SPINRITE™
ROUTER MOTOR

ROUTER MOTOR
3.25hp VARIABLE SPEED

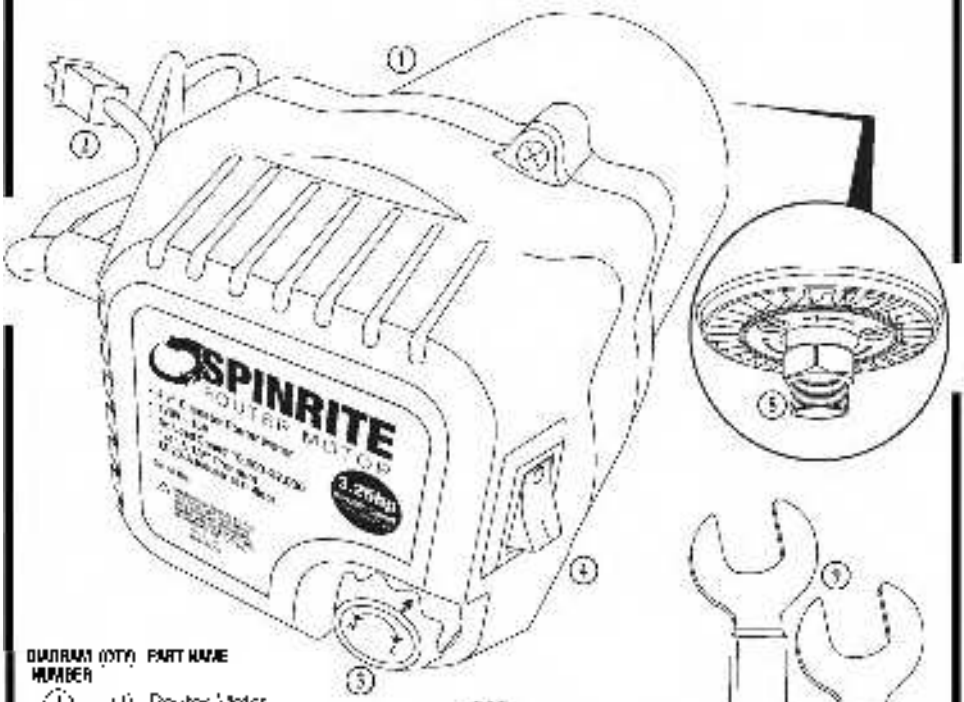
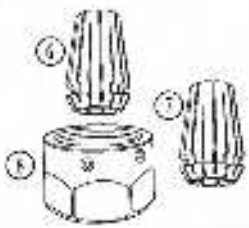
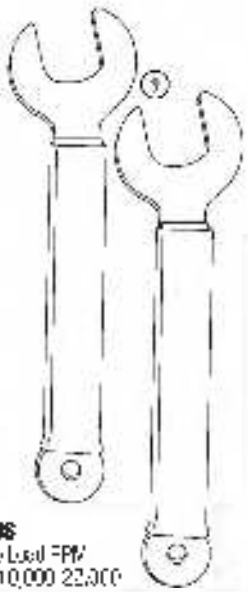


DIAGRAM NUMBER	(QTY)	PART NAME
1	(1)	Router Motor
2	(1)	Power Cord 14AWG
3	(1)	Variable Speed Dial
4	(1)	Power Switch
5	(1)	Collet Shaft
6	(1)	1/4" Collet
7	(1)	1/2" Collet
8	(1)	Collet Nut
9	(2)	Wrench





CAUTION! Read all instructions carefully. SAVE THESE INSTRUCTIONS. Refer to them often and use them to instruct others.

SPECIFICATIONS

Volts AC	Horsepower	No Load RPM
120	3.25hp*	10,000-22,000

If you think you're missing anything, call us at
800-752-0725 from 9:00 a.m. to 4:00 p.m. EST Monday - Friday.

GENERAL SAFETY RULES

WARNING! READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

CAUTION! Read all instructions carefully. SAVE THESE INSTRUCTIONS. Refer to them often and use them to instruct others.

• WORK AREA

1. **Keep work area clean and well lit.** Cluttered, dark work areas invite accidents.

2. **Avoid dangerous environments.** Do not use your power tool in rain, damp or wet locations or in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials). Remove materials or debris that may be ignited by sparks.

3. **Keep children and bystanders away.** Children and bystanders should be kept at a safe distance from the work area to avoid distracting the operator and contacting the tool or extension cord.

