



ROUTER WITH FULL SIZE TABLE

Model 91130

ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at: <http://www.harborfreight.com>

Copyright© 2004 by Harbor Freight Tools®. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

For technical questions or replacement parts, please call 1-800-444-3353.

PRODUCT SPECIFICATIONS

| Item | Description |
|-------------------------|--|
| Electrical Requirements | 120V / 60 Hz / 750 Watts / 4.3 Load Amps 1 HP Motor / 8,400-27,800 RPM Variable Speed 3- Prong, Grounded, Power Plug |
| Table Dimensions | 27" Wide x 18" Deep x 1-1/2" Thick |
| Table Height | 38" |
| Overall Height | 43-1/2" |
| Cutting Depth | 1-27/64" |
| Collet Capacity | 1/4" And 1/2" |
| Accessories | 1/4" Collet / 1/2" Collet / Miter Gauge Guide Fence / Feather Board / Wrench Dust Collector Port |
| Weight | 75.6 Pounds |

UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts Lists on pages 26 and 27** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

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 injury.
SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.

REV 08/04

3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

ELECTRICAL SAFETY

4. **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 tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
5. **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.
6. **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.
7. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
8. **Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
9. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

PERSONAL SAFETY

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

11. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
12. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
13. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
14. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
15. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

16. **Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
17. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
18. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
19. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
20. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
21. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.

22. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
23. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

24. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
25. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

1. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use the Router Table in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
2. **Maintain labels and nameplates on the Router.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
3. **Do not force the equipment.** This Router will do the work better and safer at the speed and capacity for which it was designed.
4. **Keep all guards in place and in working order.**
5. **Remove all adjusting wrenches from the Router before turning it on.**
6. **Do not abuse the Power Cord.** Do not use the Power Cord to pull its Plug from an electrical outlet. Keep the Power Cord away from heat, oil, sharp edges, and moving parts. Route the Power Cord safely. Protect the Power Cord from being damaged by other equipment in the work area. Do not route the Power Cord where it can be walked on or tripped over. Replace a damaged Power Cord immediately.

7. **Make sure the Power Switch is in the “OFF” position before plugging in the Power Cord.**
8. **Do not use this Router for cutting metals or brittle materials.** Do not cut dangerous materials, such as asbestos which can cause harmful dust or vapors.
9. **Before using the Router, make sure the router bit (not included) is properly mounted.** Make sure the router bit is not bent or cracked.
10. **Allow the router bit to spin up to full speed before feeding wood into it.** When turning off the Router, allow the router bit to spin down and stop on its own. Do not press against the router bit to stop it.
11. **Do not force the material into the router bit when cutting.** Apply moderate pressure, allowing the router bit to cut without being forced.
12. **Never attempt to remove material stuck in the moving parts of the Router while the machine is plugged in and running.**
13. **Whenever possible, use safe, practical ways to hold and support the workpiece.**
14. **Turn off the Router if the material is to be backed out of an uncompleted cut.**
15. **Avoid serious personal injury. Always keep hands and fingers away from the spinning router bit.**
16. **Store idle equipment. When not in use, tools and equipment should be stored in a dry location to inhibit rust.** Always lock up tools and equipment, and keep out of reach of children.
17. **Use eye, hearing, and breathing protection.** Always wear ANSI approved safety impact eye goggles, hearing protectors, and dust masks or respirator when working with the Router Table.
18. **Do not use this product if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this product.
19. **Industrial applications must follow OSHA requirements.**
20. **Never leave the Router running unattended.** Turn off the power, and do not leave the machine until it comes to a complete stop.

21. **Maintain this product with care.** Keep the Router clean and dry for better and safer performance. Make sure to keep router bits sharp and clean. For your safety, service and maintenance should be performed regularly by a qualified technician.
22. **Use the right tool or attachment for the right job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool or attachment. There are certain applications for which this product was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this product, and do not use this product for a purpose for which it was not intended.
23. **Always keep children away from the Router.** All visitors should be kept a safe distance away from the machine. Make the workshop “kid proof” with padlocks, master switches, or by removing the starter keys.
24. **Never stand on the Router Table.** Serious personal injury can result if the machine is tipped or if the router bit is unintentionally contacted.
25. **Make sure to feed the workpiece into the router bit and against the rotation of the router bit.**
26. **Always turn off the Router and unplug the Power Cord from its electrical outlet before changing accessories or performing any inspection, maintenance, or cleaning procedures.**
27.  **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain 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 or 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 those dust masks that are specially designed to filter out microscopic particles. *(California Health & Safety Code 25249.5, et seq.)*
28.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Electromagnetic fields in close proximity to a heart pacemaker could cause interference to or failure of the pacemaker.
29.  **WARNING!** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

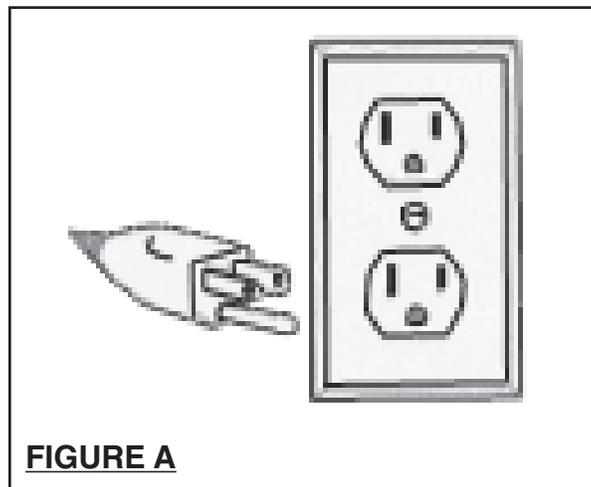
GROUNDING

WARNING!

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

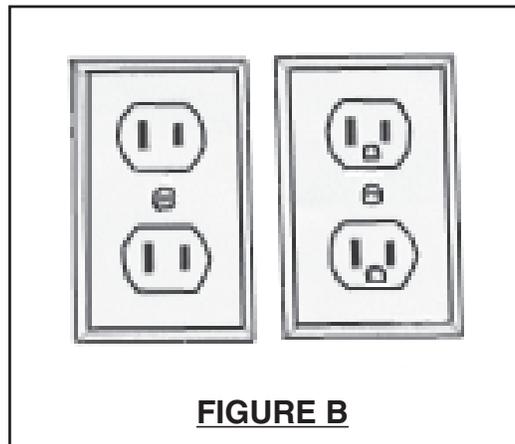
GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool’s grounding system and must never be attached to an electrically “live” terminal. **(See Figure A.)**
3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**



DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

4. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure B.)**
5. Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. **(See Figure B.)**



EXTENSION CORDS

1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
2. 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. **(See Figure C, next page.)**
3. 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. **(See Figure C.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figure C.)**
5. 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 cord size. **(See Figure C.)**

6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

| RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT) | | | | | |
|---|------------------------------|--------------------|--------------------|---------------------|---------------------|
| NAMEPLATE AMPERES (At Full Load) | EXTENSION CORD LENGTH | | | | |
| | 25 Feet | 50 Feet | 75 Feet | 100 Feet | 150 Feet |
| 0 – 2.0 | 18 | 18 | 18 | 18 | 16 |
| 2.1 – 3.4 | 18 | 18 | 18 | 16 | 14 |
| 3.5 – 5.0 | 18 | 18 | 16 | 14 | 12 |
| 5.1 – 7.0 | 18 | 16 | 14 | 12 | 12 |
| 7.1 – 12.0 | 18 | 14 | 12 | 10 | - |
| 12.1 – 16.0 | 14 | 12 | 10 | - | - |
| 16.1 – 20.0 | 12 | 10 | - | - | - |

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

SYMBOLOLOGY

| | |
|---|--------------------------------------|
|  | Double Insulated |
|  | Canadian Standards Association |
|  | Underwriters Laboratories, Inc. |
| V ~ | Volts Alternating Current |
| A | Amperes |
| $n_{o_xxxx}/min.$ | No Load Revolutions per Minute (RPM) |

FIGURE D

PRODUCT FEATURES

| Part # | Description | Part # | Description |
|--------|---------------------------|--------|-----------------------|
| 8B | Key | 14C | Feather Board |
| 9B | Power Switch (not shown) | 16C | Upper Fence |
| 10B | Safety Cover | 24C | Dust Port Box |
| 14B | Large Lock Knob | 26C | Dust Port |
| 20B | Main Table | 27C | Miter Gauge |
| 21B | Feather Board | 14D | Height Adjusting Ring |
| 28B | Variable Speed Adjustment | 15D | Collet Assembly Cover |
| 2C | Lower Fence | 19D | Collet Nut |
| 8C | Fence Lock Knob | 23D | Height Adjusting Lock |
| 13C | Fence Adjusting Knob | 22E | Spindle Lock Lever |

