release spindle lock.

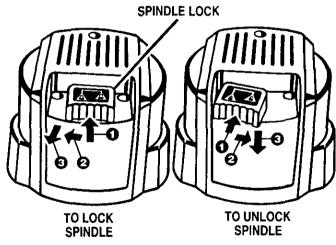
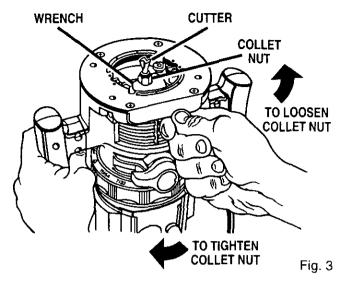


Fig. 2

Place your router upside down on table, then turn collet nut with wrench until lock mechanism interlocks. See Figure 3.



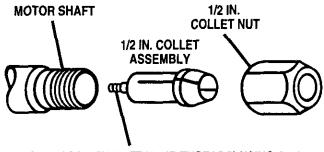
Note: Spindle lock is spring loaded and will snap into position when lock mechanism interlocks.



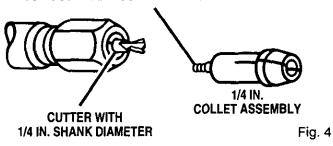
WARNING: If you are changing a cutter immediately after use, be careful not to touch the cutter or collet with your hands or fingers. They will get burned because of the heat buildup from cutting. Always use the wrench provided.

- Remove cutters by turning collet nut counterclockwise enough to allow cutter to slip easily from collet. See Figure 3.
- If installing for the first time, it can be installed once collet nut is loose. If changing cutters, cutter will easily slip from collet after loosening collet nut.
- The 1/2 in. collet is machined to precision tolerances to fit cutters with 1/2 in. diameter shanks. A 1/4 in. collet assembly has also been provided with your router so that cutters with 1/4 in. shank bits can be used. See Figure 4.

ADJUSTMENTS



COLLET SCREW (LEFT HAND THREADS) USING A #2 PHILLIPS SCREWDRIVER, TURN SCREW CLOCKWISE TO LOOSEN AND COUNTERCLOCKWISE TO TIGHTEN



WARNING: Do not use cutters with undersized shanks. Undersized shanks will not tighten properly and could be thrown from tool causing injury.



WARNING: Before connecting your router to power supply, always check to be sure it is not in lock-on position (depress and release switch trigger). Failure to do so could result in accidental starting of your router resulting in possible serious injury. Also, do not lock the trigger on jobs where your router may need to be stopped suddenly.

To use cutters with 1/4 in, shank bits, the 1/2 in. collet assembly must be removed and replaced with the 1/4 in. collet assembly. Remove the 1/2 in. collet assembly by removing collet nut, loosening collet screw by turning clockwise securing collet to motor shaft, then removing collet assembly.

Note: The collet screw has left hand threads and you will need a #2 phillips screwdriver to loosen collet screw. Turn screw clockwise to loosen and counterclockwise to tighten.

- Replace with the 1/4 in. collet assembly, securely tightening collet screw turning counterclockwise in collet to motor shaft, then reassemble 1/2 in. collet nut. See Figure 4.
- Insert shank of cutter into collet until shank bottoms out, then pull it out 1/16 in, to allow for expansion when the cutter gets hot.
- Tighten the collet nut securely by turning clockwise with the wrench provided. See Figure 3.



WARNING: If collet nut is not tightened securely, cutter may come out during use causing serious personal injury.

Place spindle lock back in unlock position. Otherwise, interlocking mechanism of spindle lock will not let you turn your router on. To unlock spindle, (1) push spindle lock in, (2) slide into unlock position, then (3) release spindle lock. See Figure 2.

DEPTH OF CUT ADJUSTMENTS

See Figures 5, 6, 7, and 8.

We recommend that cuts be made at a depth not exceeding 1/8 in. and that several passes be made to reach depths of cut greater than 1/8 in.

