MAXIMUM™

Plunge/Fixed-base Router

model no. 054-6810-8

IMPORTANT:
Please read this manual carefully before using this product, and save it for reference.

INSTRUCTION MANUAL

TABLE OF CONTENTS

NOTE: If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-888-670-6682.

SAVE THESE INSTRUCTIONS

- This manual contains important safety and operating instructions. Read all instructions and follow them with use of this product.

TECHNICAL SPECIFICATIONS

Rated voltage	120V ~ 60 Hz
Rated power input	11A
Horsepower	2.0 HP
No-load speed	11,000–25,000 RPM
Collet capacity	1/4 & 1/2"
Plunge stroke	2"
Base dimensions	Fixed base 6"
	Plunge base 6 1/2"
Inside base diameter	2"
Micro-fine depth	Fixed base adjusts to 1/64"
	Plunge base adjusts to 1/256"
Weight	12 lb (5.4 kg)

RULES FOR SAFE OPERATION

KNOW YOUR TOOL

To operate this tool, carefully read this Instruction Manual and all labels affixed to the Plunge/Fixed-base Router. Keep this Manual available for future reference.

IMPORTANT

This tool should only be serviced by a qualified service technician. For more information, call the toll free helpline at 1-800-689-9928.

READ ALL INSTRUCTIONS CAREFULLY

SAVE THESE INSTRUCTIONS

GENERAL POWER TOOL SAFETY WARNINGS

WARNING!

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

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

WORK AREA SAFETY

- **Keep the work area clean and well lit.** Cluttered or dark areas invite accidents.
- **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.
- **Keep children and bystanders away while operating a power tool.** Distractions can 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 earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce the risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or 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 dust mask, non-skid safety shoes, hard hat, or hearing protection, used for appropriate conditions, will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch 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 jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery 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 pack 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's 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.

SPECIFIC SAFETY RULES FOR ELECTRIC ROUTERS

- **Hold power tool by insulated gripping surfaces, because the cutter may contact its own cord.** Cutting a "live" wire may make exposed metal parts of the power tool "live" and shock the operator.
- **Use clamps or another practical way to support the workpiece and secure it to a stable platform.** Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.
- **Always wear a dust mask and ear protection when using this power tool.**
- **Only use cutters that are designed for this router.** Never use router bits with a diameter exceeding the maximum diameter specified in the technical data section.
- **Only use sharp cutters that are not chipped or cracked.** Blunt cutters will cause stalling.
- **Secure small pieces of wood firmly before working.** Never hold a workpiece in your hand.
- **Keep your hands away from the cutting area.**
- **Before starting the router, check that the cutter is firmly positioned and secured in the collet.**
- **Do not exceed the maximum indicated rotation speed of the cutter.**
- **Routing operations must always be performed against the direction of rotation (cutter-rotation) of the cutter.**
- **The cutter must be running at full speed before it is lowered to the workpiece.**

- **When operating the router, always hold the handles firmly with both hands.** Always ensure that your footing is secure when working.
- **Be prepared for the reaction torque of the router, particularly if the cutter becomes jammed in the workpiece.**
- **When a plunge-cutting operation is completed, release the handle to allow the router to rise back to its initial position.**
- **Familiarize yourself with your working area, and be alert for possible hazards that you may not hear due to the noise of the router.**
- **Allow sufficient run-down time for the cutter after turning the router off.** Wait for it to come to a complete stop before removing it from the workpiece.
- **Never slow the router down with your hands.**
- **Do not touch the cutter immediately after operation.** It may be extremely hot and could burn you.
- **Never stop the router by applying lateral pressure to the cutter.**
- **Do not force the router.** It will do a better job if you allow it to work at its intended speed.
- **Avoid cutting nails and screws.** Inspect timber before cutting, and remove all nails and screws.
- **In the event of an electrical or mechanical malfunction, switch the router off immediately, and disconnect the power cord from the outlet.**
- **Only use router bits suitable for the no-load speed of the tool.**
- **Always use cutter bits that are designed for this router.** Never use cutter bits which are larger in diameter than the opening in the router 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.

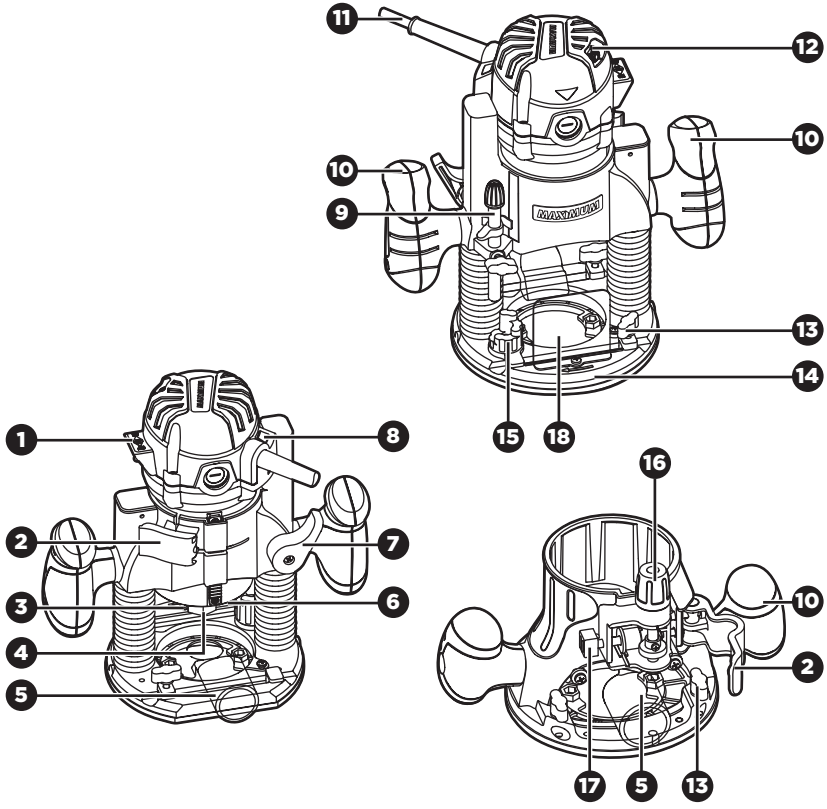
- **The label on your tool may include the following symbols. The symbols and their definitions are as follows:**

V	Volts
A	Amperes
Hz	Hertz
W	Watts
min	Minutes
~	Alternating current
⎓	Direct current
n_0	No-load speed
⧈	Class II Construction
.../min	Revolutions or reciprocation per minute
⏚	Grounding terminal
BPM	Beats per minute
	WARNING – To reduce the risk of injury, user must read instruction manual.

