

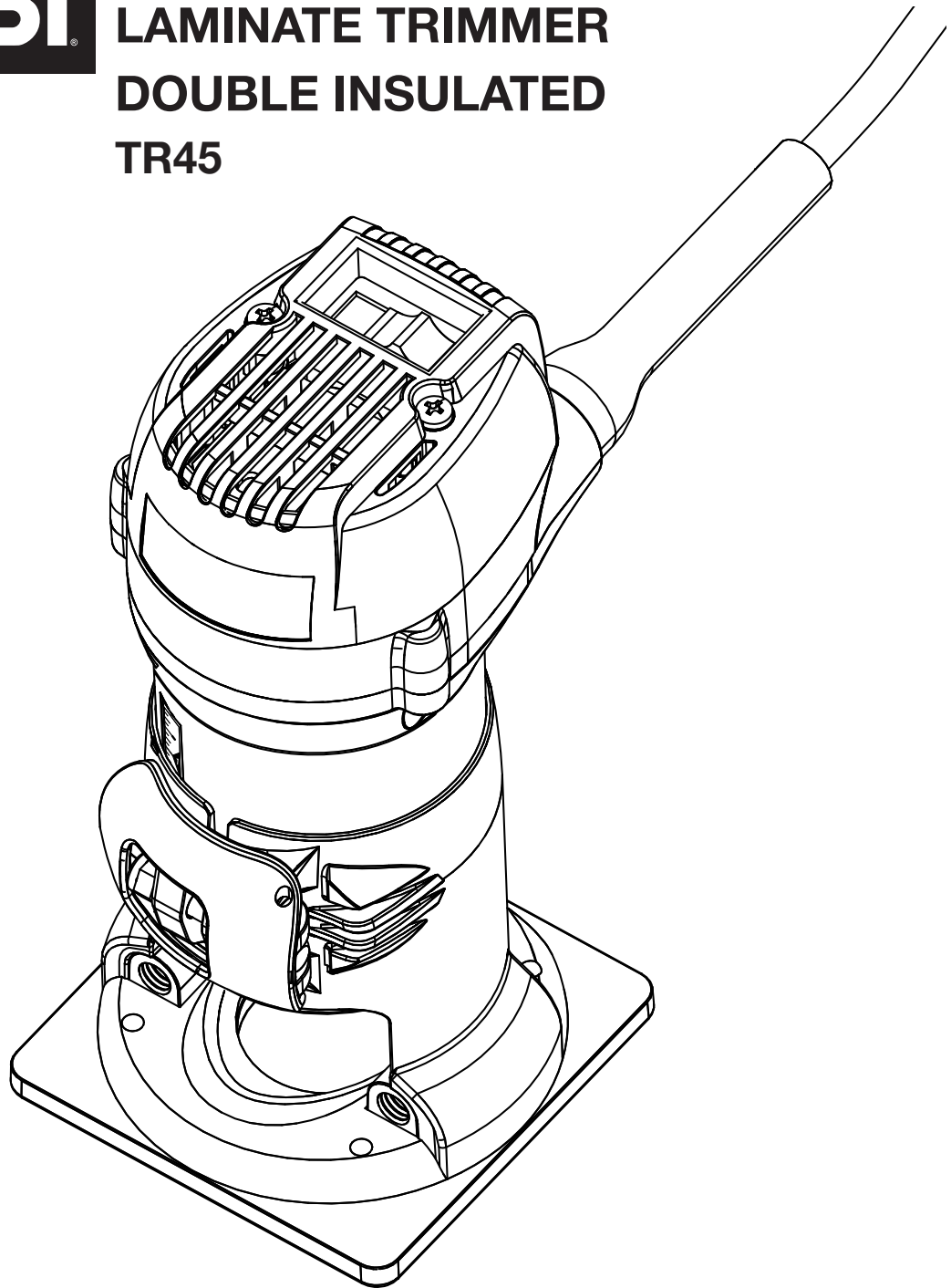


OPERATOR'S MANUAL

LAMINATE TRIMMER

DOUBLE INSULATED

TR45



Your laminate trimmer has been engineered and manufactured to Ryobi's high standard for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.

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

Thank you for buying a Ryobi product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

TABLE OF CONTENTS

■ Introduction	2
■ Warranty	2
■ General Safety Rules.....	3-4
■ Specific Safety Rules.....	4
■ Symbols.....	5-6
■ Electrical	7
■ Features.....	8-9
■ Assembly	9-10
■ Operation.....	11-17
■ Maintenance.....	18-19
■ Parts Ordering / Service	20

INTRODUCTION

This tool has many features for making its use more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

WARRANTY

RYOBI® POWER TOOL - LIMITED TWO YEAR WARRANTY AND 30 DAY EXCHANGE POLICY

One World Technologies, Inc., warrants its RYOBI® power tools with the following conditions:

30-DAY EXCHANGE POLICY: During the first 30 days after date of purchase, you may either request service under this warranty or you may exchange any RYOBI® power tool which does not work properly due to defective workmanship or materials by returning the power tool to the dealer from which it was purchased. To receive a replacement power tool or requested warranty service, you must present proof of purchase and return all original equipment packaged with the original product. The replacement power tool will be covered by the limited warranty for the balance of the two year period from the date of the original purchase.

WHAT THIS WARRANTY COVERS: This warranty covers all defects in workmanship or materials in your RYOBI® power tool for a period of two years from the date of purchase. With the exception of batteries, power tool accessories are warranted for ninety (90) days. Batteries are warranted for two years.

HOW TO GET SERVICE: Just return the power tool, properly packaged and postage prepaid, to an Authorized Service Center. You can obtain the location of the Service Center nearest you by contacting a service representative at One World Technologies, Inc., P.O. Box 1207, Anderson, SC 29622-1207, by calling 1-800-525-2579 or by logging on to www.ryobitools.com. When you request warranty service, you must also present proof of purchase documentation, which includes the date of purchase (for example, a bill of sale). We will repair any faulty workmanship, and either repair or replace any defective part, at our option. We will do so without any charge to you. We will complete the work in a reasonable time, but, in any case, within ninety (90) days or less.

WHAT'S NOT COVERED: This warranty applies only to the original purchaser at retail and may not be transferred. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defects resulting from misuse, abuse, neglect, alteration, modification or repairs by other than Authorized Service Centers. One World Technologies, Inc. makes no warranties, representations or promises as to the quality or performance of its power tools other than those specifically stated in this warranty.

ADDITIONAL LIMITATIONS: Any implied warranties granted under state law, including warranties of merchantability or fitness for a particular purpose, are limited to two years from the date of purchase. One World Technologies, Inc. is not responsible for direct, indirect, or incidental damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

GENERAL SAFETY RULES



WARNING:


Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep your work area clean and well lit.** Cluttered benches and 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 bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **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.
- **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.
- **Don't 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 to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
- **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These cords are rated for outdoor use and reduce 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 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.
- **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.

- **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection.** Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- **Do not wear loose clothing or jewelry. Contain long hair.** Loose clothes, jewelry, or long hair can be drawn into air vents.
- **Do not use on a ladder or unstable support.** Stable footing on a solid surface enables better control of the tool in unexpected situations.