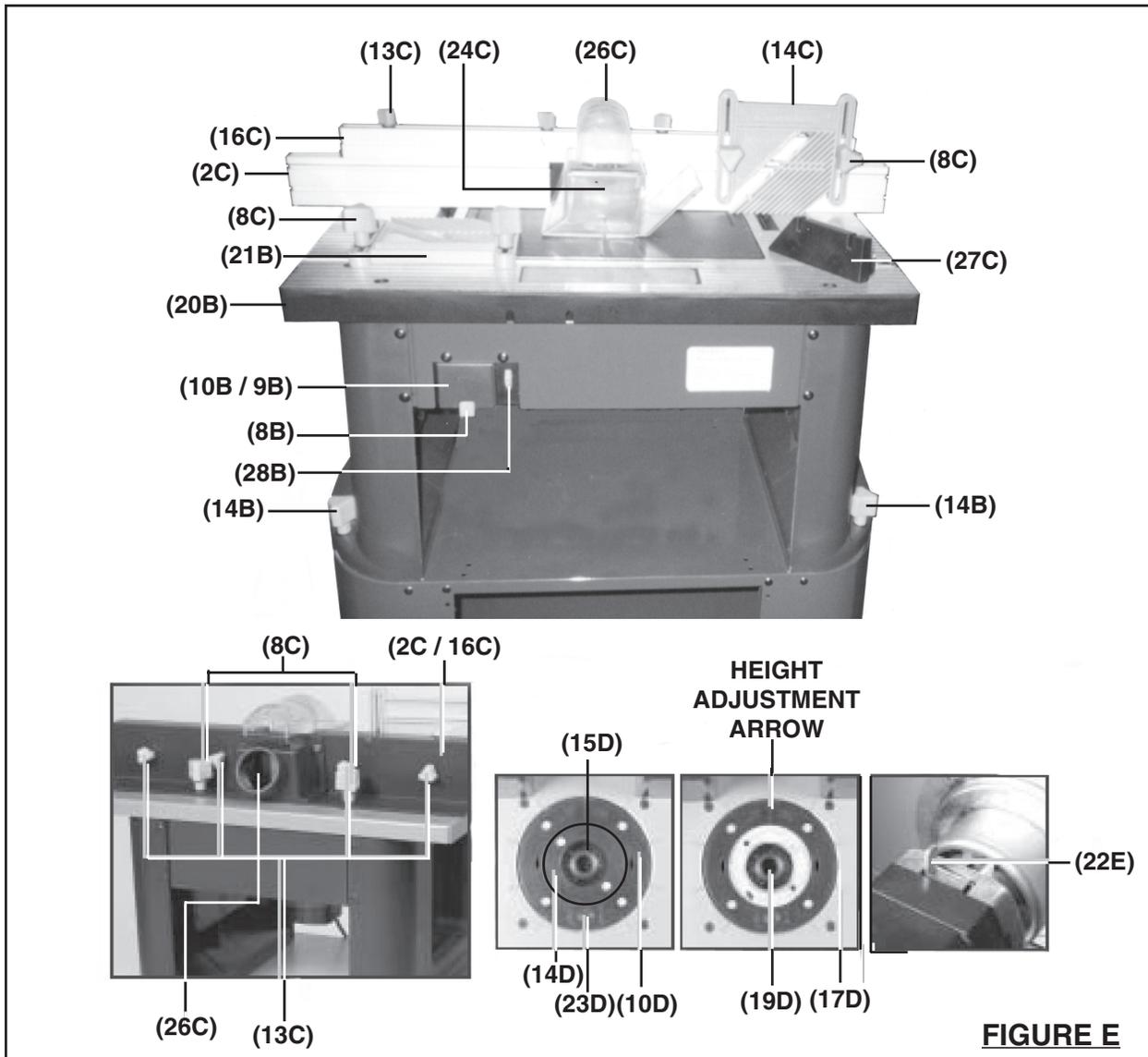


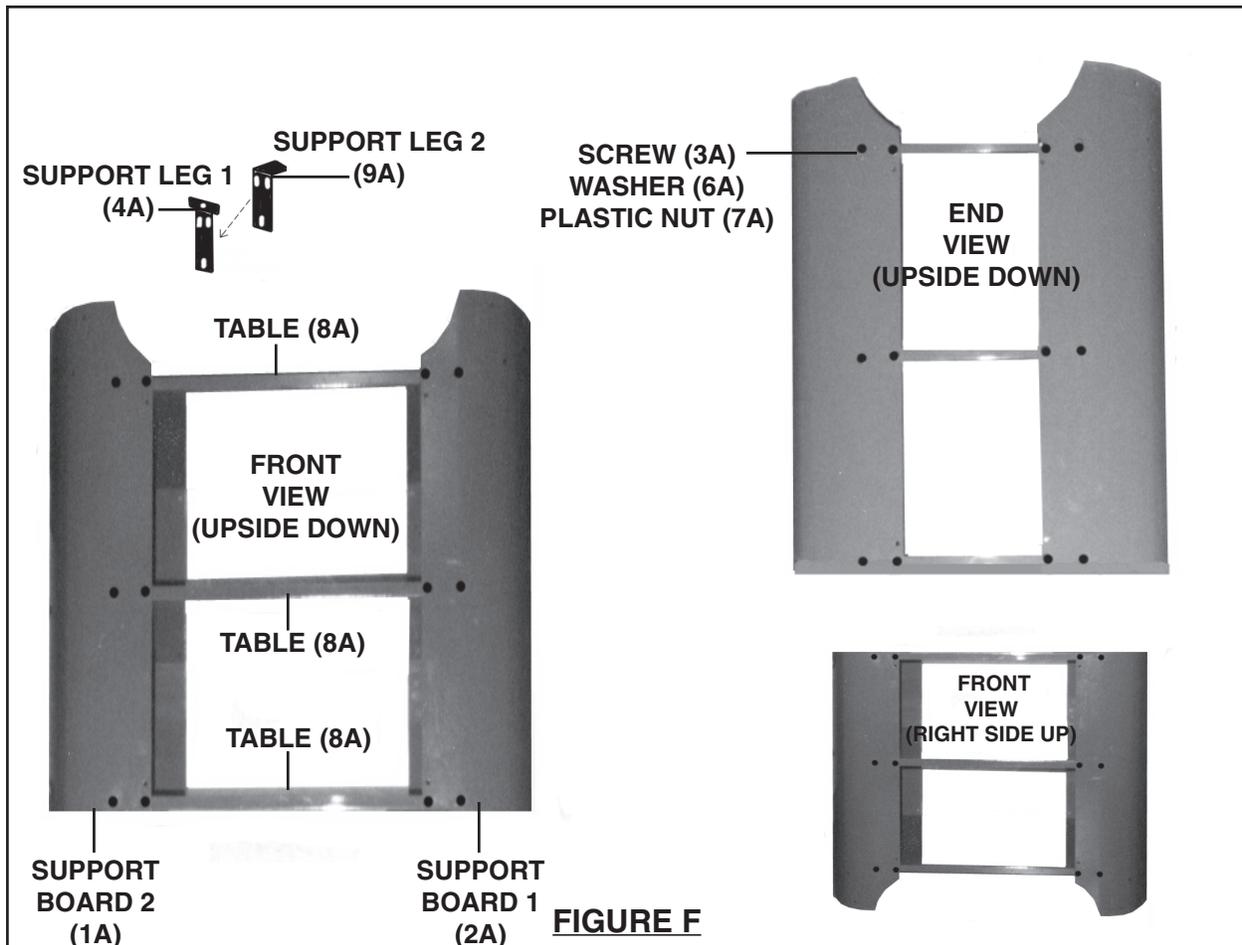
FIGURE E

ASSEMBLY INSTRUCTIONS

NOTE: For additional references to the parts listed in the following pages, refer to the **Assembly Diagrams on pages 28, 29, 30, 31, and 32.**

To Assemble The Base:

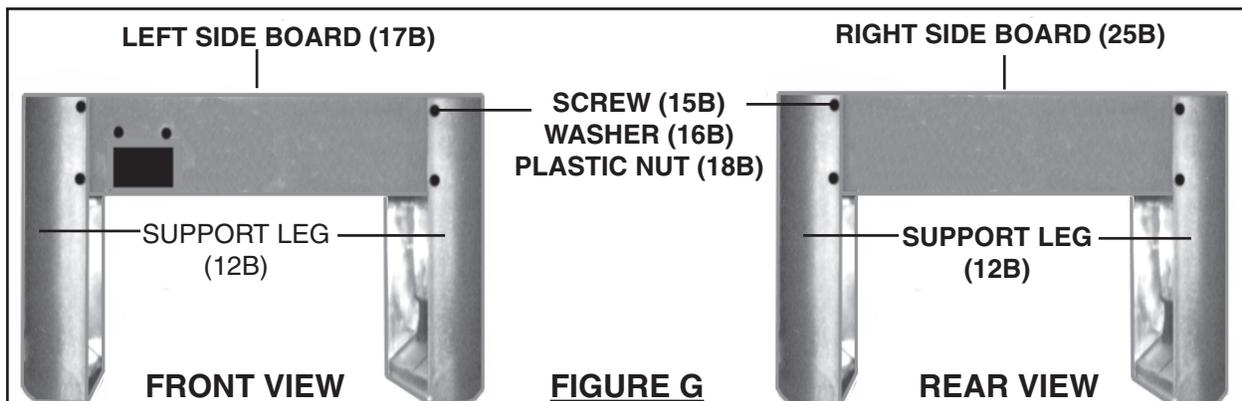
1. Place one Table (8A) *upside down* on a level floor surface. Attach a Support Board 1 (2A) to opposite corners of the Table, and attach a Support Board 2 (1A) to the two remaining opposite corners of the Table using Screws (3A), Washers (6A), and Plastic Nuts (7A). Repeat this procedure for the remaining two Tables (8A). **(See Figure F.)**
2. Hold Support Leg 1 (4A) and Support Leg 2 (9A) together with their mounting holes aligned. Then, align the mounting holes of the Support Legs with the three mounting holes in Support Board 1 (2A) and Support Board 2 (1A). Secure the Support Legs to the Support Boards, using Screws (3A), Washers (6A), and Plastic Nuts (7A). **(See Figure F.)**



3. With assistance, turn the assembled Base *right side up*. (See Figure F.)
4. With assistance, move the assembled Base to the floor surface where the Router will be used. **NOTE: Make sure the floor surface is dry, flat, level, and sturdy enough to support the weight of the Router, workpieces, and any additional tools and equipment.** Use the four Support Legs 2 (9A) as a template to mark four places where mounting holes will be drilled in the floor surface. Then, temporarily set the assembled Base aside. (See Figure F.)
5. Drill four mounting holes of appropriate size into the floor surface. Then move the assembled Base back to its original position, making sure to align the mounting holes in the Support Legs 2 (9A) with the mounting holes drilled into the floor.
6. Secure the four Support Legs 2 (9A) to the floor surface, using four bolts, lock washers, and nuts (not included). **NOTE:** It is recommended to use expansion anchor bolts for concrete and lag bolts for wooden floors.
7. Slightly loosen the Screws (3A) on the Support Legs 2 (9A) of the assembled Base. Adjust the height of each Support Leg 2 (9A) until the Base is level. Then, retighten the Screws. (See Figure F.)

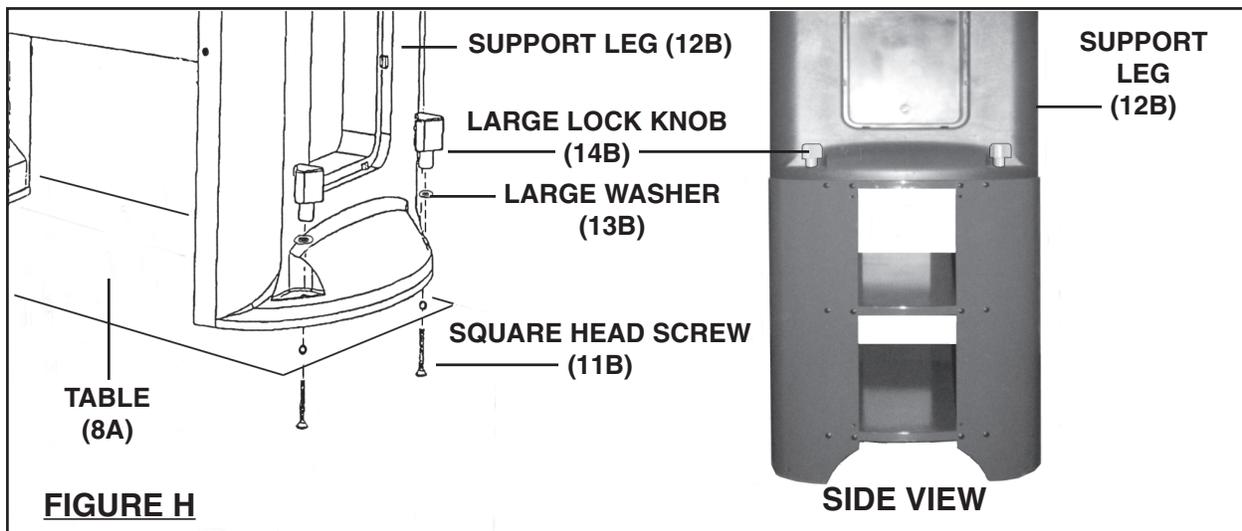
To Assemble The Mid-Section:

1. Stand the two Support Legs (12B) upright. Then place the Left Side Board (17B) against the *inside* edge of the Support Legs. Align the four mounting holes in the Left Side Board with the four mounting holes in the Support Legs, and secure the Left Side Board to the Support Legs with Screws (15B), Washers (16B), and Plastic Lock Nuts (18B). (See Figure G.)
2. Place the Right Side Board (25B) against the *inside* edge of the two Support Legs. Align the four mounting holes in the Right Side Board with the four mounting holes in the Support Legs, and secure the Right Side Board to the Support Legs with Screws (15B), Washers (16B), and Plastic Lock Nuts (18B). (See Figure G.)



