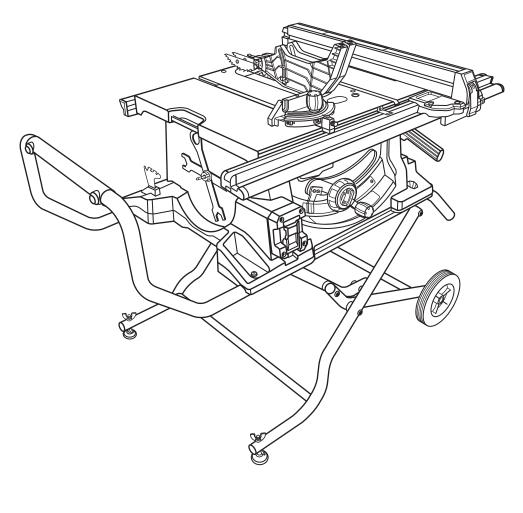


OPERATOR'S MANUAL

10 in. TABLE SAW R4510 / R45101



Your table saw has been engineered and manufactured to our high standards 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 RIDGID® product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

TABLE OF CONTENTS

■ Introduction	2
■ General Safety Rules	3-4
Specific Safety Rules	4-5
■ Symbols	
■ Electrical	
■ Glossary of Terms	8
■ Features	
■ Tools Needed	13
Loose Parts	14-22
■ Assembly	15-23
■ Operation	23-37
■ Adjustments	38-42
■ Maintenance	
■ Accessories	
■ Troubleshooting	45-46
■ Warranty	
Parts Ordering/Service	Back Page

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.

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.

READ ALL INSTRUCTIONS

READ ALL INSTRUCTIONS

- KNOW YOUR POWER TOOL. Read the operator's manual carefully. Learn the saw's applications and limitations as well as the specific potential hazards related to this tool.
- GUARD AGAINST ELECTRICAL SHOCK BY PREVENTING BODY CONTACT WITH GROUNDED SURFACES. For example, pipes, radiators, ranges, refrigerator enclosures.
- **KEEP GUARDS IN PLACE** and in good working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. **DO NOT** leave tools or pieces of wood on the saw while it is in operation.
- **DO NOT USE IN DANGEROUS ENVIRONMENTS.** Do not use power tools in damp or wet locations or expose to rain. Keep the work area well lit.
- **KEEP CHILDREN AND VISITORS AWAY.** All visitors should wear safety glasses and be kept a safe distance from work area. Do not let visitors contact tool or extension cord while operating.
- MAKE WORKSHOP CHILDPROOF with padlocks and master switches, or by removing starter keys.
- DON'T FORCE TOOL. It will do the job better and safer at the feed rate for which it was designed.
- **USE RIGHT TOOL.** Don't force the tool or attachment to do a job it was not designed for. Don't use it for a purpose not intended.
- USE THE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. Use only a cord heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. A wire gauge size (A.W.G.) of at least 14 is recommended for an extension cord 25 feet or less in length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- DRESS PROPERLY. Do not wear loose clothing, gloves, neckties, or jewelry. They can get caught and draw you into moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Also wear protective hair covering to contain long hair.
- ALWAYS WEAR SAFETY GLASSES WITH SIDE SHIELDS. Everyday eyeglasses have only impactresistant lenses, they are NOT safety glasses.

- **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories.
- **DISCONNECT TOOLS.** When not in use, before servicing, or when changing attachments, blades, bits, cutters, etc., all tools should be disconnected.
- **AVOID ACCIDENTAL STARTING.** Be sure switch is off when plugging in any tool.
- **USE RECOMMENDED ACCESSORIES.** Consult the operator's manual for recommended accessories. The use of improper accessories may risk injury.
- **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- 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 must be properly repaired or replaced by an authorized service center to avoid risk of personal injury.
- **USE THE RIGHT DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of blade or cutter only.
- NEVER LEAVE TOOL RUNNING UNATTENDED. TURN THE POWER OFF. Don't leave tool until it comes to a complete stop.
- **PROTECT YOUR LUNGS.** Wear a face or dust mask if the cutting operation is dusty.
- **PROTECT YOUR HEARING.** Wear hearing protection during extended periods of operation.
- **DO NOT ABUSE CORD.** Never yank cord to disconnect from receptacle. Keep cord away from heat, oil, and sharp edges.
- 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.
- KEEP BLADES CLEAN, SHARP, AND WITH SUFFICIENT SET. Sharp blades minimize stalling and kickback.
- **KEEP HANDS AWAY FROM CUTTING AREA.** Keep hands away from blades. Do not reach underneath work or around or over the blade while blade is rotating. Do not attempt to remove cut material when blade is moving.
- BLADE COASTS AFTER BEING TURNED OFF.
- NEVER USE IN AN EXPLOSIVE ATMOSPHERE.

 Normal sparking of the motor could ignite fumes.

GENERAL SAFETY RULES

- INSPECT TOOL CORDS PERIODICALLY. If damaged, have repaired by a qualified service technician at an authorized service facility. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal. Repair or replace a damaged or worn cord immediately. Stay constantly aware of cord location and keep it well away from the rotating blade.
- INSPECT EXTENSION CORDS PERIODICALLY and replace if damaged.
- **GROUND ALL TOOLS.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle.
- CHECK WITH A QUALIFIED ELECTRICIAN or service personnel if the grounding instructions are not completely understood or if in doubt as to whether the tool is properly grounded.
- USE ONLY CORRECT ELECTRICAL DEVICES: 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.
- **DO NOT MODIFY** the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.
- KEEP TOOL 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 solvents to clean tool.

- STAY ALERT AND EXERCISE CONTROL. Watch what you are doing and use common sense. Do not operate tool when you are tired. Do not rush.
- DO NOT USE TOOL IF SWITCH DOES NOT TURN IT ON AND OFF. Have defective switches replaced by an authorized service center.
- USE ONLY CORRECT BLADES. Do not use blades with incorrect size holes. Never use blade washers or blade bolts that are defective or incorrect. The maximum blade capacity of your saw is 10 in. (254 mm).
- BEFORE MAKING A CUT, BE SURE ALL ADJUSTMENTS ARE SECURE.
- BE SURE BLADE PATH IS FREE OF NAILS. Inspect for and remove all nails from lumber before cutting.
- **NEVER TOUCH BLADE** or other moving parts during use.
- NEVER START A TOOL WHEN ANY ROTATING COMPONENTISIN CONTACT WITH THE WORKPIECE.
- DO NOT OPERATE A TOOL WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY MEDICATION.
- WHEN SERVICING use only identical replacement parts.
 Use of any other parts may create a hazard or cause product damage.
- USE ONLY RECOMMENDED ACCESSORIES listed in this manual or addendums. Use of accessories that are not listed may cause the risk of personal injury. Instructions for safe use of accessories are included with the accessory.
- **DOUBLE CHECK ALL SETUPS.** Make sure blade is tight and not making contact with saw or workpiece before connecting to power supply.

SPECIFIC SAFETY RULES

- FIRMLY BOLT THE SAW TO A WORK BENCH OR LEG STAND at approximately hip height.
- NEVER OPERATE THE SAW ON THE FLOOR.
- GUARD AGAINST KICKBACK. Kickback occurs when the blade stalls rapidly and workpiece is driven back towards the operator. It can pull your hand into the blade resulting in serious personal injury. Stay out of blade path and turn switch off immediately if blade binds or stalls.
- **USE RIP FENCE.** Always use a fence or straight edge guide when ripping.
- **SUPPORT LARGE PANELS.** To minimize risk of blade pinching and kickback, always support large panels.
- REMOVE ALL FENCES AND AUXILIARY TABLES before transporting saw. Failure to do so can result in an accident causing possible serious personal injury.
- ALWAYS USE BLADE GUARD, RIVING KNIFE, AND ANTI-KICKBACK PAWLS on all "through-sawing" operations. Through-sawing operations are those in which the blade cuts completely through the workpiece as in

- ripping or cross cutting. Keep the blade guard down, the anti-kickback pawls down, and the riving knife in place.
- ALWAYS SECURE WORK firmly against the rip fence or miter gauge. NEVER use the rip fence during the same operation as the miter gauge.
- WHEN MAKING NON-THROUGH RIP CUTS, always use a push stick, push block, and/or featherboard so your hands do not come within 3 inches of the saw blade.
- WHEN RIPPING NARROW STOCK, always use a push stick, push block, or featherboard.
- **NEVER** perform any operation "freehand" which means using only your hands to support or guide the workpiece. Always use either the rip fence or miter gauge to position and guide the work.
- **NEVER** stand or have any part of your body in line with the path of the saw blade.
- **NEVER** reach behind, over, or within three inches of the blade or cutter with either hand for any reason.

SPECIFIC SAFETY RULES

- MOVE THE RIP FENCE out of the way when cross cutting.
- DO NOT USE THE MITER GAUGE AND RIP FENCE during the same operation.
- **NEVER** use rip fence as cutoff gauge when cross cutting.
- **NEVER** attempt to free a stalled saw blade without first turning the saw OFF and disconnecting the saw from the power source.
- PROVIDE ADEQUATE SUPPORT to the rear and sides of the saw table for wide or long workpieces.
- AVOID KICKBACKS (work thrown back toward you) by:
 - a) Keeping blade sharp.
 - b) Keeping rip fence parallel to the saw blade.
 - c) Keeping riving knife, anti-kickback pawls, and blade guard in place and operating.
 - d) Not releasing the work before it is pushed all the way past the saw blade using a push stick.
 - e) Not ripping work that is twisted or warped or does not have a straight edge to guide along the fence.
- IF THE POWER SUPPLY CORD IS DAMAGED, it must be replaced only by the manufacturer or by an authorized service center to avoid risk.
- AVOID AWKWARD OPERATIONS AND HAND **POSITIONS** where a sudden slip could cause your hand to move into the cutting tool.
- USE ONLY RECOMMENDED ACCESSORIES listed in this manual or addendums. Use of accessories that are not listed may cause the risk of personal injury. Instructions for safe use of accessories are included with the accessory.

- MAKE SURE THE WORK AREA HAS AMPLE LIGHTING to see the work and that no obstructions will interfere with safe operation **BEFORE** performing any work using the table saw.
- ALWAYS TURN OFF SAW before disconnecting it, to avoid accidental starting when reconnecting to power supply.
- ONLY USE BLADES within the thickness range stamped on the riving knife.
- THIS TOOL should have the following markings:
 - a) Wear eye protection.
 - b) Use saw blade guard and riving knife for every operation for which it can be used, including all through sawing.
 - c) Keep hands out of the line of saw blade.
 - d) Use a push stick when required.
 - e) Pay particular attention to instructions on reducing risk of kickback.
 - Do not perform any operation freehand.
 - g) Never reach around or over the saw blade.
 - h) Never operate saw on floor or below waist height.
- NEVER CUT MORE THAN ONE PIECE OF MATERIAL AT A TIME.
- **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use to instruct other users. If you loan someone this tool, loan them these instructions also.

CALIFORNIA PROPOSITION 65



A WARNING:

This product and some dust created by power sanding, sawing, grinding, drilling, and other construction activities may contain chemicals, including lead, known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling.

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 exposure to these chemicals varies, depending on how often you do this type of work. To reduce your exposure, work in a well-ventilated area and with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

SYMBOLS

The following	The following signal words and meanings are intended to explain the levels of risk associated with this product. SYMBOL SIGNAL MEANING		
A	DANGER:	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.	
A	WARNING:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.	
A	CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.	
	NOTICE:	Without Safety Alert Symbol) Indicates important information not related to an injury hazard, such as a situation that may result in property damage.	

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
A	Safety Alert	Indicates a potential personal injury hazard.
(3)	Read 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 eye protection with side shields marked to comply with ANSI Z87.1.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
V	Volts	Voltage
А	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
min	Minutes	Time
\sim	Alternating Current	Type of current
n _o	No Load Speed	Rotational speed, at no load
	Class II Construction	Double-insulated construction
/min	Per Minute	Revolutions, strokes, surface speed, orbits, etc., per minute

ELECTRICAL

EXTENSION CORDS

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug. When using a power tool at a considerable distance from the power source, use an extension cord heavy enough to carry the current that the tool will draw. An undersized extension cord will cause a drop in line voltage, resulting in a loss of power and causing the motor to overheat. Use the chart provided below to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

**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.)						
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

When working with the tool outdoors, use an extension cord that is designed for outside use. This is indicated by the letters "W-A" or "W" on the cord's jacket.

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



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 product with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.

ELECTRICAL CONNECTION

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

SPEED AND WIRING

The no-load speed of this tool is approximately 4,400 rpm. This speed is not constant and decreases under a load or with lower voltage. For voltage, the wiring in a shop is as important as the motor's horsepower rating. A line intended only for lights cannot properly carry a power tool motor. Wire that is heavy enough for a short distance will be too light for a greater distance. A line that can support one power tool may not be able to support two or three tools.

GROUNDING INSTRUCTIONS

This product must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.



WARNING:

Improper installation of the grounding plug is able to result in a risk of electric shock. When repair or replacement of the cord is required, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Repair or replace a damaged or worn cord immediately.

This product is for use on a nominal 120 volt circuit and has a grounding plug similar to the plug illustrated in figure 1. Only connect the product to an outlet having the same configuration as the plug. Do not use an adapter with this product.

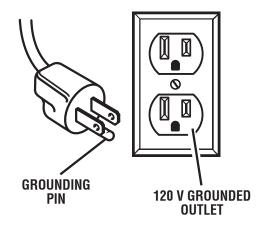


Fig. 1

GLOSSARY OF TERMS

Anti-Kickback Pawls (radial arm and table saws)

A device which, when properly installed and maintained, is designed to stop the workpiece from being kicked back toward the front of the saw during a ripping operation.