TOOL USE AND CARE

- **Use clamps or other practical way 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.
- **Do not force 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.
- **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of the reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- **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.
- **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.
- **Keep the tool and its handle dry, clean and free from oil and grease.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any strong solvents to clean your tool. Following this rule will reduce the risk of loss of control and deterioration of the enclosure plastic.

GENERAL SAFETY RULES

SERVICE

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

SPECIFIC SAFETY RULES

- **Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire will make exposed metal parts of the cutting tool “live” and shock the operator.
- **Know your power tool. Read operator’s manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this tool.** Following this rule will reduce the risk of electric shock, fire, or serious injury.
- **Always wear safety glasses. Everyday eyeglasses have only impact-resistant lenses; they are NOT safety glasses.** Following this rule will reduce the risk of serious personal injury.
- **Protect your lungs. Wear a face or dust mask if the operation is dusty.** Following this rule will reduce the risk of serious personal injury.
- **Protect your hearing. Wear hearing protection during extended periods of operation.** Following this rule will reduce the risk of serious personal injury.
- **Inspect tool cords periodically and, if damaged, have repaired at your nearest Authorized Service Center. Constantly stay aware of cord location.** Following this rule will reduce the risk of electric shock or fire.
- **Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center.** Following this rule will reduce the risk of shock, fire, or serious injury.
- **Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. A wire gauge size (A.W.G.) of at least 16 is recommended for an extension cord 50 feet or less in length. A cord exceeding 100 feet is not recommended. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.**
- **Inspect for and remove all nails from lumber before using this tool.** Following this rule will reduce the risk of serious personal injury.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.



WARNING:











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

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




SYMBOLS

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

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of current
≡	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load
	Class II Construction	Double-insulated construction
.../min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	Safety Alert	Precautions that involve your safety.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.

SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	DANGER:	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION:	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.



WARNING:

To avoid serious personal injury, do not attempt to use this product until you read thoroughly and understand completely the operator's manual. Save this operator's manual and review frequently for continuing safe operation and instructing others who may use this product.



WARNING:



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

SAVE THESE INSTRUCTIONS

ELECTRICAL

DOUBLE INSULATION

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



WARNING:

The double insulated system is intended to protect the user from shock resulting from a break in the tool's internal insulation. Observe all normal safety precautions to avoid electrical shock.

NOTE: Servicing of a tool with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service, we suggest you return the tool to your nearest authorized service center for repair. Always use original factory replacement parts when servicing.

ELECTRICAL CONNECTION

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

EXTENSION CORDS

When using a power tool at a considerable distance from a power source, be sure to use an extension cord that has the capacity to handle the current the tool will draw. An undersized cord will cause a drop in line voltage, resulting in overheating and loss of power. Use the chart to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

When working outdoors with a tool, use an extension cord that is designed for outside use. This type of cord is designated with "WA" on the cord's jacket.

Before using any extension cord, inspect it for loose or exposed wires and cut or worn insulation.

**Ampere rating (on tool faceplate)

0-2.0 2.1-3.4 3.5-5.0 5.1-7.0 7.1-12.0 12.1-16.0

Cord Length	Wire Size (A.W.G.)					
	0-2.0	2.1-3.4	3.5-5.0	5.1-7.0	7.1-12.0	12.1-16.0
25'	16	16	16	16	14	14
50'	16	16	16	14	14	12
100'	16	16	14	12	10	—

**Used on 12 gauge - 20 amp circuit.

NOTE: AWG = American Wire Gauge



WARNING:

Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with a power tool. Failure to do so can result in serious personal injury.



WARNING:

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

FEATURES

PRODUCT SPECIFICATIONS

Maximum Cutter Diameter1-1/8 in. (29 mm)
Collet1/4 in. (6.35 mm)
No Load Speed25,000/min.

Input 120 V, 60 Hz, AC only, 4.5 Amps
Net Weight3 lbs. (1.36 kg)
Cord Length10 ft. (3 m)

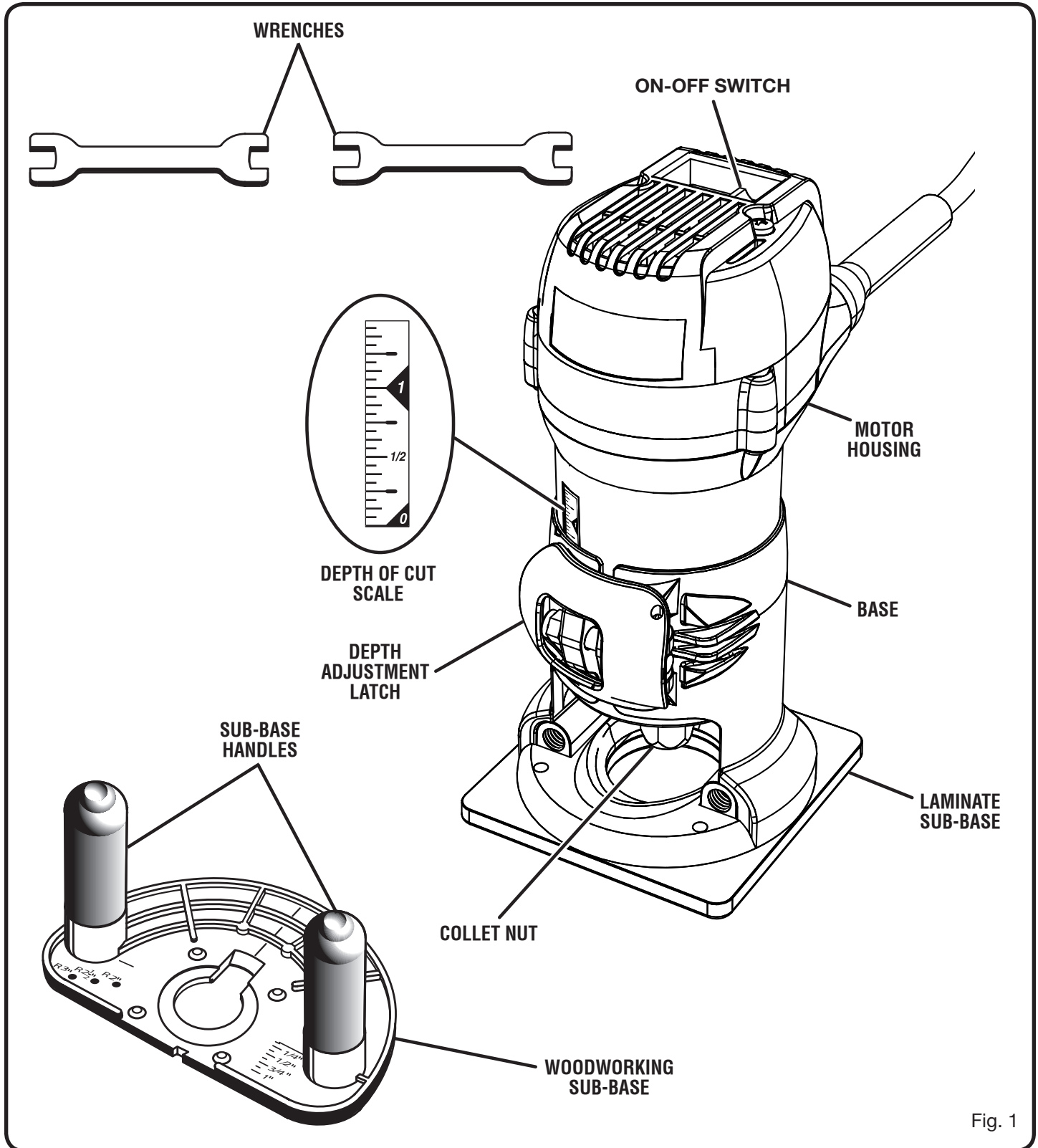


Fig. 1

FEATURES

KNOW YOUR LAMINATE TRIMMER

See Figure 1.