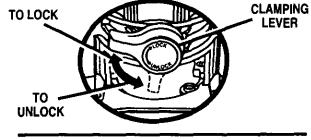
Unplug your router.

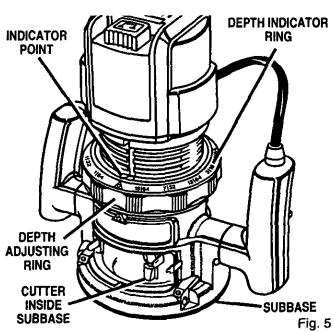


WARNING: Failure to unplug your router could result in accidental starting causing serious injury.

Place your router on a flat surface, unlock clamping lever, and turn depth adjusting ring until cutter is inside subbase. See Figure 5.

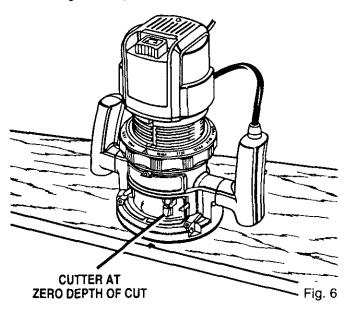
REAR VIEW OF ROUTER



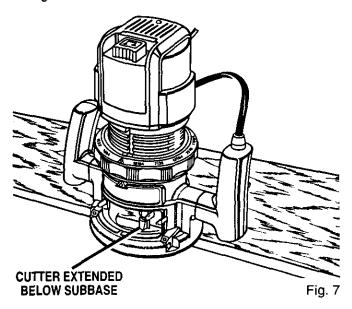


ADJUSTMENTS

■ Turn the depth adjusting ring until tip of cutter touches flat surface (zero depth of cut). See Figure 6. Next turn depth indicator ring until the zero lines up with the indicator point on front of motor housing. See Figure 5.



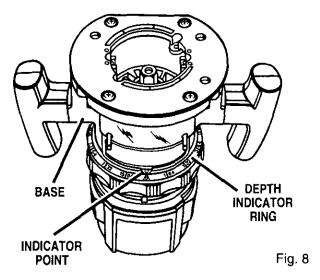
■ Position your router so that the cutter can extend below the subbase for desired depth setting. See Figure 7.



- Turn the depth adjusting ring to obtain the desired depth of cut. The distance the cutter moves can be read on the depth adjusting ring. Each mark on the depth adjusting ring indicates 1/64 inch change in depth setting. One indicator point is located on front of the motor housing, the other one is located on the base.
- Lock clamping lever, securing depth adjusting ring to motor housing and base.

DEPTH OF CUT ADJUSTMENTS WHEN ROUTER IS MOUNTED TO A ROUTER TABLE See Figure 8.

FOR ROUTER TABLE USE ONLY

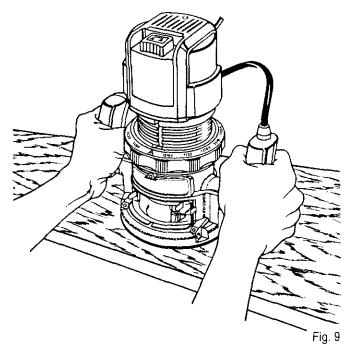


The depth of cut is readable from both sides of the depth adjusting ring. There is a depth indicator ring and indicator point on both sides of the depth adjusting ring. The bottom ring is convenient when using your router mounted to a router table. The indicator point on the base should also be used when using your router mounted to a router table.

The depth indicator rings are identical parts. Therefore, when you have your router mounted upside down on a router table, you set depth of cut by reading the scale differently. Set the cutter at zero depth of cut, rotate depth indicator ring to desired depth of cut on the scale, then turn depth adjusting ring back to zero depth of cut and lock clamping lever securely.

ROUTING

See Figure 9.



For ease of operation and maintaining proper control, your router has two handles, one on each side of the router base. When using your router hold it firmly with both hands as shown in figure 9.