Arbor

The shaft on which a blade or cutting tool is mounted.

Bevel Cut

A cutting operation made with the blade at any angle other than 90° to the table surface.

Compound Cut

A cross cut made with both a miter and a bevel angle.

Cross Cut

A cutting or shaping operation made across the grain or the width of the workpiece.

Cutterhead (planers and jointer planers)

A rotating cutterhead with adjustable blades or knives. The blades or knives remove material from the workpiece.

Dado Cut

A non-through cut which produces a square-sided notch or trough in the workpiece (requires a special blade).

Featherboard

A device used to help control the workpiece by holding it securely against the table or fence during any ripping operation.

FPM or SPM

Feet per minute (or strokes per minute), used in reference to blade movement.

Freehand

Performing a cut without the workpiece being guided by a fence, miter gauge, or other aids.

Gum

A sticky, sap-based residue from wood products.

Hee

Alignment of the blade to the fence.

Kerf

The material removed by the blade in a through cut or the slot produced by the blade in a non-through or partial cut.

Kickback

A hazard that can occur when the blade binds or stalls, throwing the workpiece back toward operator.

Miter Cut

A cutting operation made with the workpiece at any angle to the blade other than 90°.

Non-Through Cuts

Any cutting operation where the blade does not extend completely through the thickness of the workpiece.

Pilot Hole (drill presses)

A small hole drilled in a workpiece that serves as a guide for drilling large holes accurately.

Push Blocks (for jointer planers)

Device used to feed the workpiece over the jointer planer cutterhead during any operation. This aid helps keep the operator's hands well away from the cutterhead.

Push Blocks (for table saws)

Device used to hold the workpiece during cutting operations. This aid helps keep the operator's hands well away from the blade.

Push Sticks (for table saws)

Device used to push the workpiece during cutting operations. A push stick should be used for narrow ripping operations. The aid helps keep the operator's hands well away from the blade.

Resaw

A cutting operation to reduce the thickness of the workpiece to make thinner pieces.

Resin

A sticky, sap-based substance that has hardened.

Revolutions Per Minute (RPM)

The number of turns completed by a spinning object in one minute.

Ripping or Rip Cut

A cutting operation along the length of the workpiece.

Riving Knife (table saws)

A metal piece, slightly thinner than the blade, which helps keep the kerf open and also helps to prevent kickback.

Saw Blade Path

The area over, under, behind, or in front of the blade. As it applies to the workpiece, that area which will be or has been cut by the blade.

Set

The distance that the tip of the saw blade tooth is bent (or set) outward from the face of the blade.

Snipe (planers)

Depression made at either end of a workpiece by cutter blades when the workpiece is not properly supported.

Through Sawing

Any cutting operation where the blade extends completely through the thickness of the workpiece.

Throw-Back

The throwing back of a workpiece usually caused by the workpiece being dropped into the blade or being placed inadvertently in contact with the blade.

Workpiece or Material

The item on which the operation is being done.

Worktable

Surface where the workpiece rests while performing a cutting, drilling, planing, or sanding operation.

FEATURES

PRODUCT SPECIFICATIONS

Blade Diameter10 in.	Cutting Depth at 45°2-1/2 in.
Blade Arbor5/8 in.	Rating120 V~, 15 Amps, 60 Hz
Cutting Depth at 90°	No Load Speed4,400 r/min. (RPM)

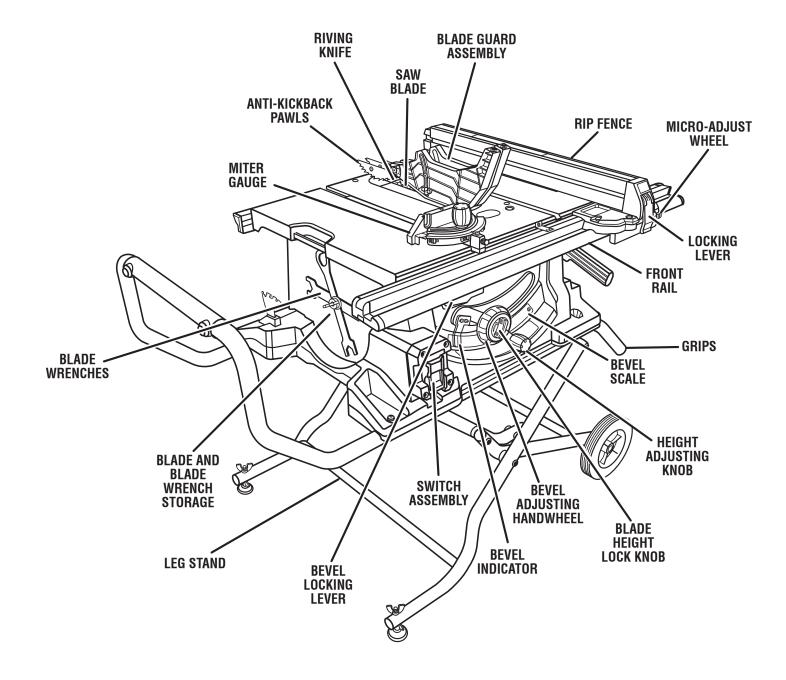


Fig. 3

FEATURES

KNOW YOUR TABLE SAW

See Figure 3.

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.

ANTI-KICKBACK PAWLS - Kickback is a hazard in which the workpiece is thrown back toward the operator. The teeth on the anti-kickback pawls point away from the workpiece. If the workpiece should be pulled back toward the operator, the teeth dig into the wood to help prevent or reduce the possibility of kickback.

BEVEL ADJUSTING HANDWHEEL - Located on the front of the cabinet, this handwheel is used to make the adjustment for bevel angles.

BEVEL LOCKING LEVER - This lever under the worktable surface on the front of the cabinet, locks the angle setting of the blade.

BEVEL SCALE - The easy-to-read scale on the front of the workstand shows the exact blade angle.

BLADE - For maximum performance, it is recommended that you use the 10 in. carbide tipped combination blade provided with your saw. The blade is raised and lowered with the height adjusting knob. Bevel angles are locked with the bevel locking lever. Additional blade styles of the same high quality are available for specific operations such as ripping. Your local dealer can provide you with complete information.



WARNING:

Do not use blades rated less than the speed of this tool. Failure to heed this warning could result in personal injury. **BLADE GUARD -** Always keep the guard down over the blade for through-sawing cuts.

BLADE HEIGHT LOCK KNOB - This knob, in the center of the bevel adjusting handwheel, locks the height of the blade.

HEIGHT ADJUSTING KNOB - Located on the front of the cabinet, this knob is used to lower and raise the blade for adjustments or blade replacement.

IND-I-CUT™ ALIGNMENT DISC - A plastic insert on which marks may be made to indicate the location of the cut on the workpiece.

LOCKING LEVER - The lever on the front of the rip fence releases the rip fence or locks it in place.

MITER GAUGE - This miter gauge aligns the wood for a cross cut. The easy-to-read indicator shows the exact angle for a miter cut, with positive stops at 0° and 45°.

MITER GAUGE GROOVES - The miter gauge rides in these grooves on either side of the blade.

RAILS - Front and rear rails provide support for the rip fence.

RIP FENCE - A sturdy metal fence guides the workpiece and is secured with the locking lever. Grooves run along the top and sides of the rip fence for use with optional clamps and accessories.

RIVING KNIFE - A removable metal piece of the blade guard assembly, slightly thinner than the saw blade, which helps keep the kerf open and prevent kickback. When in the through sawing, or "up" position, it is higher than the saw blade. When in the non-through sawing, or "down" position, it is below the saw blade teeth.

SCALE - Located on the front rail, the easy-to-read scale provides precise measurements for rip cuts.

SWITCH ASSEMBLY - This saw has an easy access power switch located below the front rail. To lock the switch in the **OFF** position, remove the yellow switch key from the switch. Place the key in a location that is inaccessible to children and others not qualified to use the tool.

FEATURES

OPERATING COMPONENTS

The upper portion of the blade projects up through the table and is surrounded by an insert called the throat plate. The height of the blade is set with a handwheel on the front of the cabinet. To accommodate wide panels, the saw table has rails on each side. Detailed instructions are provided in the Operation section of this manual for the basic cuts: cross cuts, miter cuts, bevel cuts, and compound cuts.

The rip fence is used to position work for lengthwise cuts. A scale on the front rail shows the distance between the rip fence and the blade.

It is very important to use the blade guard assembly for all through-sawing operations. The blade guard assembly includes: riving knife, anti-kickback pawls, and blade guard.

SWITCH ASSEMBLY

See Figure 4.

This saw is equipped with a switch assembly that has a built-in locking feature. This feature is intended to prevent unauthorized and possible hazardous use by children and others.

TO TURN YOUR SAW ON:

■ With the switch key inserted into the switch, lift the switch to turn ON (I).

TO TURN YOUR SAW OFF:

Press the switch down to turn OFF (O).

TO LOCK YOUR SAW:

- Press the switch down.
- Remove the switch key from the switch and store in a safe, secure location.



WARNING:

Always remove the switch key when the tool is not in use and keep it in a safe place. In the event of a power failure, turn the switch OFF (O) and remove the key. This action will prevent the tool from accidentally starting when power returns.

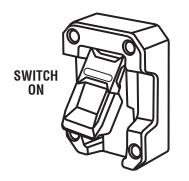
A WARNING:

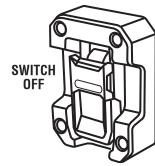
ALWAYS make sure your workpiece is not in contact with the blade before operating the switch to start the tool. Failure to heed this warning may cause the workpiece to be kicked back toward the operator and result in serious personal injury.

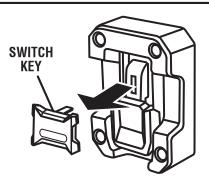


WARNING:

To reduce the risk of accidental starting, always make sure the switch is in the OFF (O) position before plugging tool into the power source.







SWITCH IN LOCKED POSITION

Fig. 4

TOOLS NEEDED

The following tools (not included or drawn to scale) are needed for assembly and adjustments:

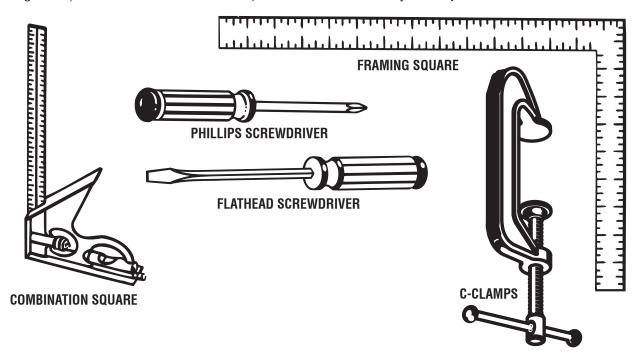


Fig. 5

LOOSE PARTS LIST

The following items are included with your table saw:

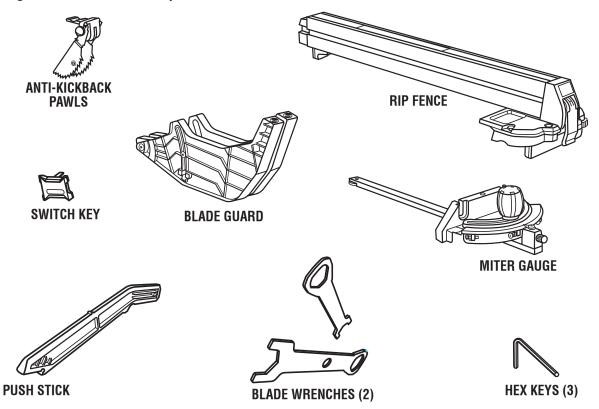
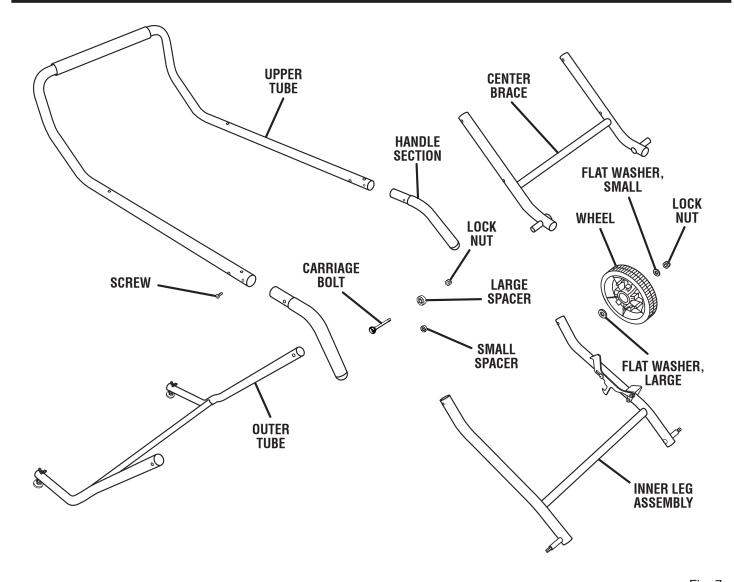


Fig. 6

LOOSE PARTS LIST



UNPACKING

This product requires assembly.

 Carefully lift the saw from the carton and place on a level work surface.

NOTE: This tool is heavy. To avoid back injury, keep your knees bent and lift with your legs, not your back, and get help when needed.



WARNING:

Do not use this product if any parts on the Loose Parts List are already assembled to your product when you unpack it. Parts on this list are not assembled to the product by the manufacturer and require customer installation. Use of a product that may have been improperly assembled could result in serious personal injury.