The safe use of this product requires an understanding of the information on the tool and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

SWITCH

The **ON/OFF** switch is located on top of the motor housing.

HEAVY DUTY MOTOR

The trimmer has a powerful 4.5 amp motor with sufficient power to handle many trimming jobs. The motor also has replaceable brushes for ease of servicing.

DEPTH OF CUT SCALE

The trimmer has an adjustable depth of cut scale.

LAMINATE SUB-BASE

The sub-base gives the operator greater visibility of the workpiece.

WOODWORKING SUB-BASE

The woodworking sub-base is used to rout circular and parallel grooves. It allows the operator to grasp the trimmer with both hands

ASSEMBLY

UNPACKING

This product requires assembly.

- Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1-800-525-2579 for assistance.

PACKING LIST

Laminate Trimmer with Laminate Sub-base

Woodworking Sub-base

Sub-base Handles (2)

Ball Bearing Flush Trim Bit

Carrying Case

Wrenches

Operator's Manual



WARNING:

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



WARNING:

Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.



WARNING:

Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

ASSEMBLY

INSTALLING/REMOVING CUTTERS

See Figure 2.

- Unplug the trimmer.
- Place the trimmer upside down on a workbench to gain easy access to the spindle and collet nut.
- Place the small end of one of the wrenches provided on the spindle flats. This will hold the spindle stationary.
- Place the larger end of the other wrench provided onto the collet nut. Rotate the wrench counterclockwise to loosen the collet nut as shown in figure 2.

WARNING:

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

- If installing the cutter for the first time, it can be installed once the collet nut is loose. If changing cutters, the cutter will easily slip from the collet after loosening the collet nut.

NOTE: The tip of the cutter has a protective wax coating that must be removed before first-time use. Simply peel off the wax coating and be sure that all traces of wax are removed before using the trimmer.

- The collet is machined to precision tolerances to fit cutters with 1/4 in. (6.4 mm) diameter shanks.
- With the trimmer still upside down on a workbench, insert the shank of the cutter into the collet. The shank of the cutter should be close to but not touching the bottom of the collet. This allows for expansion when the cutter gets hot. A clearance of 1/16 in. is adequate.
- Tighten the collet nut securely by turning clockwise with the wrench provided as shown in figure 2.

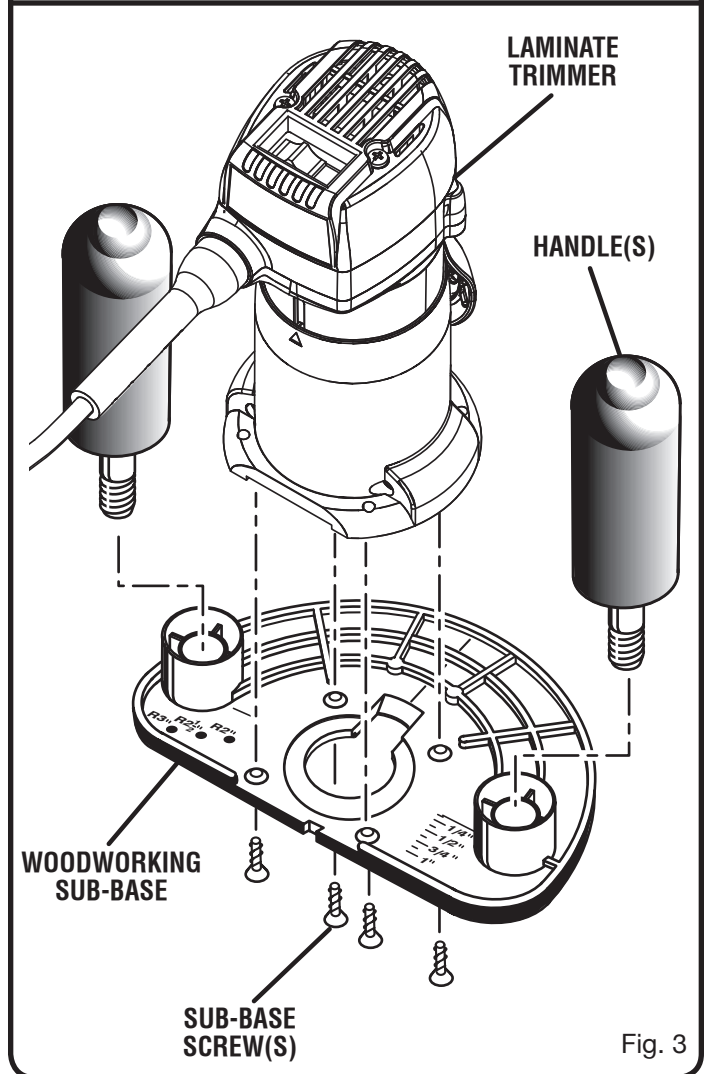
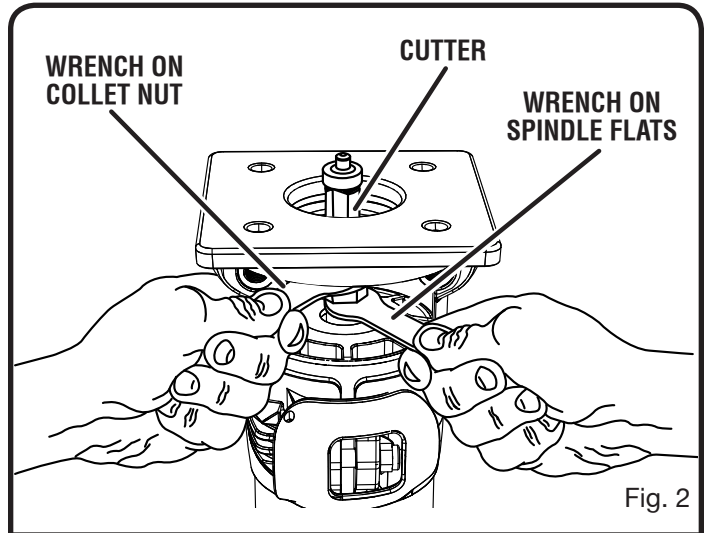
WARNING:

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

TO ATTACH THE WOODWORKING SUB-BASE AND HANDLES

See Figure 3.

- Unplug the trimmer.
- Turn the trimmer upside down to remove the four sub-base screws and laminate sub-base.
- Attach the woodworking sub-base using the same four screws.
- Tighten the screws securely. Do not overtighten.