To Attach The Mid-Section To The Body:

1. With assistance, place the Mid-Section of the Router Table on top of the Base. **(See Figure H.)**
2. Align the two mounting holes at the bottom of each Support Leg (12B) with the two mounting holes at each end of the Table (8A). **(See Figure H.)**
3. Insert a Square Head Screw (11B) *upward* through each of the two mounting holes at both ends of the Table (8A) and through the two mounting holes in each Support Leg (12B). Then secure the Mid-Section to the Body, using four Large Lock Knobs (14B) and Large Washers (13B). **(See Figure H.)**



To Attach The Power Switch Assembly And Variable Speed Adjustment:

1. Insert the Power Switch Assembly (9B) and Variable Speed Adjustment (28B) into the mounting hole located on the left end of the Left Side Board (17B). Then secure the Power Switch Assembly and Variable Speed Adjustment to the Left Side Board, using Screws (15B), Washers (16B), and Plastic Lock Nuts (18B). **(See Figure I, next page.)**

To Attach The Main Table:

1. Place four Corner Washers (19B) on the ends of the two Support Legs (12B), and align the three mounting holes in each Corner Washer with the three mounting holes at each end of the Support Legs. **(See Figure J, next page.)**
2. Place the Main Table (20B) on top of the four Corner Washers and two Support Legs (12B), and align the eight mounting holes in the Main Table with the eight

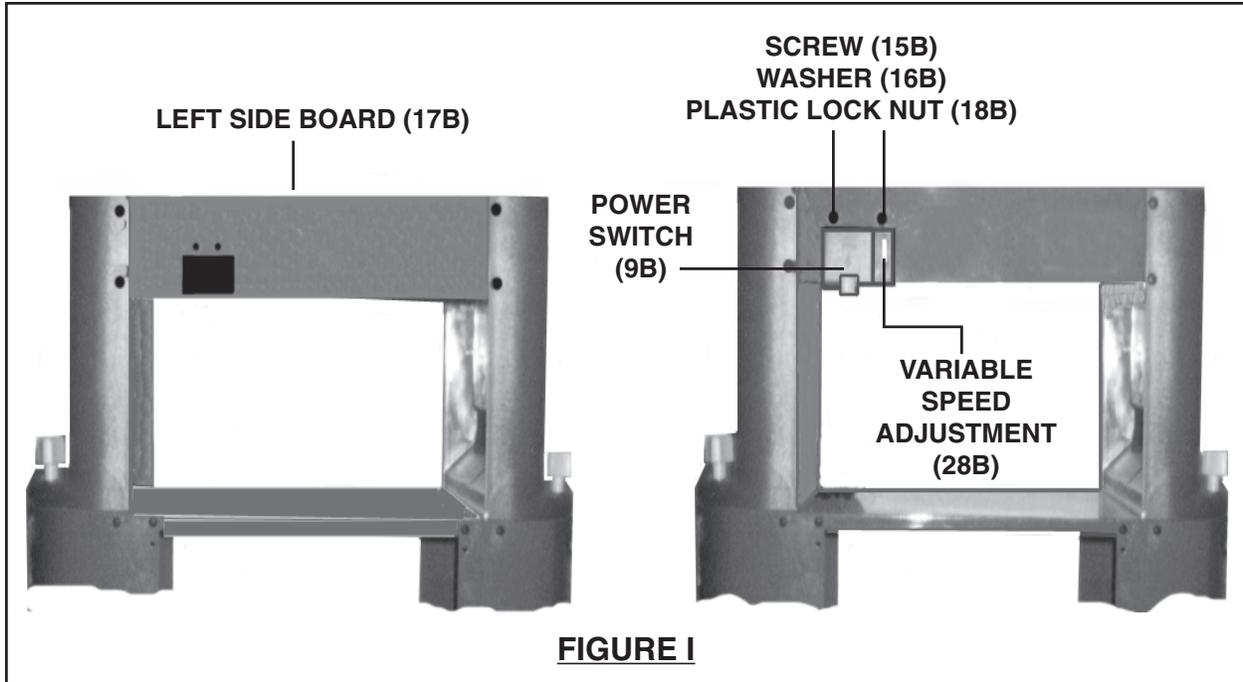


FIGURE I

mounting holes in the Corner Washers and Support Legs. (See Figure J.)

3. Insert eight Square Head Bolts (22B) downward through the eight mounting holes in the Main Table (20B) and through the eight mounting holes in the Corner Washers (19B) and Support Legs (12B). Then secure the Main Table to the Support Legs, using Large Washers (13B) and Plastic Lock Nuts (18B). (See Figure J.)

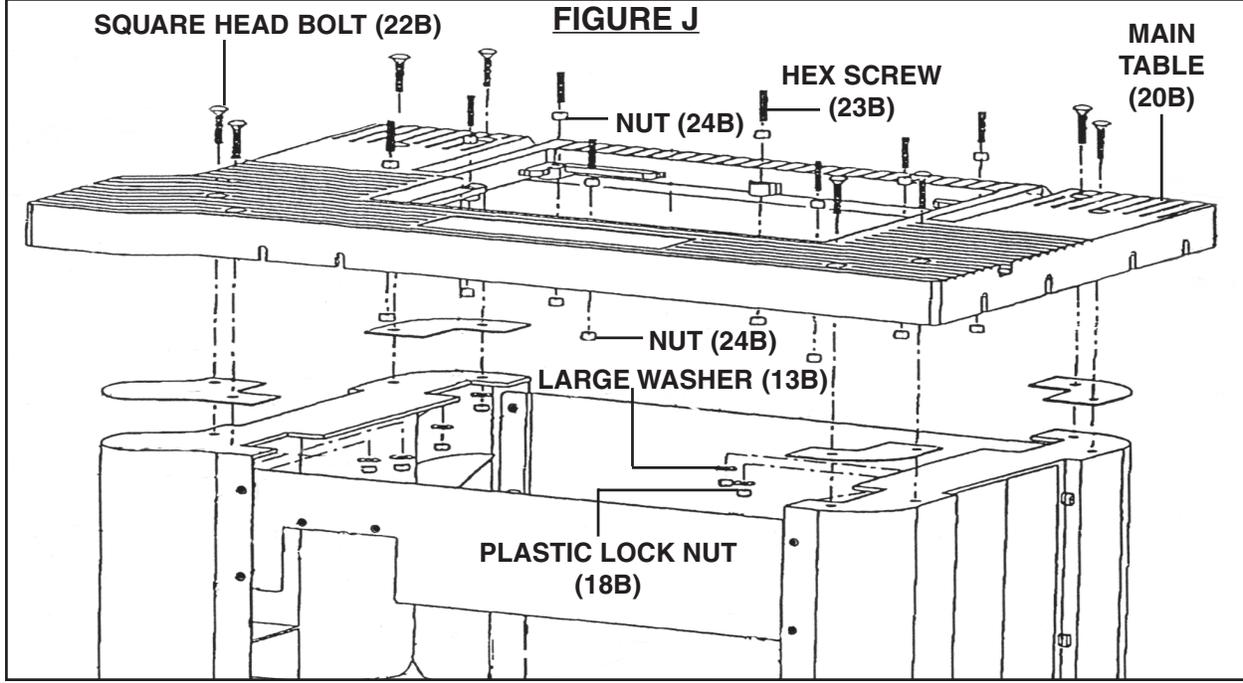
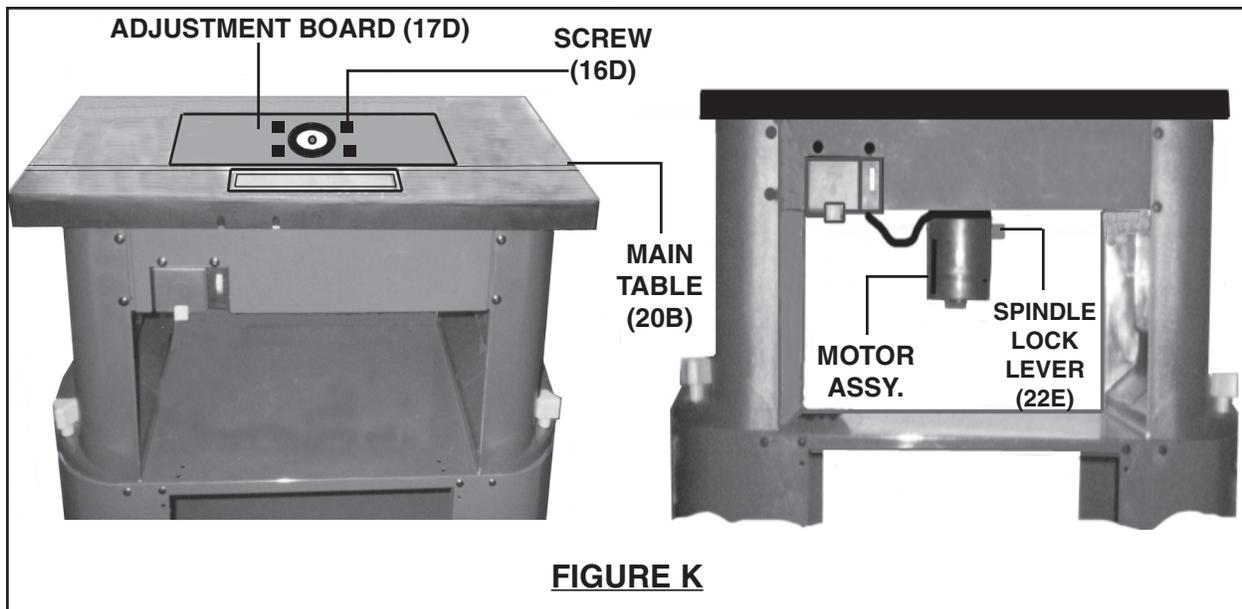


FIGURE J

4. Screw a Nut (24B) downward on each of the *eight* Hex Screws (23B). Insert the Hex Screws downward through the *eight* mounting holes located on the Main Table (20B). Make sure the Nuts are above the mounting holes. Then, screw a Nut (24B) upward on each of the eight Hex Screws to secure the Hex Screws to the Main Table. **(See Figure J.)**

To Attach The Motor Assembly:

1. Lower the Adjustment Board (17D) with its pre-attached Motor Assembly through the top of the Main Table (20B). Position the Adjustment Board and Motor Assembly so that its Power Cord is on the left hand side and the Spindle Lock Lever (22E) is on the right hand side. Continue lowering the Adjustment Board until it sits on the eight Hex Screws (23B). **(See Figures J and K.)**

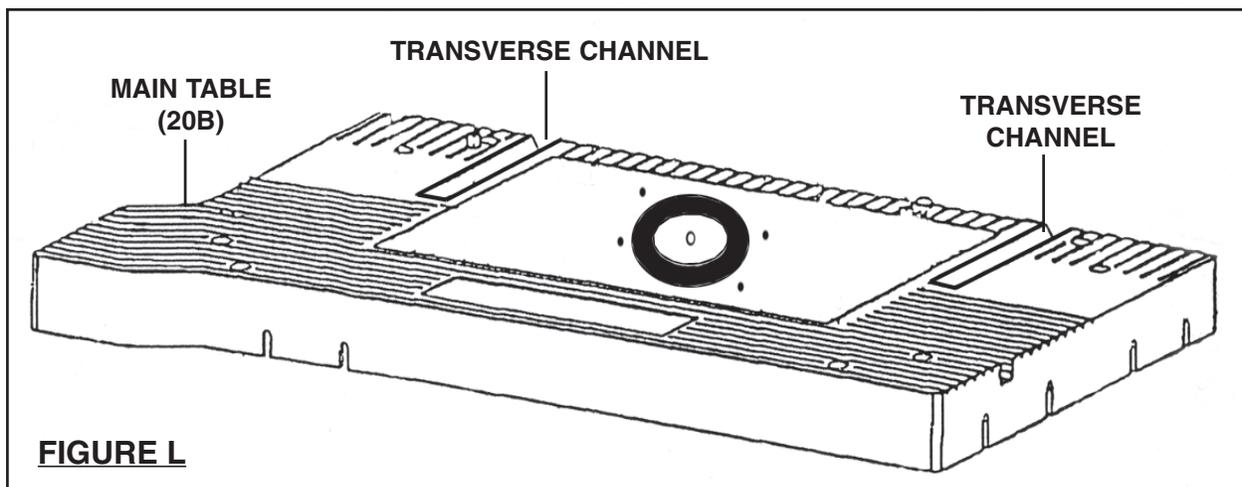


2. **NOTE:** The height of the Adjustment Board (17D) can be adjusted by inserting a hex wrench (not included) through the Adjustment Board and adjusting each Hex Screw (23B) individually. Once adjusted, secure the Adjustment Board to the Main Table (20B) with four Screws (16D). **(See Figures J and K.)**