4. **Protect others in the work area from debris such as chips and sparks.** Provide barriers or shields as needed.

5. **Make workshop child proof with padlocks, master switches, or by removing starter keys.**

• ELECTRICAL SAFETY

6. **Double insulated tools are equipped with 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 a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three-wire grounded power cord and grounded power supply system.

WARNING! To reduce the risk of injury, always unplug tool before attaching, removing accessories or making adjustments. Use only specifically recommended accessories. Others may be hazardous. Never disassemble the tool or try to do any rewiring on the tool's electrical system.

7. **Grounded tools must be plugged into an outlet properly installed and grounded** in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.

8. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. When making blind or plunge cuts, always check the work area for hidden wires or pipes. Hold your tool by insulated nonmetal grasping surfaces. Use a Ground Fault Circuit Interrupter (GFCI) to reduce shock hazards.

9. **Do not expose to rain or use in damp locations.**

10. **Do not abuse the cord.** Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

• PERSONAL SAFETY

11. **Know your power tool.** Read the manual carefully to learn your power tool's applications and limitations as well as potential hazards associated with this type of tool.

12. **Stay alert, watch what you are doing, and use common sense when operating a power tool.** Do not use 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.

13. **Dress properly.** Do not wear loose clothing or jewelry. Wear a protective hair covering to contain long hair. These may be caught in moving parts. When working outdoors, wear rubber gloves and insulated non-skid footwear. Keep hair and gloves away from moving parts.

14. **Reduce the risk of unintentional starting.** Be sure your tool is turned off before plugging it in. Do not use a tool if the power switch does not turn the tool on and off. Do not carry a plugged in tool with your finger on the switch.

15. **Remove all adjusting keys and wrenches.** Make a habit of checking that adjusting keys, wrenches, etc. are removed from the tool before turning it on.

16. **Do not overreach.** Maintain control. Keep proper footing and balance at all times.

17. **Use safety equipment.** Everyone in the work area should wear safety goggles or glasses with side shields complying with current safety standards. Everyday eyeglasses only have impact resistant lenses. They are not safety glasses. Wear hearing protection during use and a dust mask. Hard hats, face shields, safety shoes, etc. should be used when specified or necessary. Keep a fire extinguisher nearby.

18. **Keep guards in place and in working order.**

19. **Never stand on tool.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.

20. **Keep hands away from all cutting edges and moving parts.**

CAUTION! Before each start, check that Router Motor is securely in place. Check that the work is rigidly clamped and secure before making any cuts.

• TOOL USE & CARE

21. Secure work. Use clamps or a vise to hold work when practical. It is safer than using your hand and it frees both hands to operate the tool.

22. Do not force tool. Your tool will perform best at the rate for which it was designed. Excessive force only causes operator fatigue, increased wear and reduced control.

23. Use the right tool. Do not force tool or attachment to do a job for which it is not designed.

24. Unplug tool when it is not in use before changing accessories or performing recommended maintenance.

25. Store idle tools. When not in use, store your tool in a dry, secured place. Keep out of reach of children.

26. Never leave the tool running unattended. Turn power off. Do not leave the tool until it comes to a complete stop.

27. Check for damaged parts. Inspect guards and other parts before use. Check for misalignment, binding of moving parts, improper mounting, broken parts and any other conditions that may affect operation. If abnormal noise or vibration occurs, turn the tool off immediately and have the problem corrected before further use. Do not use a damaged tool.

28. Use proper accessories. Consult this manual for recommended accessories. Using improper accessories may be hazardous. Be sure accessories are properly installed and maintained. Do not alter or remove a guard or other safety device when installing or accessory or attachment.

29. Maintain tools carefully. Keep cutting edges sharp and clean. Follow instructions for lubricating and changing accessories. Periodically inspect tool cords and extension cords for damage. Have damaged parts repaired or replaced by the manufacturer.

30. Maintain labels & nameplates. These carry important information.

• SERVICE

31. Service performed by unqualified personnel may result in a risk of injury and may void warranty.

• ADDITIONAL WARNINGS

32. **WARNING!** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are: lead from lead-based paint, crystalline silica from bricks and cement and other masonry products, 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 chemicals: work in a well ventilated area and work with approved safety equipment, such as these dust masks that are specially designed to filter out microscopic particles.

33. Read, understand, and follow the instructions packaged with the router table and router lift.

34. Always wear safety goggles and dust mask. Use only in well-ventilated areas. Using personal safety devices in a safe environment can reduce the risk for injury.