- 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.
- The saw is factory set for accurate cutting. After assembling it, check for accuracy. If shipping has influenced the settings, refer to specific procedures explained in this manual.
- If any parts are damaged or missing, please call 1-866-539-1710 for assistance.



WARNING:

If any parts are damaged or missing, do not operate this tool until the parts are replaced. Use of this product with damaged or missing parts could result in 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.



warning:

Do not lift the saw without help. Hold it close to your body. Keep your knees bent and lift with your legs, not your back. Ignoring these precautions can result in back injury.



warning:

Never stand directly in line with the blade or allow hands to come closer than 3 in. to the blade. Do not reach over or across the blade. Failure to heed this warning can result in serious personal injury.



WARNING:

To avoid serious personal injury, always make sure the table saw is securely mounted to a workbench or an approved leg stand. NEVER operate the saw on the floor.

MOUNTING HOLES

The table saw must be mounted to a firm supporting surface such as a workbench or leg stand. Four bolt holes have been provided in the saw's base for this purpose. Each of the four mounting holes should be bolted securely using 1/4 in. carriage bolts, washers, lock washers, and wing nuts. Bolts should be of sufficient length to accommodate the saw base. washers, lock washers, wing nuts, and the thickness of the workbench. Tighten all four bolts securely.

Carefully check the workbench after mounting to make sure that no movement can occur during use. If any tipping, sliding, or walking is noted, secure the workbench to the floor before operating.

ASSEMBLING THE LEG STAND

See Figure 8.

Many of the leg stand parts are movable. All hardware must be tightened securely but not so tight that the leg stand won't open and close. For easier assembly, match letter to letter and fingertighten all fasteners. Only tighten fasteners securely when you are sure the release lever locks over the stop pin.

- Align handle with holes in the end of the upper tube and insert. Secure in place using a screw. Repeat for other side.
- Place a carriage bolt through the center hole in the outer tubes then place a spacer on the bolt.
- Slide the bolt/spacer into the inner leg assembly (A and C) and secure in place using a lock nut. Do not overtighten. Repeat for the other side.
- Place the center brace on top of the inner leg assembly (curve side up) with the stop pin under the pedal assembly latch.

NOTE: The stop pins rest on top of inner leg assembly.

- Insert a carriage bolt through the top hole of the inner leg assembly then slide a spacer on the bolt. Repeat for the other side.
- Slide the center brace onto the bolt and secure in place using a lock nut. Repeat for the other side.
- With the curve handle turned downward, secure the upper tubes (D and F on the right side, and E and C on the left side) to the leg stand using carriage bolts, spacers, and lock nuts. The tube with the diverter valve attached should be placed on the left side of the leg stand.
- Remove the lock nut and two flat washers from the axles on each side of the leg stand.
- Slide the flat washer, wheel, and flat washer onto the axle through the hole in the center of the wheel. Secure in place using lock nut.
- Repeat with the second wheel.
- Before use, verify the release lever locks the leg stand securely. If the leg stand will not lock, do not use; contact an authorized service center for assistance.

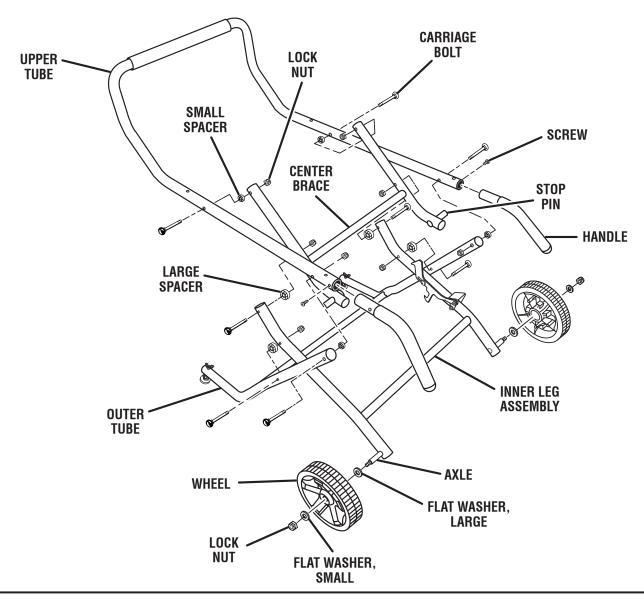


Fig. 8

MOUNTING THE LEG STAND ON THE TABLE **SAW BASE**

See Figure 9.



WARNING:

Do not lift the saw without help. The saw base weighs approximately 75 lbs. Hold it close to your body. Keep your knees bent and lift with your legs, not your back. Ignoring these precautions can result in back injury.

- Open leg stand as described on page 17.
- Place saw base on the leg stand. Align the holes in the table with the holes in the end braces.
- Insert a bolt through the hole in the table saw and into the hole in the stand.
- Add a lock washer, flat washer, ring terminal (from switch box), and a hex nut. Hand tighten. See Figure 9.
- For the three remaining holes, insert the bolts through the hole in the saw base and into the hole in the stand, then secure to the stand using a hex nut.
- Tighten all hardware with a wrench. You may find it helpful to use one wrench to hold the head of the bolt and one to tighten the hex nut.
- Move the leg set to desired location. Adjust the leveling foot with a wrench, then tighten the top hex nut.

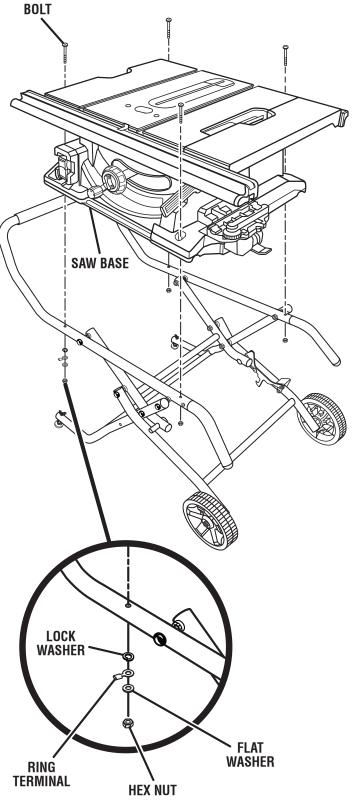


Fig. 9

TO OPEN THE LEG STAND

See Figures 10 - 12

- Grasp the grips on the saw table and stand it upright as shown below.
- Step on the release lever and pull the grips toward you at the same time.
- Once the leg stand is released from the release lever, ease the leg stand toward the floor by pushing the grips toward the floor.
- With your hands on the grips, push the leg stand towards the ground until the table saw is in an open position.

NOTE: The release lever will close over the center brace locking the leg stand in an open position.

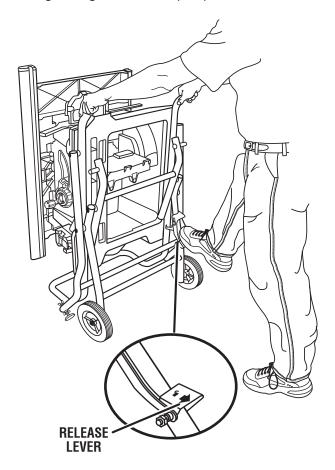


Fig. 10

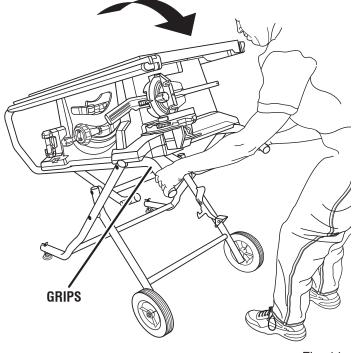


Fig. 11

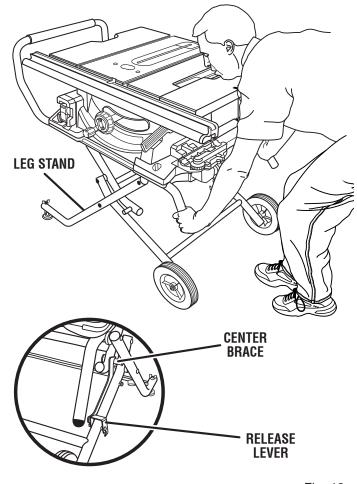


Fig. 12

TO SECURE/LEVEL THE SAW

See Figure 13.

With the leg stand open and the table saw resting on a flat, level surface, the saw should not move or rock from side to side.

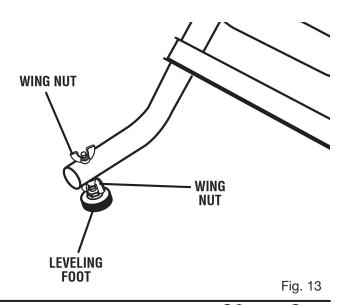
If the saw rocks from side to side, the leveling feet need adjusting until the leg stand is balanced.

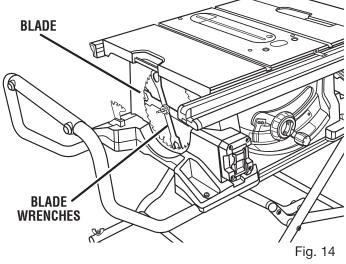
- Loosen both the top and bottom wing nuts.
- Lift the saw slightly so that you may turn the leveling foot until the leg stand no longer rocks.
 - Turning clockwise will lower the foot
 - Turning counterclockwise will raise the foot

TO STORE THE TABLE SAW ACCESSORIES

See Figures 14 - 15.

The table saw has two convenient storage areas (one on either side of the saw cabinet) specifically designed for the saw's accessories. These accessories must be securely stored prior to closing the leg stand and moving the saw.





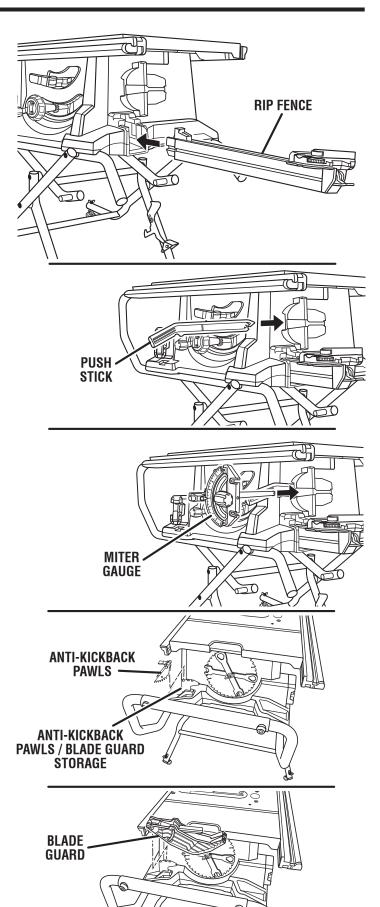


Fig. 15

TO CLOSE THE LEG STAND AND MOVE THE **SAW**

See Figures 16 - 19.

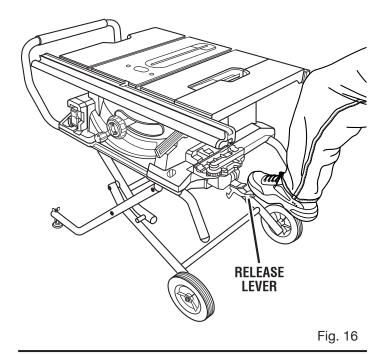
- Remove any workpieces from the tool.
- Remove and securely store any tools or accessories such as rip fence, miter gauge, clamps, blade guard, etc.
- Lower the saw blade.

To close the leg stand:

- At the same time, step on the release lever, grasp the grips, and lift the handles up and away from the body.
- Push the table saw until the release lever clicks and locks into place.

To move the leg stand:

- Holding the grips firmly, pull the handles toward you until the leg stand and saw are balanced on the wheels.
- Push the saw to the desired location then either open the leg stand for saw operation or store the saw in a dry environment.



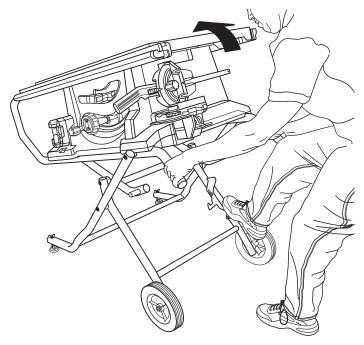
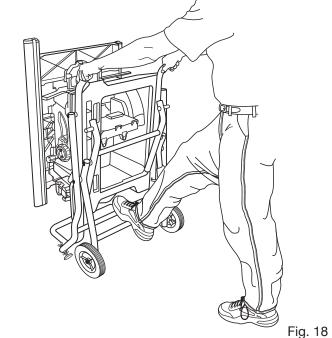
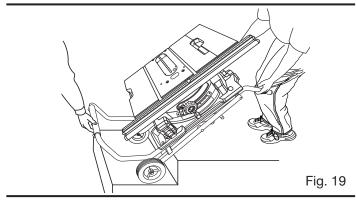


Fig. 17





TO REMOVE/REPLACE/ALIGN THE THROAT PLATE

See Figure 20.



WARNING:

The throat plate must be level with the saw table. If the throat plate is too high or too low, the workpiece can catch on the uneven edges resulting in binding or kickback which could result in serious personal injury.

- Lower the blade by:
 - 1)Unlocking the blade height lock knob (turn counter-clockwise).
 - 2) Turn the height adjusting knob counterclockwise to lower the blade.
- Using a hex key, adjust the four set screws until the throat plate is level with the saw table.

Another set screw that may require adjustment is under the throat plate on the tool housing.

- To remove the throat plate: place your index finger in the hole and lift the front end pulling the throat plate out toward the front of the saw.
- Adjust the set screw at the back of the housing until the back of the throat plate is level with the saw table.
- To reinstall the throat plate: first slip the tab into the slot at the back of the saw then push down to secure in place.



See Figure 21.

