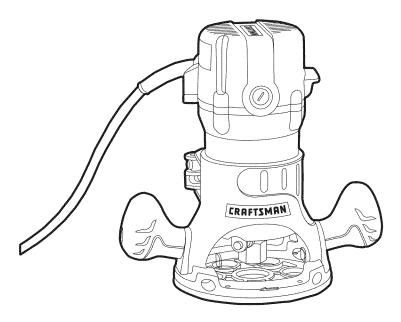
CRAFTSMAN®

9.5 Amp 1-3/4 Peak HP Fixed Base Router

Model No. 320.37595







A WARNING: To reduce the risk of injury, the user must read and understand the Operator's manual before using this product.

- WARRANTY
- SAFETY
- UNPACKING
- DESCRIPTION
- OPERATION
- ADJUSTMENTS
- MAINTENANCE

Sears Brands Management Corporation, Hoffman Estates, IL 60179 U.S.A.

www.craftsman.com

TABLE OF CONTENTS

Warranty	Page 2	
Safety Symbols	Pages 4-5	
Safety Instruction	Pages 6-10	
Unpacking	Page 11	
Description	Pages 12-14	
Assembly	Pages 14-17	
Operation	Pages 18-29	
Maintenance	Pages 30-31	
Accessories	Pages 32-33	
Parts List	Pages 34-36	

CRAFTSMAN ONE YEAR LIMITED WARRANTY

FOR ONE YEAR from the date of purchase, this product is warranted against any defects in material or workmanship. With proof of purchase, defective product will be replaced free of charge.

For warranty coverage details to obtain free replacement, visit the web site: www.craftsman.com

This warranty is void if this product is ever used while providing commercial services or if rented to another person.

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

Sears Brands Management Corporation, Hoffman Estates, IL 60179

SAVE THESE INSTRUCTIONS!

READ ALL INSTRUCTIONS!

▲ DANGER: People with electronic devices, such as pacemakers, should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

WARNING: Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the state of California 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 chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemical: 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.

SAFETY SYMBOLS

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 symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

WARNING: Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as "**DANGER**," "**WARNING**," and "**CAUTION**" before using this tool. Failure to follow all instructions listed in this manual may result in electric shock, fire and/or serious personal injury.

SYMBOL SIGNAL MEANING

A SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, or CAUTION; may be used in conjunction with other symbols or pictographs.

A DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

A WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Damage prevention and Information Messages

These inform the user of important information and/or instructions that could lead to equipment or other property damage if they are not followed. Each message is preceded by the word "NOTICE", as in the example below:

NOTICE: Equipment and/or property damage may result if these instructions are not followed.

WARNING: To ensure safety and reliability, all repairs should be performed by a qualified service technician.



WARNING: The operation of any power tools 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 a Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

SAVE THESE INSTRUCTIONS

Some of these following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and more safely.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
А	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
\sim	Alternating Current	Type of current
ACHINAGERANI COM MINI COM	Direct Current	Type or a characteristic of current
n _o	No Load Speed	Rotational speed, at no load
	Class II Construction	Double-insulated construction
/min	Per Minute	Revolutions, strokes, surface speed, orbits, etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
(3)	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
A	Safety Alert	Precautions that involve your safety.
	No-Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No-Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No-Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No-Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
8	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.

SAFETY INSTRUCTIONS

GENERAL POWER TOOL SAFETY WARNINGS

WARNING: Read all safety warnings and instructions. Failure to follow the warnings and instructions listed below may result in electric shock, fire, and/or serious personal injury.

Save all warnings and instructions for future reference.

The term "power tool" in all warnings listed below refers to corded power tools or battery-operated (cordless) power tools.

WORK AREA SAFETY

- Keep your work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive environments, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks, which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool.
 Distractions may cause you to lose control.

ELECTRICAL SAFETY

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools.
 Unmodified plugs and matching outlets will reduce the risk of electric shock.
- Avoid body contact with grounded surfaces, such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Do not expose power tools to rain or wet conditions. Water entering a
 power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling, or unplugging the power tool. Keep the cord away from heat, oil, sharp edges, or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when
 operating a power tool. Do not use the tool while tired or under the
 influence of drugs, alcohol, or medication. A moment of inattention while
 operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection.
 Protective equipment, such as a dust mask, non-skid safety shoes, hard hat, or hearing protection, used for appropriate conditions, will reduce personal injuries.
- Prevent unintentional starting. Ensure that the switch is in the OFF
 position before connecting to a power source and/or battery, picking
 up or carrying the tool. Carrying power tools with your finger on the switch
 or energizing power tools that have the switch turned on invites accidents.
- Remove any adjusting key or wrench before turning the power tool
 on. A wrench or a key left attached to a rotating part of the power tool may
 result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used. Use of these devices can reduce dust-related hazards.

POWER TOOL USE AND CARE

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and more safely at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories, tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

SERVICE

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES FOR ROUTER

- Hold power tools by the insulated gripping surfaces when performing an
 operation where the cutting tool may contact hidden wiring or its own cord.
 Contact with a "live" wire will make exposed metal parts of the tool" live"
 and shock the operator.
- Use clamps or another practical way to support and secure the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- Maintain a firm grip on the router with both hands to resist starting torque.
- Never attempt to use the router motor without first installing it in an approved base. Failure to heed this warning could result in personal injury and damage to the motor.
- Make sure that the motor housing does not move up or down when clamped in the fixed base. If the motor is not securely clamped into the base, adjustments will not be accurate.
- Do not hand-hold the router in an upside down or horizontal position.
 The motor can separate from the base if it is not properly attached according to the instructions.
- Tighten the collets/nut securely to prevent the cutter bit from slipping.
 If the collet/nut is not securely tightened, the cutter bit may detach during use, causing serious personal injury.
- Never tighten a collet/nut without a cutter bit installed in the collet/nut.
- Never hold the piece being cut in your hands or across your legs. It is
 important to support and clamp the workpiece properly in order to minimize
 body exposure, bit binding, and loss of control.
- Always keep the chip shield clean and in place.

