

FEATURES

- NEW AUTO fence designed to achieve electronic rip fence movement, auto tilt and blade lifting by LCD touch control display
- Auto Fence electronic control system is connected to a programmable controller, and the input value includes saw blade angle, saw blade height and cutting width which could achieve accurate horizontal movement and blade lifting by LCD touch control
- Powder coated, scratch resistant, high quality reinforced steel cabinet.
- Quick release combination riving style splitter and blade guard with anti-kickback pawls and a second European style riving knife also included
- Totally Enclosed Fan Cooled (TEFC) industrial motor---3HP/1PH, 5HP/3PH
- High precision General "T" Fence system with 52" and 36" long guide rails.
- 2 miter gauge T-slots and deluxe cast-iron miter gauge.
- Magnetic emergency stop safety switch to prevent unwanted or unintentional start-up.
- Matching dual V-belt drive, on balanced cast-iron pulleys for smooth, vibration-free, running.
- Arbor mounted on heavy-duty, permanently lubricated, sealed ball-bearings.

SPECIFICATIONS

BLADE/ARBOR DIAMETER 10"

MAX. DEPTH OF CUT AT 90° / 45°
3 1/8" (79 mm) / 2 1/8" (54 mm)

ARBOR TILT RANGE
0° - 45°

MAX. RIP TO LEFT / RIGHT OF BLADE
12" (305 mm) / 52" (1270 mm)

MAXIMUM DADO WIDTH
13/16" (21 MM)

DISTANCE AHEAD OF BLADE
12 3/4" (324 MM)

TABLE SIZE (L x W x H)
28" X 36" X 34"

SIZE OF T-SLOTS
3/8" x 3/4" (10 x 19 mm)

ARBOR SPEED
4000 RPM

MOTOR

3HP, 230 V, 1 PH, OR 5HP, 230V/460V 3 Ph

WEIGHT

576 Lbs.

10" AUTOMATED DELUXE LEFT TILT CABINET SAW



MODEL #850-3
MODEL # 850-5/3



GENERAL® INTERNATIONAL

GENERAL INTERNATIONAL POWER PRODUCTS LLC

6243 Industrial Parkway | Whitehouse, Ohio 43571 (USA)

THANK YOU for choosing this General® MFG model 850 10" Tilting Arbor Saw. This saw has been carefully tested and inspected before shipment and if properly used and maintained, will provide you with years of reliable service. To ensure optimum performance and trouble-free operation, and to get the most from your investment, please take the time to read this manual before assembling, installing and operating the unit.

The manual's purpose is to familiarize you with the safe operation, basic function, and features of this saw as well as the set-up, maintenance and identification of its parts and components. This manual is not intended as a substitute for formal woodworking instruction, nor to offer the user instruction in the craft of woodworking. If you are not sure about the safety of performing a certain operation or procedure, do not proceed until you can confirm, from knowledgeable and qualified sources, that it is safe to do so.

Once you've read through these instructions, keep this manual handy for future reference.

Disclaimer: The information and specifications in this manual pertain to the unit as it was supplied from the factory at the time of printing. Because we are committed to making constant improvements, General® MFG reserves the right to make changes to components, parts or features of this unit as deemed necessary, without prior notice and without obligation to install any such changes on previously delivered units. Reasonable care is taken at the factory to ensure that the specifications and information in this manual corresponds with

that of the unit with which it was supplied. However, special orders and "after factory" modifications may render some or all information in this manual inapplicable to your machine. Further, as several generations of this model of saw and several versions of this manual may be in circulation, if you own an earlier or later version of this unit, this manual may not depict your machine exactly. If you have any doubts or questions contact your retailer or our support line with the model and serial number of your unit for clarification.

GENERAL® MFG & GENERAL® INTERNATIONAL WARRANTY

All component parts of General® MFG, General® International and Excalibur by General International® products are carefully inspected during all stages of production and each unit is thoroughly inspected upon completion of assembly.

Limited Lifetime Warranty

Because of our commitment to quality and customer satisfaction, General® MFG and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser for the life of the tool. *However, the Limited Lifetime Warranty does not cover any product used for professional or commercial production purposes nor for industrial or educational applications. Such cases are covered by our Standard 3-year Limited Warranty only. The Limited Lifetime Warranty is also subject to the "Conditions and Exceptions" as listed below.*

Standard 3-Year Limited Warranty

All products not covered by our lifetime warranty including products used in commercial, industrial and educational applications are warranted for a period of 3 years (36 months) from the date of purchase. General® MFG and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser during this 3-year warranty period, subject to the "conditions and exceptions" as listed below.

To file a Claim

To file a claim under our Standard 3-year Limited Warranty or under our Limited Lifetime Warranty, all defective parts, components or machinery must be returned freight or postage prepaid to General® International, or to a nearby distributor, repair center or other location designated by General® International. For further details call our service department at 1-888-664-0449 or your local distributor for assistance when filing your claim.

Along with the return of the product being claimed for warranty, a copy of the original proof of purchase and a "letter of claim" must be included (a warranty claim form can also be used and can be obtained, upon request, from General® International or an authorized distributor) clearly stating the model and serial number of the unit (if applicable) and including an explanation of the complaint or presumed defect in material or workmanship.

CONDITIONS AND EXCEPTIONS:

This coverage is extended to the original purchaser only. Prior warranty registration is not required but documented proof of purchase i.e. a copy of original sales invoice or receipt showing the date and location of the purchase as well as the purchase price paid, must be provided at the time of claim.

Warranty does not include failures, breakage or defects deemed after inspection by General® MFG or General® International to have been directly or indirectly caused by or resulting from; improper use, or lack of or improper maintenance, misuse or abuse, negligence, accidents, damage in handling or transport, or normal wear and tear of any generally considered consumable parts or components.

Repairs made without the written consent of General® International will void all warranty.

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Contact information

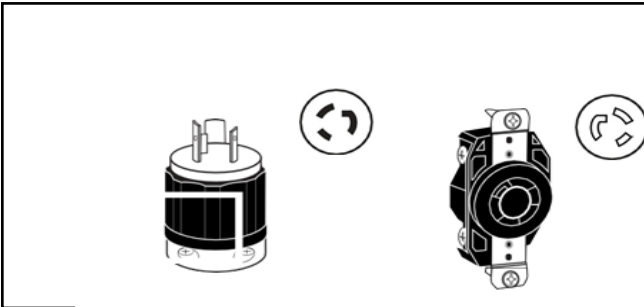
RULES FOR SAFE OPERATION

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. General® MFG disclaims any real or implied warranty and holds itself harmless for any injury that may result from improper use of its equipment.