To Attach The Fence:

1. The Upper Fence (16C) is supplied with six Nuts (11C) already fitted to one channel (groove) of the Upper Fence. The furthest *two* Nuts on each end of the Upper Fence are for attaching the two Fence Supports (10C) to the Upper Fence. The middle *two* Nuts are for attaching the Dust Port Box (24C) to the Upper Fence. **(See Assembly Diagram C.)**

2. Position the Upper Fence (16C) on the Main Table (20B).
3. Use two Screws (9C) to attach a Fence Support (10C) to the back of the Upper Fence (16C), making sure to use two of the outermost pre-fitted Nuts (11C) in the channel of the Upper Fence. Do not tighten yet. Repeat this procedure for the remaining Fence Support **(See Assembly Diagram C.)**
4. Slide the two Fence Supports (10C) along the Upper Fence (16C) until the hole in the horizontal leg of the Fence Supports is above the *transverse* (right angle) *channel* at the rear of the Main Table (20B). **(See Assembly Diagram C and Figure L.)**

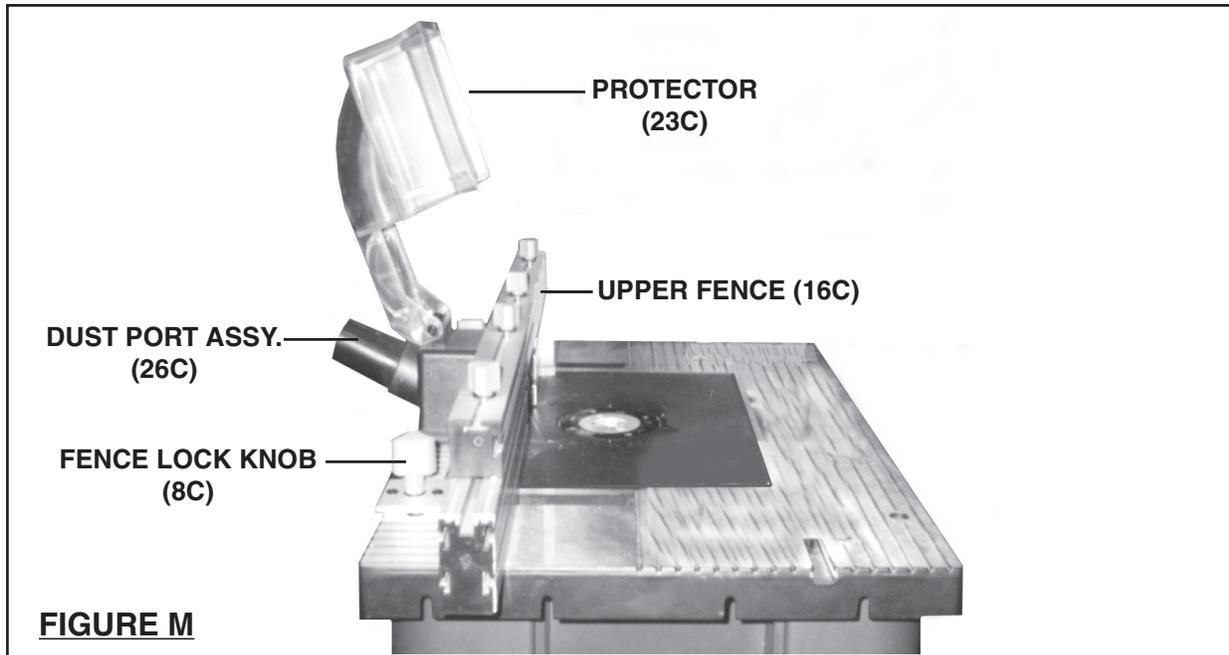


5. **NOTE:** The screw heads of the Screws (22C) locate in a channel under the Main Table (20B). This channel holds the Screws and prevents the Screws from turning when the Fence Locking Knobs (8C) are tightened or loosened. **(See Assembly Diagram C.)**
6. Insert the screw head of a Screw (22C) into the channel under the Main Table (20B) so that the threaded portion of the Screw passes through the hole in a Fence Support (10C). Tighten the Screw, using a Fence Lock Knob (8C) and Large Washer (7C). **(See Assembly Diagram C.)**
7. Tighten the Screws (9C) holding the Fence Support (10C) to the Upper Fence (16C). **(See Assembly Diagram C.)**
8. Repeat Steps #6 and #7 at the other end of the Upper Fence (16C).

To Attach The Dust Port Assembly And Protector:

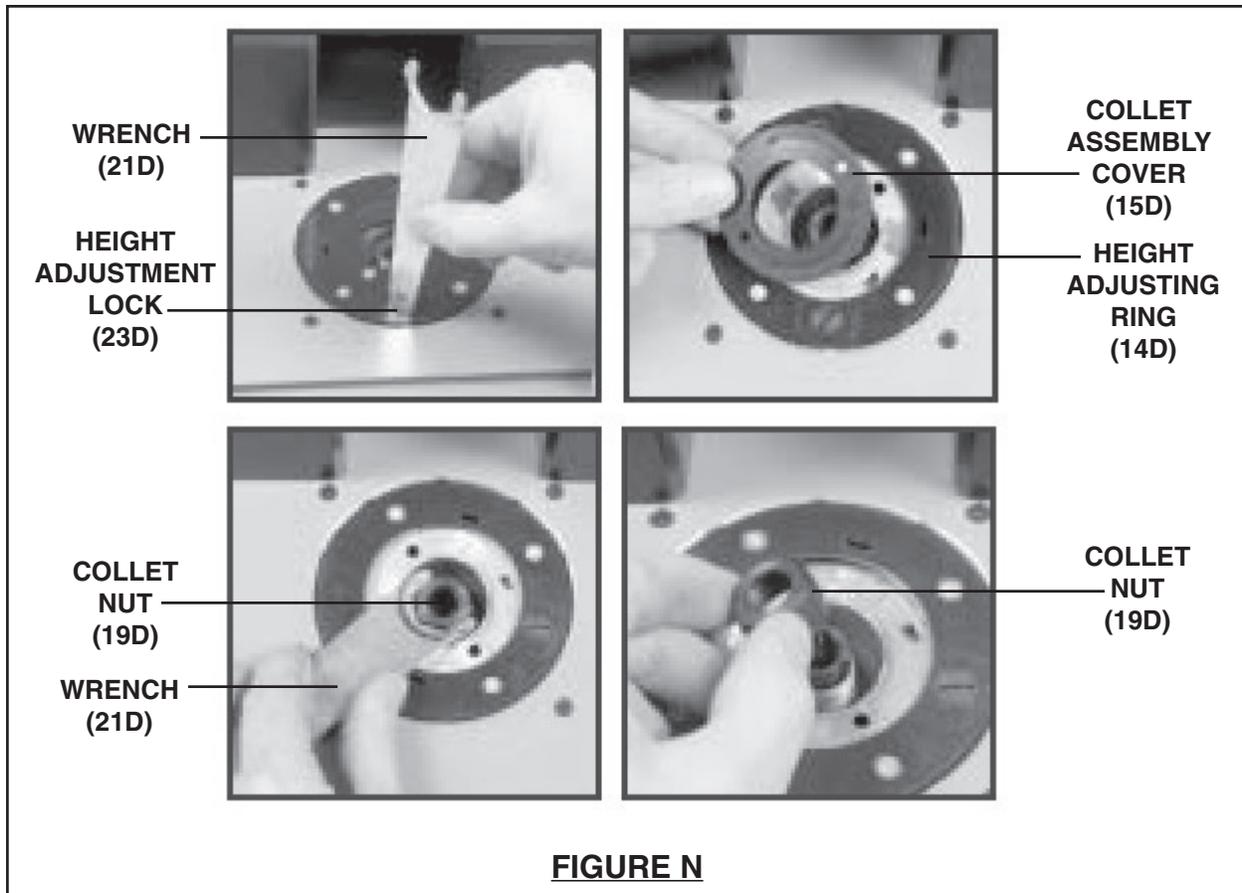
1. Position the Dust Port Assembly (26C) and Protector (23C) to the middle of the

rear of the Upper Fence (16C), using the remaining two pre-fitted Nuts (11C) in the channel of the Upper Fence and two Screws (9C).
(See Assembly Diagram C and Figure M.)

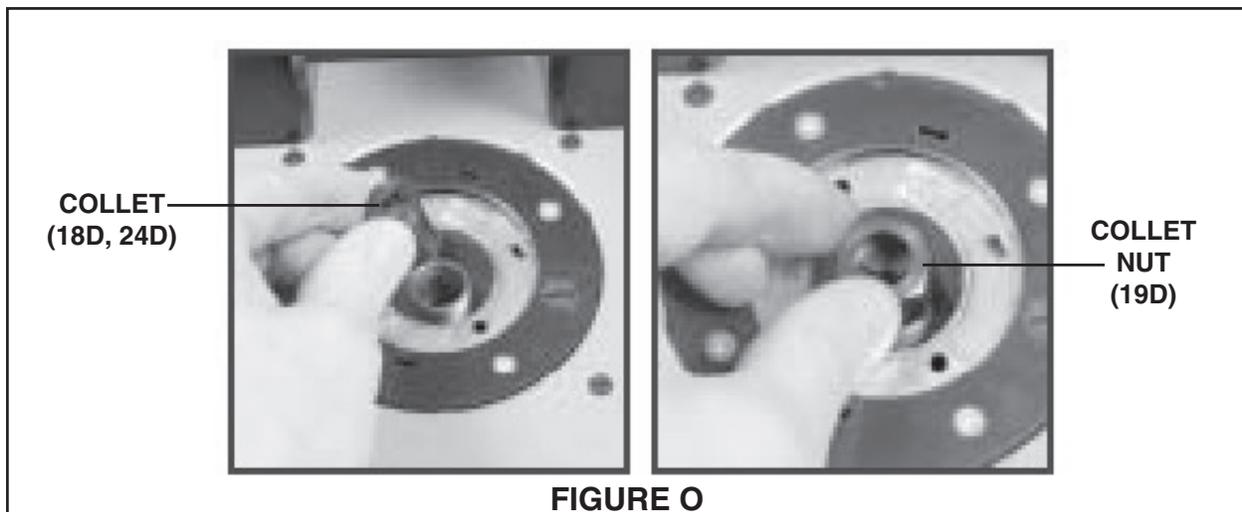


To Install And Remove Collets:

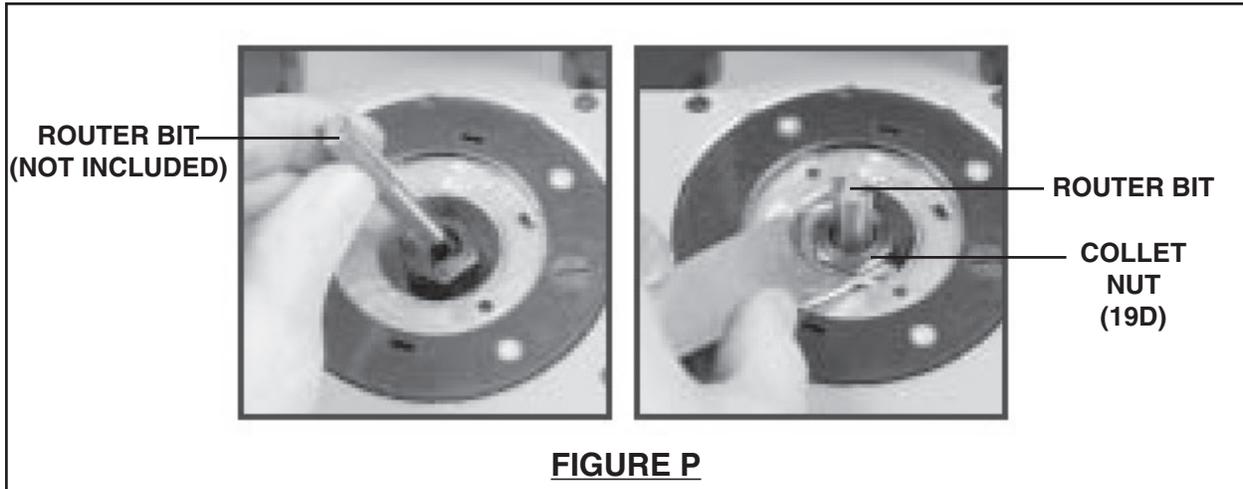
1.  **WARNING!** Always make sure the Power Switch (9B) is in its “OFF” position and the Power Cord/Plug (1B) is unplugged from its electrical outlet before making any adjustments to the Router Table.
2. The Router is equipped with a 1/4” Collet (18D) and a 1/2” Collet (24D).
3. The Collet (18D, 24D) may need to be changed to allow use of larger or smaller diameter router bits (not included).
4. **NOTE:** When changing Collets (18D, 24D) or when changing router bits, the height of the Motor Assembly should be raised to the maximum height to gain full access to the Collet Nut (19D).
5. Unlock the Height Adjustment Lock (23D) by rotating it in a counterclockwise direction, using the end of the Wrench (21D) provided.
(See Figure N, next page.)
6. Remove the Collet Assembly Cover (15D) by removing the two inner Screws (1D) on the Cover and lifting the Cover away from the Height Adjusting Ring (14D). If necessary, clean off any saw dust and debris which may have built up from previous cutting operations. **(See Figure N.)**



7. Use the Wrench (21D) to turn the Collet Nut (19D) in a *counterclockwise* direction while pulling and holding the Spindle Lock Lever (22E) forward. Then, remove the Collet Nut. **(See Figures K and N.)**
8. Remove the existing Collet (18D, 24D) from the assembly, and make sure to install the correct size Collet (1/4" or 1/2") for the router bit to be used. Then, *finger tighten* the Collet Nut (19D) back onto the assembly. **(See Figure O.)**



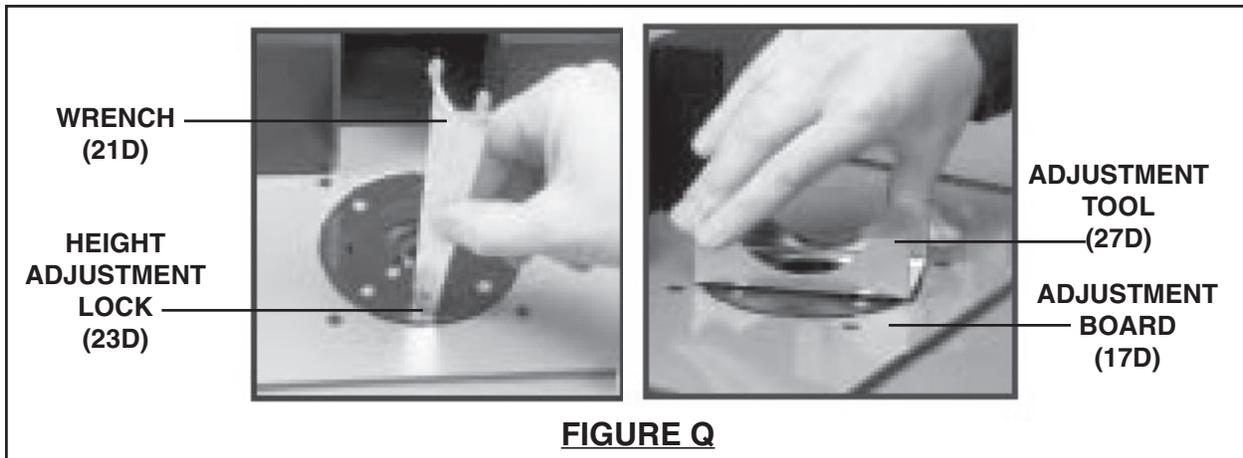
9. Make sure to insert the shaft of the router bit all the way into the Collet (18D, 24D). **(See Figure P.)**
10. Tighten the Collet Nut (19D) by pulling and holding the Spindle Lock Lever (22E) forward while screwing the Collet Nut in a clockwise direction. **(See Figures K and P.)**



11. Replace the Collet Assembly Cover (15D). **(See Figure N.)**
12. Adjust the depth of cut to the desired depth by turning the Height Adjustment Ring (14D). Then, use the Height Adjustment Lock (23D) to lock the setting in place. **NOTE:** Make sure the Height Adjustment Lock is aligned in a locking position and that the router bit is firmly secured. **(See Figure N.)**

To Adjust The Depth Of Cut:

1. Loosen the Height Adjustment Lock (23D) by turning it in a *counterclockwise* direction, using the Wrench (21D) provided. **(See Figure Q.)**



2. Fit the Adjustment Tool (27D) in the corresponding slots of the Height Adjusting Ring (14D) and turn the Ring in a *clockwise* direction for a deeper depth of cut or *counterclockwise* for a lesser depth of cut. **(See Figure Q.)**
3. **NOTE:** The Height Adjustment Ring (14D) is marked with a straight arrow pointing to the edge of the Adjustment Board (17D). The Adjustment Board (17D) is marked with ten corresponding lines. When setting the depth of cut, always align the arrow on the Height Adjustment Ring with one of the ten lines on the Adjustment Board. **(See Figure Q.)**
4. To determine the depth of cut, use a ruler to measure the distance between the base of the Main Table (20B) and the tip of the router bit.
5. Once the depth of cut is acquired, align the Height Adjustment Lock (23D) and turn the Lock in a *clockwise* direction to lock. **(See Figure Q.)**
6. **NOTE:** Always make a trial cut on scrap wood to ensure the correct depth of cut has been selected.

To Attach And Adjust The Feather Boards:

1. To attach the *first* Feather Board (14C), slide the heads of two Square Head Screws (15C) into a channel (groove) on the front of the Upper Fence (16C). Then mount the Feather Board against the Upper Fence, and secure it with two Large Washers (7C) and two Fence Lock Knobs (8C). **(See Figure R.)**

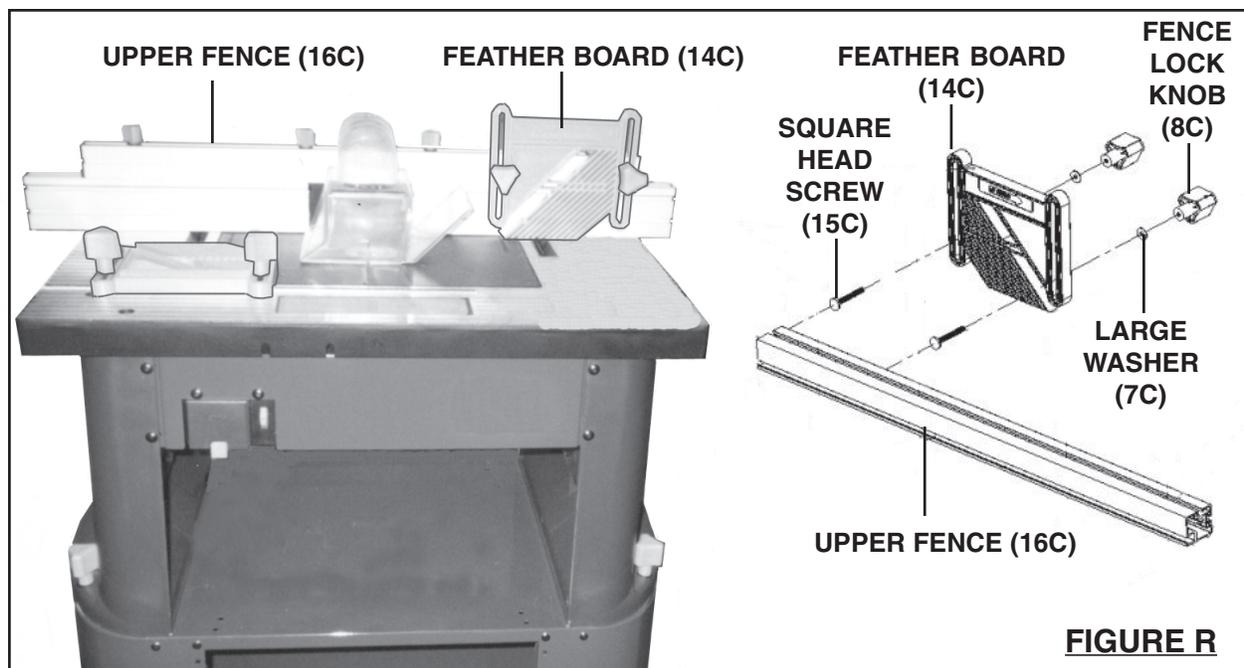
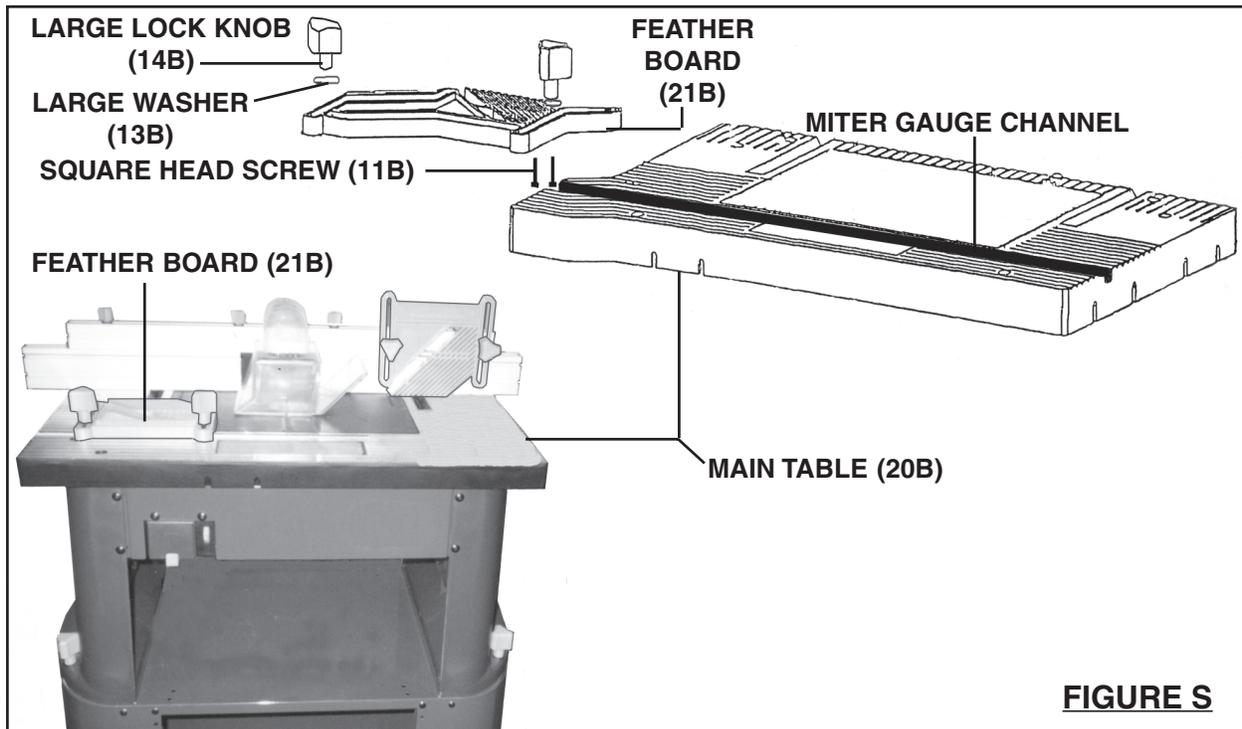