- Stay alert and clear the router cutter bit path of any obstructions before starting the motor. Keep the cutting area clear of all foreign objects while the motor is running.
- Inspect and remove all nails from lumber before routing.
- Check to see that the cord will not "hang up" during routing operation.
- Make sure that the cutter bit is not in contact with the workpiece before the switch is turned on.
- The bit must always be running at the full selected speed before contacting the workpiece.
- Keep hands clear of the cutter bit when the motor is running to prevent personal injury.
- Provide clearance under the workpiece for the router cutter bit when through-cutting.
- Keep cutting pressure constant. Do not overload the motor.
- Use only sharp cutter bits that are not chipped or cracked. Blunt cutter bits will cause stalling and burn the workpiece.
- Never use this router motor with a cutter bit larger than 3-1/2 inches in diameter.
- Always use cutter bits that are designed for this router. Never use
 cutter bits that are larger in diameter than the opening in the router
 sub-base. Cutter bits that have cutter diameters larger than the opening
 could cause possible loss of control or create other hazardous condition
 that could cause serious personal injury.
- The sub-bases on this router have openings of 1-1/4 inch in diameter. To use cutter bits with a larger diameter, install and use a sub-base with a larger opening.
- Do not use large router cutter bits for freehand routing. Use of large cutter bits when freehand routing could cause loss of control or create hazardous conditions that could result in serious personal injury. If using a router table, large bits should be used for edging only.
- Be sure that the cutter bit is centered in a template guide (sold separately) prior to template guide applications to avoid personal injury or damage to finished work.
- Do not remove more than 1/8-inch in a single pass. Excessive depth of cut can result in loss of control that could result in personal injury.
- After completing a cut, turn motor OFF and let it come to complete stop before removing router from workpiece.
- Let the motor come to a complete stop before putting the router down.
 Cutter bits coast after power is turned off.
- Only use router tables with on-board switch controlled receptacles.
 Failure to use router tables with all the appropriate safety features could result in serious personal injury.

- Disconnect the tool from the power source before making any adjustments or changing cutter bits.
- If you are changing a bit immediately after use, be careful not to touch the collet/nut or cutter bit with your hands or fingers. The heat buildup from cutting could cause severe burns. Always use the wrench provided.
- Avoid "climb cutting." see "OPERATION" section in this manual. "Climb cutting" increases the chance for loss of control resulting in possible serious injury.
- Only use router bits suitable for the no-load speed of the tool.
- Never use router bits with a diameter exceeding the maximum diameterspecified in the technical data section.

ADDITIONAL RULES FOR SAFE OPERATION

WARNING: BE SURE to read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

- Know your power tool. Read this operator's manual carefully. Learn the
 applications and limitations, as well as the specific potential hazards related
 to this tool. Following this rule will reduce the risk of electric shock, fire or
 serious injury.
- Always wear safety glasses or eye shields when using this router.
 Everyday eyeglasses have only impact-resistant lenses; they are not safety glasses.
- Protect your lungs. Wear a face mask or dust mask if the operation is dusty.
- Protect your hearing. Wear appropriate personal hearing protection during use. Under some conditions noise from this product may contribute to hearing loss.
- All vistors and bystanders must wear the same safety equipment that the operator of the router wears.
- Inspect the tool cords periodically and if damaged have them repaired by a qualified service technician. Be aware of the cord location.
- Always check the tool for damaged parts. Before further use of the
 tool, a guard or other part that is damaged should be carefully checked to
 determine if it will operate properly and perform its intended function. Check
 for misalignment or binding of moving parts, breakage of parts, and any other
 condition that may affect the tool's operation. A guard or other part that is
 damaged should be properly repaired by a qualified service technician.
- Inspect and remove all nails from lumber before routing.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If someone borrows this tool, make sure they have these instructions also.

UNPACKING

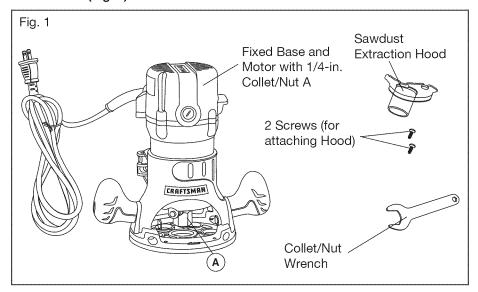
WARNING: Your router should NEVER be connected to the power source when you are assembling parts, making adjustments, installing or removing collets / nuts, cutter bits, cleaning or when it is not in use. Disconnecting the router will prevent accidental starting, which could cause serious personal injury.

When unpacking the box don't discard any packing materials until all of the contents are accounted for:

- 1. Carefully lift the Router Motor and Fixed Base with the 1/4-in. collet/nut already installed, out of the carton and place on a stable flat surface.
- Open the parts bag to locate the following:
 - Sawdust Extraction Hood and 2 Screws used to attach hood to base
 - Collet/Nut wrench
- 3. Inspect the items carefully to make sure that no breakage or damage has occurred during shipping. If any of the items mentioned are missing, (refer to "PARTS LIST" illustration on page 11), return the router to your nearest Sears store or Craftsman outlet to have the router replaced.

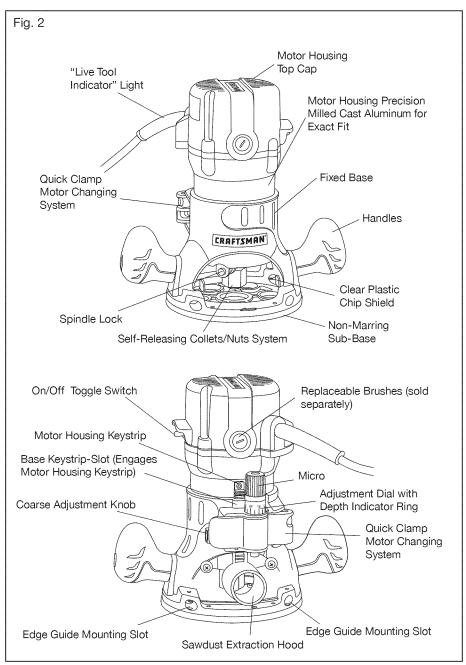
WARNING: If any parts are broken or missing, DO NOT attempt to plug in the power cord or operate router until the broken or missing parts are replaced. Failure to do so could result in possible serious injury.

PARTS LIST (Fig. 1)



DESCRIPTION

KNOW YOUR FIXED BASE ROUTER (Fig. 2)



NOTICE: Before attempting to use your router, familiarize yourself with all of the operating features and safety requirements.