WARNING! To reduce the risk of injury, wear safety goggles or glasses with side shields, ear protection & a dust mask.

35. Some woods contain preservatives that can be toxic. Take extra care to prevent inhalation and skin contact when working with these materials. Request, and follow any safety information available from your material supplier.

36. Always make sure the workpiece is free from nails, screws, and other foreign objects. Keep the working edge away from the cutting surface. Cutting these objects can cause loss of control of the workpiece and damage to the bit.

37. Never place hands near cutting surface.

38. Never use dull or damaged bits. Sharp bits must be handled with care. Damaged bits can break during use. Dull bits require more force which can cause the bit to break. Damaged bits can throw flyable pieces and burn the workpiece.

39. **WARNING!** To reduce the risk of injury always unplug tool before attaching, removing accessories or making adjustments. Use only specifically recommended accessories. Others may be hazardous.

40. After changing the bit or making any adjustments, make sure the collet nut and any other adjustment devices are securely tightened.

41. Loose adjustment devices can unexpectedly shift, causing loss of control. Loose rotating components will be violently thrown. Watch for situations or workpiece that could indicate an improperly installed bit.

42. Always keep the power supply cord away from moving parts on the tool.

43. Never start the tool when the bit is in contact with the material. The bit cutting edge may grab the material causing loss of control of the workpiece.

44. Never touch the bit during or immediately after use. After use the bit may be hot enough to burn bare skin.

45. To reduce the risk of injury, avoid "climb cutting." Climb cutting can cause the workpiece to be thrown violently out of your control. Even small router bits can result in climb cutting. Always feed the workpiece against the cutter rotation.

WARNING! To reduce the risk of injury, always use featherboards, push sticks or push blocks with proper guarding. Keep hands away from moving bit. Refer to your Router Table manual for proper table setup and use.

EXTENSION CORDS

Grounded tools require a three-wire extension cord. Double insulated tools can use either a two or three wire extension cord. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. Refer to the table shown to determine the required minimum wire size.

The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14-gauge cord can carry a higher current than a 16-gauge cord. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum wire size.

• Guidelines for Using Extension Cords

1. If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.
2. Before you use an extension cord, be sure it is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.
3. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

• Recommended Minimum Wire Gauge for Extension Cords*

	Extension Cord Length in Feet						
AMPS	25'-50'	50'-100'	100'-200'	150'-300'	200'-400'	250'-500'	300'-600'
15	16ga	12ga	10ga	8ga	6ga	6ga	4ga

*Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

I. ASSEMBLY

A. Selecting the Bit

The Router Motor can accommodate router bits with 1/4 or "1/2" diameter shanks. **CAUTION!** Do not use router bits with a diameter in excess of 3 1/2".

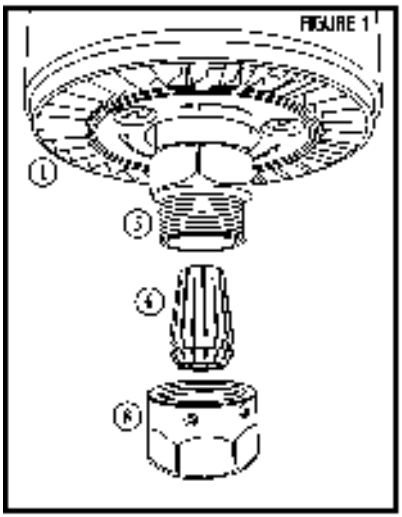
B. Changing Collets

A Collet must be attached to the Collet Nut before it is put into the Collet Shaft. Be sure that the size of the Collet matches the size of the bit shank being used. If the wrong size bit shank is used the Collet may break.

For attaching or detaching the Collet Nut to the Collet, follow these instructions. *FIGURE 1.*

1. Always disconnect the Router Motor (1) from the power supply.
2. Loosen the Collet Nut (6) from the Collet Shaft (3) completely.
3. Snap the Collet (4) or (5) out of the Collet Nut.
4. Replace the Collet by snapping it back into the Collet. Tighten the Collet Nut assembly onto the Collet Shaft.

FIGURE 1



WARNING! To reduce the risk of injury, always unplug tool before installing, removing accessories or making adjustments.

Use only specifically recommended accessories. Others may be hazardous. Never disassemble the tool or try to do any wiring on the tool's electrical system.

C. Installing the Bit

Do not use this Router Motor unless it is securely installed into a recommended router lift and table.

To install the Router Motor into a router lift, read, understand, and follow the instructions packaged with the router lift.