FIGURE R

2. Attach the *second* Feather Board (21B) horizontally to the Main Table (20B). To do so, insert two Square Head Screws (11B) upward through the Feather Board. Then slide the head of both Screws into the keyhole slot located in the channel used for the Miter Gauge (27C). Secure the Feather Board to the Main Table, using two Large Washers (13B) and two Large Lock Knobs (14B). **(See Figure S.)**

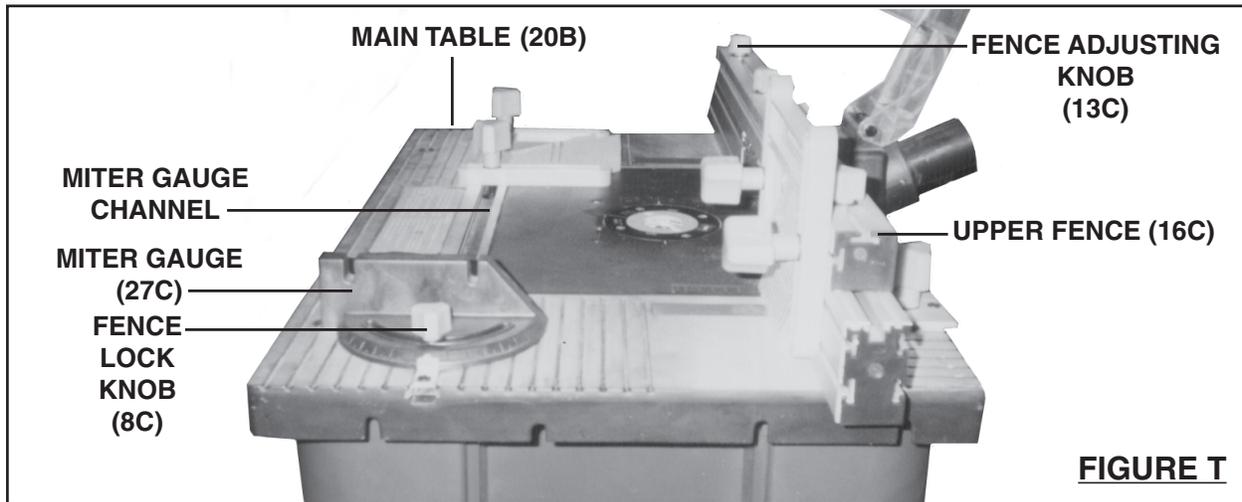


3. **NOTE:** The Feather Boards (14C, 21B) are designed to hold the workpiece in place and prevent kickback. To adjust the Feather Boards, simply loosen the Lock Knobs (8C, 14B) and move the Feather Boards into the workpiece. Then, retighten the Lock Knobs. Make sure the “feathers” of the Feather Boards allow easy feed of the workpiece and help prevent kickback. **(See Figures R and S.)**

To Attach The Miter Gauge:

1. The Miter Gauge (27C) slides horizontally along the Main Table (20B) and is designed for edging and miter cuts in the workpiece. **(See Figure T, next page.)**
2. To attach the Miter Gauge (27C), simply slide its bar into the Miter Gauge Channel on the Main Table (20B). **(See Figure T.)**
3. To adjust the Miter Gauge (27C) to the desired angle, loosen the Fence Lock Knob (8C) and rotate the Miter Gauge to the desired angle from 0 degrees to 45 degrees. Then, retighten the Fence Lock Knob. **(See Figure T.)**

4. **NOTE:** For more convenience when making miter cuts, the Upper Fence (16C) may be moved to its furthest position away from the router bit. **(See Figure T.)**

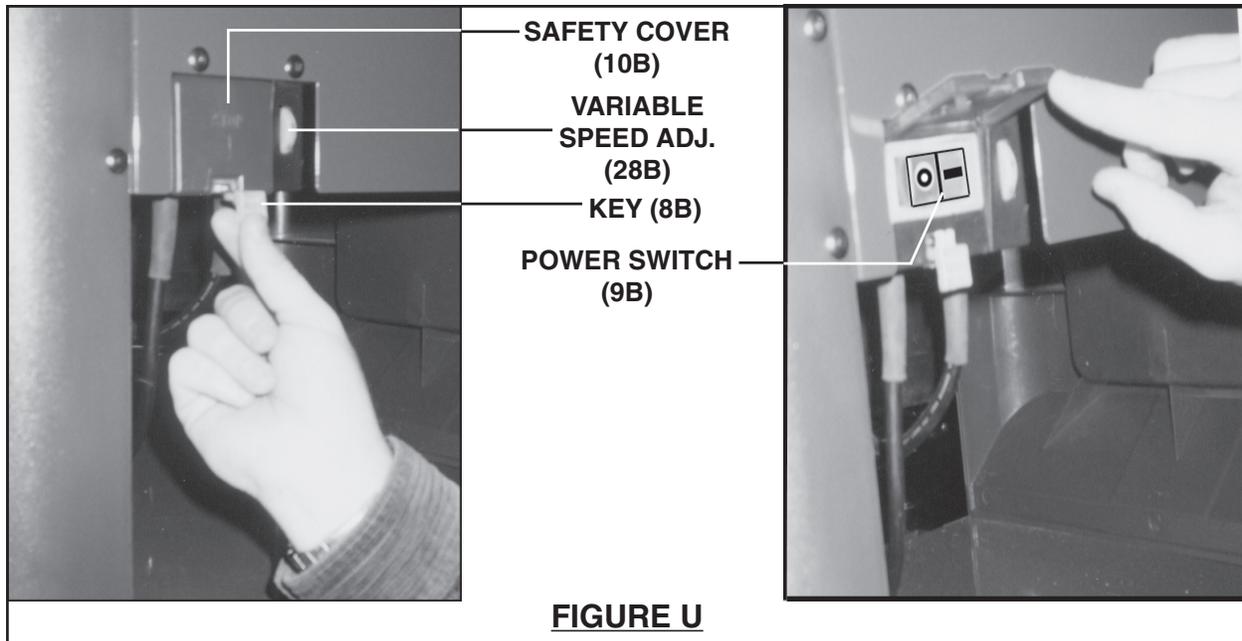


To Adjust The Upper Fence:

1. The Upper Fence (16C) can be adjusted according to the size of the workpiece and the application being performed. To do so, loosen the four Fence Adjusting Knobs (13C). **(See Figure T.)**
2. Slide the Upper Fence (16C) forward or backward to the desired position. Use the gauge on the Main Table (20B) to determine the distance from the Upper Fence to the center of the router bit. Then, retighten the four Fence Adjusting Knobs (13C). **(See Figure T.)**

To Adjust The Speed (RPM):

1. **NOTE:** Using the correct speed for the job increases the life of the router bit and can also affect the surface finish on the workpiece being cut. The Router Table features a Variable Speed Adjustment (28B) and may be adjusted from approximately 8,400 RPM to 27,800 RPM (no load). **(See Figure U, next page.)**
2. The Dial of the Variable Speed Adjustment (28B) is numbered from **1** to **6**, with **1** being the *slowest* speed and **6** being the *fastest* speed. It is recommended to determine the optimum speed by making a trial cut in a scrap piece of wood. **(See Figure U.)**
3. **IMPORTANT:** Do not attempt to adjust the speed while the Router Table is running. Turn off the machine, and allow it to come to a complete stop *before* adjusting the speed. **(See Figure U.)**



To Turn On The Router Table:

1. Connect the Power Cord/Plug (1B) to the nearest grounded, 120 volt, electrical outlet.
2. Depress the Key (8B), and lift up on the Safety Cover (10B). Then, depress the Power Switch (9B) to its "ON" position. **(See Figure U.)**
3. To turn off the Router Table, simply depress the Safety Cover (10B) to snap it shut. This pushes the "OFF" button underneath the Safety Cover and cuts off the power. **(See Figure U.)**
4. To lock the Power Switch (9B) and prevent unauthorized use, close the Safety Cover (10B) and remove the Key (8B) by pulling it out. Make sure to store the Key in a safe location out of reach of children. **(See Figure U.)**

To Operate The Router Table:

1. Insert and secure the desired Collet (18D, 24D) and router bit.
2. Make all necessary adjustments to the Router Table.
3. Make sure the Power Switch (9B) is in its "OFF" position. Then, connect the Power Cord/Plug to the nearest grounded, 120 volt, electrical outlet.
4. Depress the Power Switch (9B) to its "ON" position.

5. Feed the workpiece gradually from right to left against the rotation of the cutter. Keep the feed rate constant. Feeding the workpiece too quickly will slow the Motor of the machine. Feeding the workpiece too slowly will cause burns to the workpiece.
6. On very hard wood or large cuts it may be necessary to make more than one pass at progressive depth settings until the desired depth of cut is made.
7. When finished, depress the Safety Cover (10B) to turn off the Router Table. Then, unplug the Power Cord/Plug from its electrical outlet.

INSPECTION, MAINTENANCE, AND CLEANING

1.  **CAUTION!** Always turn the Power Switch (9B) to its “STOP” position and unplug the Power Cord (1B) from its 120 volt electrical outlet before performing any inspection, adjustments, maintenance, or cleaning.
2. **BEFORE EACH USE**, inspect the general condition of the Router Table. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, loose router bit, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use.
Do not use damaged equipment.
3. **DAILY:** With a soft brush, cloth, or vacuum, remove all sawdust and debris from the Router Table, particularly, the machine’s Dust Port (26C) and Main Table (20B), Then, use a premium quality, lightweight machine oil to lubricate all moving parts. **Do not use solvents or caustic agents to clean the Router Table.**

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

PARTS LIST A

| Part # | Description | Qty. | Part # | Description | Qty. |
|--------|-----------------|------|--------|-----------------------|------|
| 1A | Support Board 2 | 2 | 6A | Washer (5) | 60 |
| 2A | Support Board 1 | 2 | 7A | Plastic Lock Nut (M5) | 60 |
| 3A | Screw (M5 x 12) | 60 | 8A | Table | 3 |
| 4A | Support Leg 1 | 4 | 9A | Support Leg 2 | 4 |
| 5A | Leg Washer | 4 | | | |

PARTS LIST B

| Part # | Description | Qty. | Part # | Description | Qty. |
|--------|-----------------------------|------|--------|-------------------------------|------|
| 1B | Power Cord & Plug | 1 | 18B | Plastic Lock Nut (M6) | 16 |
| 2B | Cord Clip | 3 | 19B | Corner Washer | 4 |
| 3B | Cord Protector | 2 | 20B | Main Table | 1 |
| 4B | Switch Box Base | 1 | 21B | Feather Board | 1 |
| 5B | Plastic Nail | 2 | 22B | Square Head Bolt (M6 x 30) | 8 |
| 6B | Locking Buckle | 1 | 23B | Hex Screw (M6 x 27) | 8 |
| 7B | Plastic Screw (2.9 x 9) | 1 | 24B | Nut (M6) | 18 |
| 8B | Key | 1 | 25B | Right Side Board | 1 |
| 9B | Power Switch | 1 | 26B | Plastic Lock Screw (2.9 x 13) | 4 |
| 10B | Safety Cover | 1 | 27B | Switch Box Cover | 1 |
| 11B | Square Head Screw (M6 x 40) | 6 | 28B | Variable Speed Adjustment | 1 |
| 12B | Support Leg | 2 | 29B | Plastic Screw (3.5 x 13) | 4 |
| 13B | Large Washer (6) | 14 | 30B | Power Cord (16AWG) | 1 |
| 14B | Large Lock Knob | 4 | 31B | Terminal | 2 |
| 15B | Screw (M6 x 16) | 10 | 32B | Press Board | 2 |
| 16B | Washer (6) | 8 | 33B | Terminal Block | 1 |
| 17B | Left Side Board | 1 | | | |