Your fixed base router has a precision-built electric motor and it should only be connected to a 120-volt, 60-Hz AC ONLY power supply (normal household current). **DO NOT** operate on direct current (DC). This large voltage drop will cause a loss of power and the motor will overheat. If the router does not operate when plugged into a correct 120-volt, 60-Hz AC ONLY outlet, check the power supply. This router an 6-ft., 2-wire power cord (no adapter needed).

This Fixed Base Router has the following features:

- 1. Powerful, **9.5 Amp Motor** develops **1-3/4 Peak HP** to handle most routing jobs.
- Single speed 27,000 RPM (no-load speed) helps provide a quality finish in most materials.
- 3. **Fixed Base features Coarse and Fine Depth Adjustments** for accurate set-ups. Ideal for use with router table, sold separately.
- Spindle Lock for easy 1-wrench bit changes. Includes 1/4-in. Self-Releasing Collets/Nuts for use with a wide variety of 1/4-in. router bits, sold separately. A 1/2 in. collet/nut may be purchased separately for use with 1/2 in. router bits.
- 5. 100% Ball Bearings for smooth, efficient operation and long life.
- Base features Ergonomically Designed Handles for comfort, maximum control.
- Base features Large Base Opening and Large Chip Shield, to provide the highest visibility of bit and workpiece.
- 8. **Durable Non-marring Sub-base** glides smoothly over workpiece. Sub-base has cutter-bit opening of 1-1/4-inches. **Do Not Use** a bit with a cutter diameter larger than 1-1/4-in. as it will not pass through the sub-base opening!
- 9. Base constructed of Die-Cast Aluminum to provide durability and stability.
- 10. Motor Housing constructed of High Density Nylon and Precision Milled Cast Aluminum for strength and exact fit into base.
- 11. High-impact resistant **Motor Housing Top Cap and Handles on Base** help protect tool from damage.
- 12. Conveniently located **On/Off Toggle Switch**, side mounted for added visibility, easy access.
- 13. **Sawdust Extraction Hood** allows base to hook up to 1-1/4-inch vac hose attachment, sold separately.
- 14. "LIVE TOOL INDICATOR" Light is green when saw is plugged into a power source. Light is located on motor housing top cap next to power cord inlet.
- 15. Replaceable Brushes (sold separately) for dependable service.

PRODUCT SPECIFICATIONS			
Rating	9.5 Amps		
No-load Speed	27,000 RPM		
Peak HP	1-3/4		
Input	120 volts, 60Hz AC		
Collet/Nut and Cutter Bit Shank Diameter	1/4 in.		
Fixed Base Diameter	6 in.		
Sub Base Opening (Diameter for cutter bit use)	1-1/4 in.		
Sub Base Thickness	0.23 in. (6mm)		
Fixed Base Depth of Cut	1-3/4 in. (45mm)		

ASSEMBLY

NOTICE: This tool is shipped completely assembled. To install or remove bits or add accessories such as sawdust ejection hoods for hook-up to vacs, see the following instructions.

SELECTING THE CUTTER BIT

This router comes with a 1/4 in. collet/nut that accepts 1/4 in. diameter shanked cutter bits. A 1/2 in. collet/nut may be purchased separately for use with 1/2 in. router bits.

WARNING: Do not use router cutter bits that have a cutter bit diameter larger than 1-1/4 in as they will not fit through the sub-base opening, and will cause damage to the sub-base, the motor, and could cause serious personal injury to the operator.

NOTICE: The sub-base installed on this router has an opening of 1-1/4 in. To use cutting bits with a larger diameter, use a sub-base with a larger opening, sold separately at Sears stores or other Craftsman outlets.

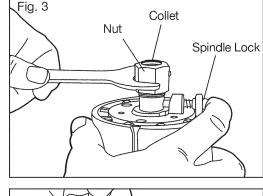
WARNING: ALWAYS turn the motor off and unplug the router before making any adjustments or installing accessories. Failure to unplug the router could result in accidental starting, which can cause serious personal injury.

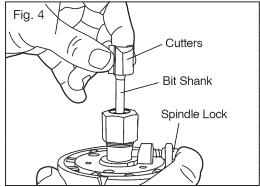
INSTALLING AND REMOVING THE CUTTER BIT (Figs. 3, 4 and 4a)

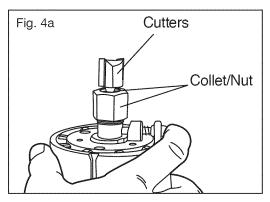
INSTALLING THE CUTTER BIT

- Turn the motor off and disconnect the router from the power source.
- 2. Remove the motor housing from the fixed base.
- **NOTICE:** See instructions on for installing and removing the motor housing from the fixed base on page 17.
- Set the motor upside down on its top cap, with the collet/ nut pointing up.
- Press the spindle lock button to engage and lock the spindle shaft and collet/ nut (Fig. 3).
- Place the wrench on the collet/nut and turn it counter-clockwise to loosen collet/nut slightly to accept the cutter bit shank.
- 6. Insert the cutter bit shank into the collet/nut assembly as far as it will go, then back the shank out until the cutters are approximately 1/8 to 1/4 in away from the face of the collet/nut (Fig. 4, 4a).
- 7. With the cutter bit inserted and the spindle lock button

pressed in to engage the shaft, place the wrench on the collet/nut and turn it clockwise until the router cutter bit and collet/ nut are firmly tightened.







WARNING: TIGHTEN THE COLLET/ NUT SECURELY to prevent the cutter bit from slipping. If the collet/ nut is not securely tightened, the cutter bit may detach during use, causing serious personal injury.

NOTICE: To ensure proper gripping of the cutter bit shank and minimize run-out, the shank of the cutter bit must be inserted into the collet/nut at least 5/8 in.

NOTICE: To prevent damage to tool, do not tighten the collet/nut without a cutter bit installed.

REMOVING THE CUTTER BIT (Figs. 3 and 4 see page 15)

- 1. Turn the motor off and disconnect the router from the power source.
- Remove the motor from the fixed base.
- 3. Set the motor upside down on its top cap, with the collet/nut pointing up.
- 4. Press the spindle lock button to engage and lock the spindle shaft and collet/nut (Fig. 3).
- 5. Place the wrench on the collet/nut and turn it counter- clockwise to loosen the collet/nut slightly; remove the cutter bit shank.