It is not necessary to remove the Router Motor from the lift to install a Collet assembly or a bit. *(If removal of the Router Motor is desired, see the instructions packaged with the router lift.)*

> **WARNING!** To reduce the risk of injury, always unplug tool before attaching, removing accessories or making adjustments. Use only specifically recommended accessories. Others may be hazardous. Never disassemble the tool or try to do any rewiring on the tool's electrical system.

1. Unplug the Router Motor from the power source.
2. Raise the Router Motor as high as possible. Always wipe wood chips, dust, or other foreign materials from the Collet Shaft and Collet assembly before assembling.
3. Assemble the Collet assembly onto the Collet Shaft.
4. Insert the bit shank into the Collet as far as it will go.
5. Back the bit shank out slightly to avoid bottoming out. This equates to approximately 1/8" (3.2 mm). Be sure there is a minimum of 1/16" between the top of the Collet assembly and the radius to the cutting portion of the bit.
6. Be sure that the Collet is not clamped to a fluted section on the bit shank. The Collet should be clamped to a solid part on the bit shank.
7. Place one Wrench ④ on flats on the Collet Shaft.
8. Place the other Wrench on the Collet and tighten clockwise. Tighten securely. *FIGURE 2*

NOTE: Never tighten a Collet assembly without inserting a bit shank of the proper size. This may damage the Collet.

D. Removing the Bit

Always wait for the bit to stop completely and unplug the Router Motor from the power supply before changing accessories or making adjustments. Never make adjustments while the Router Motor is running. Do not modify or remove the guards.

To remove the bit, reverse the above procedure. After the Collet Nut initially breaks free it will meet resistance again. Use the Wrenches and the Collet will release.

F. Connection to the Power Source

- Before connecting the Router Motor to the power source make sure the Power Switch ④ is in the "O" off position. *FIGURE 3*
- Check that your power circuit has the same specifications as the Router Motor.
- Make sure the prongs on the Power Cord are straight and make good contact with the outlet.

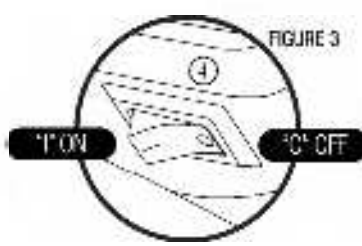


FIGURE 3

II. FEATURES OF THE ROUTER MOTOR

A. Starting / Stopping the Router Motor

- Before starting the Router Motor always wipe wood chips, dust or other foreign materials from the Collet Shaft and Collet and bit assembly.
- The Router Motor has a Soft Start feature. The Soft Start feature reduces the amount of torque reaction of the tool. This feature gradually increases the motor speed up from zero to the speed set by the Variable Speed Dial.
- Always allow the Router Motor to come to a complete stop before making bit changes or adjustments.

B. Electronic Overload Protection

Before the Router Motor is overloaded, the electronic overload protection circuit will turn off the Router Motor. If the Router Motor stops during use:

1. Turn the Power Switch to the "O" Off position.
2. Determine the cause of the overload (for example, dull bit, low voltage, excessive feed rate, etc.) and correct before continuing.
3. Restart the Router Motor following Step II A *Starting / Stopping the Router Motor* instructions.

C. Speed Control

- The Variable Speed Dial ③ on the face of the Router Motor allows you to adjust the rotating speed (RPM) of the Router Motor from "H" High to "L" Low. *FIGURE 4*
- Use the chart to determine the best speed for the bit diameter. *FIGURE 5*
- It is recommended that the speed be set prior to engaging the router bit into work. Should it be necessary to change the speed after work has begun, stop the Router Motor, remove the work piece from contact with the bit, adjust the speed, then resume the work.

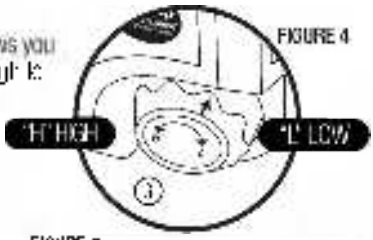


FIGURE 4

FIGURE 5

Variable Speed Setting	RPM	Maximum Bit Diameter
Slow	10,000	3" to 3-1/2"
Slow	12,000	3" to 3-1/2"
Medium	14,000	2-1/2" to 2-1/2"
Medium	16,000	2-1/2" to 2-1/2"
Medium	18,000	1-1/2" to 2"
Fast	20,000	1"
Fast	22,000	1"

D. Feedback Control

The Electronic Speed Control system allows the Router Motor to maintain constant speed between no-load and load conditions.