WARNING: Keep a firm grip on router with both hands at all times. Failure to do so could result in loss of control leading to possible serious injury.

Turn router on and let motor build to its full speed, then gradually feed cutter into workpiece. Remain alert and watch what you are doing. **Do not** operate router when fatigued.

RATE OF FEED

IMPORTANT: The whole "secret" of professional routing and edge shaping lies in making a careful setup for the cut to be made and in selecting the proper rate of feed.

PROPER FEEDING

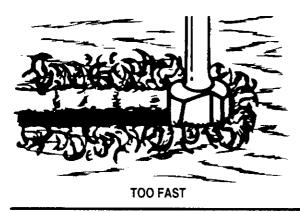
The right feed is neither too fast nor too slow. It is the rate at which the bit is being advanced firmly and surely to produce a continuous spiral of uniform chips — without hogging into the wood to make large individual chips or, on the other hand, to create only sawdust. If you are making a small diameter, shallow groove in soft, dry wood, the proper feed may be about as fast as you can travel your router along your guide line. On the other hand, if the bit is a large one, the cut is deep or the wood is hard to cut, the proper feed may be a very slow one. A cross-grain cut may require a slower pace than an identical with grain cut in the same workpiece.

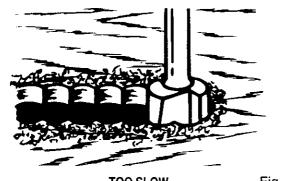
There is no fixed rule. You will learn by experience from practice and use. The best rate of feed is determined by listening to the sound of the router motor and by feeling the progress of each cut. Always test a cut on a scrap piece of the workpiece wood, beforehand.

FORCE FEEDING

Clean, smooth routing and edge shaping can be done only when the bit is revolving at a relatively high speed and is taking very small bites to produce tiny, cleanly severed chips. If your router is forced to move forward too fast, the RPM of the bit becomes slower than normal in relation to its forward movement. As a result, the bit must take bigger bites as it revolves. "Bigger bites" mean bigger chips, and a rougher finish. Bigger chips also require more power, which could result in the router motor becoming overloaded.

Under extreme force-feeding conditions the relative RPM of the bit can become so slow — and the bites it has to take so large — that chips will be partially knocked off (rather than fully cut off), with resulting splintering and gouging of the workpiece. See Figure 10.





TOO SLOW Fig. 10

Your router is an extremely high-speed tool (25,000 RPM no-load speed), and will make clean, smooth cuts if allowed to run freely without the overload of a forced (too fast) feed. Three things that cause "force feeding" are bit size, depth-of-cut, and workpiece characteristics. The larger the bit or the deeper the cut, the more slowly the router should be moved forward. If the wood is very hard, knotty, gummy or damp, the operation must be slowed still more.

You can always detect "force feeding" by the sound of the motor. Its high-pitched whine will sound lower and stronger as it loses speed. Also, the strain of holding the tool will be noticeably increased.

TOO SLOW FEEDING

It is also possible to spoil a cut by moving the router forward too slowly. When it is advanced into the work too slowly, a revolving bit does not dig into new wood fast enough to take a bite; instead, it simply scrapes away sawdust-like particles. Scraping produces heat, which can glaze, burn, or mar the cut — in extreme cases, can even overheat the bit so as to destroy its hardness.

In addition, it is more difficult to control a router when the bit is scraping instead of cutting. With practically no load on the motor the bit will be revolving at close to top RPM, and will have a much greater than normal tendency to bounce off the sides of the cut (especially if the wood has a pronounced grain with hard and soft areas). As a result, the cut produced may have rippled, instead of straight sides. See Figure 10.

"Too-slow feeding" can also cause your router to take off in a wrong direction from the intended line of cut.

Always grasp and hold your router firmly with both hands when routing.

You can detect "too-slow feeding" by the runaway too-highly pitched sound of the motor; or by feeling the "wiggle" of the bit in the cut.