PARTS LIST C

| Part # | Description | Qty. | Part # | Description | Qty. |
|--------|-------------------------------|------|--------|-----------------------------|------|
| 1C | Lower Fence Left End Cap | 2 | 15C | Square Head Screw (M6 x 40) | 2 |
| 2C | Lower Fence | 2 | 16C | Upper Fence | 1 |
| 3C | Lower Fence Right End Cap | 2 | 17C | Locking Piece | 4 |
| 4C | Self-Locking Screw (4.8 x 13) | 6 | 18C | Upper Fence Left End Cap | 1 |
| 5C | Pin | 1 | 19C | Screw (M5 x 12) | 4 |
| 6C | Screw (M5 x 25) | 1 | 20C | Fence Support Fixing Washer | 2 |
| 7C | Large Washer (5) | 8 | 21C | Plastic Lock Nut (M5) | 5 |
| 8C | Fence Lock Knob | 6 | 22C | Square Head Screw (M6 x 30) | 2 |
| 9C | Screw (M6 x 16) | 6 | 23C | Protector | 1 |
| 10C | Fence Support | 2 | 24C | Dust Port Box | 1 |
| 11C | Head Nut | 6 | 25C | Plastic Screw (M2.9 x 9) | 2 |
| 12C | Upper Fence Right End Cap | 1 | 26C | Dust Port | 1 |
| 13C | Fence Adjusting Knob | 4 | 27C | Miter Gauge (Not Shown) | 1 |
| 14C | Feather Board | 1 | | | |

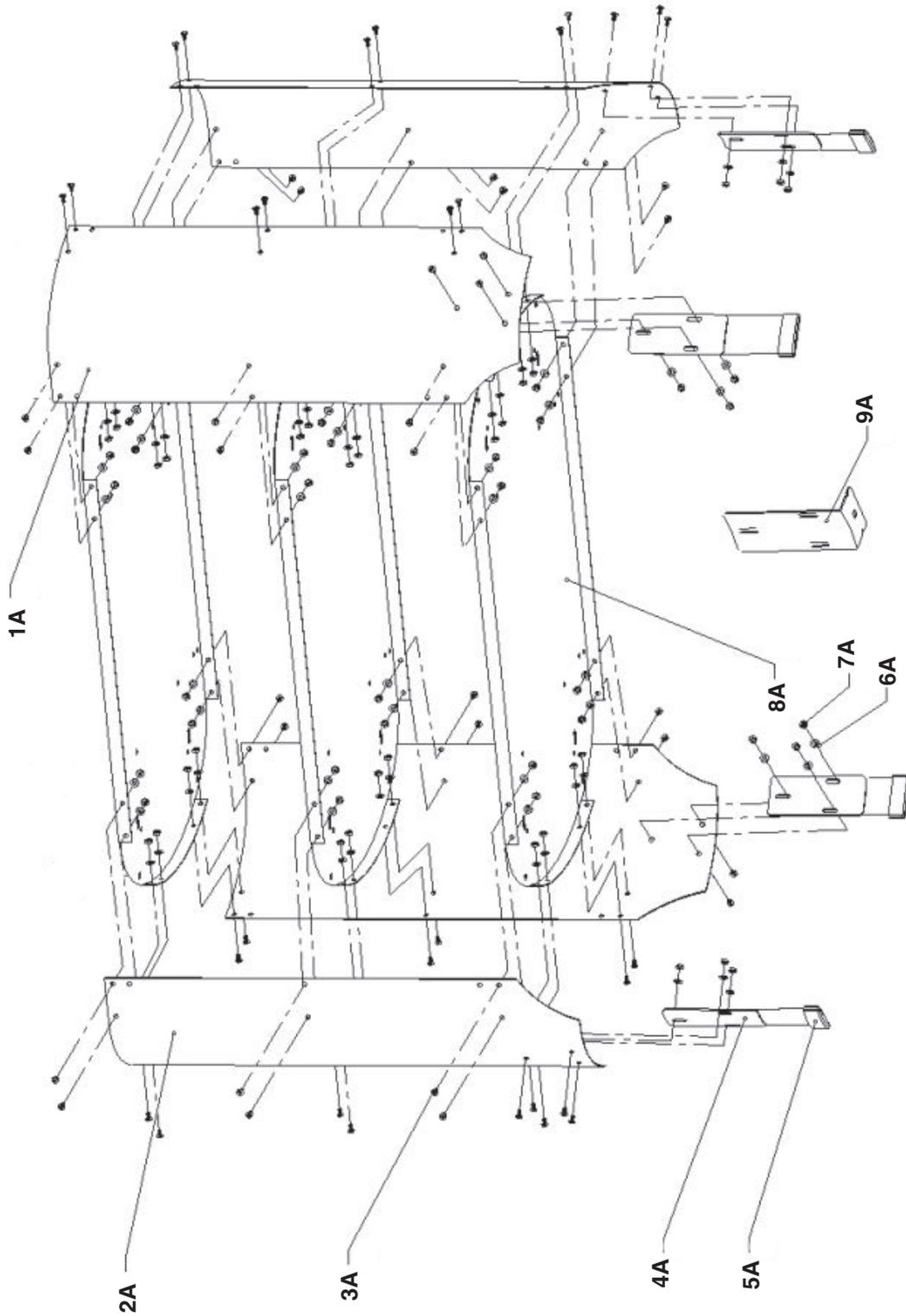
PARTS LIST D

| Part # | Description | Qty. | Part # | Description | Qty. |
|--------|-----------------------|------|--------|--------------------|------|
| 1D | Screw (M4 x 10) | 10 | 15D | Collet Assy. Cover | 1 |
| 2D | Plastic Lock Nut | 4 | 16D | Screw (M4 x 12) | 4 |
| 3D | Washer (4) | 4 | 17D | Adjustment Board | 1 |
| 4D | End Running Knot | 1 | 18D | Collet (1/2") | 1 |
| 5D | Slip Knot | 1 | 19D | Collet Nut | 2 |
| 6D | Snail Knot | 1 | 20D | C-Ring | 2 |
| 7D | Block Ring (45) | 1 | 21D | Wrench | 1 |
| 8D | Large Spring | 1 | 22D | Small Spring | 1 |
| 9D | Slip Groove | 1 | 23D | Height Adj. Lock | 1 |
| 10D | Turning Piece | 1 | 24D | Collet (1/4") | 1 |
| 11D | Steel Bead (5) | 6 | 25D | Small Washer B | 1 |
| 12D | Locking Piece | 1 | 26D | Small Washer C | 1 |
| 13D | Partial Axis | 1 | 27D | Adjustment Tool | 1 |
| 14D | Height Adjusting Ring | 1 | 28D | Large Washer | 1 |
| | | | 29D | Hex Screws | 4 |

PARTS LIST E

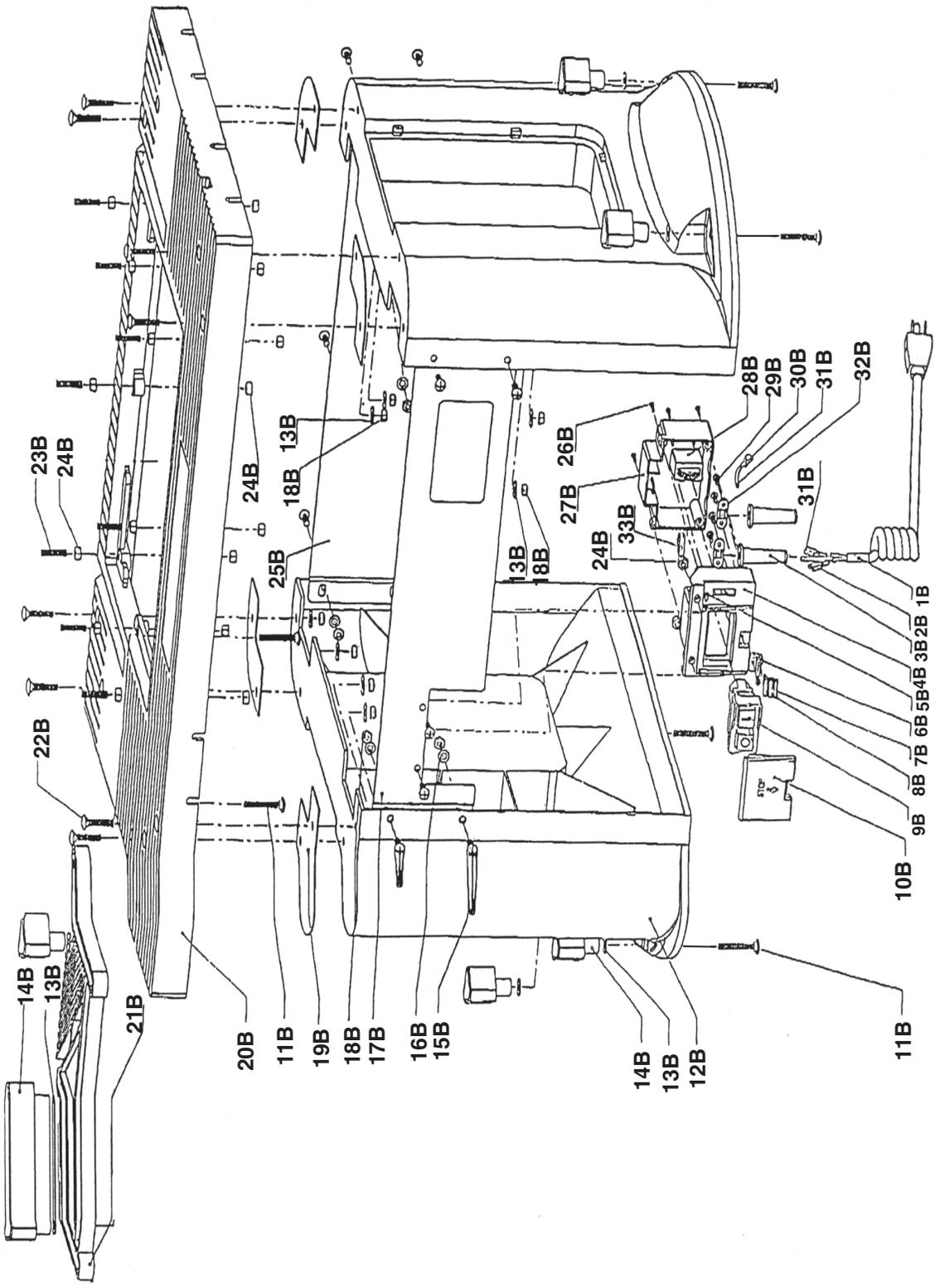
| Part # | Description | Qty. | Part # | Description | Qty. |
|--------|--------------------------|------|--------|--------------------|------|
| 1E | Plastic Bolt (M3.5 x 25) | 2 | 19E | Mat Knot | 1 |
| 2E | Fan Cover | 1 | 20E | Block Ring (37) | 1 |
| 3E | Carbon Brush | 2 | 21E | Cover | 1 |
| 4E | Brush Holder | 2 | 22E | Spindle Lock Lever | 1 |
| 5E | Insert Piece | 4 | 23E | Screw | 2 |
| 6E | Blue Non-Burning Knot | 1 | 24E | Rotator | 1 |
| 7E | Connecting Line | 1 | 25E | Screw (M4 x 65) | 2 |
| 8E | Motor Shell | 1 | 26E | Washer (4) | 5 |
| 9E | Stator Armature | 1 | 27E | Bearing Knot | 1 |
| 10E | Spring Washer (4) | 9 | 28E | Terminal | 2 |
| 11E | Bearing (608Z) | 1 | 29E | Wire | 2 |
| 12E | Block Ring (20) | 1 | 30E | Brush Box Knot | 2 |
| 13E | Block Cover | 1 | 31E | Clip | 1 |
| 14E | Locking Piece | 1 | 32E | Terminal Block | 2 |
| 15E | Wiring Spring | 1 | 33E | Washer (4) | 1 |
| 16E | Screw (M4 x 20) | 4 | 34E | Earth Line Cover | 1 |
| 17E | Bearing (6904RS) | 1 | 35E | Screw (M4 x 8) | 1 |
| 18E | Dust Block Piece | 1 | 36E | Tie Strip (88mm) | 3 |