PACKAGE CONTENTS:

Router, plunge base, fixed base, 2 self-releasing collets (1/2" & 1/4"), collet wrench, straight-edge guide, pattern guide, 2 dust-extraction adaptors, chip shield, screws, and instruction manual

KEY PARTS DIAGRAM



NO.	PART
1	ON/OFF switch
2	Lock lever
3	Spindle lock
4	Collet
5	Dust-extraction adaptor
6	LED worklight
7	Locking arm
8	Live tool indicator
9	Adjustment bar

NO.	PART
10	Handle
11	Cable
12	Variable-speed dial
13	Lock nut
14	Base plate
15	Depth stop
16	Depth-adjustment knob
17	Adjustment button
18	Chip shield

IMPORTANT INFORMATION

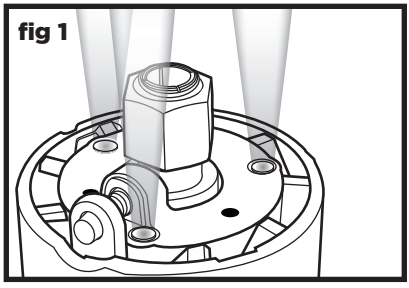
Before attempting to use this router, familiarize yourself with all of its operating features and safety requirements. This electric router is designed to be used only for milling and edge forming in wood or similar materials. Any other use of the router that is not indicated in this manual could damage the router or seriously injure the operator and, therefore, is expressly excluded from the application range.

SOFT-START FEATURE

The soft-start feature minimizes torque twist, which is customary in larger router motors, by limiting the speed at which the motor starts. This increases the life of the motor.

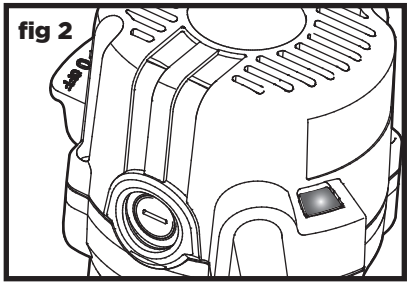
LED WORKLIGHTS (fig 1)

The router motor has 3 built-in worklights located around the collet; these provide high visibility of the workpiece when cutting. These lights are always “ON” when the toggle switch is in the “on” position.



“LIVE TOOL INDICATOR” LIGHT (fig 2)

The router also has a green “LIVE TOOL INDICATOR” light located on the motor housing top cap where the power cord enters the motor housing. This green light is always on when router motor is plugged into a power source.



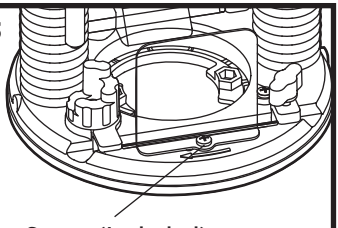
HEAVY-DUTY EDGE GUIDE

This Fixed-base Router comes with a Heavy-duty Edge Guide. This edge guide can be used as an aid in routing applications such as decorative edging, straight-edge planing and trimming, grooving, dadoing, and slotting.

CHIP SHIELD (fig 3)

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

fig 3



WARNING!

- Always wear eye protection. The chip shield deflector is not intended as a safety guards.
- Always turn the router motor off and unplug router from the power source before making any adjustments, installing accessories or performing maintenance. Failure to turn the motor off and unplug the router could result in accidental starting, which can cause serious personal injury.

CAUTION!

- Always have the chip shield deflector in place on the base when operating the router.

ASSEMBLY INSTRUCTIONS

SWITCHING FROM THE FIXED BASE TO THE PLUNGE BASE (see fig 4 to fig 7)

To remove the fixed base

1. Unplug the router.
2. Loosen the lock lever on the fixed base.
3. Hold the motor pack with one hand, and depress and hold the adjustment button with the other hand.
4. Remove the motor pack from the fixed base.

To Install the plunge base

1. Unplug the router.
2. Loosen the lock lever
3. Tighten the locking arm for stability.
4. Align the tab on the motor pack with the slot in the plunge base.
5. Tighten the lock lever.
6. Loosen the locking arm.

To install the chip shield on the plunge base

The chip shield on the plunge base is held in position with a screw. To remove the chip shield from the plunge base, unplug the router and simply loosen the screw and take the chip shield off of the base (fig 3).

fig 4

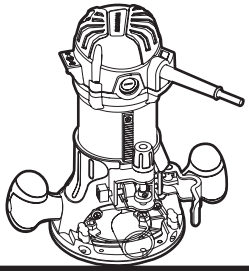


fig 5

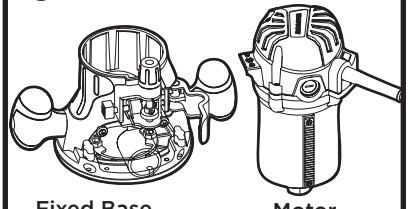
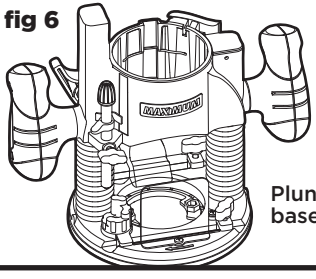


fig 6

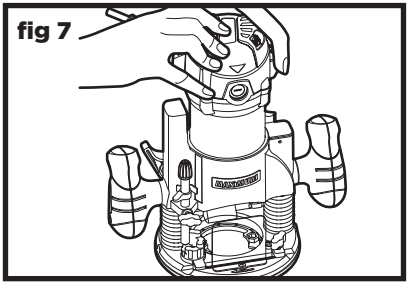


WARNING!

- Always unplug the tool from the power source before making any adjustment or attaching accessories.