1. Do not operate the saw when tired, distracted, or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
2. The working area should be well lit, clean and free of debris.
3. Keep children and visitors at a safe distance when the saw is in operation; do not permit them to operate the saw.
4. Childproof and tamper proof your shop and all machinery with locks, master electrical switches and switch keys, to prevent unauthorized or unsupervised use.
5. **Stay alert!** Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
6. Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area and whenever possible use a dust collector and wear eye, ear and respiratory protection devices.
7. Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry while the saw is in operation. Wear protective hair covering to contain long hair and wear non-slip footwear.
8. Be sure that adjusting wrenches, tools, drinks and other clutter are removed from the machine and/or the feed table surface before operating.
9. Keep hands well away from the blade and all moving parts. Use a brush, not hands, to clear away chips and dust.
10. Be sure that the blade is securely installed and in proper cutting direction before operation.
11. Be sure the blade has gained full operating speed before beginning to cut.
12. Always use a clean, properly sharpened blade. Dirty or dull blades are unsafe and can lead to accidents.
13. If using a power feeder, stop the feeder before stopping the table saw.
14. Do not push or force stock into the blade. The saw will perform better and more safely when working at the rate for which it was designed.
15. Use suitable support when cutting stock that does not have a flat surface. Always hold stock firmly against the fence when ripping, or against the miter gauge when cross cutting.
16. To minimize risk of injury in the event of workpiece kickback, never stand directly in-line with the blade or in the potential kickback path of the work piece.
17. Avoid working from awkward or off balance positions. Do not overreach while cutting; keep both feet on the floor. Never lean over or reach over the blade and never pull the work piece over the blade from behind. Use out feed support or have an assistant help when ripping long material.
18. Keep blade guards in place and in working order. If a guard must be removed for maintenance or cleaning, be sure it is properly reattached before using the tool again.
19. Never leave the machine running with the power on when not in operation.
20. Use of parts and accessories NOT recommended by GENERAL® MFG may result in equipment malfunction or risk of injury.
21. Never stand on machinery. Serious injury could result if the tool is tipped over or if the blade is unintentionally contacted.
22. Always disconnect tool from power before servicing or changing accessories such as blades, or before performing any maintenance, cleaning or adjustments, or if the machine will be left unattended.
23. Make sure that switch is in "OFF" position before plugging in the power cord.
24. Make sure the tool is properly grounded. If equipped with a 3-prong plug it should be used with a three-pole receptacle. Never remove the third prong.
25. Do not use this saw for other than its intended use. If used for other purposes, GENERAL® MFG disclaims any real implied warranty and holds itself harmless for any injury, which may result from that use.

ELECTRICAL REQUIREMENTS

NOTE: VOLTAGE REQUIREMENTS AND AMPERAGE DRAW FOR MOTORS MAY NOT BE FULLY DESCRIBED IN THIS MANUAL. FOR COMPLETE ELECTRICAL REQUIREMENTS REFER TO THE MOTOR I.D. NAME PLATE ON THE MACHINE. IF IN DOUBT CONSULT A LICENSED QUALIFIED ELECTRICIAN BEFORE PROCEEDING.

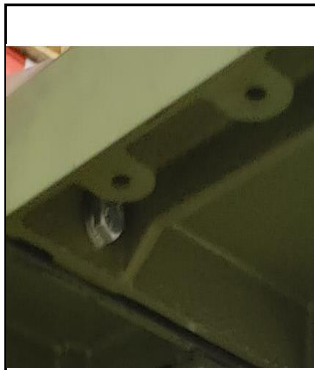


ELECTRICAL CONNECTIONS

Both a manual circuit breaker (or similar device) as well as an electrical plug are recommended and **should be installed by a qualified electrician**. Use locally approved wire that includes a separate grounding wire and a 3-prong grounding type plug with a matching receptacle.

NOTE:

For added convenience, based upon personal preference, there are mounting holes, under the corner, for the switch to be mounted on the right side OR left side.



GROUNDING INSTRUCTIONS

In the event of an electrical malfunction or short circuit, grounding reduces the risk of electric shock to the operator. The motor of this machine is wired for 230V single phase operation. As with many stationary industrial type machines because each installation situation is unique, this table saw is supplied without a power cord or plug. The installation of an

appropriate power cord and plug must be performed by a qualified electrician. The machine must be connected to an electrical source using a power cord that has a grounding wire, which must also be properly connected to the grounding prong on the plug. The outlet must be properly installed and grounded and all electrical connections must be made in accordance with all local codes and regulations.

CIRCUIT CAPACITY

Make sure that the wires in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit. If you are unsure, consult a qualified electrician. If the circuit breaker trips or the fuse blows regularly, your machine may be operating on a circuit that is close to its amperage draw capacity. However, if an unusual amperage draw does not exist and a power failure still occurs, contact a qualified technician or our service department.

EXTENSION CORDS

The use of an extension cord is not generally recommended for 230V equipment. If you find it necessary, use only 3-wire extension cords that have 3-prong grounding plug and a matching 3-pole receptacle that accepts the tool's plug. Repair or replace a damaged extension cord or plug immediately.

If you find it necessary to use an extension cord with your machine, make sure the cord rating is suitable for the amperage listed on the motor I.D. plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The accompanying chart shows the correct size extension cord to be used based on cord length and motor I.D. plate amp rating. If in doubt, use the next heavier gauge. The smaller the number, the heavier the gauge.

FOR CORD				
AMPERE RATING	TOTAL LENGTH OF CORD IN FEET			
	230 VOLTS	50 FEET	100 FEET	200+ FEET
AWG				
<5	----->	16	16	* NR
6 TO 10	----->	16	16	* NR
10 TO 12	----->	14	12	* NR
12 TO 16	----->	12	10	* NR
Recommended				

BASIC FUNCTIONS

This cabinet saw has been designed for cutting solid wood as well as manufactured wood materials such as ply-wood, wood paneling, particleboard, MDF and other wood-based by-products. This saw is not designed for cutting metals nor for cutting any materials other than wood or wood-based stock.

This saw is designed for use with maximum 10" (254 mm) diameter blades having a center hole diameter of 5/ 8". The blade can be raised to cut a maximum stock thickness of 3 1/ 8" with the blade set 90 degrees to the table. The blade can be tilted up to 45 degrees to the left for bevel cuts to a maximum stock thickness of 2 1/ 8". Using any standard aftermarket 8" diameter stacked dado blade set (not included), the maximum dado cutting capacity of this saw is 13/16". Note: for safer dado cutting, an optional dado table insert can be purchased through your General® MFG / General® International distributor.

To encourage safety through the proper use of either the supplied riving style splitter/blade guard assembly or the European style riving knife the 850 saw has been designed with a quick install/quick release feature allowing the user to install or remove either of these safety components in seconds.