- Turn the trimmer upright and thread the handles provided into the threaded holes in the woodworking sub-base.
- Tighten the handles securely. Check often to assure the handles remain securely tightened.

OPERATION

WARNING:

Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

WARNING:

Always wear safety goggles or safety glasses with side shields when operating power tools. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

WARNING:

Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

APPLICATIONS

You may use this tool for the purposes listed below:

- Smooth, professional trimming of laminates
- Cabinet making, trimming counter tops and finishing work
- Trimming wood and plastics

TURNING ON/OFF THE TRIMMER

See Figure 4.

To turn the trimmer **ON (I)**, slide the switch on top of the trimmer to the **ON (I)** position. Return the switch to the **OFF (O)** position when finished.

HOW TO OPERATE THE TRIMMER

See Figure 5.

Before starting the trimmer, unplug it and make sure the cutter is securely tightened in the collet and that the depth of cut is properly set. Never start the trimmer while the cutter is in contact with the workpiece.

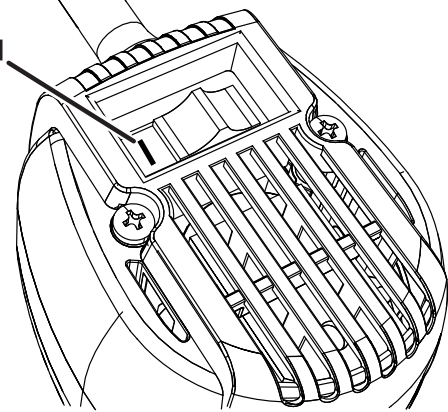
After completing a cut, pull the cutter slightly away from the cut surface. Turn the trimmer off and wait for the rotating cutter to completely stop before removing the base from the work surface.

When cutting, fit the base of the trimmer over the work surface and firmly hold the body of the trimmer with your hand. Make sure the trimmer is running at full speed before contacting the workpiece.

WARNING:

Avoid hand positions that may expose fingers to cutter through open areas of trimmer base. Fingers entering the opening in the trimmer base can be seriously cut or burned.

ON



OFF

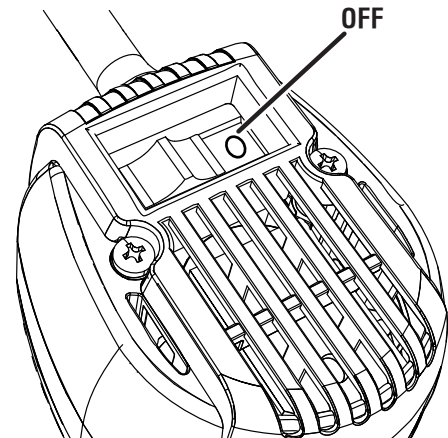


Fig. 4

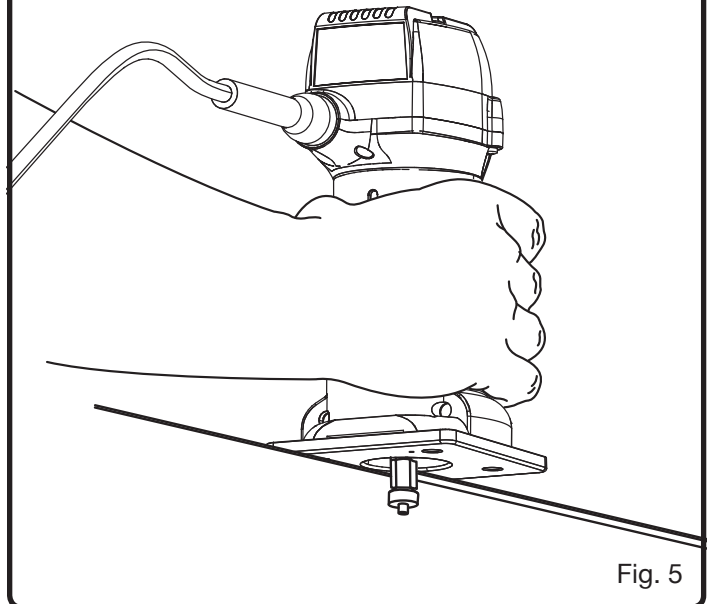


Fig. 5

WARNING:

Never install a cutter larger than 1-1/8 in. in this trimmer. The use of larger bits can result in loss of control and possible serious personal injury.

OPERATION

DIRECTION OF FEED AND THRUST

See Figures 6 and 7.

The trimmer motor and cutter revolve in a clockwise direction. This gives the tool a slight tendency to twist in your hands in a counterclockwise direction, especially when the motor starts.

Feed the trimmer into the workpiece from left to right. When fed from left to right, the rotation of the cutter pulls the trimmer against the workpiece. If fed in the opposite direction, the rotation forces of the spinning cutter will tend to throw the trimmer away from the workpiece, causing kickback. This could result in loss of control of the trimmer.