SWITCHING FROM THE PLUNGE BASE TO THE FIXED BASE (see fig 4 to fig 7)

To remove the plunge base



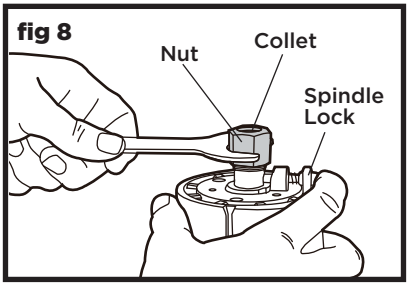
1. Unplug the router.
2. Loosen the lock lever.
3. Tighten the locking arm for stability.
4. Remove the motor pack from the plunge base.

To install the fixed base

1. Unplug the router.
2. Loosen the lock lever on the fixed base.
3. Depress and hold the adjustment button.
4. Align the tab on the motor pack with the slot in the fixed base.
5. Tighten the lock lever.

INSTALLING/REMOVING THE CUTTER

To install the cutter (see fig 8)



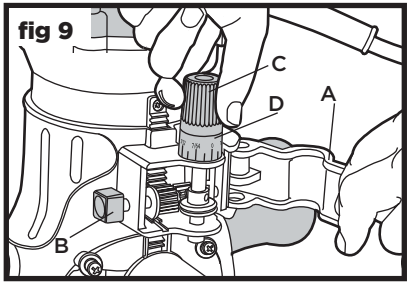
1. Unplug the router.
2. Hold the collet nut with the wrench that is provided and depress the spindle lock button until the spindle locks into place.
3. Loosen the collet nut with the wrench and remove the cutter. Insert the new cutter.
4. Tighten the collet nut with the wrench that is provided.
5. Release the spindle lock button.

To remove the cutter

1. Unplug the router.
2. Hold the collet nut with the wrench that is provided and depress the spindle lock button until the spindle locks into place.
3. Loosen the collet nut with the wrench and remove the cutter.
4. Release the spindle lock button.

SETTING THE CUTTING DEPTH FOR FIXED BASE ROUTING (see fig 9)

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



Rough Adjustment:

Depressing the Rough-adjustment Knob (B) allows the operator to quickly lower or raise the cutter bit to an approximate depth setting.

Micro-fine Adjustments:

The Depth-indicator Ring (D) is located on the Micro-fine Adjustment Dial, and is marked in 1/64" increments. Turning the Micro-fine Adjustment Dial clockwise 180° (1/2 turn), lowers the cutter bit 1/16". One full turn clockwise (360°) - zero “0” to zero “0” - lowers the bit 1/8".

The system allows a maximum of 7 full 360° clockwise revolutions in order to lower the cutter bit 7/8" (22.3 mm). The Depth-indicator Ring may be reset to zero “0” without moving the Micro-fine Adjustment Dial. This allows the user to begin adjustments from any desired reference point.

NOTICE:

- All depth adjustments on the fixed base must be made with the motor clamp loosened.
- For all fixed-base routers, the cutter bit depth equals the amount of the cutter that is exposed below the surface of the sub-base.
- Be sure the worm-gear system is engaged before making fine adjustments. Test it by turning the Micro-fine Adjustment Dial (C) clockwise and counter-clockwise to see if the bit lowers and rises. If it does not, press the Rough-adjustment Knob, and turn the Micro-fine Adjustment Dial until the gears engage, and then reset zero “0” on Depth-indicator Ring (D).

WARNING!

- Ensure that the router is never turned on or connected to the power source when assembling parts, making adjustments, or installing or removing collets and cutter bits, during cleaning, or when it is not in use. Disconnecting the router will prevent accidental start-ups, which could cause serious personal injury.

Adjusting the depth

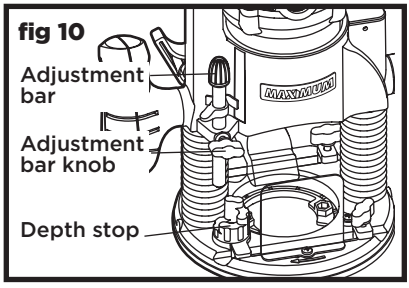
1. Turn the motor off, and unplug the tool from the power source.
2. Place the router on a flat, level surface, with the back of the fixed base facing the operator.
3. Loosen the Motor Clamp (A).
4. With the cutter bit already installed, press the Rough-adjustment Knob (B), and lower the motor into the base until the cutter bit is very close to the flat surface on which the base is sitting.
5. Turn the Micro-fine Adjustment Dial (C) until the cutter bit "just" touches the flat surface on which the base is sitting.
6. Tighten the motor clamp.
7. While continuing to press the Rough-adjustment Knob, turn the Micro-fine Adjustment Dial until the zero "0" mark on the Depth-indicator Ring is lined up with the "I" mark on the base.
8. Release the Rough-adjustment Knob, making sure that the "0" remains aligned with the mark.
9. Place the router on two level scrap workpieces, positioned so that the cutter bit can be lowered below the sub-base.
10. Turn the Micro-fine Adjustment Dial clockwise to lower the bit to the desired cutting depth. Turn the dial counter-clockwise in order to raise the cutter bit.
11. Once the cutting depth is set, tighten the motor clamp securely.

NOTICE: Making a single deep cut is never advisable. Smaller diameter cutter bits are easily broken by too much lateral thrust and torque. Larger cutter bits will cause a rough cut, and will be difficult to guide and control. For these reasons, do not exceed 1/8" cutting depth in a single pass.

SETTING THE CUTTING DEPTH FOR PLUNGE BASE ROUTING

The cutting depth can be adjusted in two ways: by depressing the handles, or by turning the depth stop on the plunge base.

Adjustment by depressing the handles (see fig 10)

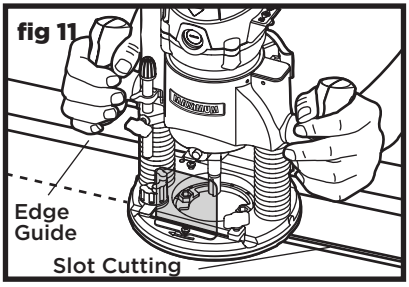


1. Unplug the router.
2. Place the plunge base on a flat surface or on the workpiece.
3. Loosen the locking arm.
4. Loosen the knob on the adjustment bar.
5. Depress the handles to the desired depth.
6. Tighten the locking arm.
7. Tighten the knob on the adjustment bar.