This saw is shipped with a riving knife that should be placed in the "down" position for non-through cutting and must be placed in the "up" position for all other cutting operations.

Unplug the saw.

To place in the "up" position for all through cutting:

- Remove the throat plate.
- Raise the saw blade by turning the height adjusting knob clockwise.
- Unlock the release lever by pulling it up.
- Grasp the riving knife and pull it towards the right side of the saw to release the riving knife from the spring-loaded riving clamp.
- Pull the riving knife up until the internal pins are engaged and the riving knife is above the saw blade.
- Lock the release lever by pushing the lever down.
- Reinstall the throat plate.

To place in riving knife down position for all non-through cutting:

- Remove the throat plate.
- Raise the saw blade by turning the height adjusting knob clockwise.
- Unlock the release lever by pulling it up.

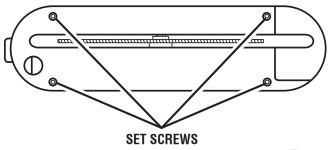
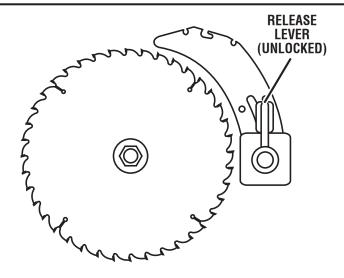
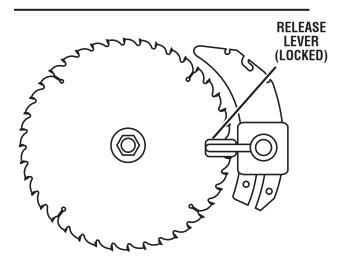


Fig. 20



IN UP POSITION FOR THROUGH CUTTING



IN DOWN POSITION FOR NON-THROUGH CUTTING

Fig. 21

- Push the riving knife down until it is below the saw blade.
- Lock the release lever by pushing the lever down.
- Reinstall the throat plate.

TO CHECK SAW BLADE INSTALLATION

See Figure 22.



CAUTION:

To work properly, the saw blade teeth must point down toward the front of the saw. Failure to heed this warning could cause damage to the saw blade, the saw, or the workpiece.

NOTE: Arbor shaft has right-hand threads.

- Unplug the saw.
- Remove blade wrenches from storage area by unscrewing wing nut.
- Lower the saw blade and remove the throat plate.
- Make sure the bevel locking lever is securely pushed to the left. Raise the saw blade to its full height by turning the height adjusting knob clockwise.

To loosen the blade:

- Using the left blade wrench, insert the open end onto the flats on the arbor shaft.
- Insert the closed end of the other wrench over the hex nut. Holding both wrenches firmly, pull the outside wrench (right side) forward while pushing the inside (left side) to the back of the saw.

To tighten the blade:

- Using the left blade wrench, insert the open end onto the flats on the arbor shaft.
- Insert the closed end of the other blade wrench over the hex nut. Holding both wrenches firmly, push the right wrench to the back of the machine. Make sure the blade nut is securely tightened. Do not overtighten.
- Reinstall the throat plate.

Check all clearances for free blade rotation. Refer to **To Check and Align the Blade Guard Assembly**.

TO INSTALL THE ANTI-KICKBACK PAWLS AND BLADE GUARD

See Figures 23 - 24.



WARNING:

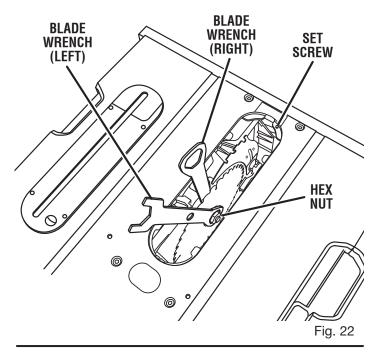
Replace dull or damaged anti-kickback pawls. Dull or damaged pawls may not stop a kickback increasing the risk of serious personal injury.

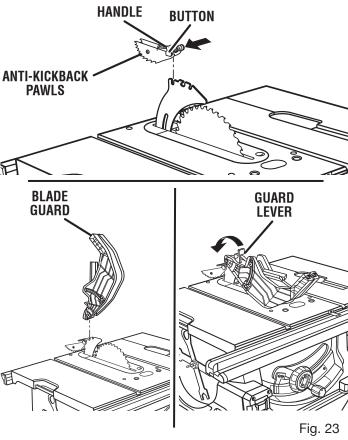
Anti-kickback pawls should only be installed for through cuts.

- Unplug the saw.
- Raise the saw blade by turning the height/bevel adjusting handwheel clockwise.
- Place riving knife in "up" position.
- Reinstall the throat plate.

To install anti-kickback pawls:

Press and hold the button on the right side of the antikickback pawls.





- Align the slot in the pawls over the rear hole in the riving knife.
- Push the pawl handle down snapping them into place and release the button.

NOTE: Pull on the pawl handle to make sure pawls are securely locked.

To install blade guard:

- Lift the guard lever up to unlock.
- With the front of the blade guard raised, lower the back of the guard into the middle hole of the riving knife. Push the front of the guard down until it is **parallel to the table** (see figure 24). If the blade guard is not parallel to the table, the riving knife is not in the "up" position.
- Lock the guard in place by pushing the guard lever down.

NOTE: Blade alignment can be adjusted for different blade widths. Refer to: **To Check and Align the Riving Knife and Saw Blade**. Check the blade guard assembly for clearances and free movement.

TO CHECK AND ALIGN THE RIVING KNIFE AND SAW BLADE

See Figure 25.

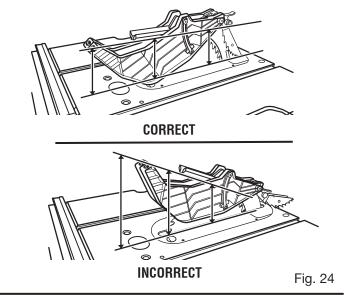
If the riving knife is out of alignment with the saw blade, adjustment is needed.

To check alignment of the riving knife:

- Unplug the saw.
- Raise the saw blade by turning the height adjusting knob clockwise.
- Remove the anti-kickback pawls and blade guard assembly. Place a framing square or straight edge against both the saw blade and the riving knife.
 - **NOTE:** Place framing square between carbide teeth and measure from blade. This step will insure framing square is square against blade from the front to back of blade.
- The saw blade and riving knife are aligned when the framing square contacts both the blade and riving knife evenly with no gaps.

To adjust (horizontally and vertically):

- Remove the anti-kickback pawls and blade guard assembly.
- Loosen the screws holding the mounting bracket.
- Reposition the riving knife left or right as needed to align the riving knife with the saw blade.
- Once properly aligned, securely retighten the screws.
- Check again for squareness and continue to adjust if needed.



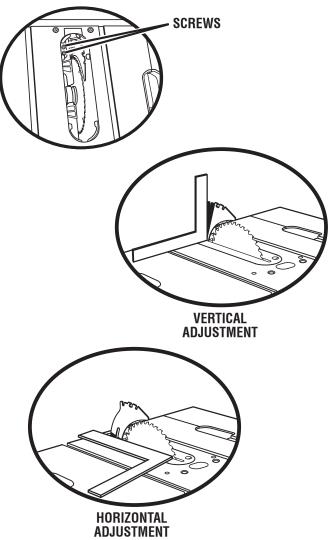


Fig. 25



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 eye protection with side shields marked to comply with ANSI Z87.1. 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.



WARNING:

Although many of the illustrations in this manual are shown with the blade guard removed for clarity, do not operate the saw without the blade guard unless specifically instructed to do so.

APPLICATIONS

You may use this tool for the purposes listed below:

- Straight line cutting operations such as cross cutting, ripping, mitering, beveling, and compound cutting
- Dado cuts with optional accessories
- Cabinet making and woodworking

NOTE: This table saw is designed to cut wood and wood composition products only.

BASIC OPERATION OF THE TABLE SAW

The 3-prong plug must be plugged into a matching outlet that is properly installed and grounded according to all local codes and ordinances. Improper connection of the equipment can result in electric shock. Check with an electrician or service personnel if you are unsure about proper grounding. Do not modify the plug; if it will not fit the outlet, have the correct outlet installed by a qualified electrician. Refer to the *Electrical* section earlier in this manual.

CAUSES OF KICKBACK

Kickback can occur when the blade stalls or binds, kicking the workpiece back toward you with great force and speed. If your hands are near the saw blade, they may be jerked loose from the workpiece and may contact the blade. Obviously, kickback can cause serious injury, and it is well worth using precautions to avoid the risks.

Kickback can be caused by any action that pinches the blade in the wood, such as the following:

- Making a cut with incorrect blade depth
- Sawing into knots or nails in the workpiece
- Twisting the wood while making a cut
- Failing to support work
- Forcing a cut
- Cutting warped or wet lumber
- Using the wrong blade for the type of cut
- Not following correct operating procedures
- Misusing the saw
- Failing to use the anti-kickback pawls
- Cutting with a dull, gummed-up, or improperly set blade

AVOIDING KICKBACK

- Always use the correct blade depth setting. The top of the blade teeth should clear the workpiece by 1/8 in. to 1/4 in.
- Inspect the work for knots or nails before beginning a cut. Knock out any loose knots with a hammer. Never saw into a loose knot or nail.
- Always use the rip fence when rip cutting. Use the miter gauge when cross cutting. This helps prevent twisting the wood in the cut.
- Always use clean, sharp, and properly-set blades. Never make cuts with dull blades.
- To avoid pinching the blade, support the work properly before beginning a cut.
- When making a cut, use steady, even pressure. Never force cuts.
- Do not cut wet or warped lumber.
- Use extra caution when cutting some prefinished or composition wood products as the anti-kickback pawls may not always be effective.
- Always guide your workpiece with both hands or with push sticks and/or push blocks. Keep your body in a balanced position to be ready to resist kickback should it occur. Never stand directly in line with the blade.
- Use of a featherboard will help hold the workpiece securely against the saw table or fence.
- Clean the saw, blade guard, under the throat plate, and any areas where saw dust or scrap workpieces may gather.
- Use the right type of blade for the cut being made.
- Always use the riving knife for every operation where it is allowed. The use of this device will greatly reduce the risk of kickback.

CUTTING AIDS

See Figure 26.

Push sticks are devices that may be used for pushing a workpiece through the blade in any rip cut. When making non-through cuts or ripping narrow stock, always use a push stick, push block, and/or featherboard so your hands do not come within 3 inches of the saw blade. They can be made in various sizes and shapes from scrap wood and used in a specific project. The stick must be narrower than the workpiece, with a 90° notch in one end and shaping for a grip on the other end.

A push block has a handle fastened by recessed screws from the underside. Use push blocks for narrow cuts and all non-through cuts.



CAUTION:

Be sure the screws in a push block are recessed to avoid damaging the saw or workpiece.

AUXILIARY FENCE

An auxiliary fence is a device used to close the gap between the rip fence and the saw table. Always make and use and auxiliary fence when ripping material 1/8 in. or thinner.

HOW TO MAKE AND ATTACH AN AUXILIARY FENCE (FOR RIP CUTTING THIN WORKPIECE)

See Figure 27.

Rip fence holes are used to secure an auxiliary fence which requires a piece of wood 3/4 in. thick, 3-1/2 in. wide, and 21 in. long to make.

To attach the auxiliary fence to the rip fence:

- Place the wood against the rip fence and resting firmly on the saw table.
- From the back side of the rip fence, secure the wood to the fence using 1-3/4 in. wood screws.

HOW TO MAKE A JIG (FOR RIP CUTTING NARROW WORKPIECE)

See Figure 28.

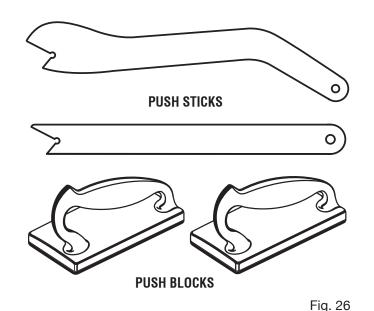
If ripping a narrow workpiece places the hands too close to the blade, it will be necessary to make and use a jig.

To make a jig:

- Attach a handle to a long, straight piece of wood and secure from the underside using recessed screws.
- Cut an L-shaped stop in the side of the jig.

To use a jig:

- Position the workpiece flat on the table with the edge flush against the jig and against the stop.
- Holding the jig handle and using a push block and/or push stick, make the rip cut as described on page 32 later in this section.



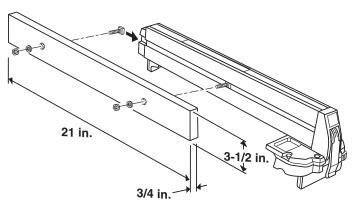
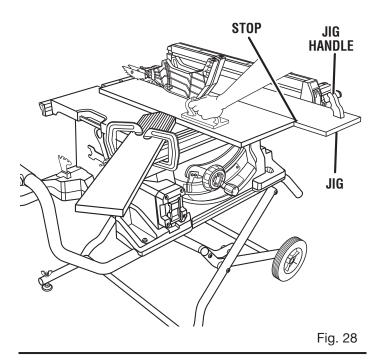


Fig. 27



TYPES OF CUTS

See Figure 29.

There are six basic cuts: 1) the cross cut, 2) the rip cut, 3) the miter cut, 4) the bevel cross cut, 5) the bevel rip cut, and 6) the compound (bevel) miter cut. All other cuts are combinations of these basic six. Operating procedures for making each kind of cut are given later in this section.



WARNING:

Always make sure the blade guard and antikickback pawls are in place and working properly when making these cuts to avoid possible injury.

Cross cuts are straight 90° cuts made across the grain of the workpiece. The wood is fed into the cut at a 90° angle to the blade, and the blade is vertical.