COLLET/NUT CARE

From time to time, inspect the collet/nut to make sure that it is clean and is gripping the cutter bit properly.

With the router cutter bit removed, turn the collet/nut counterclockwise (with the spindle lock engaged) until it is free from the motor's spindle shaft.

Blow the collet out with compressed air and clean the tapered inside of the collet/nut with a tissue or fine brush.

Always make sure that the cutter bit shank, collet/nut and motor spindle are clean and free of woodchips, dust, residue, grease and rust before installing.

Apply a slight amount of machine oil to the spindle shaft if it looks dry. Replace worn or damaged collets/nuts immediately.

NOTICE: The collet/nut is self-releasing; it is NOT necessary to strike the collet/nut to free the router cutter bit. If cutter bit seems stuck after use, loosen the collet/nut a little more until it releases.

CUTTER BITS

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

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

INSTALLING ROUTER MOTOR IN BASE

WARNING: NEVER use the router motor without installing it into either an approved fixed or plunge base. Failure to do so could result in serious personal injury and damage to motor.

NOTICE: Before installing motor housing in fixed base, have the collet/nut and router cutter bit you are going to use already installed in motor housing. See page 15 "INSTALLING AND REMOVING THE CUTTER BIT".

WARNING: ALWAYS turn the motor off and unplug the router from the power source before making any adjustments or installing accessories. Failure to turn the motor off and unplug the router could result in accidental starting which can cause serious personal injury.

Fig. 5

D

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В

INSTALLING ROUTER MOTOR IN BASE (Fig. 5)

- 1. Turn the motor off and disconnect the router from the power source.
- Place the fixed base on a flat surface.
- 3. With the back of the fixed base facing you, open the motor clamp (A).
- 4. Press in the coarse adjustment knob (B) to disengage the gears (C) while you align the motor housing's keystrip (D) with the keystrip-slot (E) in the fixed base.
- 5. When the motor's keystrip is aligned and engaged into the base's keystrip slot, slide the motor down into the fixed base.
- 6. The motor will now slide up or down to set coarse adjustments when the coarse adjustment knob is pressed in.
- 7. After all adjustments are made, close the motor clamp securely.

REMOVING MOTOR FROM BASE (see Fig. 5)

- 1. Turn the motor off and disconnect the router form the power source.
- 2. Place the router (fixed base/motor housing) on a flat surface.
- 3. With the back of the router facing you, open the motor clamp (A).
- 4. Push in the **coarse adjustment knob (B)** to release the motor housing "**keystrip**" **(C)** from the gear in the base, while you lift the motor free of the base.
- 5. Set the motor upside down on its top cap with the collet pointing up and remove the cutter bit. Store the motor and base in the case when not in use.

WARNING: ALWAYS remove cutter bits from collet/nut when the router is not being used. Leaving bits installed could result in an accident causing serious personal injury.

OPERATION

ADJUSTING DEPTH OF CUT

▲ WARNING: Your router should NEVER BE TURNED ON or be connected to the power source when you are assembling parts, making adjustments, installing or removing collets / nuts, cutter bits, cleaning or when it is not in use. Disconnecting the router will prevent accidental starting, which could cause serious personal injury.

NOTICE: All depth adjustments on the Fixed Base must be made with the motor clamp open.

NOTICE: For all Fixed Base Routers, the cutter bit depth equals the amount of the cutter that is exposed below the surface of the subbase.

The fixed base is designed with a micrometer fine adjustment worm gear system. When the bit is lowered to the approximate position desired (coarse setting), the system then can be micro adjusted to the precise depth.

Coarse Adjustment:

Depressing the **coarse adjustment knob (B)** allows you to quickly lower or raise the cutter bit to a larger or approximate depth setting.

Micro Adjustments:

NOTICE: Be sure the worm gear system is engaged before making fine adjustments. Test it by turning the **fine adjustment dial (C)** clockwise and counter-clockwise to see if the bit lowers and raises. If it does not, press in

the coarse adjustment knob and turn the fine adjustment dial until the gears engage, then reset zero "0" on **depth indicator ring (D)**.

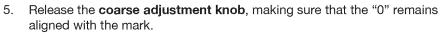
The **depth indicator ring (D)** located on the fine adjustment dial is marked 1/64 inch increments. Turning the fine adjustment dial clockwise 180° (1/2 turn), lowers the cutter bit 1/16 in. One full turn clockwise (360°: zero "0" to zero "0") lowers the bit 1/8 in.

The incremental lines between the 64th marks are 1/128's for super fine micro adjustments. The system allows a maximum of 7 full 360° revolutions, clockwise, to lower the cutter bit 7/8 in.

The depth indicator ring may be reset to zero "0" without moving the fine adjustment dial. This allows the user to begin adjustments from any reference point desired.

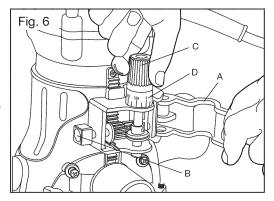
To Adjust Depth (Figs. 6 and 6a)

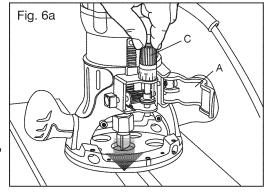
- 1. Turn motor off and unplug from power source.
- Place router on a flat, level surface with back of fixed base facing you and open the motor clamp (A).
- 3. With the cutter bit already installed, Press in the coarse adjustment knob (B), and lower the motor into the base until the cutter bit is very close to the flat surface on which the base is sitting, turn the fine adjustment dial (C) until the cutter bit "just" touches the flat surface on which the base is sitting. Then lock the motor clamp (A).
- 4. While continuing to press the coarse adjustment knob (B), turn the fine adjustment dial (C) until the ZERO "0" mark on the depth indicator ring
 - (D) is aligned with the "I" mark on the base.



- 6. Place the router on two level scrap workpieces, positioned so the cutter bit can be lowered below the subbase (see Fig. 6a).
- 7. Turn the **fine adjustment dial (C)** clockwise to lower the bit to the desired depth of cut. Turn the dial counterclockwise to raise the cutter bit.
- 8. Once your depth of cut is set, close the **motor clamp (A)** securely.