UNPACKING

Carefully unpack and remove the saw from the crate. All other components and accessories are packed inside the saw cabinet. Check for damaged or missing items as per the list of contents below.

NOTE: Please report any damaged or missing items to your General@ International distributor immediately.

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SAW	1
SPLITTER /BLADE GUARD ASSEMBLY	1
ANTI KICKBACK PAWL ASSEMBLV	1
ARBOR WRENCH.....	1
MITER GAUGE	1
PUSH STICL	1

NOTE: F-42 rip fence and T-50 guide rails are packaged separately.



ADDITIONAL REQUIREMENTS FOR SET UP

- Phillips Screwdriver
- 1/2", 7/16" and 9/16" and openend wrench
- 1/8" Allen key
- Square

OR

PLACEMENT WITHIN THE SHOP/ ESTABLISHING A SAFETY ZONE



THIS MODEL, 850, 10" TILTING ARBOR SAW IS VERY HEAVY. DO NOT OVEREXERT. A HOIST OR FORKLIFT SHOULD BE USED TO LIFT MACHINE.

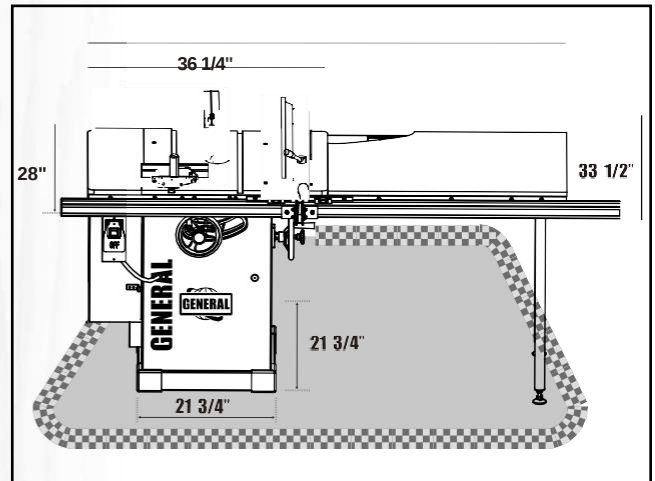
PLACEMENT WITHIN THE SHOP

This machine should be installed and operated only on a solid, flat and stable floor that is able to support the weight of the saw (576 lbs) and the operator.

Using the dimensions shown beside as a guideline, plan for placement within your shop that will allow the operator to work unencumbered and unobstructed by foot traffic (either passing shop visitors or other shop workers) or other tools or machinery.

ESTABLISHING A SAFETY ZONE

For shops with frequent visitors or multiple operators, it is advisable to establish a safety zone around shop machinery. A clearly defined "no-go" zone on the floor around each machine can help avoid accidents that could cause injury to either the operator or the shop visitor. It is advisable to take a few moments to either paint (using non-slip paint) or using tape, define on the floor the limits or perimeter of each machine's safety zone. Take steps to ensure that all operators and shop visitors are aware that these areas are off limits whenever a machine is running for everyone but the individual operating the unit.



CLEAN UP

The protective coating on the saw table prevents rust from forming during shipping and storage. Remove it by rubbing with a rag dipped in kerosene, mineral spirits or paint thinner. (Dispose of potentially flammable solvent-soaked rags according to manufacturer's safety recommendations.)

A putty knife, held flat to avoid scratching the surface, may also be used to scrape off the coating followed by clean-up with solvent. Avoid rubbing the saw's painted surfaces, as many solvent-based products will remove paint.

To prevent rust, apply a light coating of paste wax or use regular applications of any after-market surface protectant or rust inhibitor.



ASSEMBLY INSTRUCTIONS

For your convenience this saw is shipped from the factory partially assembled and requires only minimal assembly and set up before being put into service. The left and right table extension wings are factory installed and aligned and unless seriously shaken or jolted in transport should not require further alignment.

If purchased with the standard General "T" Fence System, a full installation and operating instructions manual for the fence system is supplied in the box.

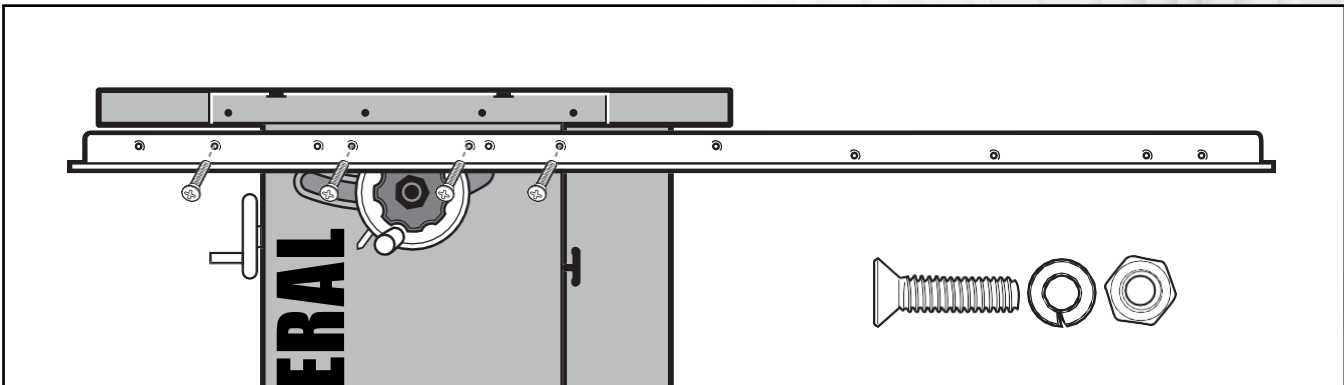
If purchased with the table board extension and support legs or if adding an aftermarket table board and legs, installation instructions can also be found in the fence manual.



Before connecting the machine to the power source, verify that the voltage of your power supply corresponds with the Voltage specified on the motor ID nameplate. This tool is for INDOOR use ONLY! Do NOT use in wet or damp locations.

INSTALL AND ADJUST RAILS AND FENCE

ATTACH THE FRONT FENCE RAIL TO YOUR SAW



Referring to the diagram above, place 4 flat head countersunk screws, lock washers and nuts to assemble the front rail to the front of the saw. But don't tighten the nuts yet.

