

Save This Manual For
Future Reference

SEARS

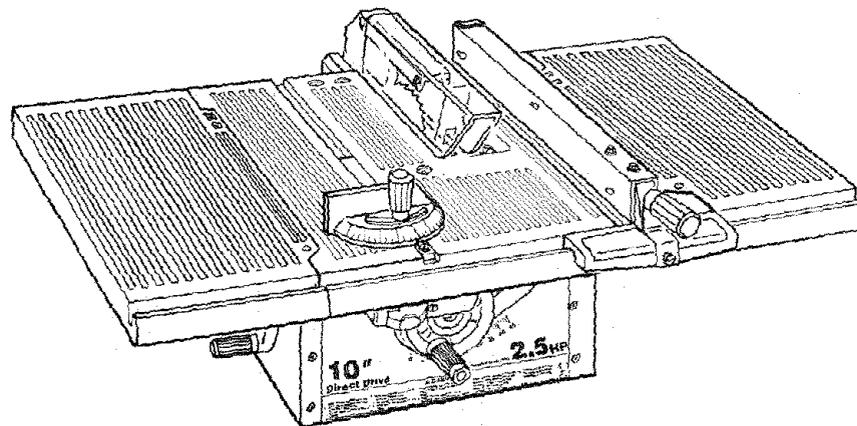
*owners
manual*

**MODEL NO.
113.221720
SAW WITH
TABLE EXTENSIONS**

**Serial
Number**
Model and serial number may be found
at the rear of the base.

You should record both model and
serial number in a safe place for future
use.

**FOR YOUR
SAFETY:
READ ALL
INSTRUCTIONS
CAREFULLY**



SEARS / CRAFTSMAN

**10-INCH
DIRECT DRIVE
TABLE SAW**

- *assembly*
- *operating*
- *repair parts*

Sold by SEARS, ROEBUCK AND CO., Chicago, IL. 60684 U.S.A.

Part No. SP5537

Printed in U.S.A.

FULL ONE YEAR WARRANTY ON CRAFTSMAN TABLE SAW

If within one year from the date of purchase, this Craftsman Table Saw falls due to a defect in material or workmanship, Sears will repair it, free of charge.

WARRANTY SERVICE IS AVAILABLE BY SIMPLY CONTACTING THE NEAREST SEARS SERVICE CENTER/DEPARTMENT THROUGHOUT THE UNITED STATES.

THIS WARRANTY APPLIES ONLY WHILE THIS PRODUCT IS USED IN THE UNITED STATES.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SEARS, ROEBUCK AND CO., D/18 WA Hoffman Estates, IL 60195

safety instructions for table saw

Safety is a combination of common sense, staying alert and knowing how your table saw works. Read this manual to understand this saw.

BEFORE USING THE SAW

WARNING: To avoid mistakes that could cause serious, permanent injury, do not plug the saw in until the following steps have been satisfactorily completed.

1. Assembly and Alignment (See pages 9 - 24).
2. Learn the use and function of the ON-OFF Switch, Guard, Spreader, Anti-Kickback device, Miter Gauge, Fence, Table Insert and Blade Elevation and Bevel Controls. (See page 25)
3. Review and understand all safety instructions and operating procedures in this manual.
4. Review the maintenance methods for this saw. (See page 38)

Read the DANGER label found on the front of the saw, as shown below.

WHEN INSTALLING OR MOVING THE SAW

1. AVOID DANGEROUS ENVIRONMENT. Use the saw in a dry place protected from rain. Keep work area well lighted.
2. To avoid injury from unexpected saw movement:
 - A. Bolt or clamp the saw to a firm level surface where there is plenty of room for handling and properly supporting the workpiece.
 - B. Support the saw so the table is level and the saw does not rock.
 - C. Bolt the saw support to the floor if it tends to slip walk, or slide during normal use.
 - D. When using table extensions over 24 inches wide on any side of the saw, bolt the saw support to the floor or prop up the outer end of the extension from the floor to keep the saw from tipping.
3. Put the saw where neither operators or bystanders must stand in line with the saw blade.