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

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

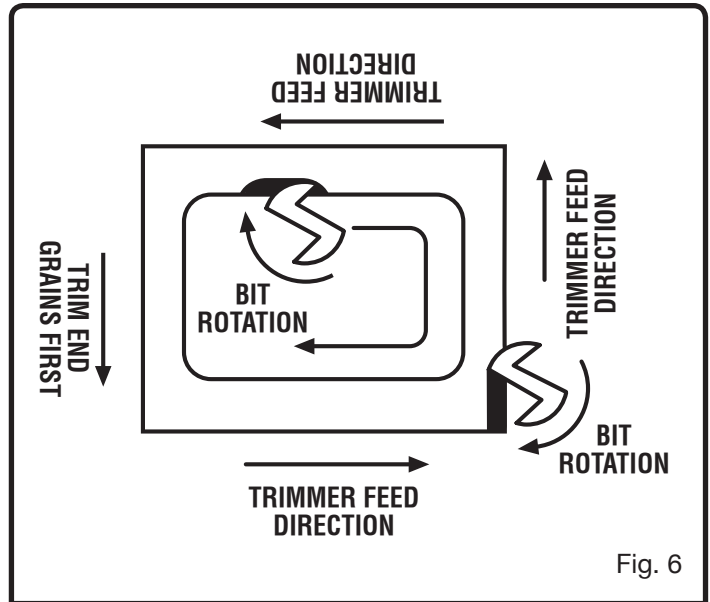


Fig. 6

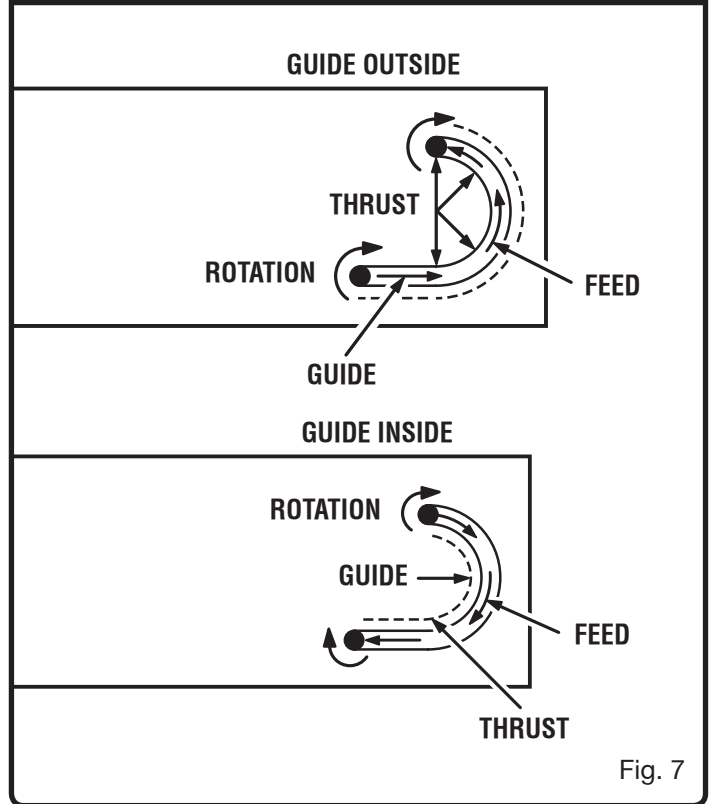


Fig. 7

OPERATION

PROPER RATE OF FEED

Professional trimming and edge shaping depend upon careful set-up and selecting the proper rate of feed.

The proper rate of feed is dependent upon:

- the hardness and moisture content of the workpiece
- the depth of cut
- the cutting diameter of the cutter.

When cutting shallow grooves in soft woods such as pine, a faster rate of feed can be used. When making cuts in hardwoods such as oak, a slower rate of feed will be required.

Several factors will help you select the proper rate of feed.

- Choose a rate that does not slow down the trimmer motor.
- Choose the rate at which the cutter advances firmly and surely to produce a continuous spiral of uniform chips or a smooth trim edge on laminate.
- Listen to the sound of the trimmer motor. A high-pitched sound means you are feeding too slowly. A strained, lower-pitched sound signals force-feeding.
- Check the progress of each cut. Too-slow feeding can cause the trimmer to take off in a wrong direction from the intended line of cut. Force-feeding increases the strain of holding the tool and results in loss of speed.
- Notice the chips being produced as you cut. If the trimmer is fed too slowly, it will scorch or burn the wood. If the trimmer is fed too fast, it will take large chips out of the wood and leave gouge marks.

Always test a cut on a scrap piece of the workpiece wood or laminate before you begin. Always grasp and hold the trimmer firmly with both hands when trimming.

If you are making a small-diameter, shallow groove in soft, dry wood, the proper feed rate may be determined by the speed at which you can travel the trimmer along the guide line. If the cutter is a large one, the cut is deep or the workpiece is hard to cut, the proper feed may be a very slow one. A cross-grain cut may require a slower pace than an identical with-grain cut in the same workpiece.

There is no fixed rule. Proper rate of feed is learned through practice and use.

FORCE FEEDING

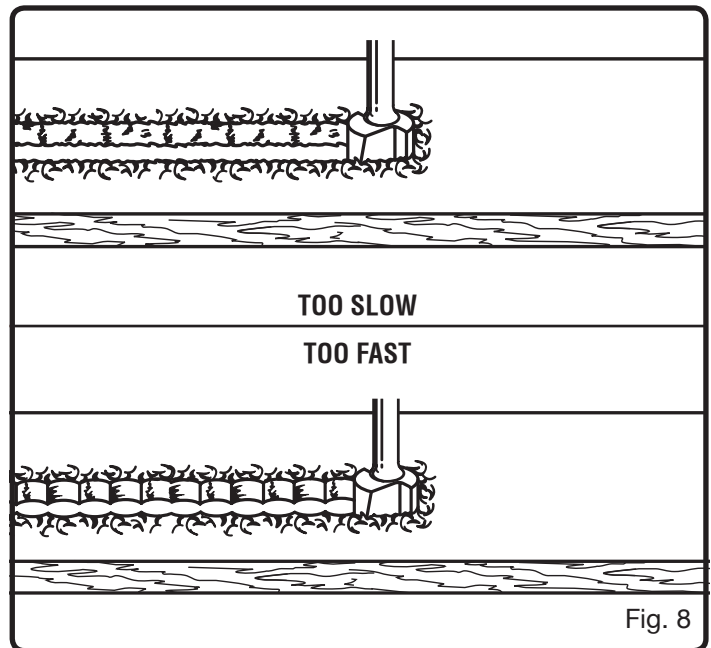
See Figure 8.

The trimmer is an extremely high-speed tool (25,000/min), and will make clean, smooth cuts if allowed to run freely without the overload of a forced feed. Three things that cause force feeding are cutter size, depth of cut, and workpiece characteristics. The larger the cutter or the deeper the cut, the more slowly the trimmer should be moved forward. If the wood is very hard, knotty, gummy or damp, the operation must be slowed still more.

Clean, smooth laminate trimming and edge shaping can be done only when the cutter is revolving at a relatively high

speed and is taking very small bites to produce tiny, cleanly-severed chips. If the trimmer is forced to move forward too fast, the speed of the cutter becomes slower than normal in relation to its forward movement. As a result, the cutter must take bigger bites as it revolves. Bigger bites mean bigger chips and a rougher finish. Bigger chips also require more power, which could result in overloading the motor.

Under extreme force-feeding conditions, the relative speed of the cutter can become so slow—and the bites it has to take so large—that chips will be partially knocked off rather than fully cut off. This will result in splintering and gouging of the workpiece.



TOO SLOW FEEDING

See Figure 8.

When the trimmer is advanced into the work too slowly, the revolving cutter does not dig into new wood fast enough to take a bite; instead, it scrapes away sawdust-like particles. Scraping produces heat, which can glaze, burn, or mar the cut, and can overheat the cutter. Dull cutters can also contribute to scraping and burning.

It is more difficult to control a trimmer when the cutter is scraping instead of cutting. With practically no load on the motor, the cutter will be revolving near top RPM, and will have a greater than normal tendency to bounce off the sides of the cut, especially if the wood has a pronounced grain with hard and soft areas. The cut that results may have rippled sides instead of straight.

OPERATION

DEPTH OF CUT

See Figure 9.

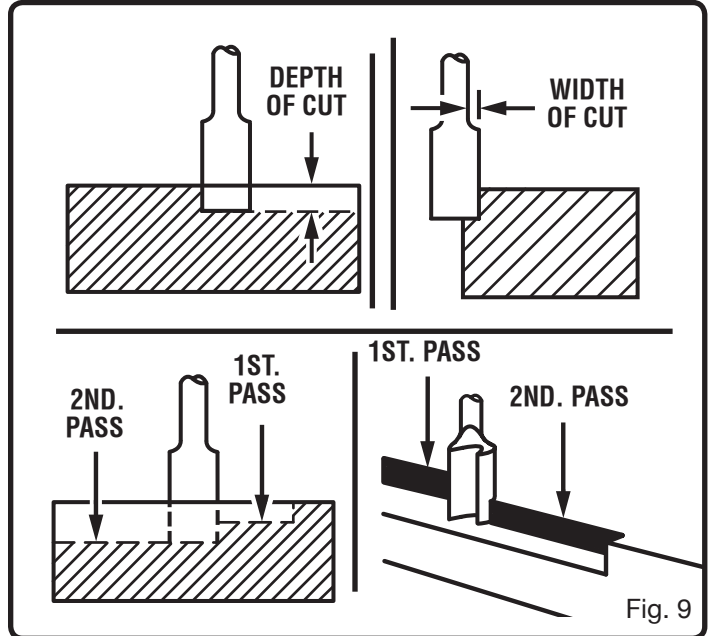
Depth of cut affects the rate of feed and the quality of a cut. Using the proper depth of cut can lessen the possibility of damage to the trimmer motor and cutter.