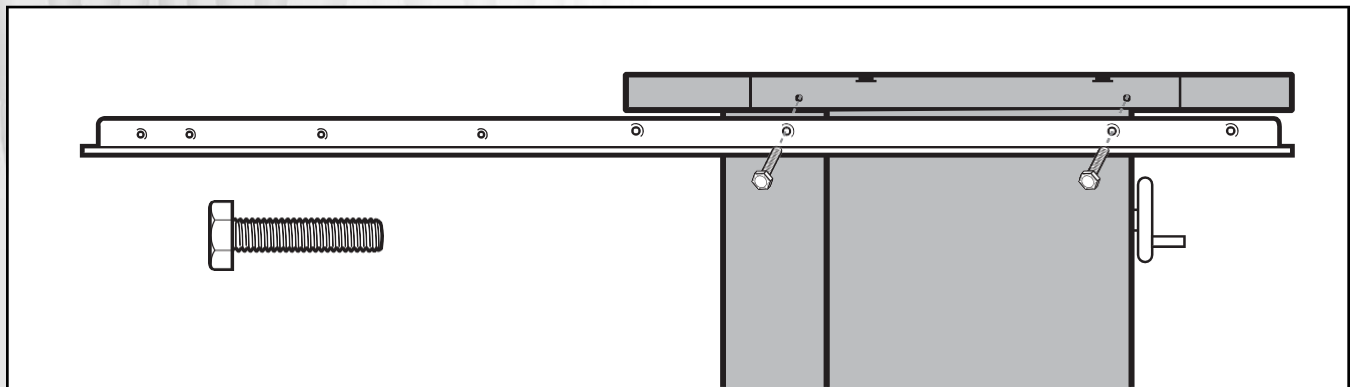
NOTE: The front rail, is the wider of the two rails and has holes in both faces.

ADJUST THE FRONT RAIL HEIGHT



Place the supplied L-jig on top of the table. Adjust the rail height until the bottom of the jig is flush with the rail shelf. Hold the nuts firm with a 7/16" wrench and the two screws on left and right ends of the rail. Tighten the centerscrews only after double-checking rail height using the L-jig all along the rail and at both ends.

ATTACH THE BACK FENCE RAIL TO YOUR SAW



Referring to the diagram above, place hex. head bolts and where applicable lock washers and nuts to assemble the rear rail to the back of the saw.

INSTALL AND ALIGN THE FENCE

Proceed to fence installation and alignment as per the instructions provided in your fence manual.

REMOVE / INSTALL A SAW BLADE

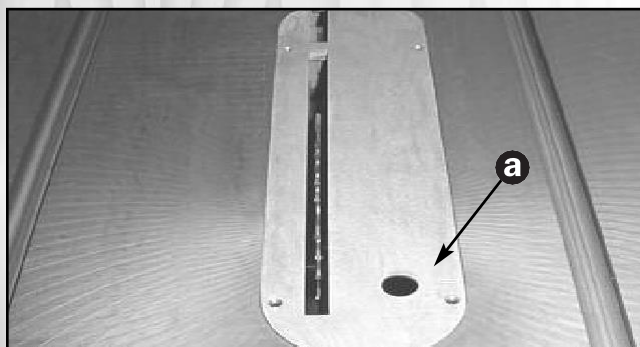
NOTE

*This saw is intended for use with 10" (250mm) diameter or less saw blades having a center hole diameter of 5/8". There are many types of blades available to perform specific cutting jobs, such as crosscuts or ripping only, or for use with plywood, paneling and other products. A good quality specialty blade can produce a finer finish, be more efficient and place less strain on the saw. Use only saw blades designed for use at a maximum operating speed of **6000 RPM** or less. Saw blades should be kept clean and sharp. Never store saw blades by stacking them directly in contact with each other. Place a layer of cardboard or similar material between the blades to keep them from coming into contact with each other.*

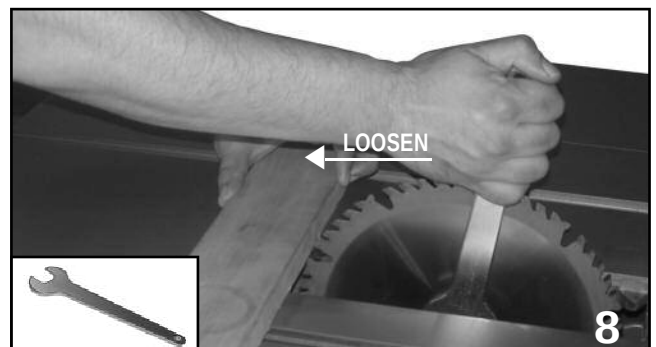


Be sure the saw is unplugged and completely disconnected whenever installing or removing a saw blade!

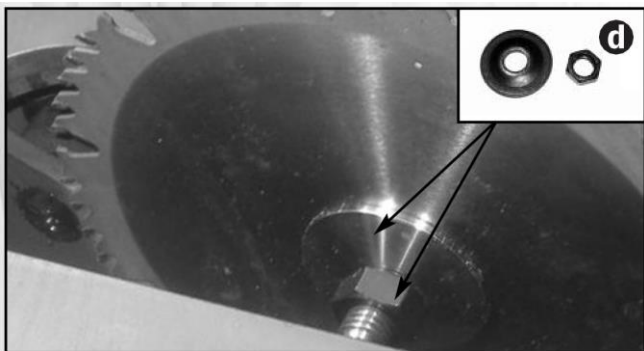
REMOVE A SAW BLADE



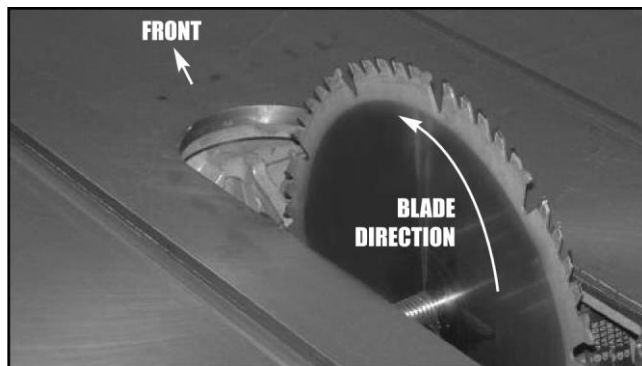
1. Remove the table insert.



Holding the arbor with the arbor wrench provided, wedge a block of wood between the teeth in front of the saw and pull the arbor wrench toward you or counterclockwise.



3. Remove the arbor nut & flange (D), then remove the blade.



TO INSTALL A SAW BLADE:

1. Install the blade on the arbor so that the openings between the teeth, face the front of the saw (the blade spins in the counterclockwise direction).



2. Replace the flange and arbor nut. Holding the arbor with the arbor wrench provided, wedge a block of wood between the teeth at the rear of the saw and push the arbor wrench away from you or clockwise.
3. Re-install the table insert.