Adjustment using the depth stop

1. Unplug the router.
2. Unlock the locking arm.
3. Loosen the knob on the adjustment bar.
4. Set the plunge adjustment knob to the desired setting by turning it clockwise or counter-clockwise to raise or lower the depth stop.
5. Tighten the locking arm.
6. Tighten the knob on the adjustment bar.

PLUNGING ACTION (fig 11)

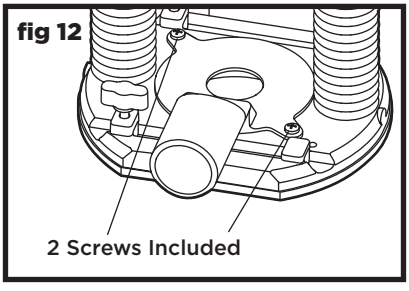


The plunge base feature simplifies depth adjustments and allows the cutter bit to be accurately lowered into the workpiece for precise set-ups.

1. To lower the cutter bit, release the plunge-lock lever by moving it "UP" to the unlock position.
2. Apply an even, downward pressure on the plunge action until the cutter bit reaches the desired depth, then move the plunge-lock lever "DOWN" to the locked position.
3. To raise the bit and the plunge action, unlock the plunge-lock lever and the cutter bit and the plunge action will automatically retract from the workpiece and return to the raised position.

Always have the plunge action in the raised position and locked when the bit is not cutting in the workpiece.

DUST COLLECTION WITH VACUUM PORT (fig 12)



The vacuum port is sized to accept a 1 1/4" vac hose adapter (sold separately).

Unplug the router. To attach the vacuum port onto the plunge base, position and secure it to the back of the base with the two screws (included), as shown in fig 12.

The vacuum port can also be installed with the hose outlet facing the front of the plunge base by removing the chip shield and attaching the adapter at the front of the base.

ASSEMBLING THE EDGE GUIDE

To assemble the edge guide onto the fixed or plunge base, simply insert the edge-guide rods into the edge guide mounting slots, adjust to the desired position, and lock down using the edge-guide locking knobs.

WARNING!

- Always turn the router motor off and unplug the router from the power source before making any adjustments, installing accessories or performing maintenance. Failure to turn the motor off and unplug the router could result in accidental starting, which can cause serious personal injury.

OPERATING INSTRUCTIONS

TO TURN THE ROUTER ON AND OFF (fig 13)

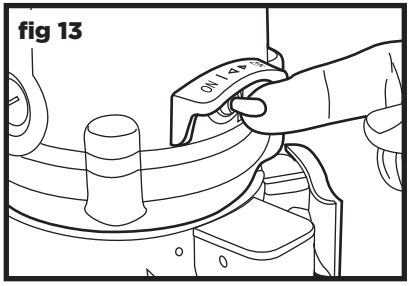


fig 13

The router motor is turned “ON” and “OFF” with using the toggle switch located on the top cap of the motor housing. The left side of the toggle switch hood (when facing the operator) is marked “I” for “ON”, and the right side (when facing the operator) is marked “O” for “OFF”.

To turn the motor “ON”, push the toggle switch to the left side, marked “I” for “ON”.

To turn the motor “OFF”, push the toggle switch to the right side marked “O” for “OFF”.

Always hold the router and cutter bit away from the workpiece when turning the toggle switch “on”.

Only allow the router and cutter bit to come into contact with the workpiece after the router has reached full speed. Only remove the router and cutter bit from the workpiece after turning the router motor “off” and allowing the cutter bit to come to a complete stop. Operating in this manner will increase the life of the toggle switch and motor, and will increase the quality of the work.

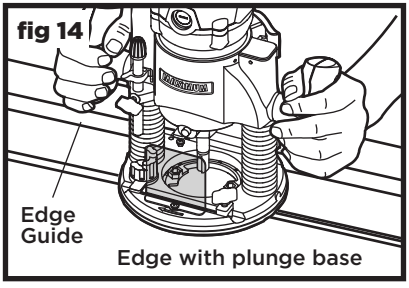
WARNING!

- Always make sure that the switch is in the “OFF” position before plugging it into a power source.

STARTING THE CUT

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.

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 (Fig. 14).



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: start at one depth and then make several passes, each time increasing the cutting depth, until the desired depth is reached.

Making a cut that is too deep will stress the router 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, causing you to lose of control of the router, which may result in a serious accident.

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

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

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

WARNING!

- Before operating the router, follow all safety instructions in this manual. Failure to do so could result in serious personal injury.
- Always be alert and watch what you are doing. Never operate the router when you are fatigued or otherwise impaired.

EDGE ROUTING WITH THE FIXED/PLUNGE BASE (fig 14)

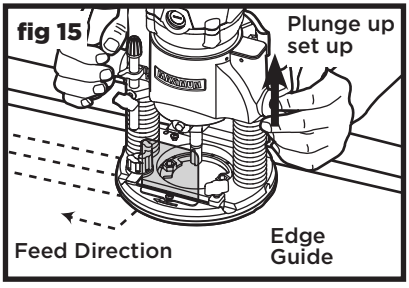
1. Unplug the router.
2. Set the cutting depth and place the router on the edge of workpiece, making sure that the cutter does not contact the workpiece.
3. Clamp an edge guide (board or metal straightedge) onto the workpiece to help guide the router base.
4. Plug in the router.
5. Turn the router "On", and allow the motor to build to the full speed selected.
6. To begin your cut, gradually feed the cutter bit into the edge of the workpiece.
7. When the cut is complete, turn the motor "Off" and allow cutter bit come to a complete stop before removing it from the workpiece.
8. Unplug the router from the power source, place the router upside down on the worktable, and inspect the finished cut in the workpiece.