A deeper cut requires a slower feed than a shallow one. Making a cut that is too deep will slow the feed so that the cutter is scraping, rather than cutting, and is not recommended.

A too-deep cut can cause smaller cutters to be broken off. Cutters that are 1/16 in. (1.6 mm) in diameter are easily broken off when subjected to too much side thrust. A larger cutter is not as likely to break, but attempting a cut that is too deep may result in a rough cut, and may make it difficult to guide and control the cutter as desired.

It is recommended that you do not exceed 1/8 in. (3.2 mm) depth of cut in a single pass, regardless of the cutter size or the softness or condition of the workpiece. This will result in a higher quality cut.

To make deeper cuts, it is necessary to make as many successive passes as required, lowering the cutter 1/8 in (3.2 mm) for each new pass. To save time, perform all the cutting necessary at one depth setting, then lower the cutter for the next pass. This will assure uniform depth when the final pass is completed.



WARNING:

If the desired depth of cut is greater than can be safely cut in one pass, make cuts in two or more passes. Do not remove more than 1/8 in. in a single pass. Excessive depth of cut can result in loss of control and the possibility of serious personal injury.

OPERATION

TO SET DEPTH OF CUT

See Figure 10.

- Unplug the trimmer.
- Open the depth adjustment latch as indicated by the arrow in figure 10.
- Slide the motor housing section of the trimmer upward until the tip of the cutter reaches the work surface. The depth of cut is zero at this point.
- Adjust the position of the trimmer to obtain the desired depth of cut by moving the motor housing section up or down, as shown by the up/down arrow in figure 10. The distance the cutter moves can be read on the depth of cut scale. Each mark on the scale indicates a 1/16 in. (1.6 mm) change in depth setting. Indicator points are located on the base.
- Completely close the depth adjustment latch.

⚠ WARNING:

Avoid open area of trimmer base. Serious personal injury will result from contact with a rotating cutter.

NOTE: When adjusting the base, note the groove that serves as a stop to prevent the motor housing from sliding directly off and separating from the base.

REMOVING THE BASE

See Figure 11.

- Unplug the trimmer.
- Open the depth adjustment latch.
- Holding the trimmer by the motor housing, slide the base downward and over. Continue to slide the base downward to remove it.

NOTE: Replace the base before using the trimmer. Do not attempt to operate the trimmer without the base installed.

⚠ WARNING:

Always use the laminate sub-base for laminate trimming. Always use the woodworking sub-base for trim routing operations. Use of the trimmer without a sub-base or using the incorrect base can result in serious personal injury.