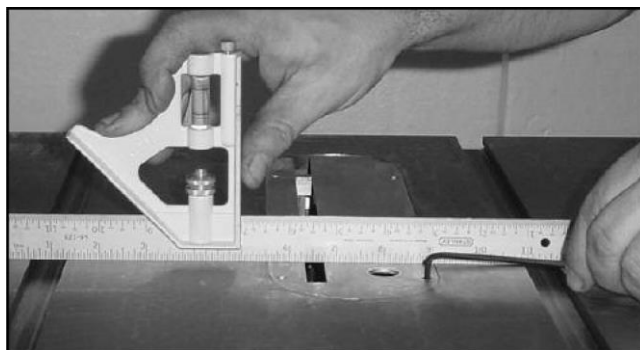
NOTE

When tightening the arbor nut, take care not to over tighten as this will make it very difficult to remove later. Because the rotation of the blade runs counter to the direction of the threads on the nut, the blade is essentially tightening itself to the nut whenever the saw is running. Though there are no hard and fast rules for how much torque is required, the arbor nut should always be tightened firmly but without excess.

LEVEL THE TABLE INSERT

Use a straightedge to determine whether the insert is level with the tabletop. Turn each of the 4 adjusting screws with a 1/8" Allen key until done.

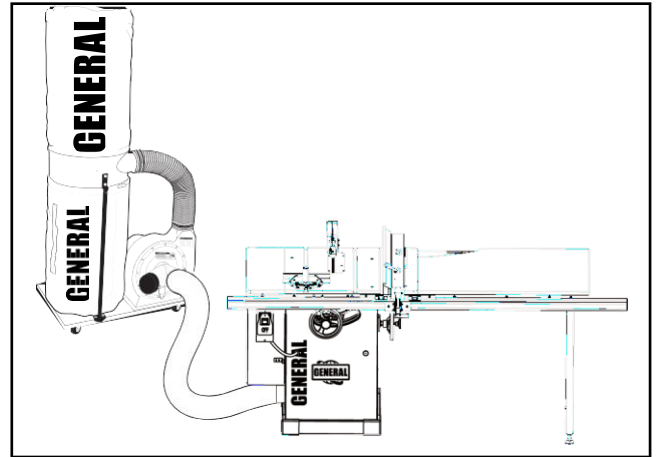
Suggestion: Start by adjusting one rear screw and its diagonal opposite in front, then tweak the remaining two screws.



CONNECTING TO A DUST COLLECTOR

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- There is a 4" dust outlet located on the lower right of the saw cabinet allowing for the connection to a dust collection system (not included).
- Be sure to use appropriate size hose and fittings (not included) and check that all connections are sealed tightly to minimize airborne dust.
- If you do not already own a dust collection system consider contacting your General® International distributor for information on our complete line of dust collection systems and accessories or visit our website at www.generaltoolsusa.ca
- Always turn on dust collector before starting the saw & always stop the saw before turning off dust collector.

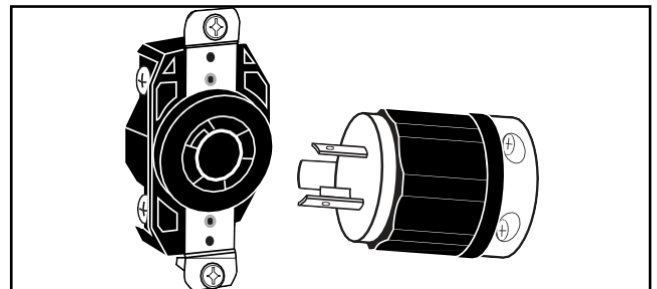


BASIC ADJUSTMENT & CONTROLS



To avoid the risk of shock or fire, do NOT operate the unit with a damaged power cord or plug. Replace damaged plug or cord immediately.

Once the assembly steps have been completed, plug the power cord into an appropriate outlet. Refer back to the section entitled "ELECTRICAL REQUIREMENTS" and make sure all requirements and grounding instructions are followed. When cutting operations have been completed unplug the saw from the power source.

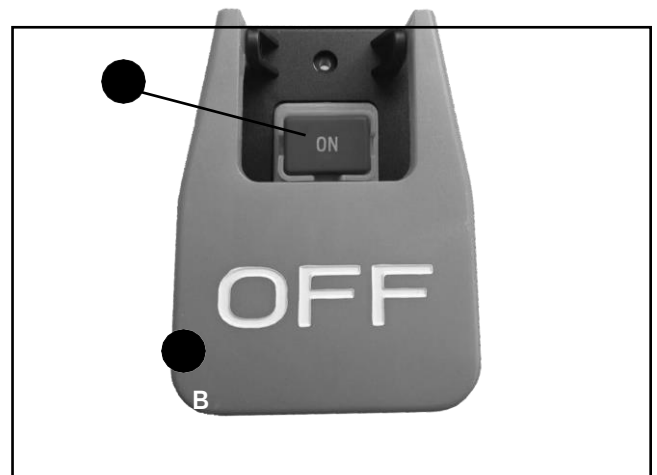


ON/OFF MAGNOIC POWER SWITCH

The switch assembly is equipped with a GREEN "START" button **A**, an extra-large easy access RED stop panel **B**.

To start the saw: Press on the GREEN "START" button **A**.

To stop the saw: Press on the RED "STOP" panel, **B**.



OVERLOAD PROTECTION

The magnetic safety switch on this saw is equipped with an overload protection feature. To prevent an electrical overload from damaging the motor, in the event of a spike in line voltage or amperage draw, the internal overload protector will automatically be tripped, thereby cutting off power to the motor.

Note: The most common causes of such overloads are:

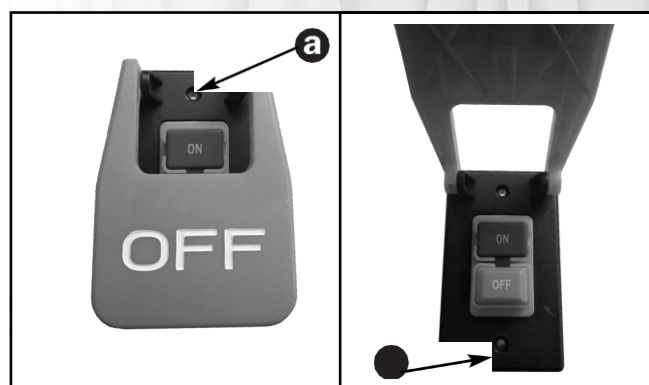
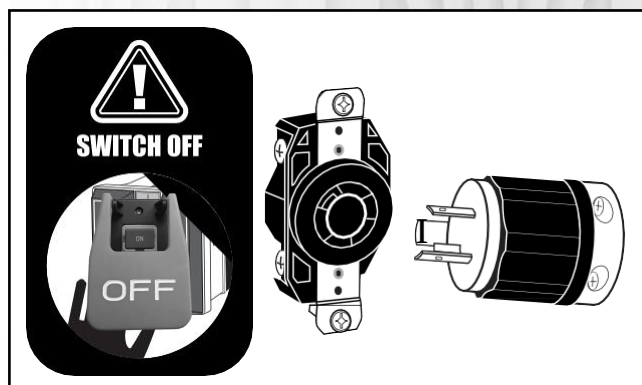
1. *Overworking the motor by attempting to feed thick dense workpiece material too quickly, thereby causing an increase in power consumption and a spike in amperage draw.*
2. *An electrical extension cord that is too long or not the correct gauge of wire, which can also cause an increase in amperage draw. If an electric extension cord must be used, follow the instructions and refer to the chart in the electrical requirements section at the beginning of this manual.*
3. *Overworked circuit caused by operating on a circuit that is close to its amperage draw capacity. Make sure the circuit being used is capable of handling the amperage draw from this machine as well as any other electrical devices operating on the same circuit. If you are unsure, consult a qualified electrician.*