NOTICE: Making a single deep cut is never advisable. Smaller diameter cutter bits are easily broken by too much side thrust and torque. Larger cutter bits will cause a rough cut and be difficult to guide and control. For these reasons, DO NOT EXCEED 1/8-IN. DEPTH OF CUT in a single pass.





Deep Cuts

The proper cutting depth for each pass is always determined by the material, the cutter bit size and type, and the power of the motor.

Always make several progressively deeper cuts by starting at one depth and then make several passes, each time increasing the cutting depth until your desired depth is reached.

Making a cut that is too deep will stress the motor and the cutter bit, and it may burn the workpiece and dull the cutter bit. It could also "grab" too much of the workpiece and cause you to lose control of the router, causing a serious accident.

To be certain that your depth settings are as desired, always make test cuts in scrap material similar to your workpiece before beginning your final cutting.

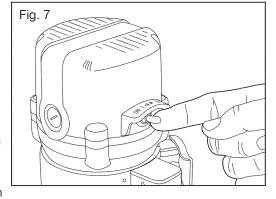
Remember, knowing the right depth for each cut comes with routing experience.

TOGGLE "ON/OFF" SWITCH (Fig. 7)

Your router motor is turned "ON" and "OFF" by the toggle switch located on the top cap of the motor housing.

The left side of the toggle switch hood (as you face it) is marked "I" for "On" and the right side (as you face it) is marked "O" for "Off".

Always hold the router and cutter bit away from the workpiece when



turning the toggle switch "On". Only contact the workpiece with the router and cutter bit after the router has reached full speed.

ONLY remove the router and cutter bit from the workpiece AFTER turning the router motor "OFF", and the cutter bit comes to a complete stop.

TO TURN THE MOTOR "ON"

Push the toggle switch to the left side marked "I", or "On."

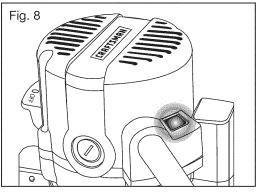
TO TURN THE MOTOR "OFF"

Push the toggle switch to the right side marked "O", or "Off".

Operating in this manner will increase toggle switch and motor life, and will increase the quality of your work.

"LIVE TOOL INDICATOR" LIGHT (Fig. 8)

Your router also has a "live tool indicator" green light, located on the motor housing top cap adjacent to where the power cord enters the motor housing. This green light is always on when router motor is plugged into a power source.



PLACING THE ROUTER ONTO THE WORKPIECE AND STARTING THE CUT

WARNING: Before operating your router, follow all safety instructions in this manual. Failure to do so could result in serious personal injury.

NOTICE: Making test cuts is essential with most routing applications. Even with careful set-ups you won't know exactly how the cut will go until you try it out.

A test cut will give you a feel for the set-up, the router's speed, the depth of cut and how the cutter bit reacts to the workpiece.

Much of routing is a trial-and-error process of making various adjustments, followed by test cuts as you become familiar with all of your router's operational abilities. To avoid ruining good material, make your test cuts on scrap materials.

Placing your router onto a workpiece (starting the cut) with a fixed base depends on the type of routing you are going to produce: **Edge Routing or Internal Routing.**

EDGE ROUTING OR INTERNAL ROUTING

For ease of operation and to maintain proper control, your router has two handles, one on each side of the router base. When operating the router, always hold it firmly with both hands (see Fig. 9).

Turn the router "On", let the motor build to its full speed, then gradually feed the cutter bit into the workpiece. **ALWAYS** be alert and watch what you are doing. **NEVER** operate the router when you are fatigued.

Fig. 9

EDGE ROUTING (Fig. 9)

- With the depth-of-cut set, place the router sub-base on the edge of the workpiece, making sure the cutter does not contact the workpiece.
- Clamp an edge guide (board or metal straightedge) in place to help guide router's base when making your edge cut.
- RRETTSMAN
- 3. Turn the router "On", and let the motor build to its full speed.
- 4. To begin your cut, gradually feed the cutter bit into the edge of the workpiece.
- 5. When cut is completed, turn motor "Off" and let cutter bit come to a complete stop before removing it from the workpiece.
- 6. Unplug the router from the power source, place the router upside down on the worktable, and inspect the finished cut.

WARNING: Always securely clamp your workpiece and keep a firm grip on the router base with BOTH HANDS at all times. Failure to do so could result in loss of control causing possible serious personal injury.

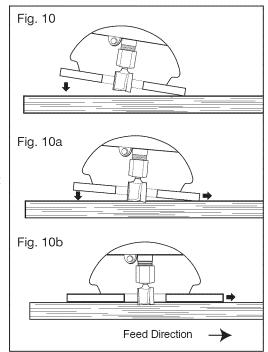
WARNING: Removing a cutter bit from the workpiece while it is still rotating could damage the workpiece and result in loss of control, causing serious personal injury.

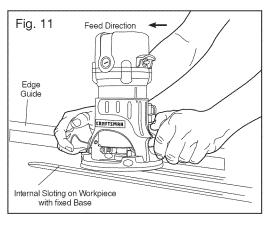
NOTICE: Making test cuts in scrap material that is similar to your workpiece is essential. Learning how the router's speed, depth-of-cut and cutter bit will react in the workpiece will help you produce quality cuts.

INTERNAL ROUTING (Figs. 10, 10a, 10b and 11)

- With the depth-of-cut set, tilt the router and place the subbase on the workpiece with leading edge of sub-base contacting workpiece first (Fig. 10).
- 2. Turn the motor "On" and let motor build up to its full speed, being careful not to let cutter bit contact workpiece.
- 3. To begin your cut, gradually feed the cutter bit into the workpiece until the sub-base is flat on the workpiece (see Fig 10a, 10b).
- When the cut is completed, turn the motor "Off" and let the cutter bit come to a complete stop before removing it from the workpiece.
- 5. Unplug the router from the power source, place the router upside down on the worktable, and inspect the finished cut.

WARNING: Always securely clamp your workpiece and keep a firm grip on the router base with BOTH HANDS at all times. Failure to do so could result in loss of control causing possible serious personal injury. If using a router table, large cutter bits should be used for edging only.