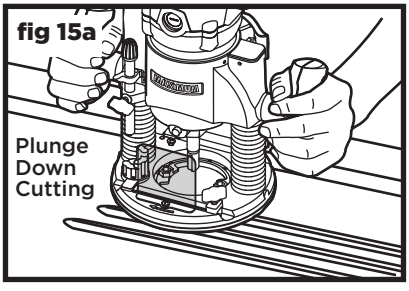
NOTICE: Making test cuts in scrap material that is similar to your workpiece is essential. Learning how the router's speed, depth-of-cut and cutter bit will react in the workpiece will help you produce quality cuts.

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 possibly serious personal injury. If using a router table, large cutter bits should be used for edging only.
- Removing the cutter bit from the workpiece while it is still rotating could damage the workpiece and result in loss of control, causing serious personal injury.

INTERNAL ROUTING WITH THE PLUNGE BASE (figs 15 and 15a)





1. Set the cutting depth and lock the plunge action in the raised (Up) position. Turn the motor "On" and allow the motor build up to its full speed (see fig 15).
2. To begin your cut, unlock the plunge lock lever and gently lower the plunge action into the workpiece (see fig 15a).
3. When the desired depth-of-cut is achieved, lock the plunge lock lever (Down) and proceed to make your cut (fig 15a).
4. When the cut is completed, turn the motor "off" and allow the cutter bit to come to a complete stop before removing it from the workpiece.
5. When the cutter bit comes to a complete stop, unlock the plunge lock lever (Up) and the plunge action will automatically retract the cutter bit from the workpiece.
6. Unplug the router from the power source, place the router on the worktable, and inspect the finished cut in the workpiece.

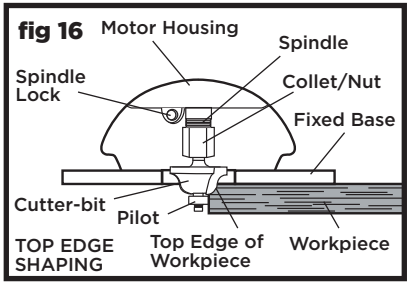
NOTICE: Making test cuts in scrap material that is similar to your workpiece is essential. Learning how the router's speed, depth-of-cut and cutter bit will react in the workpiece will help you produce quality cuts.

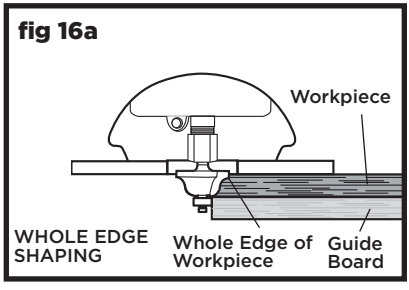
WARNING!
- Always securely clamp your workpiece and keep a firm grip on the router base with both hands at all times. Failure to do so could result in loss of control, causing possibly serious personal injury.
- Removing the cutter bit from the workpiece while it is still rotating could damage the workpiece and result in loss of control, causing serious personal injury.

EDGING WITH A PILOT BIT (figs 16 and 16a)

The arbor-type bits with pilots are excellent for edge shaping any workpiece edge that is either straight, or has a curve equal to or greater than the radius of the bit to be used.

The pilot prevents the bit from making an excessively deep cut, and holding the pilot firmly in contact with the workpiece edge throughout prevents the cut from becoming too shallow.





Top Edge Shaping

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 (fig 16).

Whole Edge Shaping

If the workpiece is too thin or if the bit is set so low that there will be no uncut edge against which to ride the pilot, you will be shaping the whole edge of the workpiece, and an extra board must be placed under the workpiece to act as a guide (see fig 16a). This "guide" board must have exactly the same contour - straight or curved - as the workpiece edge. If it is positioned so that its edge is flush with the workpiece edge, the bit will make a full cut (cutting in as far as the bit radius). On the other hand, if the guide is positioned so that it extends beyond the edge of the workpiece, the bit will make less than a full cut - which will alter the shape of the finished edge.

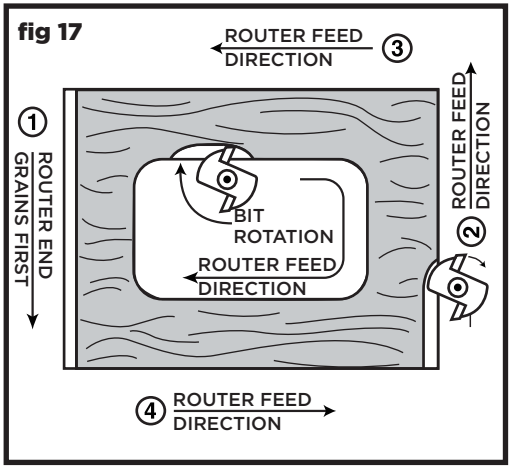
NOTICE: The size (diameter) of the pilot that is used determines the maximum width that can be cut with the pilot against the workpiece edge (a small pilot exposes all of the bit; a large pilot reduces this amount by 1/16 in.). Any of the piloted cutter bits can be used without a pilot for edge shaping 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 17)

The secrets to professional-looking routing are careful set-up for the cut, proper depth-of-cut selection, knowing how the cutting bit reacts in the workpiece, and the rate and direction of feed of the router.



DIRECTION OF FEED: EXTERNAL CUTS

The router motor and cutting bit rotate clockwise. This requires the feed of the cutting bit to be from left to right (see fig 17). Feeding the bit from left to right will cause the bit to pull the router towards (up against) the workpiece.

If the router is fed in the opposite direction (right to left), the rotating force of the cutting 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 of losing 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.

KICKBACK

Because of the high speed of the cutting bit during a proper feeding operation (left to right), there is very little kickback under normal conditions. However, if the cutting bit strikes a knot, an area of hard grain in the 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, possibly causing serious personal injury. Kickback is always counterclockwise: the opposite direction of the clockwise cutting bit rotation.

To guard against and help prevent Kickback, Always inspect the workpiece for knots, hard grain, and foreign objects that could cause a kickback problem and plan the set-up and direction of feed so that the router is always moving, and keep the sharp edges of the cutting bit continuously biting straight into new (uncut) wood (workpiece).

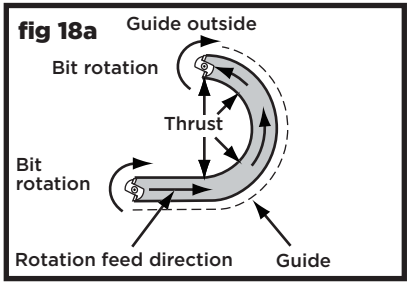
NOTICE: When the router is installed in a router table, the bit rotation will be counterclockwise and the workpiece must be fed from right to left on the table.