4. GROUND THE SAW- This saw has an approved 3-conductor cord and a 3-prong grounding type plug. The plug fits grounding type outlets designed for 120 volt 15 amp circuits. The green conductor in the cord is the grounding wire. To avoid electrocution, NEVER connect the green wire to a live terminal.
5. To avoid injury from electrical shock, make sure your fingers do not touch the plug's metal prongs when plugging in or unplugging the saw.
6. To avoid back injury get help to move the saw. Always get help if you need to lift the saw. Hold the saw close to your body. Bend your knees so you can lift with your legs, not your back.
7. NEVER STAND ON TOOL. Serious injury could occur if the tool tips or you accidentally hit the cutting tool. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

BEFORE EACH USE:

1. Inspect your saw

- A. To avoid injury from accidental starting, unplug the saw, turn the switch off and remove the switch key before raising or removing the Guard, changing the cutting tool, changing the setup or adjusting anything.
- B. Check for alignment of moving parts, binding of moving parts, breakage of parts, saw stability, and any other conditions that may affect the way the saw works. If any part is missing, bent, or broken in any way, or any electrical part does not work properly, turn the saw off and unplug the saw.
- C. Replace damaged, missing, or failed parts before using the saw again.
- D. Use the Sawblade Guard, Spreader, and Anti-Kickback Pawls for any thru-sawing (whenever the blade comes through the top of the workpiece). Make sure the Pawls work properly. Make sure the Spreader is in line with the sawblade.

DANGER

- | | | | | |
|--|---|--|---|--|
| 1. Read manual before using saw. | 4. Keep blade guard down and in place for through cuts. | 7. When ripping, use push stick when fence is set 2 inches or more from blade. | 9. When ripping, use push block and auxiliary fence when fence is set between 1/2 and 2 inches from blade. Do not make rip cuts narrower than 1/2 inch. | 10. Turn power off and wait for blade to stop before adjusting or servicing. |
| 2. Wear safety goggles that meet ANSI Z87.1 standards. | 5. Do not do freehand cuts. | 8. Know how to reduce the risk of kickback. See instructions for ripping. | | |
| 3. Do not reach around or over saw blades | 6. Keep hands out of path of saw blade. | | | |



E. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking for and removing keys and adjusting wrenches from tool before turning it on.

F. To avoid injury from jams, slips or thrown pieces (kickback and throwback):

1. USE ONLY "Recommended Accessories" (See page 40). Follow the instructions that come with the accessories. Using other accessories may be dangerous.
2. Choose the right blade or cutting accessory for the material and the type of cutting you plan to do.
3. Never use grinding wheels, abrasive cut-off wheels, friction wheels (metal slitting blades) wire wheels or buffing wheel. They can fly apart explosively.
4. Choose and inspect your cutting tool carefully.
 - a. To avoid cutting tool failure and thrown shrapnel (broken pieces of blade), use only 10" or smaller blades or other cutting tools marked for speeds of 5000 rpm or higher.
 - b. Always use unbroken, balanced blades designed to fit this saw's 5/8 inch arbor.
 - c. When thru-sawing (making cuts where the blade comes through the workpiece top), always use a 10 inch diameter blade. This keeps the spreader closest to the blade.
 - d. Do not overtighten arbor nut. Use arbor wrenches to "snug" it securely.
 - e. Use only sharp blades with properly set teeth. Consult a professional blade sharpener when in doubt.
 - f. Keep blades clean of gum and resin.
5. Adjust table inserts flush with the table top. NEVER use the saw without the proper insert.
6. Make sure all clamps and locks are tight and no parts have any excessive play.

2. Keep work area clean

- A. Cluttered areas and benches invite accidents. Floor must not be slippery from wax or sawdust.
- B. To avoid burns or other fire damage, never use the saw near flammable liquids, vapors or gases.
- C. To avoid injury, don't do layout, assembly, or setup work on the table while the blade is spinning. It could cut or throw anything hitting the blade.

PLAN AHEAD TO PROTECT YOUR EYES, HANDS, FACE, EARS.

3. Plan your work

- A. USE THE RIGHT TOOL - Don't force tool or attachment to do a job it was not designed for.
- B. Dress for safety:
 1. Do not wear loose clothing, gloves, neckties or

jewelry (rings, wristwatches). They can get caught and draw you into moving parts.

2. Wear nonslip footwear.
3. Tie back long hair.
4. Roll long sleeves above the elbow.
5. Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using saw for long periods of time.
6. Any power saw can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.