DEPTH OF CUT

As previously mentioned, the depth of cut is important because it affects the rate of feed which, in turn, affects the quality of a cut (and, also, the possibility of damage to your router motor and bit). A deep cut requires a slower feed than a shallow one, and a too deep cut will cause you to slow the feed so much that the bit is no longer cutting, it is scraping, instead.

Making a deep cut is never advisable. The smaller bits —especially those only 1/16 inch in diameter — are easily broken off when subjected to too much side thrust. A large enough bit may not be broken off, but if the cut is too deep a rough cut will result — and it may be very difficult to guide and control the bit as desired. For these reasons, we recommend that you do not exceed 1/8 inch depth of cut in a single pass, regardless of the bit size or the softness or condition of the workpiece. See Figure 11.

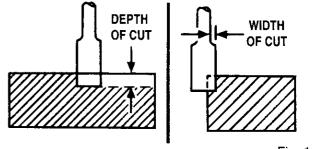
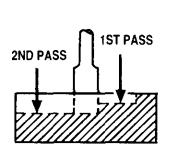


Fig. 11

To make deeper cuts it is therefore necessary to make as many successive passes as required, lowering the bit 1/8 inch for each new pass. In order to save time, do all the cutting necessary at one depth setting, before lowering the bit for the next pass. This will also assure a uniform depth when the final pass is completed. See Figure 12.



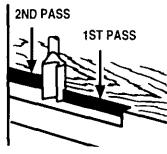


Fig.12

DIRECTION OF FEED AND THRUST

The router motor and bit revolve in a clockwise direction. This gives the tool a slight tendency to twist (in your hands) in a counterclockwise direction, especially when the motor revs up (as at starting).

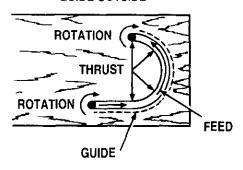
Because of the extremely high speed of bit rotation during a "proper feeding" operation, there is very little kickback to contend with under normal conditions. However, should the bit strike a knot, hard grain, foreign object, etc. that would affect the normal progress of the cutting action, there will be a slight kickback — sufficient to spoil the trueness of your cut if you are not prepared. Such a kickback is always in the direction opposite to the direction of bit rotation.

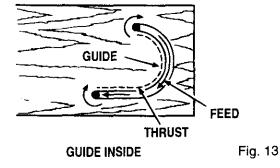
To guard against such a kickback, plan your setup and direction of feed so that you will always be thrusting the tool — to hold it against whatever you are using to guide the cut — in the same direction that the leading edge of the bit is moving. In short, the thrust should be in a direction that keeps the sharp edges of the bit continuously biting straight into new (uncut) wood.

ROUTING

Whenever you are routing a groove, your travel should be in a direction that places whatever guide you are using at the right-hand side. In short, when the guide is positioned as shown in the first part of Figure 13, tool travel should be left to right and counterclockwise around curves. When the guide is positioned as shown in the second part of Figure 13 tool travel should be right to left and clockwise around curves. If there is a choice, the first setup is generally the easiest to use. In either case, the sideways thrust you use is against the guide.

GUIDE OUTSIDE





12

STARTING AND ENDING A CUT INTERNAL ROUTING

Tilt router and place on workpiece, letting edge of subbase contact workpiece first. Be careful not to let router bit contact workpiece. Turn router on and let motor build to its full speed. Gradually feed cutter into workpiece until subbase is level with workpiece.



WARNING: Keep a firm grip on router with both hands at all times. Failure to do so could result in loss of control leading to possible serious injury.

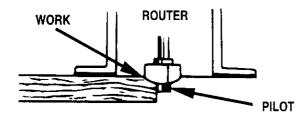
Upon completion of cut, turn motor off and let it come to a complete stop before removing router from work surface.



WARNING: Never pull router out of work and place upside down on work surface before the cutter stops.

EDGING WITH PILOT BITS

See Figure 14.