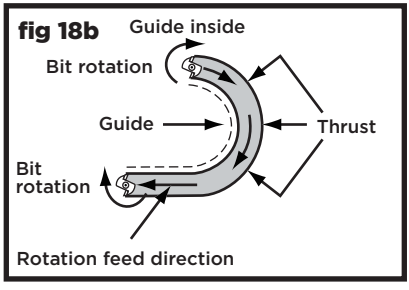
DIRECTION OF FEED - INTERNAL CUTS (figs 18a and 18b)

When making an internal cut, such as a groove, dado, or slot, the edge guide, straight edge, or board guide must always be positioned on the right-hand side of the router as you make the cut (fig 18a).

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 18a). 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 18b, the router travel should be from left to right and clockwise around curves.





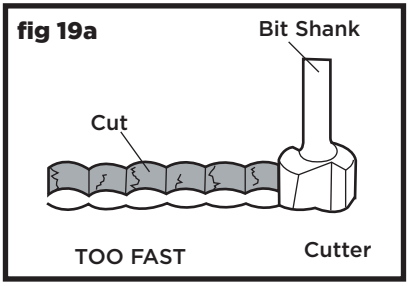
If there is a choice, the set-up in fig 18a is easier to use, but there is the possibility of "Climb Cutting" around curves. In either case, fig 18a or fig 18b, the sideways thrust of the router cutting is always against the guide, as is proper.

WARNING!

- Always securely clamp the workpiece in place, 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 possibly serious personal injury.

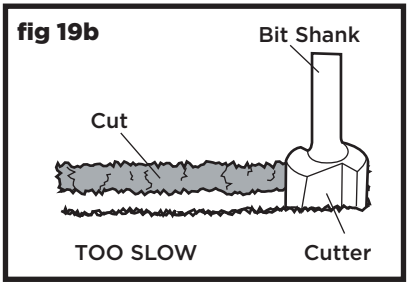
RATE OF FEED (figs 19a and 19b)

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 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 RAPIDLY (fig 19a)

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



Forcing the feed of the cutting bit forward too rapidly slows the revolution of the cutting bit, and the bit takes larger bites as it rotates. Larger bites mean larger chips and a rough finish. This forcing action can also cause the router motor to overheat.

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

The router will make clean, smooth cuts if it is 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 more difficult to do.

FEEDING TOO SLOWLY (fig 19b)

When you feed the cutting bit too slowly, the rotating cutting bit does not cut into new wood rapidly 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 cutting bit.

When the cutting bit is scraping instead of cutting, the router is more difficult to control as you feed it.

With almost no load on the motor, the cutting bit has a tendency to bounce off the sides of the cut in the workpiece, producing a cut with a rippled finish instead of clean, straight sides.

MAINTENANCE

Before cleaning or performing any maintenance, verify that the router has been disconnected from the power supply. Keep all ventilation openings clean. Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents. Use a clean cloth to remove dirt, oil, and grease.

WARNING!

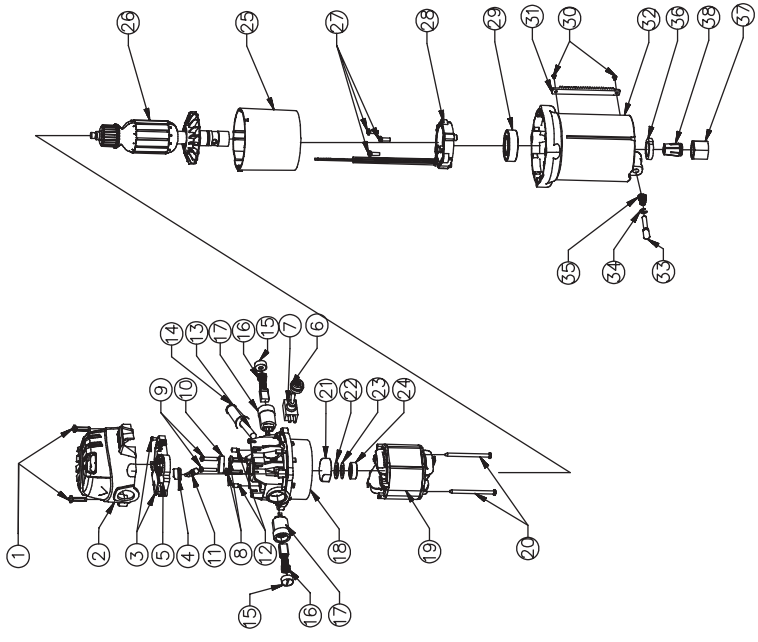
- Always turn the router motor off and unplug router from the power source before making any adjustments, installing accessories or preforming maintenance. Failure to turn the motor off and unplug the router could result in accidental starting, which can cause serious personal injury.
- Do not let brake fluids, gasoline, petroleum-based products, penetrating oil, etc., come into contact with plastic parts. They contain chemicals that can damage, weaken, or destroy plastic.
- To ensure safety and reliability, all repairs should be performed by a qualified service technician.
- If the supply cord is damaged, it must be replaced by a specially prepared cord available through the service organization.

TROUBLESHOOTING

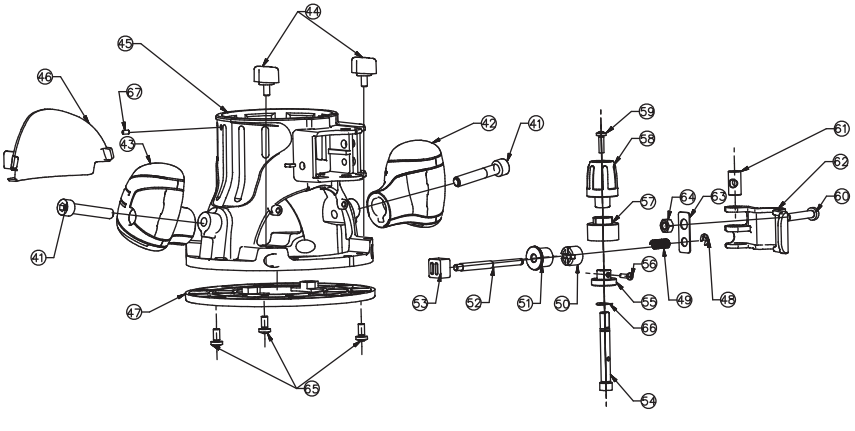
Problem	Possible causes	Solution
The router does not work	The router is not plugged into an electrical outlet.	Insert the plug from the router power cord into an electrical outlet.