To reset the overload protection switch after it has been tripped proceed as follows:

1. Set the power switch on the saw to the off position and disconnect the machine from the power source.

Note: If the saw is permanently connected to a circuit (hard-wired), set the wall panel circuit breaker or main circuit interrupter to the off position.

2. Unscrew the 2 screws and remove the controlbox front cover.
3. Reinstall the control box cover.
4. Reconnect the saw to the power source.
5. You can now resume cutting operations.



To avoid Unexpected or Unintentional start up, make sure the Power switch on the saw is in the "OFF" position before Connecting to a power source.

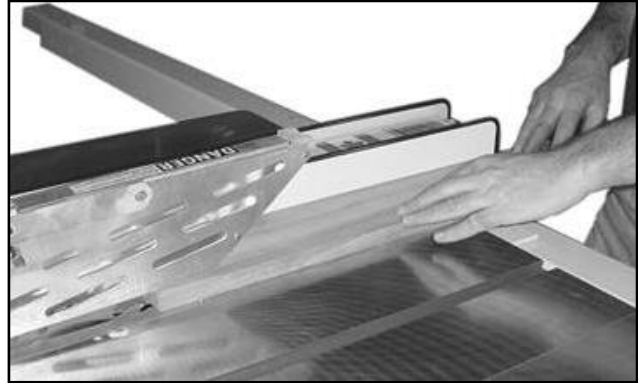
OPERATING INSTRUCTIONS

- Make sure that the arbor nut is secure and that the blade is firmly tightened snug on the arbor.
- Check that the blade angle and height lock knobs are tight.
- If ripping, make sure the fence lock lever is engaged and that the fence is parallel to the blade.
- If cross cutting, make sure the miter gauge is locked tight.
- While using the saw, be sure to wear safety glasses at all times.
- Make sure that the blade guard/splitter assembly is properly installed and aligned with the blade, and that the anti-kickback pawls are functioning.

TYPES OF CUTS

RIPPING

Cutting a wood plank or sheet of plywood lengthwise to reduce its width is called "ripping." To rip stock, hold the work with both hands pushing it into the blade as well as firmly against the rip fence so that it is cut straight.



- The work to be cut must have a straight edge to ride the fence and must be flat to make solid contact with the table during the cut in order to avoid "kickback" (a blade jam causing the wood to fly backwards and hit you).
- Never rip or cut wood without using the fence or miter gauge to guide it because the stock could kickback.
- Always use the blade guard and splitter assembly when cutting wood. It has anti-kickback fingers and splitter to prevent the saw "kerf" (the slit cut by the blade) from closing and binding the blade, which can overload and/or stall the motor or cause the blade to lift and eject the workpiece towards the front of the saw at very high speeds. The blade guard keeps your fingers away from the blade and also reduces the amount of saw dust flying free.
- Although certain operations require the removal of the blade guard and splitter assembly, it should always be replaced for regular cutting.
- Never stand in the line of the blade when ripping.
- Raise the saw blade only about 1/4" higher than the work to be cut.

As you complete the rip, the wood will either remain on the table, tilt up to be caught on the end of the guard, or fall onto the floor (or outfeed table). The waste part of the stock remains on the table to be removed only after the saw is stopped (unless it is large enough for immediate safe removal).

If the work to be ripped is narrow, it is safer to use a push stick, rather than the hands, to feed it into the blade. Push sticks with non-slip grippers can be purchased, shop-made one works just as well.

When ripping extremely narrow stock that may not clear the width of the blade guard, or very thin material such as paneling, which may slip between the underside of the fence and the table surface, a strip of wood as an auxiliary guide can be attached to the fence.



Never reach in towards the blade while the blade is still spinning! Whenever a rip cut is completed, turn off the saw and Wait for the blade to come to a complete stop before reaching in to remove the workpiece or the waste material.

BEVEL RIPPING

Bevel ripping is performed the same as ripping but with the saw blade set to an angle not perpendicular with the table surface. After changing the bevel angle verify the alignment of the guard and splitter; make sure there is clearance with the saw blade.

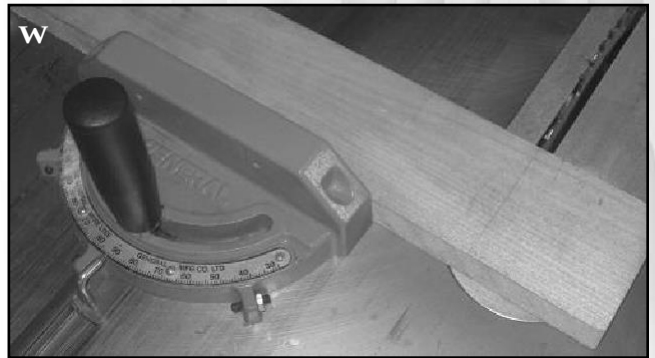
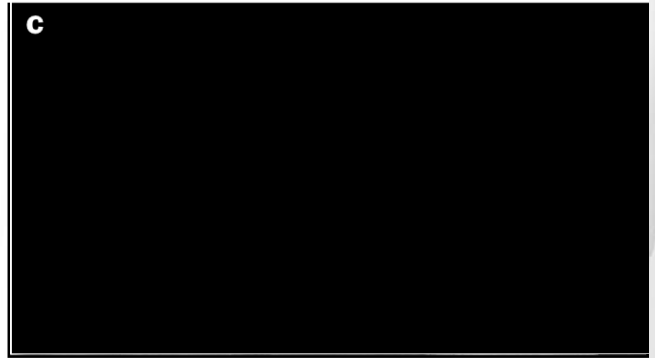
RIPPING SMALL WORK PIECES

Do not attempt rip cuts if the work piece is too small, as this will oblige you to place your hands too close to the blade and put you at serious risk of injury. When ripping narrower widths; use a push block or a push stick in order to avoid placing hands near the blade.