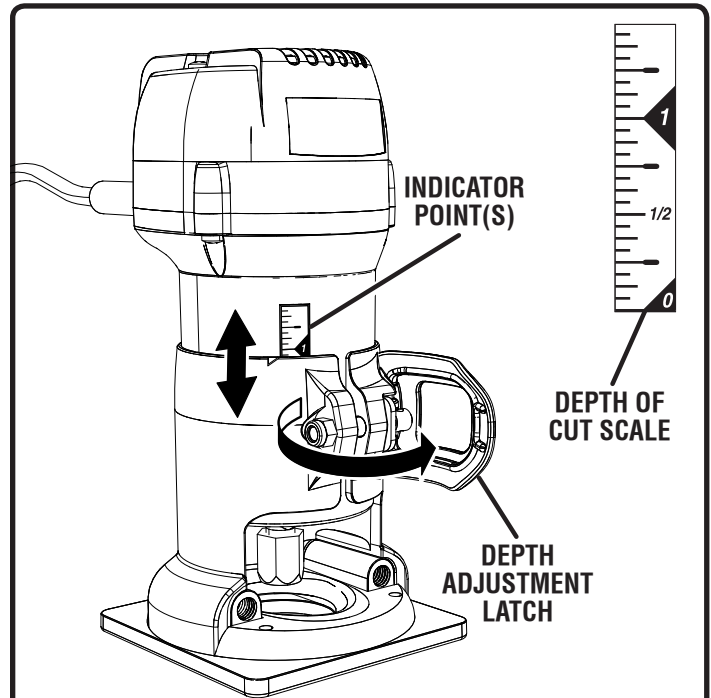


Fig. 10

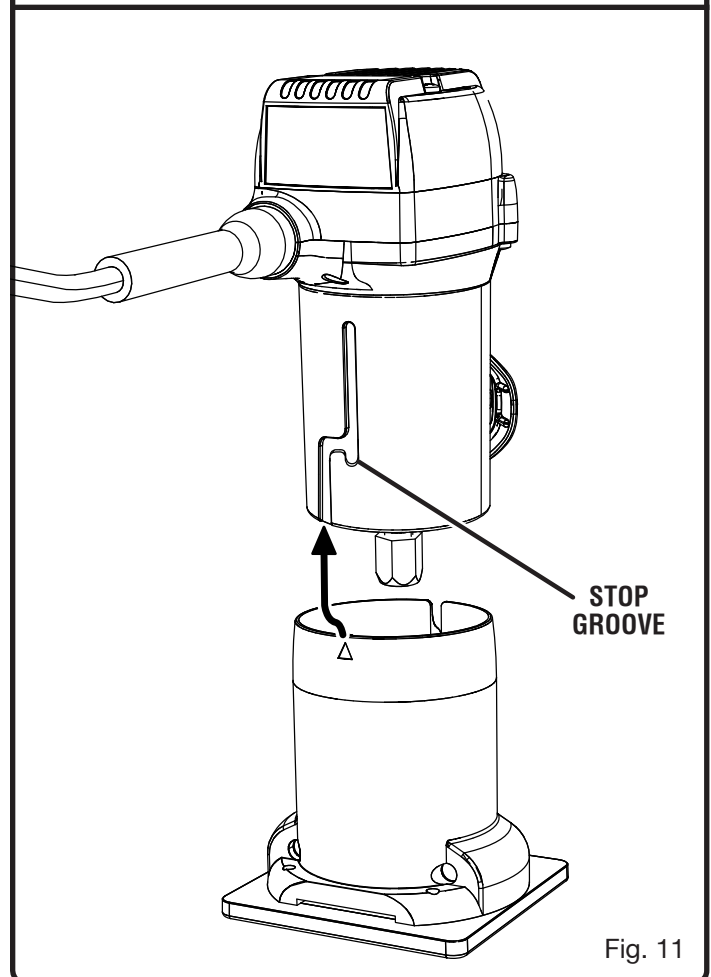


Fig. 11

OPERATION

USING THE WOODWORKING SUB-BASE WITH HANDLES

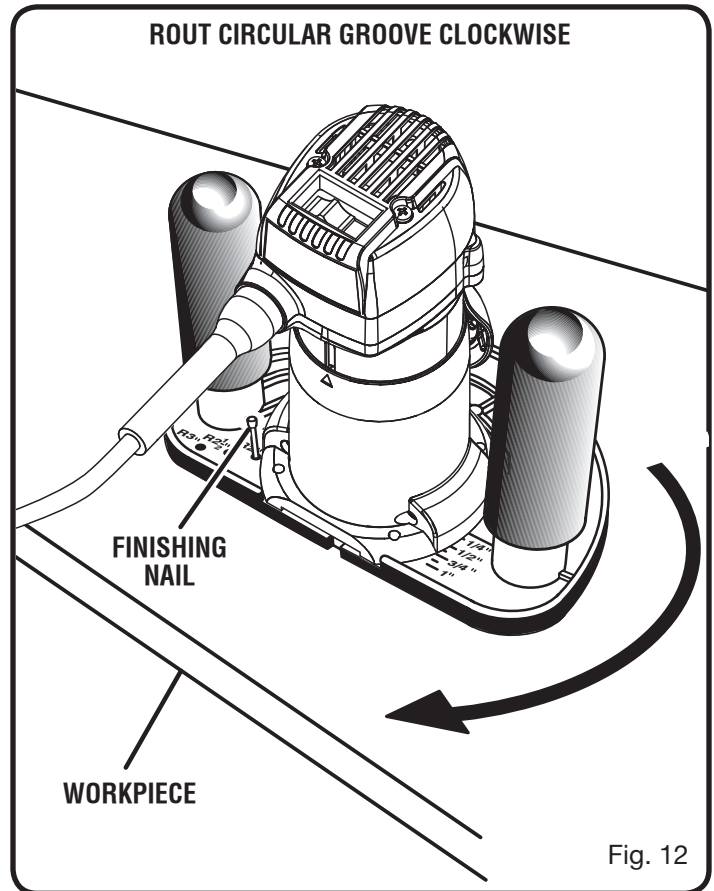
The woodworking sub-base with handles is convenient when routing 4 in. (101.6 mm), 5 in. (127 mm), or 6 in. (152.4 mm) circular grooves. It can also be used when routing grooves parallel to the edge of the workpiece.

The handles allow you to grasp and hold the trimmer with two hands, similar to grasping and holding a router.

ROUTING GROOVES IN A CIRCLE

See Figure 12.

- There are three holes marked R2", R2-1/2", and R3" on the sub-base. Each number represents a radius and may be used when cutting circular grooves that are 4 in. (101.6 mm), 5 in. (127 mm) or 6 in. (152.4 mm) in diameter.
- Select the radius for the desired circle, place a finishing nail through the hole and securely tack it into the workpiece. This will create a pivot axis for that size radius.
- Rout a circular groove in a clockwise direction only. See the arrow in figure 12.



OPERATION

ROUTING GROOVES PARALLEL TO AN EDGE

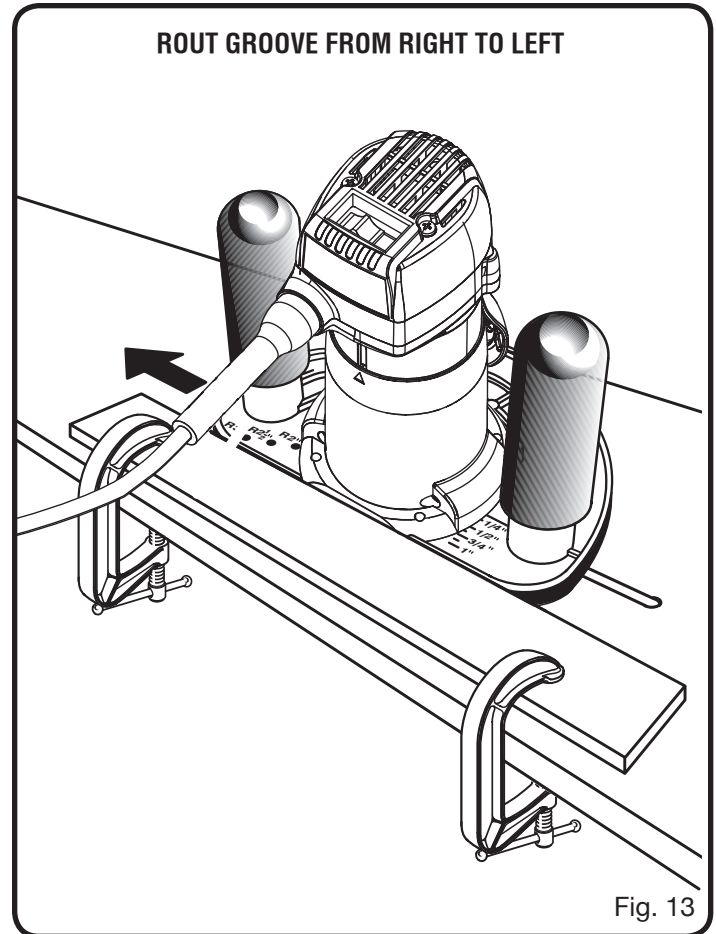
See Figure 13.

You can use the scale provided on the woodworking sub-base to cut a straight parallel line up to 1 in. (25.4 mm) from the edge of the workpiece.

- The intersection of the horizontal and vertical lines at the center of the woodworking sub-base indicates the center of the cutter. This is also the center of groove being cut.
- For grooves more than 1 in. (25.4 mm) from the edge of workpiece, align the center of desired groove on the workpiece with the centerline on the woodworking sub-base. Then measure from the centerline on the woodworking sub-base to the guiding portion of the straight guide. Tighten the knob on the straight guide securely.
- Using “C” clamps and a board to act as the straight edge, place the cutter at the desired position on the workpiece and make the cut from right to left as shown by the arrow in figure 13.

NOTE: The board being used as a straight edge must be 1/4 in. (6.4 mm) thick or less to prevent contact with the trimmer base. It must also be at least as long as the workpiece in order to be a guide.

- The thrust is from the trimmer against the straight edge.
- Do not make a cut that is too heavy in one pass. If a deep cut is required, make successive passes at increasing depths with each new pass until you reach the desired groove depth.



MAINTENANCE

WARNING:

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

WARNING:

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

GENERAL MAINTENANCE

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

WARNING:

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

Electric tools used on fiberglass material, wallboard, spackling compounds, or plaster are subject to accelerated wear and possible premature failure because the fiberglass chips and grindings are highly abrasive to bearings, brushes, commutators, etc. Consequently, we do not recommend using this tool for extended work on these types of materials. However, if you do work with any of these materials, it is extremely important to clean the tool using compressed air.

LUBRICATION

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

ADJUSTING TENSION ON THE DEPTH ADJUSTMENT LATCH

With use, the depth adjustment latch may loosen. Periodically check the latch and adjust it when necessary.