TOP EDGE SHAPING

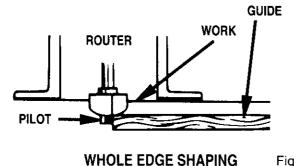


Fig. 14

Arbor-type bits with pilots are excellent for quick, easy, edge shaping. They will follow workpiece edges that are either straight or curved. The pilot prevents the bit from making too deep a cut; and holding the pilot firmly in contact with the workpiece edge throughout prevents the cut from becoming too shallow.

Whenever the workpiece thickness together with the desired depth of cut (as adjusted by router depth setting) are such that only the top part of the edge is to be shaped (leaving at least a 1/16 inch thick uncut portion at bottom), the pilot can ride against the uncut portion, which will serve to guide it. See Figure 14. However, if the workpiece is too thin or the bit set too low so that there will be no uncut edge to ride the pilot against, an extra board to act as a guide must be placed under the workpiece. This "guide" board must have exactly the same contour — straight or curved - as the workpiece edge. If it is positioned so that its edge is flush with the workpiece edge, the bit will make a full cut (in as far as the bit radius). On the other hand, if the guide is positioned as shown in Figure 14 (out from the workpiece edge), the bit will make less than a full cut --- which will alter the shape of the finished edge.

Note: Any of the piloted bits can be used without a pilot for edge shaping with guides, as preceding. The size (diameter) of the pilot that is used determines the maximum cut width that can be made with the pilot against the workpiece edge - the small pilot exposes all of the bit; the large one reduces this amount by 1/16 inch.

EDGE ROUTING

Place router on workpiece, making sure the router bit does not contact workpiece. Turn router on and let motor build to its full speed. Begin your cut, gradually feeding cutter into workpiece.



WARNING: Keep a firm grip on router with both hands at all times. Failure to do so could result in loss of control leading to possible serious injury.

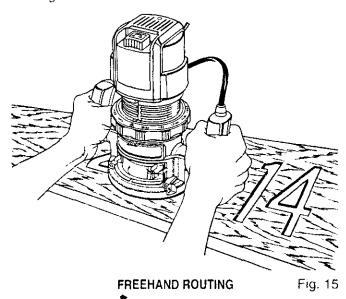
Upon completion of cut, turn motor off and let it come to a complete stop before removing router from work surface.



WARNING: Never pull router out of work and place upside down on work surface before the cutter stops.

FREEHAND ROUTING

See Figure 15.



When used freehand, your router becomes a flexible and versatile tool. This flexibility makes it possible to easily rout signs, relief sculptures, etc.

There are two basic techniques for freehand routing:

- Routing letters, grooves, and patterns into wood. See figure 15.
- Routing out the background, leaving the letters or pattern raised above the surface.

When freehand routing, we suggest the following:

- Draw or layout the pattern on workpiece.
- Choose the appropriate cutter.

Note: A core box or V-groove bit is often used for routing letters and engraving objects. Straight bits and ball mills are often used to make relief carvings. Veining bits are used to carve small, intricate details.

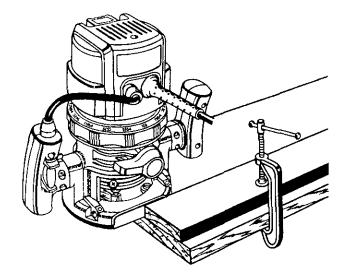
- Rout the pattern in two or more passes. Make the first pass at 25% of the desired depth of cut. This will provide better control as well as being a guide for the next pass.
- Do not rout deeper than 1/8 in. per pass or cut.



WARNING: Do not use large router bits for freehand routing. Use of large router bits when freehand routing could cause loss of control or create other hazardous conditions that could cause possible serious personal injury. When using a router table, large router bits should be used for edging only. Do not use router bits that are larger in diameter than the opening in router base for any purpose.

ROUTING WITH STRAIGHT EDGE OF SUBBASE

See Figure 16.