Rip cuts are made with the grain of the wood. To avoid kickback while making a rip cut, make sure one side of the wood rides firmly against the rip fence.

Miter cuts are made with the wood at any angle to the blade other than 90°. The blade is vertical. Miter cuts tend to "creep" during cutting. This can be controlled by holding the workpiece securely against the miter gauge.



WARNING:

Always use a push stick with small pieces of wood, and also to finish the cut when ripping a long narrow piece of wood, to prevent your hands from getting close to the blade.

Bevel cuts are made with an angled blade. Bevel cross cuts are across the wood grain, and bevel rip cuts are with the grain. The rip fence must always be on the right side of the blade for bevel rip cuts.

Compound (or bevel) miter cuts are made with an angled blade on wood that is angled to the blade. Be thoroughly familiar with making cross cuts, rip cuts, bevel cuts, and miter cuts before trying a compound miter cut.

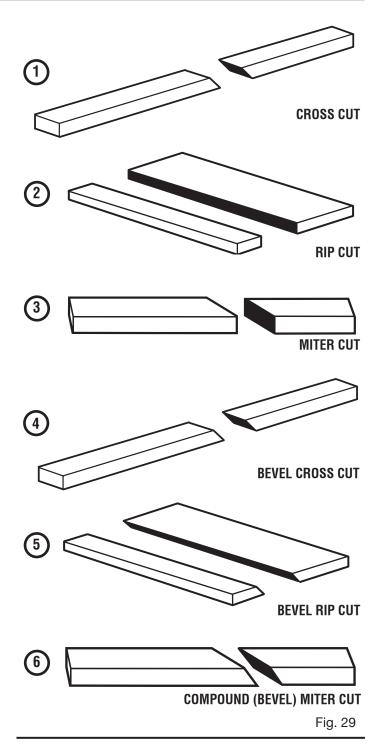
CUTTING TIPS

Dado and rabbet cuts are non-through cuts which can be either rip cuts or cross cuts. Carefully read and understand all sections of this operator's manual before attempting any operation.



WARNING:

Do not use blades rated less than the speed of this tool. Failure to heed this warning could result in personal injury.



- The kerf (the cut made by the blade in the wood) will be wider than the blade to avoid overheating or binding. Make allowance for the kerf when measuring wood.
- Make sure the kerf is made on the waste side of the measuring line.
- Cut the wood with the finish side up.
- Knock out any loose knots with a hammer before making the cut.
- Always provide proper support for the wood as it comes out of the saw.

FEATHERBOARD

A featherboard is a device used to help control the workpiece by guiding it securely against the table or fence. Featherboards are especially useful when ripping small workpieces and for completing non-through cuts. The end is angled with a number of short kerfs to give a friction hold on the workpiece and locked in place on the table with a C-clamp. Test to ensure it can resist kickback.



WARNING:

Place the featherboard against the uncut portion of the workpiece to avoid kickback that could cause serious personal injury.

HOW TO MAKE A FEATHERBOARD

See Figure 30.

The featherboard is an excellent project for the saw. Select a solid piece of lumber approximately 3/4 in. thick, 3-5/8 in. wide and 18 in. long. Mark the center of the width on one end of the stock. Miter one-half of the width to 30° and miter the other half of the same end to 45° (see page 32 for information on miter cuts). Mark the board from the point at 6 in., 8 in., 10 in., and 12 in. Drill a 3/8 in. hole at the 8 in., 10 in., and 12 in. marks.

Prepare the saw for ripping as discussed on page 32. Set the rip fence to allow approximately a 1/4 in. "finger" to be cut in the stock. Feed the stock only to the mark previously made at 6 in. Turn the saw **OFF** and allow the blade to completely stop rotating before removing the stock.

HOW TO MOUNT A FEATHERBOARD

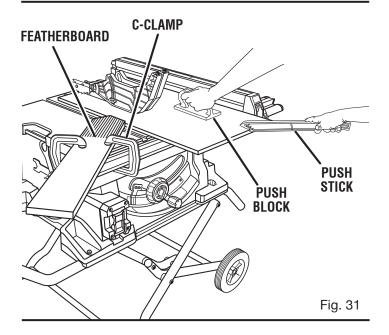
See Figure 31.

Completely lower the saw blade. Position the rip fence to the desired adjustment for the cut to be performed and lock the rip fence. Place the workpiece against the fence and over the saw blade area. Adjust the featherboard to apply resistance to the workpiece just forward of the blade. Attach C-clamps to secure the featherboard to the edge of the saw table.



WARNING:

Do not locate the featherboard to the rear of the blade. If positioned improperly, kickback can result from the featherboard pinching the workpiece and binding the blade in the saw kerf. Failure to heed this warning can result in serious personal injury.



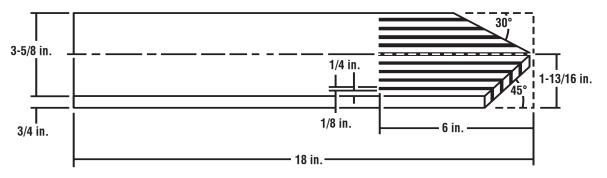


Fig. 30

TO CHANGE BLADE DEPTH

See Figure 32.

The blade depth should be set so that the outer points of the saw blade are higher than the workpiece by approximately 1/8 in. to 1/4 in. but the lowest points (gullets) are below the workpiece.

- Unlock the blade height lock knob.
- Raise the saw blade by turning the height adjusting knob clockwise or lower it by turning the knob counterclockwise.
- Once the desired saw blade height is achieved, lock the blade height lock knob by turning it clockwise.



See Figure 33.

NOTE: A 90° cut has a 0° bevel and a 45° cut has a 45° bevel.

- Unplug the saw.
- Unlock bevel locking lever by pulling the lever all the way to the right.
- Adjust the bevel angle, turning the handwheel counterclockwise increases the angle of the blade, bringing it closer to 45°. Turning it clockwise decreases the angle, bringing the blade closer to 90°.

NOTE: When the bevel adjusting handwheel is pushed back towards the saw housing and released, the bevel angle can be quickly changed by pushing the handwheel left or right.

■ Lock bevel locking lever by pushing lever to the left.

TO ADJUST THE BEVEL INDICATOR

See Figure 34.

If the bevel indicator is not at zero when the saw blade is at 90° , adjust the indicator by loosening the screws and setting at 0° on the bevel scale. Retighten the screws.

TO USE THE IND-I-CUT

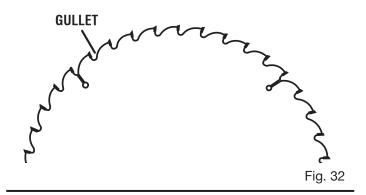
See Figure 35.

The plastic disc embedded in the saw table in front of the saw blade is provided for marking the location of the saw cut (kerf) on the workpiece.

The disc should be level or slightly below the surface of the saw table. Place a piece of hardwood over the plastic disc and tap the hardwood with a hammer until the disc is level or below the saw table surface.

Once the Ind-I-Cut is level:

- From the front of the table saw, place the miter gauge in the left miter groove and move the bevel adjusting handwheel until the bevel scale is set at 0°.
- Turn on the table saw and cross cut a piece of wood holding the wood firmly against the miter gauge.
- Turn off the table saw. Once the blade has stopped, pull the miter gauge back until the freshly cut wood is over the disc.



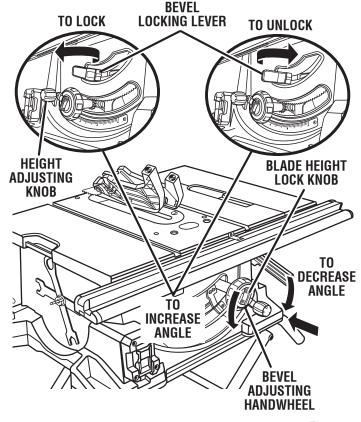
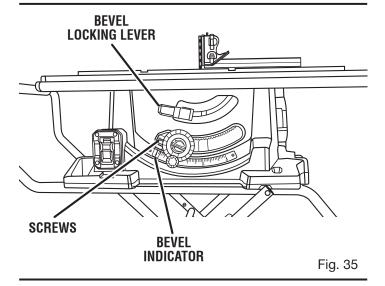


Fig. 33



Using a sharp pencil, mark a line on the disc at the edge of the freshly cut wood.

NOTE: These lines indicate the path of the cut made by the saw blade. When the blade is changed, these lines will need to be erased and reset.

■ With the miter gauge in the right miter gauge groove, follow the above procedures and make a second mark on the disc.

TO SET THE RIP FENCE INDICATOR TO THE BLADE

See Figure 36.

Use the indicator on the rip fence to position the fence along the scale on the front rail.

NOTE: The anti-kickback pawls and blade guard assembly must be removed to perform this adjustment. Reinstall the blade guard assembly when the adjustment is complete.

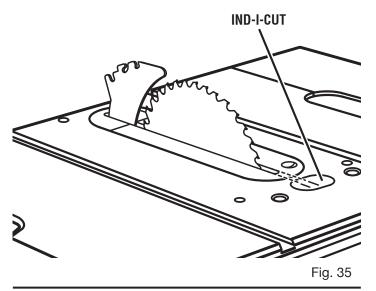
- Unplug the saw.
- Place the rip fence on the saw table so that it lightly touches the right side of the saw blade. Lock the rip fence in place.
- Loosen pan head screws and adjust the indicator so that the red line is located over the "zero" line on the right rip scale on the front rail. Retighten screws.

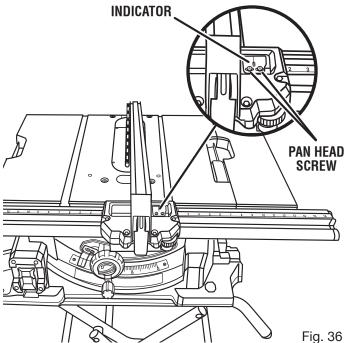
TO USE THE RIP FENCE

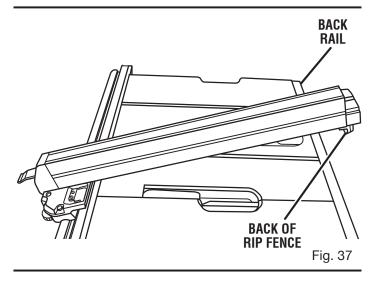
See Figures 36 - 37.

- Place the front of the rip fence on the front rail.
- Lower the back end of the rip fence onto the back rail.
- Check for smooth gliding action.
- Position the rip fence the desired distance from the blade.
- Push the locking lever down to automatically align and secure the fence. When securely locked, the locking lever should point downward.

Check for a smooth gliding action. If adjustments are needed, see **To Check and Adjust the Alignment of the Rip Fence** in the *Adjustments* section of this manual.







TO USE THE MICRO-ADJUST WHEEL ON THE RIP FENCE

See Figure 38.

The micro-adjust wheel on the rip fence allows the user to make one-handed adjustments.

- Unlock the locking lever by lifting the lever.
- Push in on the micro-adjust wheel and rotate to the desired location.
- Push the locking lever downward to lock the rip fence into place.

TO USE THE MITER GAUGE

See Figure 39.

The miter gauge provides greater accuracy in angled cuts. For very close tolerances, test cuts are recommended.

There are two miter gauge channels, one on either side of the blade. When making a 90° cross cut, you can use either miter gauge channel. When making a beveled cross cut (the blade tilted in relation to the table) the miter gauge should be located in the slot on the right so that the blade is tilted away from the miter gauge and your hands.

The miter gauge can be turned 60° to the right or left. Positive stops at 0° and 45° can be located by pushing in the stop pin.

- Slide the miter gauge in the miter gauge slot.
- Loosen the lock knob by turning it counterclockwise.
- Pull out the stop pin and rotate the gauge until the desired angle is reached on the scale.
- Retighten the lock knob by turning it clockwise.

TO USE THE SLIDING TABLE EXTENSION

See Figure 40.

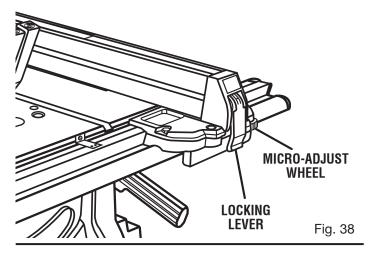
Increase the length of the saw table by using the sliding table extension.

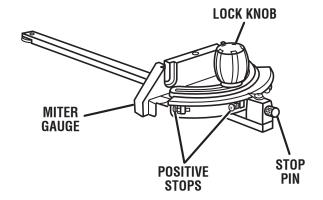
- Remove the rip fence.
- Unlock the sliding table extension by lifting the table extension lock lever.
- Slide the table extension to the desired width.

NOTE: Use the scale on the front rail when a specific width is desired.

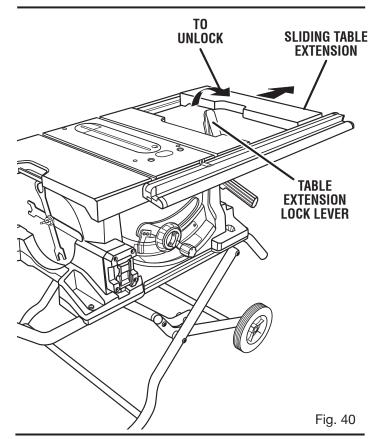
Once the extension table is set to the desired width, relock the lever by pushing the lever back towards the saw base.

NOTE: When using the table extended, only set the fence beyond the arrow marked on the label on the rear rail.









HEELING (PARALLELING) THE BLADE TO THE MITER GAUGE GROOVE

See Figures 41 - 43.



WARNING:

The blade must be square so the wood does not bind resulting in kickback. Failure to do so could result in serious personal injury.