EXPLODED VIEW

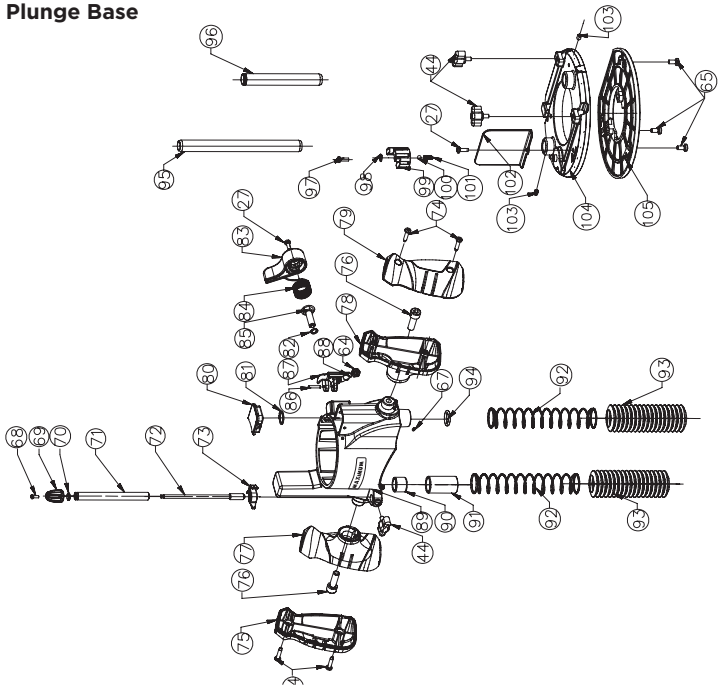
Motor Unit



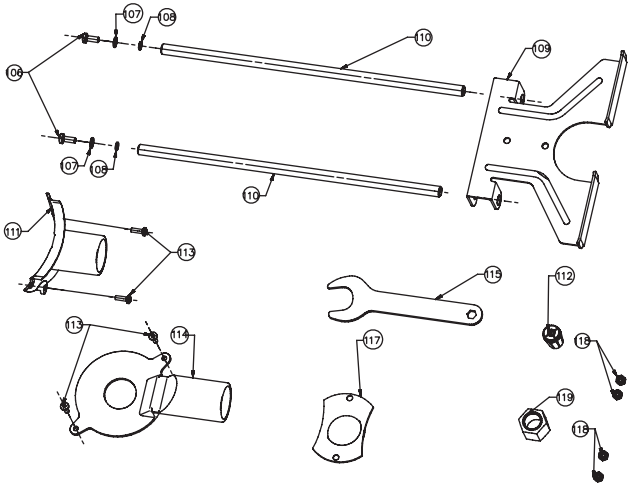
Fixed Unit



Plunge Base



Router Accessory



PART LIST

No.	Part No.	Description
1	5610220000	Screw
2	3320366000	Rear Cover
3	5610017000	Screw
4	3121518000	Transparent Cap
5	4900247000	PCB Plate
6	3122851000	Seal Ring
7	4870073000	Switch
8	5610059000	Screw
9	5610106000	Tapping Screw
10	3122798000	Cord Anchorage
11	4540017000	Power Indicator Light
12	5620017000	Screw
13	4810002188	Power Cord
14	3121050000	Cord Guard
15	3120537000	Brush Cap
16	4960019000	Carbon Brush
17	2800005000	Brush Holder
18	3121494000	Middle Housing
19	2740118000	Stator
20	5610050000	Screw
21	3123926000	Bearing Holder
22	3121049000	Rubber Spring
23	3700249000	Washer
24	5700008000	Bearing
25	3121495000	Fan Baffle
26	2750184000	Rotor
27	5620040000	Screw
28	2820887000	LED
29	5700056000	Bearing
30	5620062000	Screw
31	3520227000	Gear Rack

No.	Part No.	Description
32	3420356000	Housing
33	3550592000	Spindle Lock
34	5660005000	“E” Ring
35	3660174000	Stop Spring
36	5630179000	Nut
37	5630187000	Collet Nut
38	3550721000	Collet
41	5620024000	Screw
42	3320363000	Right Handle
43	3320368000	Left Handle
44	3400189000	Lock Bolt
45	3420471000	Mounting
46	3121637000	Chip Shield
47	3122840000	Base Plate
48	5660003000	E Ring
49	3660167000	Spring
50	3520147000	Lock Gear
51	3520141000	Gear
52	3550579000	Gear Shaft
53	3121648000	Button
54	3550613000	Shaft
55	3550615000	Worm
56	5620033000	Screw
57	3121647000	Indicator Ring
58	3121646000	Adjusting Knob
59	5620041000	Screw
60	5620332000	Screw
61	3550596000	Lock Pin
62	3420395000	Clamping Lever
63	3700848000	Plate
64	5630015000	Lock Nut

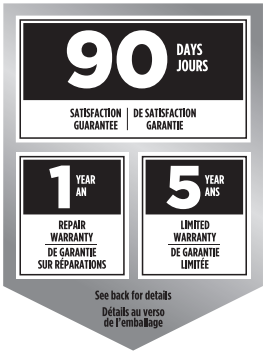
No.	Part No.	Description
65	5620049000	Screw
66	5650172000	Washer
67	5670040000	Located Pin
68	5620032000	Screw
69	3120200000	Depth Adjusting Cap
70	5690002000	“O” Ring
71	3550791000	Depth Stop Bar
72	3550083000	Adjusting Pole
73	3121634000	Depth Indicator
74	5610042000	Screw
75	3320369000	Left Handle Cover
76	5620023000	Screw
77	3320365000	Left Handle
78	3320364000	Right Handle
79	3320367000	Right Handle Cover
80	3121639000	Cover
81	5660018000	Circlips of Shaft
82	3700078000	Spring Washer
83	3420398000	Plunge Lock Lever
84	3660254000	Torsion Spring
85	5640045000	Bolt
86	5670039000	Pin
87	3420390000	Clamping Lever
88	3550577000	Mitre Lock Bolt
89	3420470000	Plunge Frame
90	5700055000	Oil Impreging Bearing
91	3520138000	Bush