WARNING! To reduce the risk of injury, always unplug tool before attaching, removing accessories or making all adjustments.

Use only electrically rated accessories. Others may be hazardous. Never disassemble the tool or try to do any rewiring on the tool's electrical system.

WARNING! To reduce the risk of injury, always use both the knobs (left side) and push sticks with proper guarding. Keep hands away from moving bit. Refer to your Router table manual for proper table setup and use.

IV. USING THE ROUTER MOTOR

CAUTION! Before each start, check that the Router Motor is firmly in place. Check that the work is rigidly clamped and secure before making any cuts.

WARNING! To reduce the risk of injury, wear safety goggles or glasses with side shields during operation & a dust mask.

A. Cutting

• Before using your router, consider the kind and total amount of material to be removed. It may be necessary, depending on the material, to make more than one cut to avoid overloading the Router Motor. Keep the cutting pressure constant but do not crowd the router as the Router Motor speed slows excessively.

• Before beginning the cut on the actual workpiece, it is advisable to take a sample cut on a scrap piece of lumber. This will show you exactly how the cut will look as well as enable you to check dimensions.

• The speed and depth of cut will depend largely on the type of material being used. Keep the cutting pressure constant but do not use excessive force so the Router Motor speed slows excessively. It may be necessary on exceptionally hard woods or problem materials to make more than one pass to get the desired depth of cut.

• When making cuts on all 4 edges of the workpiece, it is advisable to have the first cut on the end of the workpiece across the grain of the wood. Chipping of the wood may occur at the end of a cut, but will be removed when making the next cut that is parallel with the grain.

• Post on the fence so that the workpiece feeds against the cutter rotation. **Feeding the workpiece with the cutter rotation is called climb cutting, which is VERY DANGEROUS. Climb cutting can result in the workpiece being thrown violently out of your control at great speed.**

> **WARNING!** To reduce the risk of injury, avoid "climb cutting." Climb cutting can cause the workpiece to be thrown violently out of your control. Even small router bits can cause damage or injury if climb cutting.

V. MAINTENANCE

A. Tool Maintenance

Keep your tool in functioning property by adopting a regular maintenance program. Before use, examine the general condition of your tool. Inspect guards, switches, power cords and extension cord for damage. Check for loose screws, misalignment, binding of moving parts. Improper mounting, broken parts and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, turn the tool off immediately and have the problem corrected before further use. Do not use a damaged tool.

> **WARNING!** To reduce the risk of injury, electric shock and damage to the tool, never immerse your tool in liquid or allow a liquid to flow inside the tool.

B. Cleaning Your Tool

Clean dust and debris from vents. Use only soft damp cloth to clean your tool. Never use cleaning agents and solvents such as gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia, household detergents containing ammonia, flammable or combustible solvents around tools. These are harmful to your tool, plastics and insulated parts.

WARNING! To reduce the risk of injury, always unplug tool before attaching, removing accessories or making adjustments.

Use only specifically recommended accessories. Others may be hazardous. Never disassemble the tool or try to do any rewiring on the tool's electrical system.

SPINRITE™
ROUTER MOTOR

ONE YEAR LIMITED WARRANTY

Warrantor warrants to the original purchaser that SpinRite Router Motor will be free from defects in materials and workmanship under normal use and service for a period of one (1) year from the date of original purchase.

The obligation of this Warranty is limited to repair or replacement, at our option, of components which prove defective under normal use.

Any product or component claimed to be defective should be sent during warranty period postage prepaid to SpinRite Warranty Department together with a copy of your original dated sales receipt. Please call for authorization number before sending.

This warranty is in lieu of all other express warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS OR LIABILITIES, SHALL BE LIMITED IN DURATION TO THE ONE YEAR PERIOD OF THIS LIMITED WARRANTY. NO AGENT, REPRESENTATIVE, DEALER OR EMPLOYEE OF THE COMPANY HAS THE AUTHORITY TO INCREASE OR ALTER THE OBLIGATIONS OF THIS WARRANTY.

This Warranty shall not apply to any product or component which in the opinion of the Warrantor has been modified or altered in any way, damaged as a result of an accident, misuse or abuse, or loss of parts. In no case shall the Warrantor be liable for any special or consequential damages, or any other costs or warranty, expressed or implied, whatsoever. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you think you're missing anything, call us at
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SPINRITE™
ROUTER MOTOR

WARNING: This product can expose you to chemicals including chromium, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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