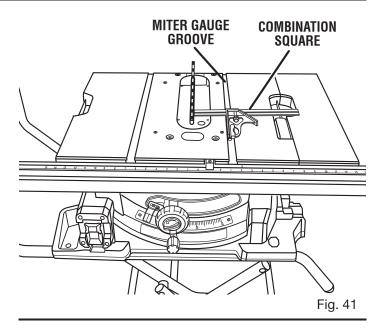
Do not loosen any screws for this adjustment until you have checked with a square and made test cuts to be sure adjustments are necessary. Once the screws are loosened, these items must be reset.

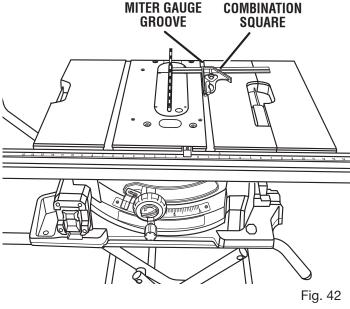
- Unplug the saw.
- Remove the blade guard and anti-kickback pawls. Raise the blade by turning the bevel adjusting handwheel.
- Mark beside one of the blade teeth at the front of the blade. Place the body of a combination square against the miter gauge groove as shown in figure 41. Measure the distance from the blade tooth to the right miter gauge groove.
- Turn the blade so the marked tooth is at the back.
- Move the combination square to the rear and again measure the distance from the blade tooth to the right miter gauge groove. If the distances are the same, the blade and the miter gauge groove are parallel.
- Loosen the four alignment screws 1/2 turn; this allows the mechanism beneath the table to be shifted sideways.
 NOTE: The adjustment screws are located on the top of the saw table next to the blade.
- Place a block of wood on the side of the blade and push it into the blade until the blade is parallel to the miter gauge groove. Retighten one screw.
- Check with square to determine if marked tooth touches square by the same amount at front and rear. If it does, alternately tighten other three screws. If it does not, loosen screw and move blade the required amount.

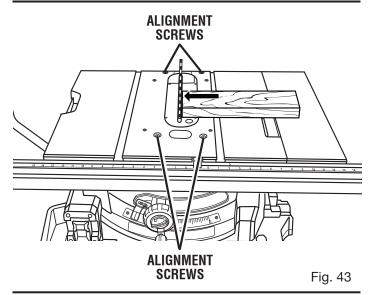


WARNING:

To reduce the risk of injury from kickback, align the rip fence to the blade following any blade adjustments. Always make sure the rip fence is parallel to the blade before beginning any operation.







MAKING CUTS

The blade provided with your saw is a high-quality combination blade suitable for ripping and cross cut operations. Carefully check all setups and rotate the blade one full revolution to assure proper clearance before connecting saw to power source.



WARNING:

Do not use blades rated less than the speed of this tool. Failure to heed this warning could result in personal injury.

Use the miter gauge when making cross, miter, bevel, and compound miter cuts. To secure the angle, lock the miter gauge in place by twisting the lock knob clockwise. Always tighten the lock knob securely in place before use.

NOTE: It is recommended that you place the piece to be saved on the left side of the blade and that you make a test cut on scrap wood first.

MAKING A CROSS CUT

See Figures 44 - 45.



WARNING:

Using the rip fence as a cutoff gauge when cross cutting will result in kickback which can cause serious personal injury.



WARNING:

Make sure the blade guard assembly is installed and working properly to avoid serious personal injury.

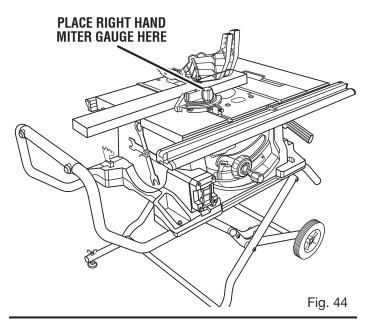
- Remove the rip fence by lifting the locking lever.
- Set the blade to the correct depth for the workpiece.
- Set the miter gauge to 0° and tighten the lock knob.
- Make sure the wood is clear of the blade before turning on the saw.
- To turn the saw **ON**, lift the switch.
- To turn saw OFF, press the switch down.

NOTE: To prevent unauthorized use, remove the switch key as shown in figure 45.

- Let the blade build up to full speed before moving the workpiece into the blade.
- Hold the workpiece firmly with both hands and feed the workpiece into the blade.

NOTE: The hand closest to the blade should be placed on the miter gauge lock knob and the hand farthest from the blade should be placed on the workpiece.

CROSS CUT



SWITCH IN LOCKED POSITION

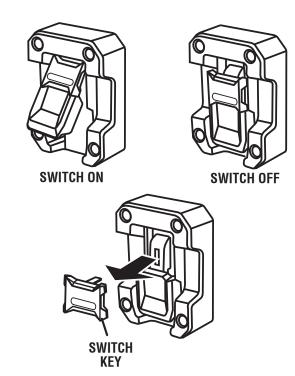


Fig. 45

When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing any part of the workpiece.

MAKING A RIP CUT

See Figure 46.



WARNING:

Make sure the blade guard assembly is installed and working properly to avoid serious personal injury.

- Set the blade to the correct depth for the workpiece.
- Position the rip fence the desired distance from the blade for the cut and securely lock the handle.
- When ripping a long workpiece, place a support the same height as the table surface behind the saw for the cut work.
- Make sure the wood is clear of the blade before turning on the table saw.
- Turn the saw on.
- Position the workpiece flat on the table with the edge flush against the rip fence. Let the blade build up to full speed before feeding the workpiece into the blade.
- Using a push stick and/or push blocks, slowly feed the workpiece toward the blade. Stand slightly to the side of the wood as it contacts the blade to reduce the chance of injury should kickback occur.
- Once the blade has made contact with the workpiece, use the hand closest to the rip fence to guide it. Make sure the edge of the workpiece remains in solid contact with both the rip fence and the surface of the table. If ripping a narrow piece, use a push stick to move the piece through the cut and past the blade.
- When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing the workpiece.

MAKING A MITER CUT

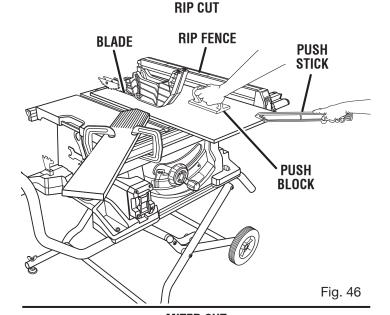
See Figure 47.



WARNING:

Make sure the blade guard assembly is installed and working properly to avoid serious personal injury.

- Set the blade to the correct depth for the workpiece.
- Remove the rip fence by lifting the locking lever.
- Set the miter gauge to desired angle and tighten the lock knob.
- Make sure the wood is clear of the blade before turning on the saw.
- Turn the saw on.
- Let the blade build up to full speed before moving the



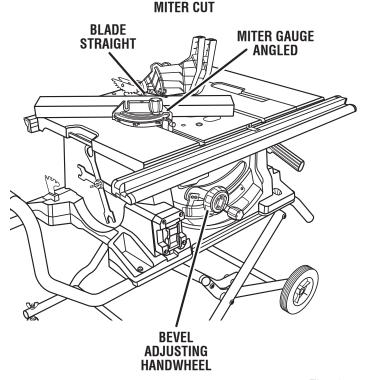


Fig. 47

workpiece into the blade.

■ Hold the workpiece firmly with both hands and feed the workpiece into the blade.

NOTE: The hand closest to the blade should be placed on the miter gauge lock knob and the hand farthest from the blade should be placed on the workpiece.

When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing any part of the workpiece.

MAKING A BEVEL CROSS CUT

See Figures 48 - 49.



WARNING:

Make sure the blade guard assembly is installed and working properly to avoid serious personal injury.



WARNING:

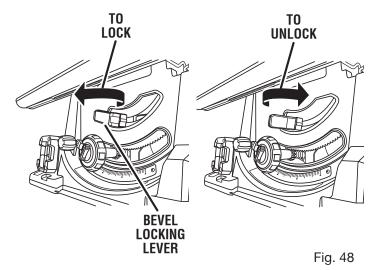
The miter gauge must be on the right side of the blade to avoid trapping the wood and causing kickback. Placement of the miter gauge to the left of the blade will result in kickback and the risk of serious personal injury

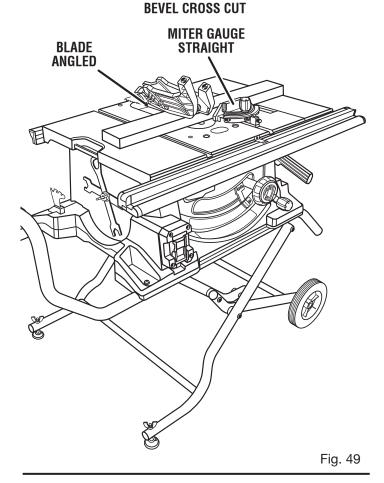
- Remove the rip fence by lifting the locking lever.
- Unlock the bevel locking lever.
- Turn the bevel adjusting handwheel until the bevel indicator is at the desired angle. Push the bevel locking lever securely to the left to lock the angle.
- Push the bevel locking lever toward the table to relock.
- Set the blade to the correct depth for the workpiece.
- Set miter gauge to 0° and tighten the lock knob.
- Make sure the wood is clear of the blade before turning on the saw.
- Turn the saw on.
- Let the saw blade build up to full speed before moving the miter gauge and the workpiece into the blade.
- Hold the workpiece firmly with both hands and feed the workpiece into the blade.

NOTE: The hand closest to the blade should be placed on the miter gauge lock knob and the hand farthest from the blade should be placed on the workpiece.

■ When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing any part of the workpiece.

VIEWED FROM THE FRONT, BELOW THE TABLE SAW





MAKING A BEVEL RIP CUT

See Figure 50.



WARNING:

The rip fence must be on the right side of the blade to avoid trapping the wood and causing kickback. Placement of the rip fence to the left of the blade will result in kickback and the risk of serious personal injury.

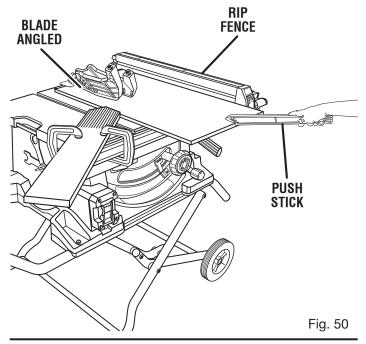


WARNING:

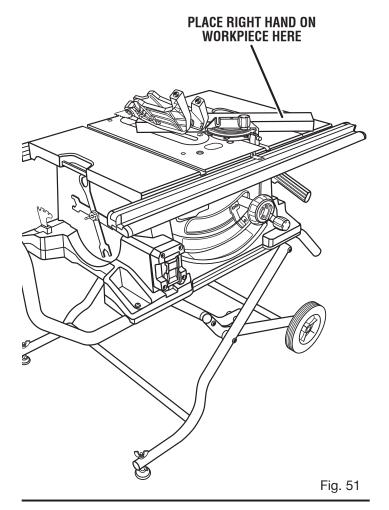
Make sure the blade guard assembly is installed and working properly to avoid serious personal injury.

- Remove the miter gauge.
- Unlock the bevel locking lever.
- Adjust the bevel angle to the desired setting.
- Lock the bevel locking lever.
- Set the blade to the correct depth for the workpiece.
- Position the rip fence the desired distance from the blade and securely lock down the lever.
- When ripping a long workpiece, place a support the same height as the table surface behind the saw for the cut work.
- Turn the saw on.
- Position the workpiece flat on the table with the edge flush against the rip fence. Let the blade build up to full speed before feeding the workpiece into the blade.
- Using a push stick and/or push blocks, slowly feed the workpiece toward the blade. Stand slightly to the side of the wood as it contacts the blade to reduce the chance of injury should kickback occur.
- Once the blade has made contact with the workpiece, use the hand closest to the rip fence to guide it. Make sure the edge of the workpiece remains in solid contact with both the rip fence and the surface of the table. If ripping a narrow piece, use a push stick to move the piece through the cut and past the blade.
- When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing any part of the workpiece.

BEVEL RIP CUT



COMPOUND (BEVEL) MITER CUT



MAKING A COMPOUND (BEVEL) MITER CUT See Figure 51.



WARNING:

Make sure the blade guard assembly is installed and working properly to avoid serious personal injury.



WARNING:

The miter gauge must be on the right side of the blade to avoid trapping the wood and causing kickback. Placement of the miter gauge to the left of the blade will result in kickback and the risk of serious personal injury

- Remove the rip fence by lifting the locking lever.
- Unlock the bevel locking lever.
- Adjust the bevel angle to the desired setting.
- Lock the bevel locking lever.
- Set the blade to the correct depth for the workpiece.
- Set the miter gauge to the desired angle and tighten the lock knob.
- Make sure the wood is clear of the blade before turning on the saw.
- Turn the saw on.
- Let the blade build up to full speed before moving the workpiece into the blade.
- Hold the workpiece firmly with both hands on the miter gauge and feed the workpiece into the blade.
 - **NOTE:** The hand closest to the blade should be placed on the miter gauge lock knob and the hand farthest from the blade should be placed on the workpiece.
- When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing the workpiece.

MAKING A LARGE PANEL CUT

See Figure 52.

Make sure the saw is properly secured to a work surface or leg stand to avoid tipping from the weight of a large panel.



WARNING:

Make sure the blade guard assembly is installed and working properly to avoid serious personal injury.