CROSS CUTTING

Cutting against the grain, to shorten the length of a board is cross cutting. With some smaller-sized and rectangular pieces, you often have the choice of ripping or crosscutting. Always use the miter gauge, when cross cutting, never cut a piece unsupported. Miter gauge may be used in either slot, but most operators prefer the left groove for typical work. When the blade is tilted for bevel cutting, use the table slot that does not cause interference with your hand or the saw blade guard.

To begin crosscutting, place the work on the miter gauge and, with the motor OFF, slide it up close to the blade to align the outer edges of the teeth with your cut mark. Keep a firm grip as you pull the miter gauge and wood back away from the blade. Lower the blade guard, turn on the saw and make the cut. When the work is cut through, move one or both cut pieces - if long enough to handle without danger - immediately off to the side, away from the turning blade. Turn off the motor.



BEVEL CROSS CUTTING

This procedure is the same as cross cutting except that the blade is set to an angle other than 0. After changing the Bevel angle, verify the alignment of the guard and splitter and verify that there is clearance with the saw blade.

ADJUSTING AND USING THE MITER GAUGE

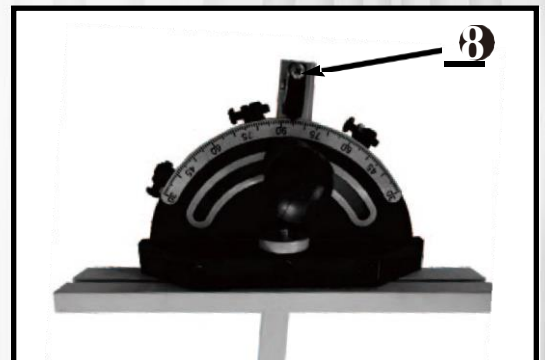
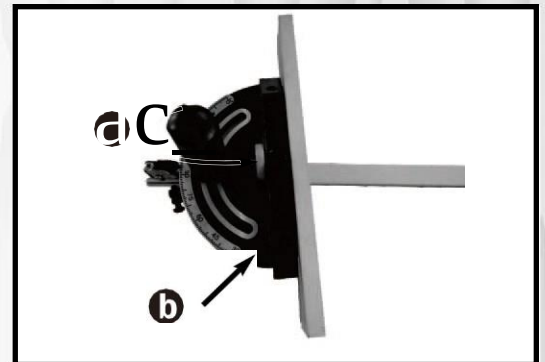
ADJUSTING THE MITER GAUGE

The miter gauge supplied with your saw has accurately adjusted index stops at 90° and 45° to the right and left, with a 30° maximum.

To use a setting other than 90°, loosen the lock knob, by turning it counter-clockwise, flip down the stop-lock tab, rotate the miter head to 45°, or any angle shown on the guide. Turn the lock knob clockwise to tighten it.

To check the accuracy of the miter gauge's factory settings, set it at 90° and check it with an L-square or T-square. To verify the setting, make a test cut in scrap stock and then use a square to check the cut piece.

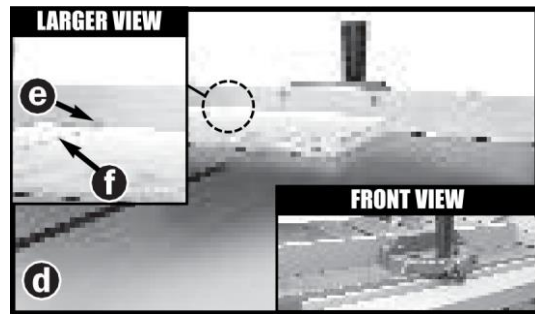
If the miter gauge needs adjusting, manually turn the head so the pointer is where you think it ought to be, tighten the lock knob and loosen the nut. Turn the adjusting screw until it touches the stop-lock tab. Run down the nut. Recheck the angle by making another test cut. Repeat, if necessary, until a true 90° is achieved.



ADDING AN AUXILIARY FENCE TO THE MITER GAUGE

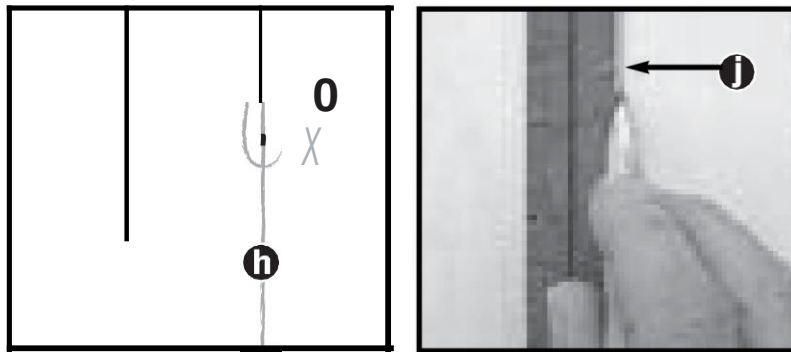
To ensure a true 90° crosscut, especially with longer pieces of wood that need more support than the narrow miter gauge head can provide, an auxiliary wood fence can be attached.

Make sure the wood for the fence is straight, not bowed. It should be about 2 inches wide and extend about 12 inches from either side of the miter head. Drill 2 holes in the wood corresponding to those on the miter head and use bolts and nuts to secure the wood fence to the head.



To use the miter gauge with an auxiliary fence, first notch the fence with the saw blade a bit higher than the work-piece. Measure and draw a cutline on your wood, then place it on the miter fence. Position your cutline against the notch. Turn on the saw, slide the work up until it is cut through (but don't cut off the fence).

Marking Wood. If you measure a cut for 24 inches, line up the blade on the waste side of the mark. Don't cut through the middle of the measurement line or you'll reduce your desired board length by half the width of the saw blade! For accurate work, don't mark your cut with a fat pencil line. A narrow dash, with a sharp pencil point is best. Encircle the dash so you'll find it again and add a small X to indicate the waste or cut-off side. Pencils, like saw blades, have thickness. When squaring off from the cut mark, align your square to allow for pencil clearance, which will be about 1/16" away from the drawing edge of the square.



MITER CUTS

This operation is the same as cross cutting, except the miter gauge is set to an angle other than 0. Hold the work piece firmly against the miter gauge and feed the work piece slowly into the blade to prevent it from moving during the cut.