ROUTING WITH STRAIGHT EDGE OF SUBBASE AGAINST AN EDGE GUIDE

Fig. 16

The subbase on your router has a straight edge. It should be used when placing your router against an edge guide or fence and routing grooves parallel to the fence.



WARNING: Do not use with router tables that fail to conform to safe woodworking practices and offer proper guarding for the cutter. Failure to comply can result in an accident causing possible serious injury.

MAINTENANCE



WARNING: When servicing, use only identical Craftsman replacement parts. Use of any other part may create a hazard or cause product damage.

GENERAL

Only the parts shown on parts list, page 19, 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 Sears service technician.

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



WARNING: Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.

It has been found that electric tools are subject to accelerated wear and possible premature failure when they are used on fiberglass boats, sports cars, wallboard, spackling compounds, or plaster. The chips and grindings from these materials are highly abrasive to electric tool parts such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiberglass material, wallboard, spackling compounds, or plaster. During any use on these materials it is extremely important that the tool is cleaned frequently by blowing with an air jet.



WARNING: Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

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.

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 an extension cord that is heavy enough to carry the current the tool will draw.

A wire gage size (A.W.G.) of at least 14 is recommended for an extension cord 50 feet or less in length. When working outdoors, use an extension cord that is suitable for outdoor use. The cord's jacket will be marked WA.



A CAUTION: Keep extension cords away from the cutting area and position the cord so that it will not get caught on lumber, tools, etc., during cutting operation.



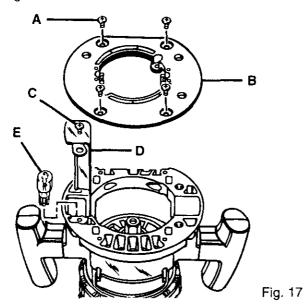
WARNING: Check extension cords before each use. If damaged replace immediately, Never use tool with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.

Extension cords suitable for use with your router are available at your nearest Sears Retail Store.

MAINTENANCE

LIGHT BULB REPLACEMENT

See Figure 17.



Unplug your router.

A

WARNING: Failure to unplug your router could result in accidental starting causing serious injury.

- Remove cutter from router. Refer to page 8 to remove cutter.
- Adjust router to maximum height.
- Remove screws (A) and subbase (B). See Figure 17.
- Remove screw (C) and work light lens (D).
- With bulb (E) pointing toward you, pull bulb from socket.
- Install new bulb by reversing the above procedure.
- Reassemble all parts and tighten screws securely.

PROPER CARE OF CUTTERS

Get faster more accurate cutting results by keeping cutters clean and sharp. Remove all accumulated pitch and gum from cutters after each use.

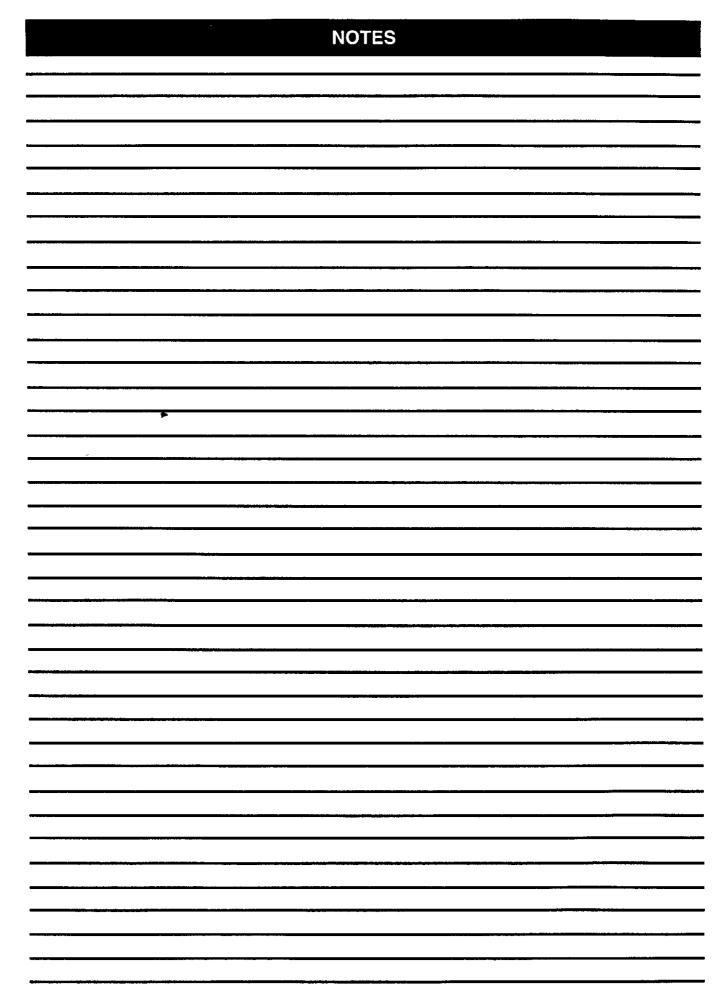
When sharpening cutters, sharpen only the inside of the cutting edge. Never grind the outside diameter. Be sure when sharpening the end of a cutter to grind the clearance angle the same as originally ground.