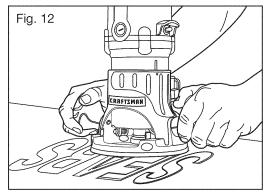




WARNING: Removing the cutter bit from workpiece while it is still rotating could damage the workpiece and result in loss of control, causing serious personal injury.

FREEHAND ROUTING WITH THE FIXED BASE (Fig. 12)

WARNING: Do not use large cutter bits for freehand routing. Use of large cutter bits when freehand routing could cause loss of control or create other hazardous conditions that could result in personal injury. If using a router table, large bits should be used for edging only.



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

- 1. Draw or layout the pattern on the workpiece.
- 2. Choose the appropriate bit.
- 3. Rout the pattern in two or more passes. Do not exceed 1/8-in. depth of cut in a single pass. This will help provide better control as well as serve as a guide on the next passes.

NOTICE: 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.

NOTICE: Making a single deep cut is never advisable. Smaller diameter bits are easily broken by too much side thrust and torque. Larger bits will cause a rough cut and be difficult to guide and control. For these reasons, DO NOT EXCEED 1/8-IN. DEPTH OF CUT in a single pass.

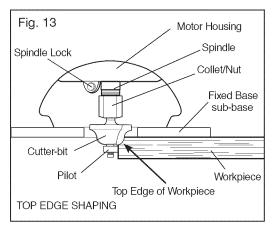
WARNING: Always securely clamp your workpiece and keep a firm grip on the router base with BOTH HANDS at all times. Failure to do so could result in loss of control causing possible serious personal injury.

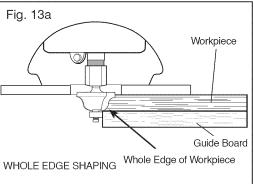
EDGING WITH A PILOT BIT (Figs. 13 and 13a)

Arbor-type bits with pilots are excellent for edge shaping of any workpiece edge that is either straight, or curved at a curvature as great or greater than the radius of the bit to be used. The pilot prevents the bit from making too deep a cut; 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-in. thick uncut portion at the bottom), the pilot can ride against the uncut portion, which serves to guide it (see Fig. 13).

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 (see Fig. 13a). This "guide" board must have the same contour 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 Fig. 13a (out from the workpiece edge), the bit will make less than a full cut - which will alter the shape of the finished edge.

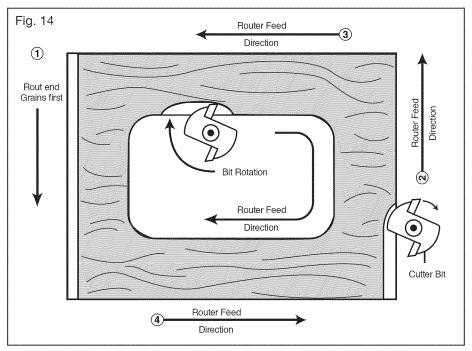
NOTICE: The size (diameter) of the pilot that is used determines the maximum cut width that can be made with the pilot against the workpiece edge (the small pilot exposes all of the bit; the large one reduces this amount by 1/16-in.). Any of the piloted cutter bits can be used without a pilot for edge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

WARNING: Always securely clamp your workpiece and keep a firm grip on the router base with BOTH HANDS at all times. Failure to do so could result in loss of control causing possible serious personal injury.

FEEDING THE ROUTER (Fig. 14)

The secret to professional routing is in making a careful set-up for the cut, selecting the proper depth of cut, knowing how the cutter bit reacts in your workpiece, and the rate and direction of feed of the router.

DIRECTION OF FEED - EXTERNAL CUTS (Fig. 14)



The router motor and cutter bit rotate clockwise. This requires the feed of the cutter bit to be from left to right (see Fig. 14). Feeding the bit from left to right will cause the bit to pull the router towards (up against) the workpiece.

If you feed the router in the opposite direction (right to left), the rotating force of the cutter bit will tend to throw the bit away from the workpiece, making it hard to control; this is called **Climb-Cutting**: cutting in the opposite direction of the proper feed direction. **Climb-Cutting** increases the chance for loss of control, resulting in possible personal injury. When **Climb-Cutting** is required (backing around a corner for example), exercise extreme caution to maintain control of the router.

Because of the high speed of the cutter bit during a proper feeding operation (left to right), there is very little kickback under normal conditions. However, if the cutter bit strikes a knot, an area of hard grain in the wood workpiece, or a foreign object, the normal cutting action could be affected and cause "Kickback".

This Kickback may cause damage to your workpiece, and could cause you to lose control of the router, causing possible personal injury. Kickback is always in the opposite direction of the clockwise cutter bit rotation, or counterclockwise.

To guard against and help prevent Kickback, plan your set-up and direction of feed so you're always thrusting the router, keeping the sharp edges of the cutter bit continuously biting straight into new (uncut) wood (workpiece). Also, always inspect your workpiece for knots, hard grain, and foreign objects that could cause a kickback problem.

Fig. 15

Bit Rotation

Bit Rotation

DIRECTION OF FEED -INTERNAL CUTS (Figs. 15 and 15a)

When making an internal cut, such as a groove, dado or slot, always have the guide you are using with the router (edge guide, straight edge, board guide), on the righthand side of the router as you make your cut, see Fig. 15).

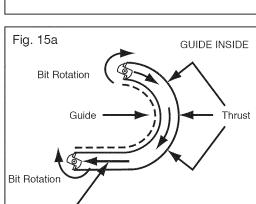
When the guide is positioned on the right hand side of the router, the router travel should be from left to right and "counterclockwise" around curves (see Fig. 15). This counterclockwise action around the curve could cause Climb-Cutting. Always be alert and exercise extreme caution to maintain control of the router when making this type of cut around curves.

When the guide is positioned as shown in Fig. 15a, the router travel should be from left to right and clockwise around curves.

If there is a choice, the set-up

Router Feed Direction Guide Fig. 15a GUIDE INSIDE Bit Rotation Thrust Guide Bit Rotation

GUIDE OUTSIDE



in Fig. 15 is easier to use, but there is the possibility of Climb-Cutting around curves. In either case, Fig. 15 or Fig. 15a, the sideways thrust of the router cutting is always against the guide, as is proper.