7. For dusty operations, wear a dust mask along with the safety goggles.

C. Inspect your workpiece. Make sure there are no nails or foreign objects in the part of the workpiece to be cut.

D. Plan your cut to avoid **KICKBACKS** and **THROWBACKS** (when a part or all of the workpiece binds on the blade and is thrown violently back toward the front of the saw).

1. **Never cut FREEHAND:** Always use either a Rip Fence, Miter Gauge or fixture to position and guide the work, so it won't twist, bind on the blade and kickback.
2. Make sure there's no debris between the workpiece and its supports.
3. When cutting **Irregularly shaped workpieces**, plan your work so it will not slip and pinch the blade:
 - a. A piece of molding, for example, must lie flat or be held by a fixture or jig that will not let it twist, rock or slip while being cut. Use jigs or fixtures where needed to prevent workpiece shifting.
 - b. Use a different, better suited type of tool for work that can't be made stable.
4. Use extra caution with large, very small or awkward workpieces:
 - a. Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough

safety instructions for table saw

to tip when not held down to the table top. NEVER use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic saw table, or to help feed, support or pull the workpiece.

- b. Never confine the piece being cut off, that is, the piece NOT against the fence, miter gauge or fixture. Never hold it, clamp it, touch it, or use length stops against it. It must be free to move. If confined, it could get wedged against the blade and cause a kickback or throwback.
- c. Never cut more than one workpiece at a time.
- d. Never turn your table saw "ON" before clearing everything except the workpiece and related support devices off the table.

4. Plan the way you will push the workpiece through

- A. NEVER pull the workpiece through. Start and finish the cut from the front of the table saw.
- B. NEVER put your fingers or hands in the path of the sawblade or other cutting tool.
- C. NEVER reach in back of the cutting tool with either hand to hold down or support the workpiece, remove wood scraps, or for any other reason.
- D. Avoid hand positions where a sudden slip could cause fingers or hand to move into a sawblade or other cutting tool.
- E. DON'T OVERREACH. Always keep good footing and balance.
- F. Push the workpiece against the rotation of the blade. NEVER feed material into the cutting tool from the rear of the saw.
- G. Always push the workpiece all the way past the sawblade.
- H. As much as possible, keep your face and body to one side of the sawblade, out of line with a possible kickback or throwback.
- I. NEVER turn the saw "ON" before clearing the table of all tools, wood scraps, etc., except the workpiece and related feed or support devices for the cut planned.
- J. AVOID ACCIDENTAL STARTING - Make sure switch is "OFF" before plugging saw in.

WHENEVER SAW BLADE IS SPINNING

WARNING: Don't let familiarity (gained from frequent use of your table saw) cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

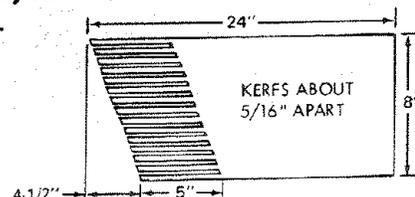
1. Before actually cutting with the saw, watch it while it runs for a short while. If it makes an unfamiliar noise

or vibrates a lot, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and fixing the problem.

2. Make sure the top of the arbor or cutting tool turns toward the front of the saw.
3. Set the cutting tool as low as possible for the cut you're planning.
4. KEEP CHILDREN AWAY. All visitors should be kept a safe distance from work. Make sure bystanders are clear of the saw and workpiece.
5. Let the blade reach full speed before cutting.
6. DON'T FORCE TOOL. It will do the job better and safer at its designed rate. Feed the workpiece into the blade only fast enough to let it cut without bogging down or binding.
7. Before freeing any jammed material:
 - A. Turn switch "OFF".
 - B. Unplug the saw.
 - C. Wait for all moving parts to stop.
 - D. Check blade, Spreader and Fence for proper alignment before starting, again.
8. To avoid throwback of cut off pieces;
 - A. Use the Guard assembly.
 - B. To remove loose pieces beneath or trapped inside the guard:
 1. Turn saw "OFF".
 2. Remove switch key.
 3. Wait for blade to stop before lifting the Guard.