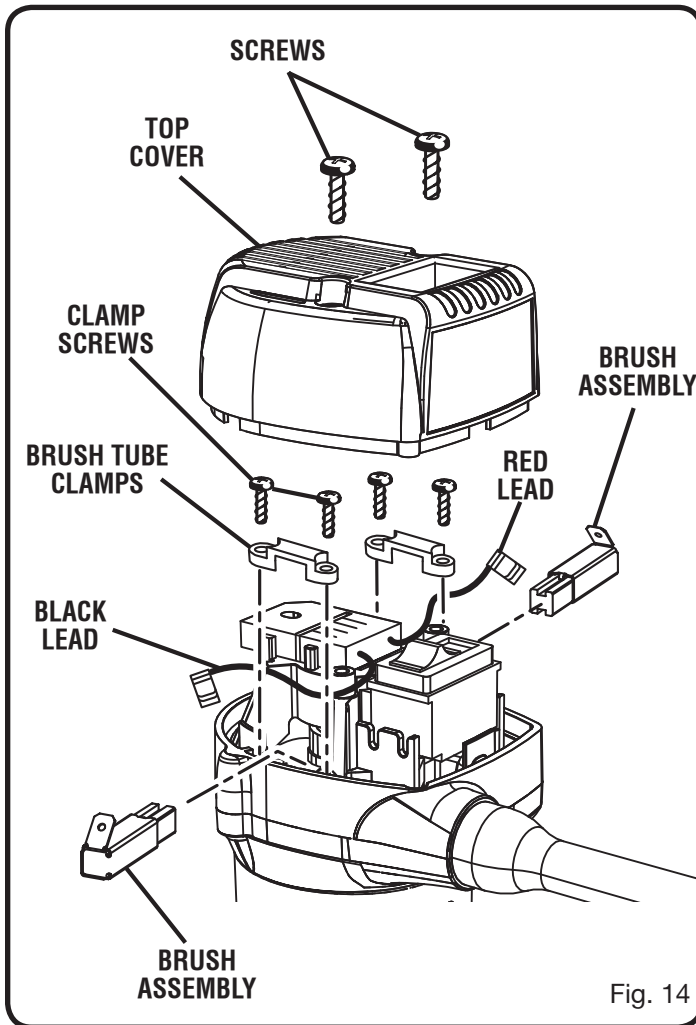
- Unplug the trimmer
- Open the depth adjustment latch.
- Using a small adjusting wrench, tighten the hex nut by turning it clockwise. Do not overtighten.
- Close the latch and assure the latch is securely tightened by checking the sub-base. It should not move.

MAINTENANCE

BRUSH REPLACEMENT

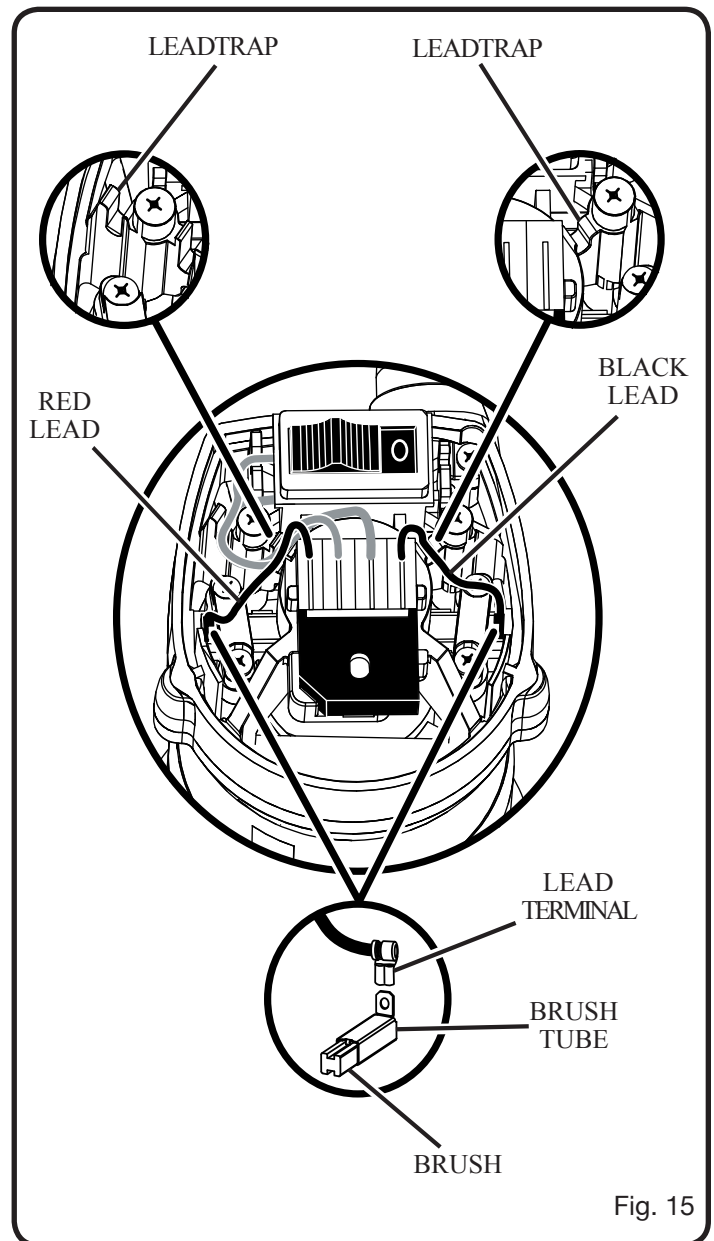
See Figures 14 - 15.

- Unplug the trimmer.
- Remove screws from the top cover of the trimmer.
- Remove the top cover.
- Remove the clamp screws.
- Remove the brush tube clamps.
- Disconnect the red and black lead terminals from the brush tubes.



- Remove the brush assemblies.
- Check for wear. Replace both brush assemblies when either has less than 1/4 in. length of carbon remaining. Do not replace one side without replacing the other.
- Make sure the wire terminals are secured to the brush tubes prior to reassembly.
- Reassemble using new brush assemblies. Make sure the curvature of the brush matches the curvature of the motor and that the brush moves freely in the brush tube.

- Replace the brush assemblies.
- Reconnect the red and black lead terminals to the brush tubes.
- Ensure that the wires are placed securely in the lead traps to prevent loose wires.
- Replace the brush tube clamps and clamp screws.
- Replace the top cover.
- Replace the screws on the top cover of the trimmer.
- Tighten all screws securely. **Do not** overtighten.





OPERATOR'S MANUAL

LAMINATE TRIMMER

DOUBLE INSULATED

TR45

- **SERVICE**

Now that you have purchased your tool, should a need ever exist for repair parts or service, simply contact your nearest Authorized Service Center. Be sure to provide all pertinent facts when you call or visit. Please call 1-800-525-2579 for your nearest Authorized Service Center. You can also check our web site at www.ryobitools.com for a complete list of Authorized Service Centers.

- **MODEL NO. AND SERIAL NO.**

The model number of this tool will be found on a plate attached to the motor housing. Please record the model number and serial number in the space provided below.

- **HOW TO ORDER REPAIR PARTS**

When ordering repair parts, always give the following information:

- MODEL NUMBER TR45
- SERIAL NUMBER _____

Ryobi® is a registered trademark of Ryobi Limited used under license.

ONE WORLD TECHNOLOGIES, INC.

1428 Pearman Dairy Road, Anderson, SC 29625

Phone 1-800-525-2579

www.ryobitools.com