No.	Part No.	Description
92	3660166000	Spring
93	3123581000	Bellows Seal
94	5690120000	“O”Ring
95	3550576000	Long Plunge Rod
96	3550575000	Plunge Rod
97	5620103000	Screw
98	5650007000	Gasket
99	3420387000	Turn Table
100	5700046000	Steel Ball
101	3660030000	Spring
102	3121583000	Chip Shield
103	5670158000	Spring Pin
104	3420370000	Mounting
105	3122841000	Base Plate
106	5620050000	Screw
107	5650015000	Spring Washer
108	5650013000	Plain Washer
109	3703591000	Parallel Guide
110	3550683000	Guiding Rod
111	3122784000	Vacuum Adapter
112	3550595000	Collet
113	5620040000	Screw
114	3121599000	Vacuum Adapter
115	3700807000	Wrench
117	3700806000	Guide Bush
118	5630003000	Nut
119	5630187000	Collet Nut

If the problem remains unsolved after performing the checks described above, call the toll-free helpline at 1-800-689-9928.

WARRANTY

5-YEAR LIMITED WARRANTY



This MAXIMUM product is guaranteed for a period of 5 years from the date of original retail purchase against defects in workmanship and materials only and is subject to the following components:

a) Component A: The carrying case is guaranteed for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.

b) Component B: Accessories, including drill bits and saw blades, do not carry a warranty.

Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at the sole discretion of the Maximum Canada authorised repair centre ("Service Provider"). We will bear the cost of any repair or replacement and any costs of labour relating thereto.

These warranties are subject to the following conditions and limitations:*

a) a bill of sale verifying the purchase and purchase date must be provided;

b) defects in workmanship and material to be assessed and determined by the Service Provider;

c) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions);

d) this warranty does not apply to normal wear and tear or to expendable parts or accessories (including drill bits and saw blades) that may be supplied with the product that by their nature have a limited life span and are expected to become inoperative or unusable after a reasonable period of use;

e) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, rubber o-rings, tune-ups or adjustments;

f) this warranty excludes the following components that may accompany your product:

   (1) the carrying case, which is only for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.

   (2) accessories, including drill bits and saw blades, which do not carry a warranty of any kind.

g) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer), and any such unauthorized repairs or attempted repairs shall void this warranty in its entirety;

h) this warranty will not apply to any parts other than original parts, except to the extent that the retailer or manufacturer or persons authorized by either of them have repaired or replaced them;

i) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);

j) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;

k) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and

l) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under that product manufacturer's warranty, if any;

m) any products replaced by the retailer in attempt to fulfill warranty obligations is subject to the original product warranty conditions and related time period as initiated by the original date of purchase; if product is purchased in Quebec, the warranty term will be extended for a period equal to the time during which the Quebec retailer possesses the product in attempt to fulfill warranty obligations; replaced product will not default to new product warranty conditions; and

n) the retailer and manufacturer's sole obligation and the purchaser's sole remedy under this warranty shall be as set out herein. The warranties contained herein are not transferable and are given only to the purchaser. FURTHER, THE WARRANTIES SET OUT HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, WHETHER EXPRESS, IMPLIED OR STATUTORY (INCLUDING SUCH AS ARISE UNDER THE SALE OF GOODS ACT OR THE INTERNATIONAL SALE OF GOODS ACT), ARISING OUT OF A COURSE OF DEALING OR USAGE OF TRADE OR OTHERWISE, INCLUDING, SUBJECT TO APPLICABLE LAW, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, MERCHANTABLE QUALITY, FITNESS OR ADEQUACY FOR A PARTICULAR PURPOSE OR USE, AND ALL OTHER SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED BY THE RETAILER AND MANUFACTURER.

Additional Limitations

This warranty applies only to the original purchaser and may not be transferred.

This warranty applies for a period of 5 years from the date of original retail purchase, as indicated on the bill of sale.

Neither the retailer, Maximum Canada, nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

WARRANTY

Under no circumstances shall the retailer, Maximum Canada, or manufacturer be liable to the purchaser for any claim for (a) indirect, special, punitive, incidental, exemplary, or consequential damages, (b) compensation for loss of profits, anticipated revenue, savings or goodwill, or other economic loss of the purchaser, (c) exemplary, aggravated or punitive damages howsoever incurred, (d) contribution or set-off in respect of any claims against the purchaser, (e) any damages whatsoever relating to third party products or services or the purchaser's materials, or (f) any damages whatsoever relating to interruption, delays, errors or omissions; in each case under any theory of law or equity, arising out of or in any way related to this warranty, even if advised of the possibility thereof. Notwithstanding any provision herein or entitlement of the purchaser at law, in equity or otherwise, in no event shall the liability of the retailer or manufacturer under this warranty, whether in contract, tort, product liability or otherwise, exceed, in the aggregate, the amount paid by the purchaser to the retailer for the product to which this warranty applies.

***Notice to Consumer**

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.

In addition to the 5-Year Limited Warranty, this MAXIMUM product is covered by our:

1-Year Repair Warranty

Maximum Canada will maintain this product and replace critical parts which have worn beyond reasonable use through normal use of such product, any time during the first year after purchase.

The following are excluded from this 1-Year Repair Warranty:

a) missing or damaged parts or components that are a result of abuse or misuse;

b) any wear and tear to non-critical parts or accessories that do not affect the core function of the product.

90-Day Satisfaction Guarantee

If you are not completely satisfied with the performance of your MAXIMUM product for any reason, you can return it within 90 days from the date of purchase with proof of purchase for exchange or a full refund.

Made in China

Imported by

MAXIMUM Canada Toronto, Canada M4S 2B8