LARGE PANEL CUT

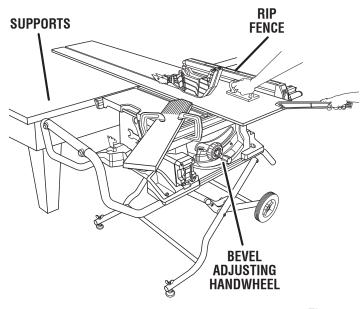


Fig. 52

- Place a support the same height as the top of the saw table behind the saw for the cut work. Add supports to the sides as needed.
- Depending on the shape of the panel, use the rip fence or miter gauge. If the panel is too large to use either the rip fence or the miter gauge, it is too large for this saw.



WARNING:

Never make freehand cuts (cuts without the miter gauge or rip fence). Such a cut increases the risk of kickback and can result in serious injury.

- Make sure the wood does not touch the blade before you turn on the saw.
- Turn the saw on.
- Position the workpiece flat on the table with the edge flush against the rip fence. Let the blade build up to full speed before feeding the workpiece into the blade.
- Use a push stick to move the piece through the cut and past the blade.
- When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing the workpiece.

MAKING A NON-THROUGH CUT

See Figure 53.

Non-through cuts (made with a standard 10 in. blade) can be made with the grain (ripping) or across the grain (cross cut). The use of a non-through cut is essential to cutting grooves, rabbets, and dadoes. This is the only type cut that is made without the blade guard assembly installed. Make sure the blade guard assembly is reinstalled upon completion of this type of cut. Read the appropriate section which describes the type of cut in addition to this section on non-through or dado cuts. For example, if your non-through cut is a straight cross cut, read and understand the section on straight cross cuts before proceeding.



WARNING:

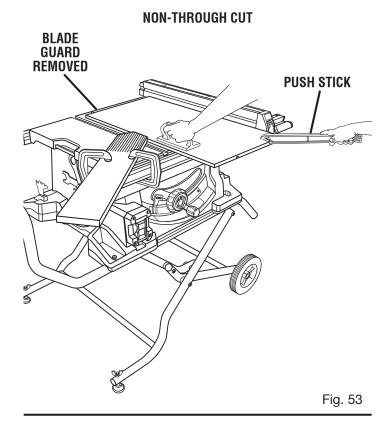
When making a non-through cut, the cutter is covered by the workpiece during most of the cut. Be alert to the exposed cutter at the start and finish of every cut to avoid the risk of personal injury.



WARNING:

Never feed wood with your hands when making any non-through cut such as rabbets or dadoes. To avoid personal injury, always use push blocks, push sticks, and featherboards.

- Unplug the saw.
- Remove the blade guard and anti-kickback pawls.
- Place riving knife in "down" position.
- Unlock the bevel locking lever.
- Adjust the bevel angle to 0°.
- Turn the bevel adjusting handwheel until the bevel indicator is at the desired angle. Push the bevel locking lever securely to the left to lock the angle.



- Set the blade to the correct depth for the workpiece.
- Plug the saw into the power source and turn on saw.
- Let the blade build up to full speed before moving the workpiece into the blade.
- Always use push blocks, push sticks, and/or featherboards when making non-through cuts to reduce the risk of serious injury.
- When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing the workpiece.

Once all non-through cuts are completed:

- Unplug your saw.
- Reinstall the riving knife in the "up" position then install blade guard and anti-kickback pawls.

OPERATION

MAKING A DADO CUT

See Figure 54.

An optional dado throat plate is required for this procedure (refer to the Accessories section later in this manual and check with the retailer where the table saw was purchased). All blades and dado sets must not be rated less than the speed of this tool. This saw is designed for use with a 6 in. stack dado (up to width of 3/4 in.). Do not use an adjustable dado on this saw.

NOTE: This saw cannot be used to make a bevel dado cut.

- Unplug your saw.
- Remove the blade guard, anti-kickback pawls, and throat plate.
- Next, remove the blade nut, blade washer, and saw blade.

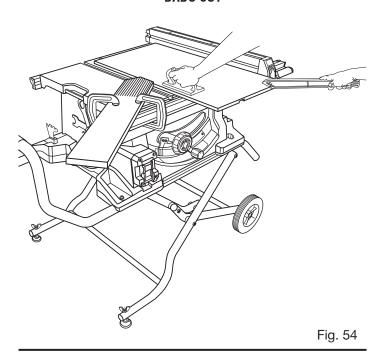


WARNING:

Always store the blade washer and throat plate in secure location when changing back to saw blade. Failure to do so may result in possible injury and damage to the tool.

- Remove the riving knife.
- Mount the dado blade, according to manufacturer instructions, using the blade and chippers appropriate for the desired width of cut.
- Reinstall the blade nut.
 - **NOTE:** The blade washer may be used provided the arbor shaft extends slightly beyond the arbor nut.
- Make sure the blade nut is fully engaged and the arbor extends past a securely tightened blade nut.
- Place release lever in locked position.
- Install the dado throat plate and rotate the blade by hand to make sure it turns freely then lower the blade.
- Depending on the shape and size of the wood, use either the rip fence or miter gauge.
- Turn the saw on.
 - NOTE: Make sure the wood does not touch the blade before you turn on the saw. Let the blade build up to full speed before feeding the workpiece into the blade.
- Position the workpiece flat on the table with the edge flush against the rip fence or miter gauge and hold firmly against the saw table.

DADO CUT



- Use a push block or push stick to move the wood through the cut past the blade. Never push a small piece of wood into the blade with your hand, always use a push stick. The use of push blocks, push sticks, and featherboards are necessary when making non-through cuts.
- When the cut is made, turn the saw off. Wait for the blade to come to a complete stop before removing the workpiece.

Once all dado cuts are completed:

- Unplug your saw.
- Reinstall the riving knife in the "up" position then install blade guard and anti-kickback pawls.



WARNING:

Always use push blocks, push sticks, or featherboards when making dado cuts to avoid the risk of serious injury.



WARNING:

Do not use blades rated less than the speed of this tool. Failure to heed this warning could result in personal injury.

Δ

WARNING:

Before performing any adjustment, make sure the tool is unplugged from the power supply. Failure to heed this warning could result in serious personal injury.

To avoid unnecessary set-ups and adjustments, a good practice is to check your setups carefully with a framing square and make practice cuts in scrap wood before making finish cuts in good workpieces. Do not start any adjustments until you have checked with a square and made test cuts to be sure adjustments are needed.

TO REPLACE THE BLADE

See Figures 55 - 56.

Blade kerf width must be within the limits stamped on the riving knife.

- Unplug the saw.
- Lower the saw blade and remove the throat plate.
- Raise the saw blade to full height then remove the blade guard and anti-kickback pawls.
- Make sure the bevel locking lever is securely pushed to the left. Raise the saw blade to its full height by turning the height adjusting knob clockwise.
- Using the left blade wrench, insert the open end onto the flats on the arbor shaft.
- Insert the closed end of the other wrench over the hex nut. Holding both wrenches firmly, pull the outside wrench (right side) forward while pushing the inside (left side) to the back of the saw.
- Unlock the release locking lever to remove the blade.

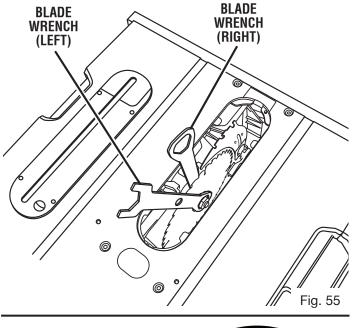
NOTE: Arbor shaft has right-hand threads.

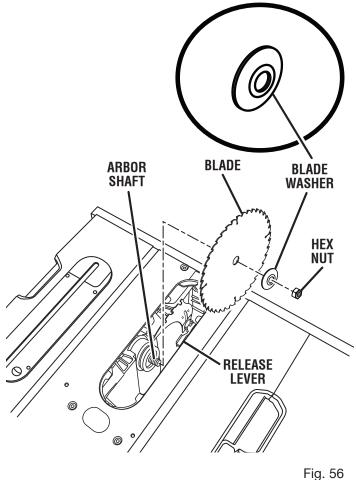
Check all clearances for free blade rotation. Refer to **To Set the Rip Fence Indicator to the Blade** in the *Operation* section earlier in this manual. In cutting operations, the scale will be set to the side of the blade where the cut will be measured and made.

To replace the blade with an accessory blade, follow the instructions provided with the accessory.

To install a standard blade:

- Place the new blade on the arbor shaft (the teeth must point down toward the front of the saw to work properly).
- Place the blade washer and the hex nut over the arbor shaft. Be sure the flat side of the blade washer faces out from the blade and that all items are snug against the arbor housing. Make sure the hex nut is securely tightened. Do not overtighten.
- Lock the release lever.
- Rotate the blade by hand to make sure it turns freely.
- Lower the saw blade and reinstall the throat plate.





TO SET THE BEVEL INDICATOR AND BEVEL STOPS AT 0° AND 45°

See Figures 57 - 60.

The angle settings of the saw have been set at the factory and, unless damaged in shipping, should not require setting during assembly. After extensive use, it may need to be checked.

To check for squareness, 0° position:

- Unplug the saw.
- Raise the blade to a 3 in. depth of cut.
- Release the bevel locking lever.
- Push the bevel adjusting handwheel to the left as far as possible.
- Lock the bevel locking lever.
- Place the combination square against blade. Make sure square is not touching the tip of one of the saw teeth.

If blade is square to the table:

- Check bevel indicator.
- If indicator is not pointing to the 0° mark on the bevel scale, loosen the indicator adjusting screw and adjust indicator.
- Retighten screw.

If blade is not 0° to the table:

- Loosen 0° stop screw until it is even with the top of the saw table using a hex key.
- Release the bevel locking lever and position the bevel adjusting handwheel until blade is 0° to the table. Lock the bevel locking lever.
- Screw the 0° stop screw until the saw blade starts to move. Check again for squareness and readjust if needed.
- Check bevel indicator.
- If indicator is not pointing to the 0° mark on the bevel scale, loosen the indicator adjusting screw and adjust indicator.
- Retighten screw.

To check for squareness, 45° position:

- Release the bevel locking lever.
- Push the bevel adjusting handwheel to the right as far as possible.
- Lock the bevel locking lever.
- Place the combination square against blade. Make sure square is not touching the tip of one of the saw teeth.

If blade is square to the table:

- Check bevel indicator.
- If indicator is not pointing to the 45° mark on the bevel scale, loosen the indicator adjusting screw and adjust indicator.
- Retighten screws.

BLADE AT 0° POSITION

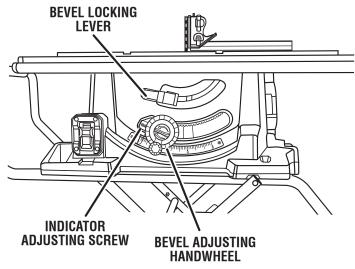
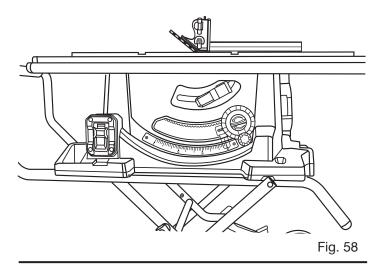
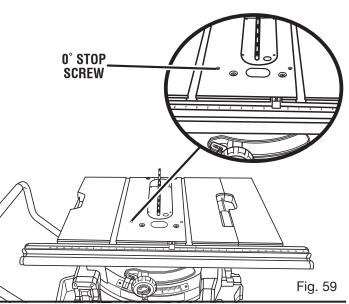


Fig. 57

BLADE AT 45° POSITION





If blade is not 45° to the table:

- Loosen 45° stop screw until it is even with the top of the saw table using a hex key.
- Release the bevel locking lever and position the bevel adjusting handwheel until blade is 45° to the table. Lock the bevel locking lever.
- Screw the 45° stop screw until the saw blade starts to move. Check again for squareness and readjust if needed.
- Check bevel indicator.
- If indicator is not pointing to the 45° mark on the bevel scale, loosen the indicator adjusting screw and adjust indicator.
- Retighten screw.

TO ADJUST THE MITER GAUGE

See Figures 61 - 62.

You can set the miter gauge at 0° and plus or minus 45° with the miter gauge stop pin and adjustable stop screws.

NOTE: The miter gauge provides close accuracy in angled cuts. For very close tolerances, test cuts are recommended.

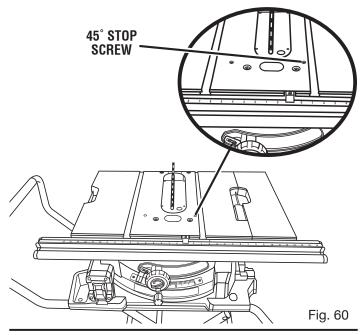
To adjust stop screws:

- Loosen the lock knob and pull out on stop pin to rotate miter gauge base past stop screws.
- Loosen the lock nut of the 0° stop screw at the stop pin with a wrench.
- Place a 90° square against the miter gauge rod and the miter gauge base.
- If the rod is not square, loosen the lock knob, adjust the rod, and retighten the knob.
- Adjust the stop screw until it rests against the stop pin and tighten lock nut.

To adjust miter gauge base:

The miter gauge base should swivel smoothly on the bar after the knob is loosened. If adjustment is required:

- Loosen the lock knob.
- Loosen set screw.
- If the base is too loose, turn the phillips head screw in a clockwise direction. If the base is too tight, turn the flat head screw in a counterclockwise direction.
- Retighten set screw.