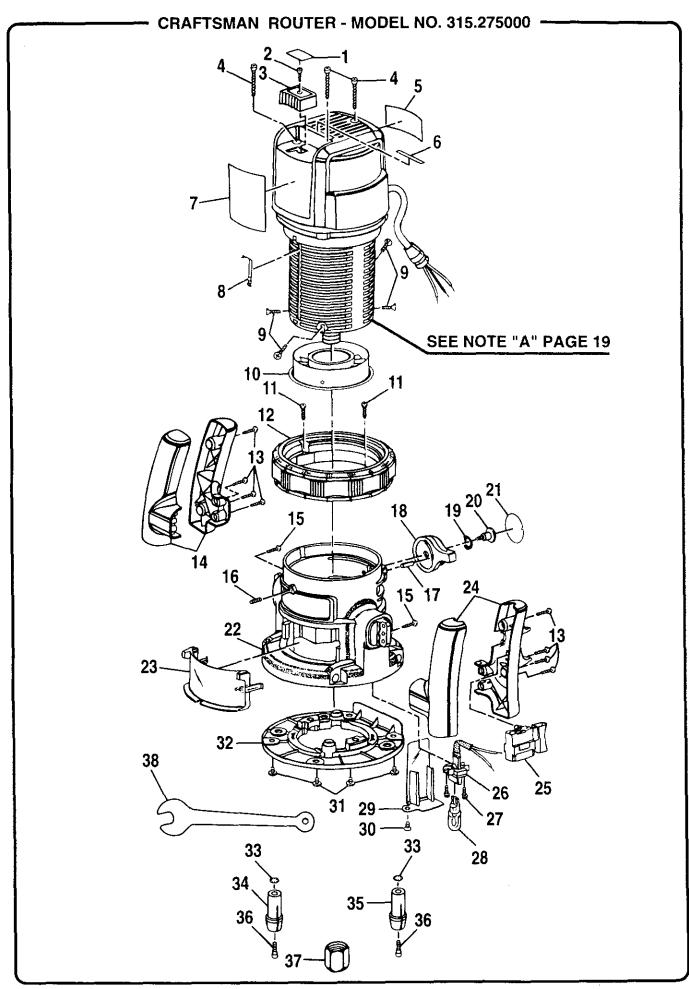
PROPER CARE OF COLLET

From time to time, it also becomes necessary to clean your collet and collet nut. To do so, simply remove collet nut from collet and clean the dust and chips that have collected. Then return collet nut to its original position.