ASSEMBLY DIAGRAM A



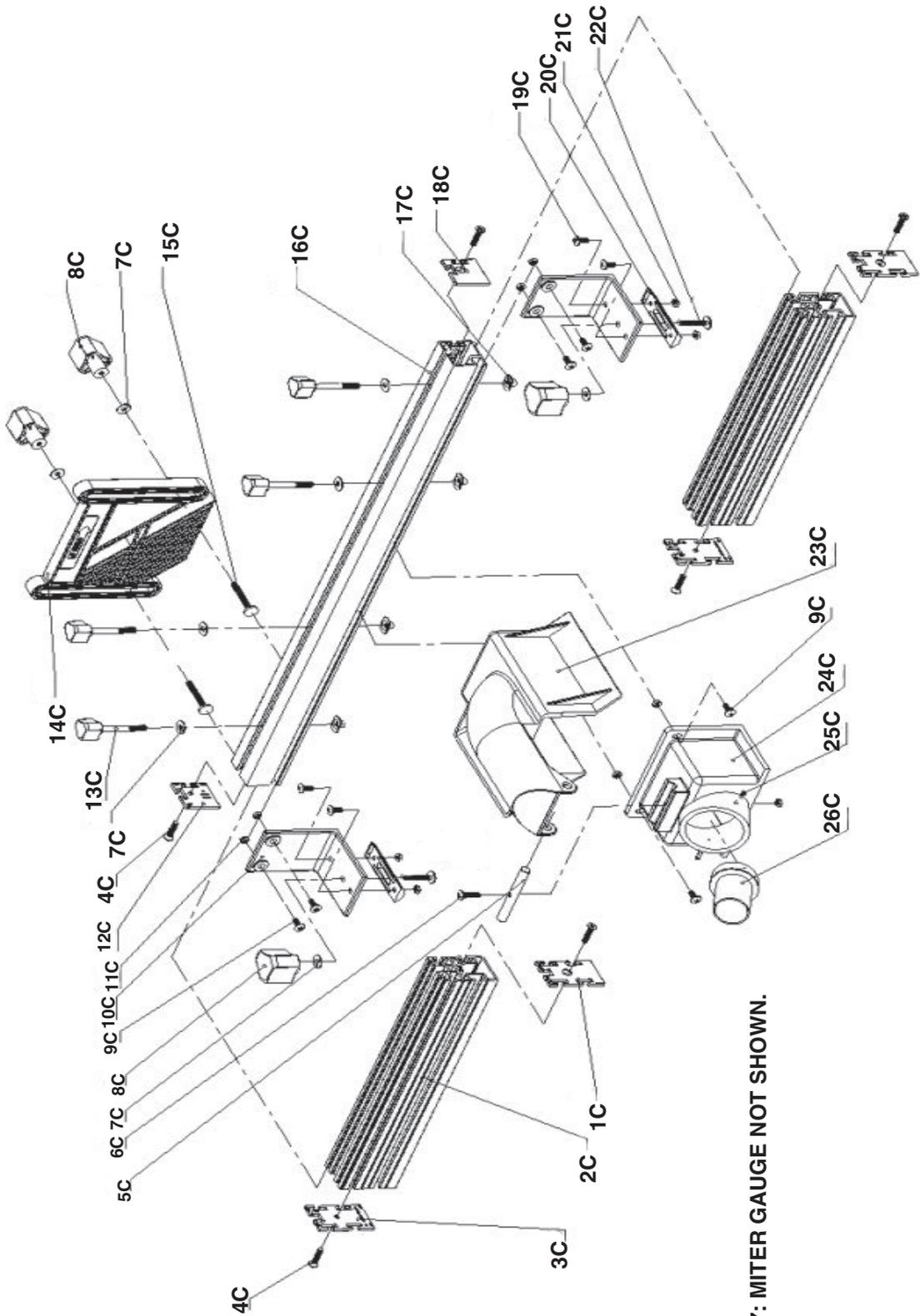
NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

ASSEMBLY DIAGRAM B



NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

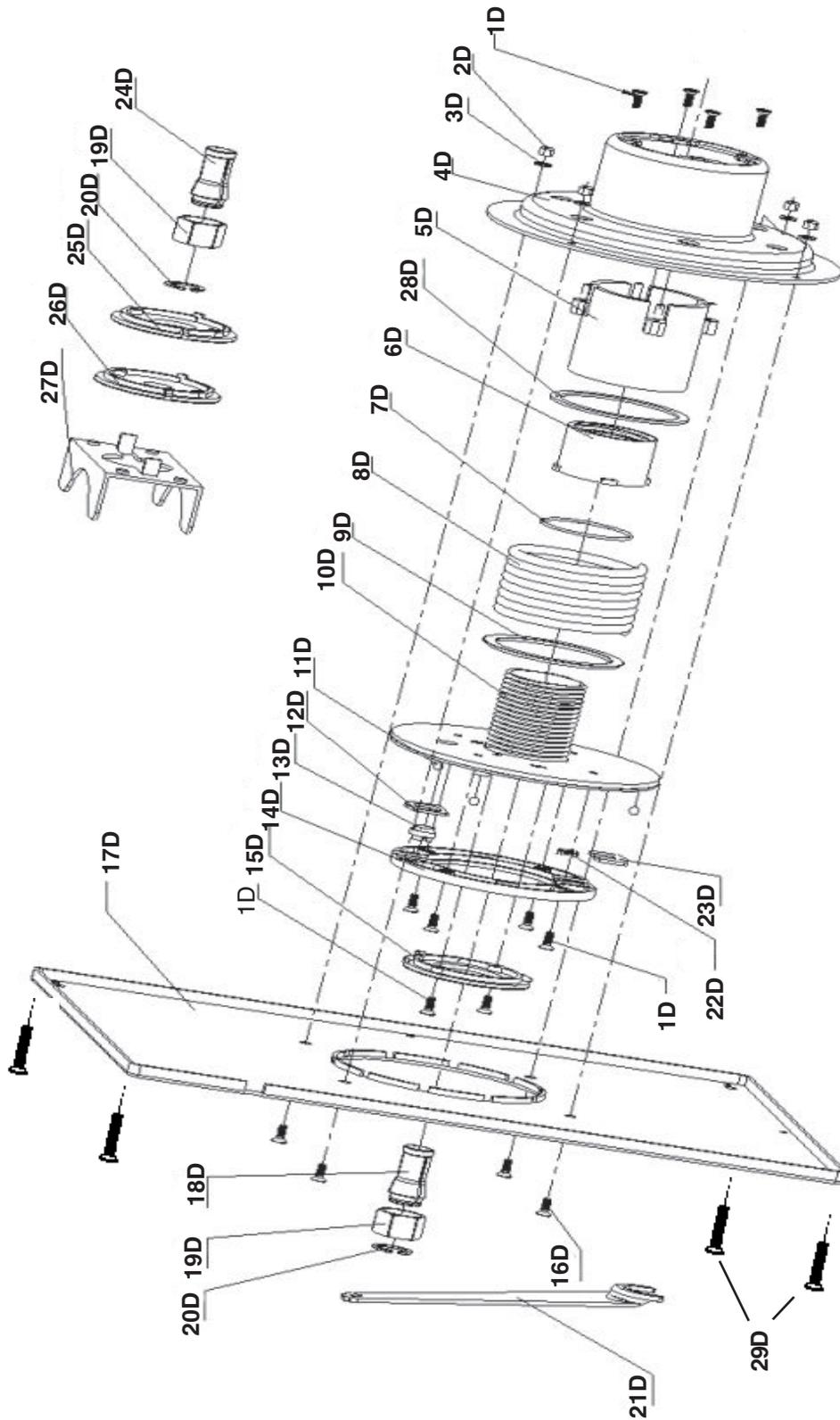
ASSEMBLY DIAGRAM C



27: MITER GAUGE NOT SHOWN.

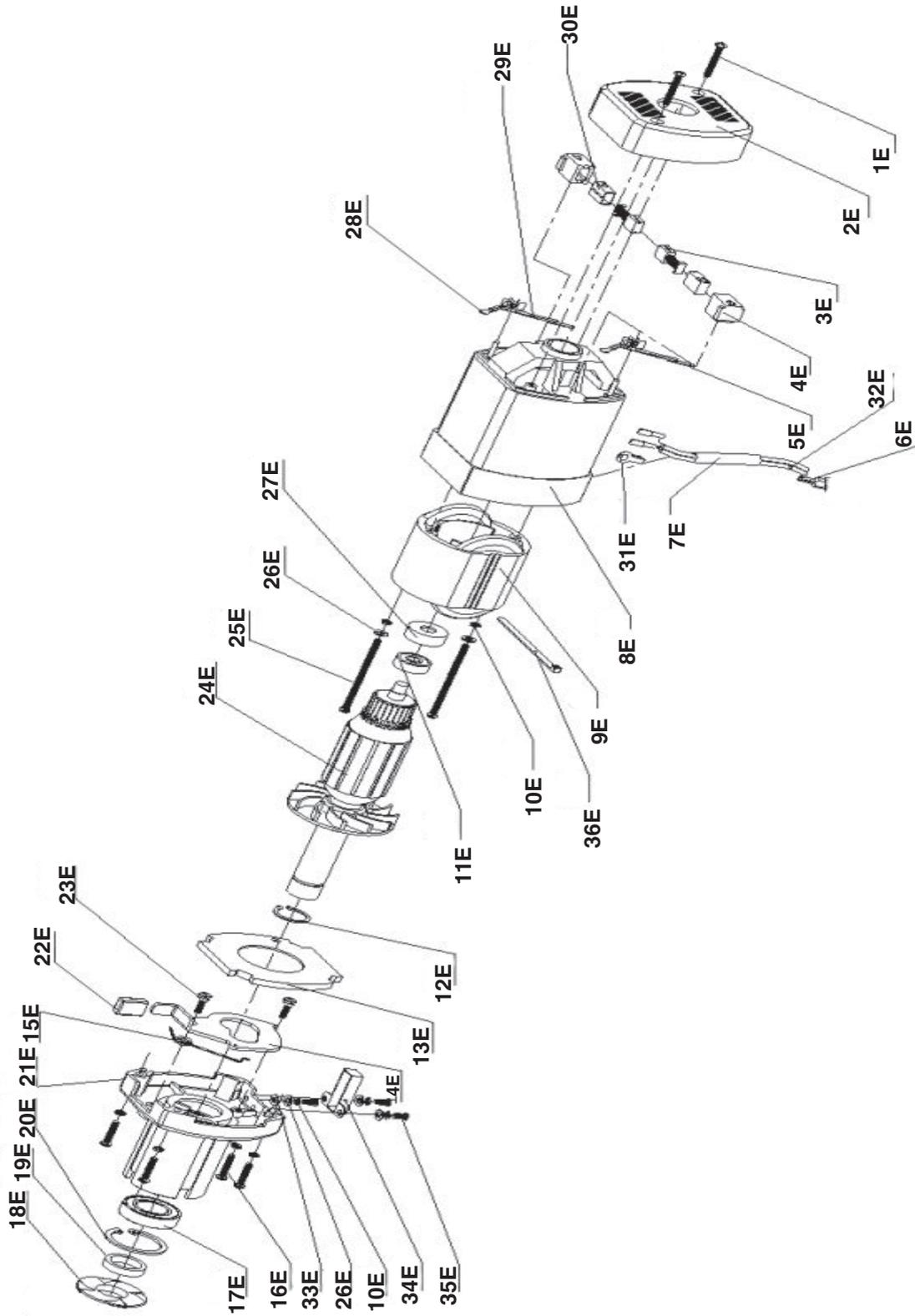
NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

ASSEMBLY DIAGRAM D



NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

ASSEMBLY DIAGRAM E



NOTE: Some parts are listed and shown for illustration purposes only, and are available individually as replacement parts.