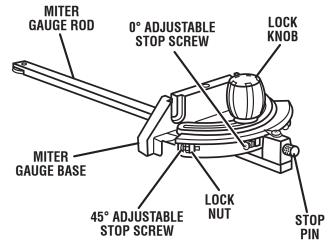
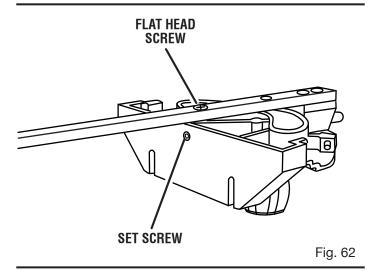


Fig. 61



TO CHECK AND ADJUST THE ALIGNMENT OF THE RIP FENCE

See Figures 63 - 65.

The rip fence must be parallel to the saw blade and the miter gauge grooves.



WARNING:

A misaligned rip fence can cause kickbacks and jams. To reduce the risk of injury, always maintain proper rip fence alignment

- Unplug the saw.
- Move the rip fence along side the miter gauge groove and lock the rip fence in place with the locking lever.
- If the rip fence is not parallel, loosen the four socket head cap screws located to each side of the locking handle.
- Place the blade of the combination square in the right miter gauge groove.
- Slide the rip fence against the blade of the combination square.
- Alternately tighten the socket head cap screws. Recheck alignment.
- Repeat steps as needed until rip fence is correctly aligned.

The locking lever on the rip fence should hold the rip fence securely against the front and back rails. The lever should not be difficult to push down and lock. To assure proper fence lock adjustment:

- Lock the rip fence in place.
- Try moving the fence from side-to-side. If the fence moves, tighten the adjusting nut 1/4 turn.
- With the rip fence in the locked position, recheck rip fence parallelism with the miter gauge groove and adjust if necessary.

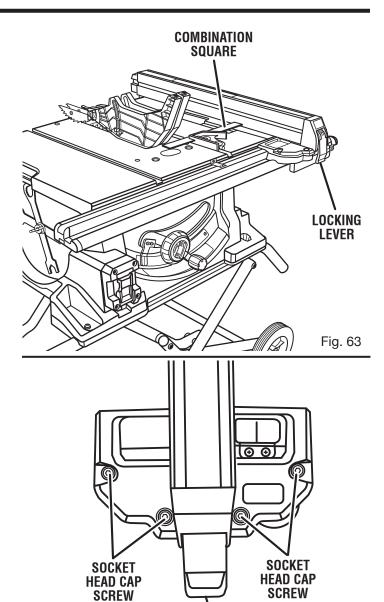
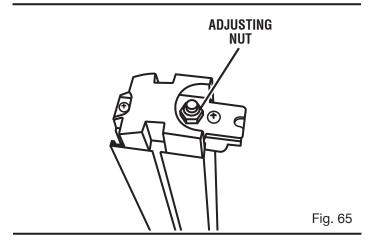


Fig. 64



LOCKING LEVER

TO ADJUST THE BEVEL LOCKING LEVER

See Figure 66.

- Release bevel locking lever and bevel saw blade to 45°.
- Push bevel locking lever to lock blade into place.
- With moderate force, attempt to move the bevel adjusting handwheel toward the 0° bevel.
- If bevel adjusting handwheel cannot be moved, no adjustment is needed. If handwheel can be moved, adjust the bevel lock nut by rotating clockwise 1/4 turn.
- Repeat above step as necessary.
- Release bevel locking lever and move bevel adjusting handwheel back to 0°.

CHECKING THE TABLE EXTENSION

See Figure 67.

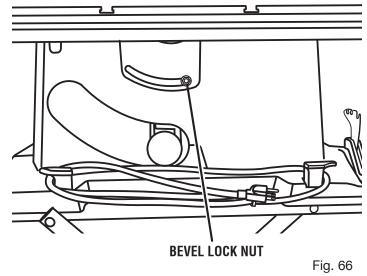
Lock the sliding table extension. The sliding table extension should not move while locked. If the extension moves:

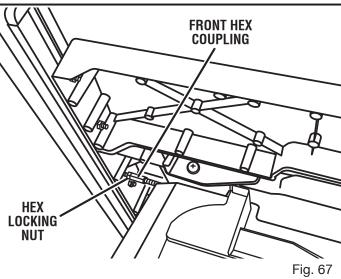
- Lift the table extension lock lever.
- Find the front hex coupling located underneath the front table.
- Loosen the hex locking nut.
- Turn the hex coupling counterclockwise.
- Lock the table extension lock. Push and pull on the sliding table extension.
- Readjust hex coupling if necessary.
- Tighten the hex locking nut against coupling.

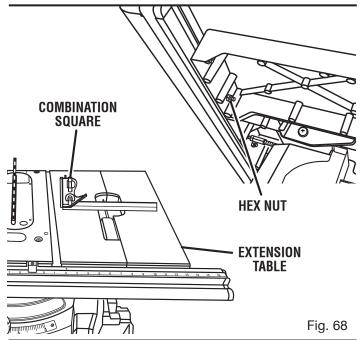
TO ADJUST THE TABLE EXTENSION

See Figure 68.

- Lock table extension lever.
- Loosen the four nuts underneath the sliding table extension.
- Use a combination square to make sure the top of the sliding table extension is the same height as the main table.
- Tighten the four hex nuts. Recheck and readjust if necessary.







MAINTENANCE



WARNING:

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



WARNING:

Always wear eye protection with side shields marked to comply with ANSI Z87.1 during product operation. 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:

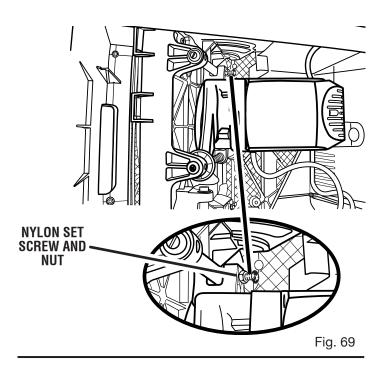
Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

- Periodically check all clamps, nuts, bolts, and screws for tightness and condition. Make sure the throat plate is in good condition and in position.
- Check the blade guard assembly.
- Clean cutting tools with a gum and pitch remover.
- To maintain the table surfaces and rails, periodically apply paste wax to them and buff to provide smooth functioning. To prevent work from slipping during cutting operations, **DO NOT** wax the working face of the miter gauge.
- Protect the saw blade by cleaning out sawdust from underneath the saw table and in the blade teeth. Use a resin solvent on the blade teeth.
- Clean plastic parts only with a soft damp cloth. Do not use any aerosol or petroleum solvents.

LUBRICATION

This saw's motor bearings have been packed at the factory with proper lubrication.

- Clean screw threads and nuts with a solvent recommended for gum and pitch removal.
- Lubricate screw threads, nuts, and bearing points (including those on the blade guard assembly and miter gauge).



NYLON SET SCREW ADJUSTMENT

See Figure 69.

If the saw blade has a slight amount of lateral movement, the nylon set screw needs to be tightened.

- Unplug the saw.
- Lower blade completely and bevel to 45°. Lock the blade.
- Turn saw upside down.
- Locate the nylon set screw and nut.
- Turn the nut counterclockwise to loosen.
- Tighten the set screw.
- Retighten the nut.
- Bevel the saw blade back to 0°.

MAINTENANCE

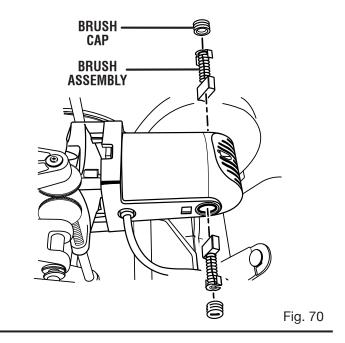
BRUSH REPLACEMENT

See Figure 70.

- Unplug the saw.
- Lower blade completely and bevel to 45°. Lock the blade.
- Turn saw upside down.
- Remove brush caps with a screwdriver.

NOTE: Brush assembly is spring load and will pop out when brush cap is removed.

- Remove brush assemblies and check for wear.
- Replace both brushes when either has less than 1/4 in. length of carbon remaining. Do not replace one side without replacing the other.
- Reassemble using new brush assemblies by reversing the steps listed above. Make sure curvature of brush matches curvature of motor and that brush moves freely in brush tube.
- Tighten all brush caps securely. **Do not** overtighten.



ACCESSORIES

Look for these accessories where you purchased this product:

AC31DP1 Dado Throat Plate

AC9933 Flip Top Portable Work Support



MARNING:

Current attachments and accessories available for use with this tool are listed above. 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.

TROUBLESHOOTING

Problem	Cause	Solution
Excess vibration.	Blade is out of balance.	Replace blade.
	Blade is damaged.	Replace blade.
	Saw is not mounted securely.	Tighten all hardware.
	Work surface is uneven.	Reposition on flat surface.
	Blade is warped.	Check saw blade installation.
Rip fence does not move smoothly.	Rip fence not mounted correctly.	Remount the rip fence.
	Rails are dirty or sticky.	Clean and wax rails.
	Adjusting nut is out of adjustment.	Adjust adjusting nut.
Rip fence does not lock at rear.	Adjusting nut is out of adjustment.	Adjust adjusting nut.
Cutting binds or burns work.	Blade is dull.	Replace or sharpen blade.
	Blade is heeling.	Align rip fence, miter gauge, and/or blade.
	Work is fed too fast.	Slow the feed rate.
	Rip fence is misaligned.	Align the rip fence.
	Riving knife is out of alignment.	See To Check and Align the Blade Guard Assembly in the <i>Assembly</i> section.
	Wood is warped.	Replace the wood. Always cut with convex side to table surface.
Wood edges away from rip fence when ripping.	Rip fence is misaligned.	Check and adjust the rip fence.
	Blade not properly aligned or set.	Resharpen or set blade.

TROUBLESHOOTING

Problem	Cause	Solution
Saw does not make 0° or 45° cuts.	Bevel stops not properly adjusted.	See To Set the Bevel Indicator and Bevel Stops at 0° and 45° (Squaring the Blade) in the <i>Adjustments</i> section.
	Miter gauge is misaligned (Miter Cuts).	See To Adjust the Miter Gauge in the <i>Adjustments</i> section.
Height Adjusting Knob is hard to turn.	Gears or screw post inside cabinet are clogged with sawdust.	Clean the gears or screw posts.
	Handwheel is locked.	Unlock the blade height lock knob by pushing the bevel lock lever to the right.
Saw does not start.	Power cord not plugged in.	Plug in power cord.
	Circuit fuse is blown.	Replace circuit fuse.
	Circuit breaker is tripped.	Reset circuit breaker.
	Cord, switch, or motor is damaged.	Have replaced by qualified service center.
Blade makes poor cuts.	Blade is dull or dirty.	Clean, sharpen, or replace blade.
	Blade is wrong type for cut being made.	Replace with correct type.
	Blade is mounted backwards.	Remount blade.
Motor overheats.	Work is fed too fast; motor overloaded.	Feed work slower into the blade.
Motor labors in rip cut.	Blade not proper for rip cut.	Change blade; rip blade typically has fewer teeth.

RIDGID® HAND HELD AND STATIONARY POWER TOOL 3 YEAR LIMITED SERVICE WARRANTY

Proof of purchase must be presented when requesting warranty service.

Limited to RIDGID® hand held and stationary power tools purchased 2/1/04 and after. This product is manufactured by One World Technologies, Inc. The trademark is licensed from RIDGID, Inc. All warranty communications should be directed to One World Technologies, Inc., attn: RIDGID Hand Held and Stationary Power Tool Technical Service at (toll free) 1-866-539-1710.

90-DAY SATISFACTION GUARANTEE POLICY

During the first 90 days after the date of purchase, if you are dissatisfied with the performance of this RIDGID® Hand Held or Stationary Power Tool for any reason you may return the tool to the dealer from which it was purchased for a full refund or exchange. To receive a replacement tool you must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the 3 YEAR service warranty period.

WHAT IS COVERED UNDER THE 3 YEAR LIMITED SERVICE WARRANTY

This warranty on RIDGID® Hand Held and Stationary Power Tools covers all defects in workmanship or materials and normal wear items such as brushes, chucks, motors, switches, cords, gears and even cordless batteries in this RIDGID® tool for three years following the purchase date of the tool. Warranties for other RIDGID® products may vary.

HOW TO OBTAIN SERVICE

To obtain service for this RIDGID® tool you must return it; freight prepaid, or take it in to an authorized service center for RIDGID® branded hand held and stationary power tools. You may obtain the location of the authorized service center nearest you by calling (toll free) 1-866-539-1710 or by logging on to the RIDGID® website at www.ridgid.com. When requesting warranty service, you must present the original dated sales receipt. The authorized service center will repair any faulty workmanship, and either repair or replace any part covered under the warranty, at our option, at no charge to you.

WHAT IS 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 defect resulting from misuse, abuse, neglect, alteration, modification or repair by other than an authorized service center for RIDGID® branded hand held and stationary power tools. Consumable accessories provided with the tool such as, but not limited to, blades, bits and sand paper are not covered.

RIDGID, INC. AND ONE WORLD TECHNOLOGIES, INC. MAKE 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

To the extent permitted by applicable law, all implied warranties, including warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, are disclaimed. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, that cannot be disclaimed under state law are limited to three years from the date of purchase. One World Technologies, Inc. and RIDGID, Inc. are not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations 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.

One World Technologies, Inc.

P.O. Box 35, Hwy. 8 Pickens, SC 29671



OPERATOR'S MANUAL

10 in. TABLE SAW R4510 / R45101

CUSTOMER SERVICE INFORMATION

For parts or service, contact your nearest RIDGID authorized service center. Be sure to provide all relevant information when you call or visit. For the location of the authorized service center nearest you, please call 1-866-539-1710 or visit us online at www.ridgidwoodworking.com.

The model number of this tool is found on a plate attached to the motor housing. Please record the serial number in the space provided below. When ordering repair parts, always give the following information:

Model No.	R4510 / R45101
Serial No.	