HELPFUL HINTS

- ✓ Always clamp workpiece securely before routing.
- A safe operator is one who thinks ahead.
- ✓ Always wear eye protection when routing.
- ✓ Make setup adjustments carefully. Then double check. Measure twice and cut once.
- ✓ Keep cutters clean and properly sharpened.
- Don't let familiarity make you careless.
- ✓ Study all safety rules and do the job safely.
- ✓ Never place your hands in jeopardy.
- ✓ Make certain clamps can't loosen while in use.
- ✓ Test difficult setups on scrap Don't waste lumber.
- ✓ Plan each operation before you begin.
- ✓ Provide for smoother operation by cleaning your router frequently. Shake router or blow with an air jet to remove sawdust buildup.
- ✓ Think safety by thinking ahead.





- CRAFTSMAN ROUTER - MODEL NO. 315.275000

The model number will be found on a plate attached to the motor housing. 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 No.	Part No.		Description	Quan.
1	973689-001		Label	
2	999053-003	*	Screw (#5-10 x 1/2 in. Fil. Hd.)	
3	973671-001		Actuator Button	
4	989592-002	*	Screw (#8-10 x 1-3/8 in. Fil. Hd.)	
5	975778-001		Data Plate	
6	974289-001		Caution Label	1
7	975779-001		Logo Plate	
8	973688-002		Pointer	1
9	612556-003	•	Screw (#8-18 x 9/16 in. Fil. Hd. T.C.)	4
10	974098-001		Lower Bearing Plate	
11	974516-001	*	Screw (#4-40 x 3/4 in. Pan Hd.)	
12	974239-003		Ring Assembly	
13	610120-005	*	Screw (#6-10 x 3/4 in. Pan Hd.)	8
14	975811-001		Auxiliary Handle Assembly	
15	616968-003	*	Screw (#6-20 x 5/8 in. Pan Hd. T.C.)	
16	726676-002	*	Set Screw (#8-32 x 7/16 in. Flat Point)	1
17	623924-007		Needle Roller	
18	973669-001		Depth Lock Lever	1
19	622347-020		Spring Washer	
20	970712-002	*	Shoulder Screw (#10-32 X 5/16 in. Pan Hd.)	
21	974323-002		Shaft Lock Label	
22	974908-011		Base Assembly (Includes Key No. 17)	
23	973672-001		Chip Shield	1
24	975810-001		Power Handle Assembly	
25	998895-001		Switch Trigger	1
26	973986-100		Lamp Base	1
27	616445-001	*	Screw (#8-18 X 5/8 in. Fil. Hd.)	2
28	644328-001		Bulb	1
29	973968-001		Lens	1
30	614661-001	*	Screw (#10-32 X 1/2 in. Flat Hd.)	
31	998586-001	*	Screw (#10-32 X 1/4 in. Pan Hd.)	4
32	973668-002		Subbase	1
33	607896-001		Retaining Ring	
34	974252-003		1/2 in. Collet Assembly (Inc. Key No. 33 And One Of Key N	
35	974252-005		1/4 in. Collet Assembly (Inc. Key No. 33 And One Of Key N	
36	974096-001		Shoulder Screw	
37	973844-001		1/2 in. Collet Nut	
38	974518-001		Wrench	
39	976242-001	***	Optional Edge Guide	
40	976269-001	***	Optional Guide Bushing Adapter	
41	060721-630	***	Optional Guide Bushing w/Nut (1/4 in. x 5/16 in.)	
42	060721-530	***	Optional Guide Bushing w/Nut (1/4 in. x 3/8 in.)	
43	060721-430	***	Optional Guide Bushing w/Nut (1/2 in. x 5/8 in.)	
44	060721-030	***	Optional Guide Bushing w/Nut (11/32 in. x 7/16 in.)	
	972000-416		Owner's Manual	

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 Repair Center. Contact your nearest Sears Retail Store for Service Center information.

^{*} Standard Hardware Item — May Be Purchased Locally

^{***} Optional Accessory (Not Shown) — Available At Your Nearest Sears Retail Store

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(1-888-784-6427)

Au Canada pour service en français: 1-877-LE-FOYERSM

(1-877-533-6937)