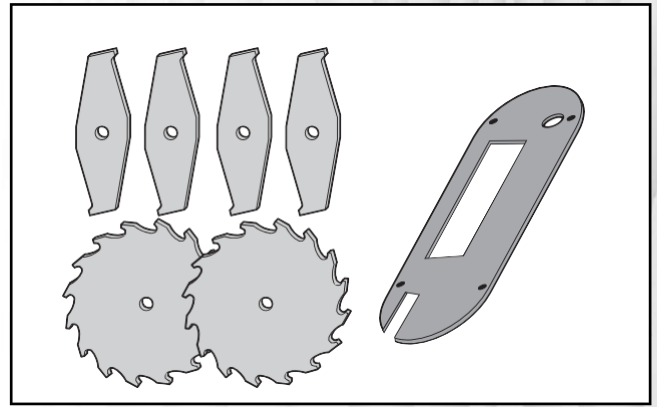
COMPOUND MITERING

This is a combination of bevel cross cutting and mitering. It is infrequently used. Follow instructions for both bevel cutting and mitering.

USING A DADO HEAD BLADE

A dado is cutting a "rabbet" or a wide groove into the work. A dado blade, (not supplied with yoursaw) usually consists of two outer blades and several interior cutters. These can be adjusted to cut grooves from 1/8" to 13/16" for making shelves, joints and tenoning. Set the blade's width according to the instructions supplied with your dado blade.

After adjusting its width, mount the dado blade on your saw, just like a regular blade. You'll need an optional Dado insert, to replace the standard one that comes with your saw. Use the fence to line up the cut. The blade guard/splitter must be removed when Dadoing. Never use the dado blade in a bevel position.



Always verify the dado blade clearance before connecting the saw to the power source. Reattach the guard & verify & adjust splitter/riving knife alignment if needed, after the dado cut is finished. The Maximum dado head for this saw is 13/16" and the maximum dado blade diameter is 8".

MAINTENANCE



Make sure the saw has been turned off & unplugged from the power source before performing any maintenance.

PERIODIC MAINTENANCE

- Inspect/test the ON/OFF switch before each use. Do not operate the saw with a damaged switch - replace a damaged switch immediately
- Inspect the saw blade for damage or chipped teeth before each use. Replace a damaged or chipped blade immediately. Never operate the saw with a damaged or chipped blade
- Keep the saw table clean and free of dust, pitch or glue.
- An occasional light coating of paste wax can be used to protect the cast-iron surface. Ask our local distributor for suggestions on tabletop cleaners and cast-iron surface protection based on what is readily available in your area.
- Occasionally open the cabinet door and brush off and vacuum out accumulated dust from inside the cabinet and on the blade tilting gears and on or around the motor.
- Periodically inspect the power cord and plug for damage. To minimize the risk of electric shock or fire, never operate the saw with a damaged power cord or plug. Replace a damaged power cord or plug at the first sign of damage.
- To minimize airborne dust particles periodically inspect all dust collection fittings - re-tighten as needed.

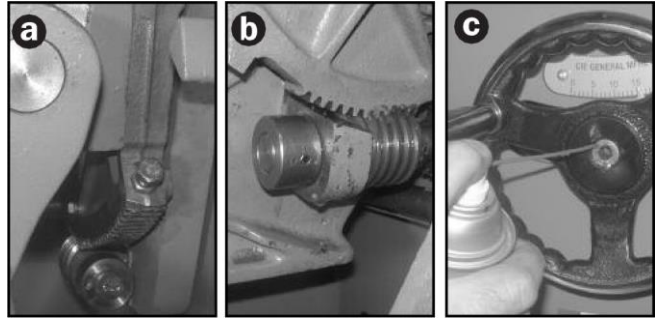
LUBRICATION

Keep the blade tilt mechanism as well as the blade height adjustment mechanism well lubricated and free of dust or debris. Clean and remove dust, debris, and old lubricant as needed depending on frequency of use. After cleaning, reapply lubricant as needed.

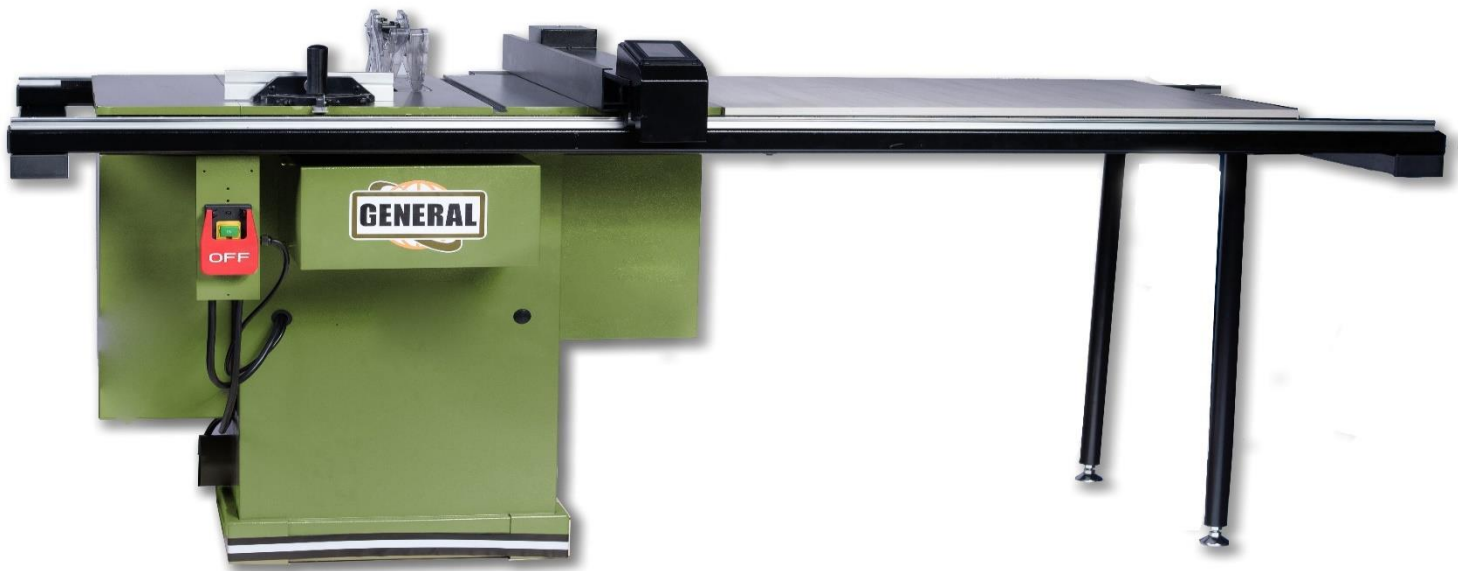
Note: To lubricate the blade tilt mechanism, apply a very light dab of any all-purpose grease (available at any hardware store).

To lubricate the blade height adjustment mechanism, loosen and remove the lock knob on the blade tilt adjustment hand wheel, then spray some dry lubricant into the hole.

The motor and all bearings are sealed and permanently lubricated - no further lubrication is required. No other part of this table saw needs lubrication.



MODEL 850-3 & 850-5/3



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