Router Feed Direction

MARNING: Always securely clamp your workpiece and keep a firm grip on the router base with BOTH HANDS at all times. Failure to do so could result in loss of control causing possible serious personal injury.

RATE OF FEED (Figs. 16 and 16a)

The proper rate of feed depends on several factors: the hardness and moisture content of the workpiece, the depth of cut, and the cutting diameter of the bit. When you are cutting shallow grooves in soft woods such as pine, you may use a faster rate of feed.

When making deep cuts in hardwoods such as oak, you should use a slower rate of feed.

FEEDING TOO FAST (Fig. 16)

Clean and smooth finished cuts can only be achieved when the cutter bit is rotating at a relatively high speed, taking very small bites and producing tiny, clean cut chips.

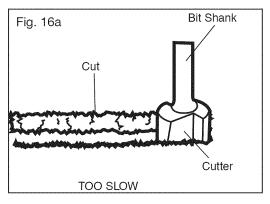
Forcing the feed of the cutter bit forward too fast slows the rotation of the cutter bit, and the bit takes bigger bites as it rotates. Bigger

Fig. 16

Cut

Cutter

TOO FAST



bites mean bigger chips and a rough finish. This forcing action can also cause the router motor to overheat.

Under extreme force-feeding conditions, the rotational speed can become so slow and the bites become so large that chips become partially cut off, causing splintering and gouging of the workpiece.

The router will make clean, smooth cuts if allowed to run freely without the overload of forced feeding. You can detect forced feeding by the sound of the motor. Its usual high-pitched whine will sound lower and stronger as it loses speed. Holding the router against the workpiece will also be strained and harder to do.

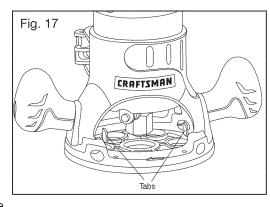
FEEDING TOO SLOWLY (Fig. 16a)

When you feed the cutter bit too slowly, the rotating cutter bit does not cut into new wood fast enough to take a bite. Instead, it scrapes away sawdust-like particles. This scraping produces heat, which can glaze, burn and mar the cut in the workpiece and, in extreme cases, overheat the cutter bit.

CHIP SHIELD DEFLECTOR (Fig. 17)

▲ WARNING: ALWAYS wear eye protection. The chip shield deflector is not intended as a safety guard.

To remove chip shield from fixed base, press inward on the tabs until the chip shield releases from the base; remove the shield. To attach, place the chip shield back in position and flex the sides while



pushing it in until it snaps back into place (See Fig. 17).

A WARNING: The chip shield deflector helps keep dust and chips away from the operator; it will not stop objects larger than woodchips thrown from the bit.

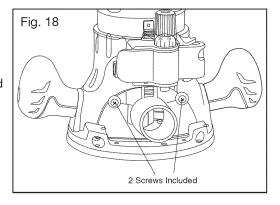
A CAUTION: ALWAYS have the chip shield deflector in place on the base when operating the router.

WARNING: ALWAYS turn the motor off and unplug the router from the power source before making any adjustments or installing accessories. Failure to turn the motor off and unplug the router could result in accidental starting which can cause serious personal injury.

DUST COLLECTION WITH DUST EXTRACTION HOOD (Fig. 18)

There is a dust extraction hood included with this router. The hood is sized to accept a 1-1/4 in. vac hose adapter, sold separately.

To attach the hood onto the fixed base, position and secure it to the back of the base with the two screws (included) as shown in Fig. 18.



MAINTENANCE

A WARNING: To ensure safety and reliability, all repairs should be performed by a qualified service technician.

GENERAL

Only the parts shown on the parts list are intended for repair or replacement by the customer. All other parts represent an important part of the double insulation system and should be serviced only be a qualified service technician.

WARNING: For your safety, ALWAYS turn off the switch and unplug the router motor from the power source before performing any maintenance or cleaning.

It has been found that electric tools are subject to accelerated wear and possible premature failure when they are used to work on fiber glass, wallboard, spackling compounds or plaster. The chips and grindings from these materials are highly abrasive to electrical 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 compound 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 operations, or when blowing dust. If operation is dusty, also wear a dust mask.

ROUTINE MAINTENANCE

WARNING: DO NOT at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic, which may result in serious personal injury.

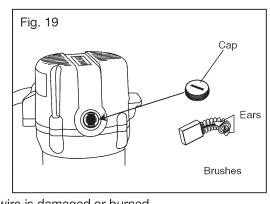
- When work has been completed, clean the tool to allow smooth functioning of the tool over time.
- 2. Use clean damp cloths to wipe the tool.
- Check the state of all electrical cables.
- 4. Keep the motor air openings free from oil, grease and sawdust or woodchips, and store tool in a dry place.
- 5. Be certain that all moving parts are well lubricated, particularly after lengthy exposure to damp and/or dirty conditions.

WARNING: For your safety, ALWAYS turn off switch and unplug router motor from the power source before performing any maintenance or cleaning. Refer to Collet/Nut Care and Cutter Bits on page 16 for cleaning care.

REPLACEMENT OF CARBON BRUSHES (Fig. 19)

Replacement brush sets are available through Craftsman Parts and Repair Centers.

- Unplug the router motor before inspecting or replacing brushes.
- 2. Replace both carbon brushes when either has less than 1/4 in. length of carbon remaining, or if the spring or wire is damaged or burned.



3. Using a slotted screwdriver, remove the black plastic cap on each side of the router motor (Fig. 19) and carefully withdraw the spring-loaded brush assemblies. Keep brushes clean and sliding freely in their guide channels.

NOTICE: To reinstall the same brushes, make sure the brushes go back in the same way they came out. This will avoid a break-in period.

- 4. Insert new brush assemblies into guide channels, with the carbon part going in first, being certain to fit the two the metal "ears" into their slots in the channel (Fig. 19).
- 5. Remember to replace both end caps after inspecting or servicing brushes. Tighten the caps snugly, but do not over-tighten. The router should be allowed to "RUN IN" (run at no load without a cutter bit) for 5 minutes before use, to seat the new brushes properly.

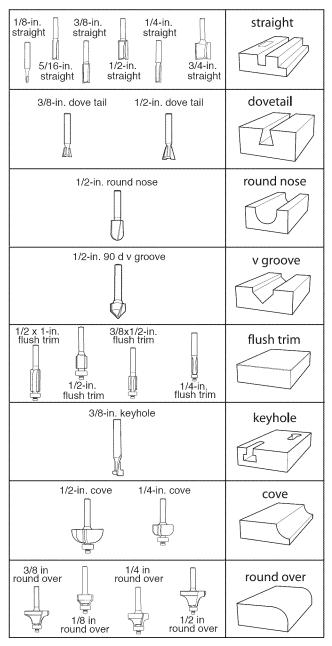
WARNING: For your safety, ALWAYS turn off switch and unplug router motor from the power source before performing any maintenance or cleaning.

LUBRICATION

All of the bearings in this tool are lubricated with a sufficient amount of highgrade lubricant for the life of the tool under normal operating conditions. Therefore, no further lubrication is required.

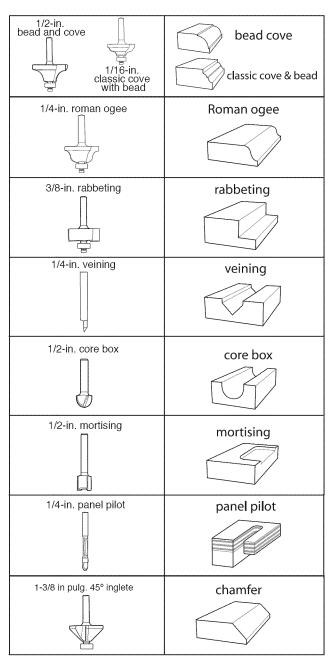
ACCESSORIES

A WARNING: The use of attachments or accessories that are not recommended for this tool might be dangerous and could result in serious injury.



In addition to a wide variety of router bits other Craftsman accessories are available, such as: Router tables, various template sets, universal router fence with lock knobs (64181), 11 pc. bushing set (64180) and clear sub-base sets; 6pc. fixed base (64182/37695) 6 pc.

warning: Only use router tables with proper guarding for the cutter bit and with "on-board" switch controlled receptacles. Failure to use router tables with appropriate safety features could result in serious personal injury.

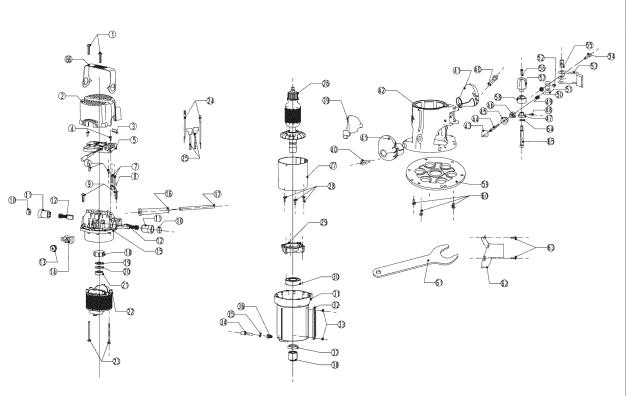


PARTS LIST

9.5 Amp / 1-3/4 Peak HP - MODEL NUMBER 320.37595

The Model Number will be found on the Nameplate attached to the motor unit. Always mention the Model Number when ordering parts for this tool.

To order parts, call 1-800-469-4663.



PARTS LIST

9.5 Amp / 1-3/4 Peak HP Fixed Base Router- MODEL NUMBER 320.37595

The Model Number will be found on the Nameplate attached to the motor unit. Always mention the Model Number when ordering parts for this tool.

To order parts, call 1-800-469-4663.

No	Part No	Part Name	QTY
1	5610220000	Screw	2
2	3121517000	Rear Cover	1
3	3121518000	Cap	1
4	5610017000	Screw	2
5	4900046000	PCB Assembly	1
6	5620017000	Hexagon Socket Screw	2
7	5610106000	Tapping Screw	2
8	3122798000	Cord Anchorage	1
9	5610059000	Thread Forming Screw	2
10	3120537000	Brush Cover	2
11	2800005000	Brush Holder Assembly	2
12	4960019000	Carbon Brush Assembly	2
13	3122851000	Seal Ring	1
14	4870073000	Switch	1
15	3121494000	Middle Housing	1
16	3121050000	Cord Guard	1
17	4810002000	Power Cord & Plug	1
18	3123926000	Bearing Holder	1
19	3121049000	Rubber Spring	1
20	3700249000	Washer	1
21	5700008000	Ball Bearing	1
22	2740116000	Stator	1
23	5610048000	Tapping Screw	2
24	2822039000	Internal Wire Assembly	2
25	2822038000	Internal Wire Assembly	2
26	2750719000	Rotor	1
27	3121495000	Fan Baffle	1
28	5620040000	Screw	3
29	3121521000	Holder	1
30	5700056000	Ball Bearing	1

No	Part No	Part Name	QTY
31	3420356000	Motor Housing	1
32	3520227000	Gear Rack	1
33	5620062000	Screw	1
34	3550592000	Spindle Lock	1
35	5660005000	"E" Ring	1
36	3660174000	Stop Spring	1
37	5630179000	Nut	1
38	2823125000	Collet Assembly (1/4 in.)	1
39	3121637000	Chip Shield	1
40	5620024000	Hexagon Socket Screw	2
41	3121635000	Handle	2
42	3420396000	Mounting Set	1
43	3121648000	Button	1
44	3550579000	Gear Shaft	1
45	3520141000	Gear	1
46	3520147000	Lock Gear	1
47	3550615000	Worm	1
48	5620033000	Screw	1
49	3660167000	Spring	1
50	5630015000	Prevailing Torque Hexagon Nut	1
51	3700848000	Plate	1
52	5660003000	E Ring	1
53	3420395000	Clamping Lever	1
54	5620332000	Screw	1
55	3550596000	Lock Pin	1
56	5620041000	Screw	1
57	3121646000	Adjusting Knob	1
58	3121647000	Indicator	1
59	3122924000	Mounting Plate	1
60	5620049000	Screw	3
61	3700807000	Wrench	1
62	3122784000	Vacuum Adapter	1
63	5620040000	Screw	2
64	5650172000	Wave Washer	1
65	3550613000	Shaft	1
66	3704921000	Decorative Cover	1