ADDITIONAL INSTRUCTIONS FOR RIP TYPE CUTS

1. NEVER use the Miter Gauge when ripping.
2. Use a Push Stick whenever the fence is 2 or more inches from the blade. When thru-sawing, use an Auxiliary Fence and Push Block whenever the Fence must be between 1/2 and 2 inches of the blade. Never thru-saw rip cuts narrower than 1/2 inch. (See "Basic Saw Operation - Using the Rip Fence" section.)
3. Never rip anything shorter than 10" long.
4. When using a Push Stick or Push Block, the trailing end of the board must be square. A Push Stick or Block against an uneven end could slip off or push the work away from the Fence.
5. A FEATHERBOARD can help guide the workpiece. See "Basic Saw Operations - Using the Rip Fence". Always use Featherboards for any non thru rip type cuts.



BEFORE STARTING

1. To avoid kickbacks and slips into the blade, make sure the Rip Fence is parallel to the sawblade.
2. Before thru-sawing, check the Anti-Kickback Pawls. (See "Basic Saw Operation - Using the Rip Fence.") The Pawls must stop a kickback once it has started. Replace or sharpen Anti-Kickback Pawls when points become dull.
3. Plastic and composition (like hardboard) materials may be cut on your saw. However, since these are usually quite hard and slippery, the Anti-Kickback Pawls may not stop a kickback. Therefore, be especially careful in your set-up and cutting procedures.

WHILE CUTTING

1. To avoid kickbacks and slips into the blade, always push forward on the section of the workpiece between the saw blade and the Rip Fence. Never push forward on the piece being cut off.

ADDITIONAL INSTRUCTIONS FOR CROSS CUT TYPE CUTS

BEFORE STARTING

1. NEVER use the Rip Fence when crosscutting.

2. An auxiliary wood facing attached to the Miter Gauge can help prevent workpiece twisting and throwbacks. Attach it to the holes provided. Make the facing long enough and big enough to support your work. Make sure, however, it will not interfere with the Sawblade Guard.
3. Use jigs or fixtures to help hold any piece too small to extend across the full length of the Miter Gauge face during the cut. This lets you properly hold the Miter Gauge and workpiece and helps keep your hands away from the blade. (See page 20.)

WHILE CUTTING

1. To avoid blade contact, always hold the Miter Gauge as shown in the "Basic Saw Operation - Using the Miter Gauge."

BEFORE LEAVING THE SAW

1. Turn the saw off.
2. Wait for blade to stop spinning.
3. Make workshop child-proof. Lock the shop. Disconnect master switches. Remove the yellow Switch Key. Store it away from children and others not qualified to use the tool.
4. Unplug the saw.

glossary of terms for woodworking

Anti-Kickback Pawls (AKP)

Device which, when properly maintained, is designed to stop the workpiece from being kicked back at the operator during ripping operation.

Arbor

The shaft on which a cutting tool is mounted.

Crosscut

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

Dado

A non through cut which produces a square sided notch or trough in the workpiece.

Featherboard

A device which can help guide workpieces during rip type operation.

Freehand

Performing a cut without using a Fence, Miter Gauge, fixture, hold down or other proper device to keep the workpiece from twisting during the cut.

Gum

A sticky, sap based residue from wood products.

Heel

Misalignment of the blade.

Kerf

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

Kickback

An uncontrolled grabbing and throwing of the workpiece back toward the front of the saw.

Leading End

The end of the workpiece which, during a rip type operation, is pushed into the cutting tool first.

Molding

A non through cut which produces a special shape in the workpiece used for joining or decoration.

Push Stick

A device used to feed the workpiece through the saw during narrow ripping type operations and helps keep the operator's hands well away from the blade.

Push Block

A device used for ripping type operations too narrow to allow use of a Push Stick.

Rabbet

A notch in the edge of a workpiece.

Resin

A sticky, sap base substance that has hardened.

Ripping

A cutting operation along the length of the workpiece.

Revolutions Per Minute (RPM)

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

glossary of terms for woodworking

Sawblade Path

The area of the workpiece or table top directly in line with the part of the workpiece which will be, or has been, cut by the blade.

Set

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

Throw-Back

Throwing of pieces in a manner similar to a kickback.

Thru-Sawing

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

Trailing End

The workpiece end last cut by the blade in a ripping operation.

Workpiece

The item on which the cutting operation is being done. The surfaces of a workpiece are commonly referred to as faces, ends, and edges.

motor specifications and electrical requirements

MOTOR SPECIFICATIONS

The universal motor used in this saw has the following specifications:

Voltage	120
Amperes	13
Hertz	60
Phase	Single
RPM	5000
Rotation (viewed from sawblade end)	Counterclockwise

MOTOR SAFETY PROTECTION

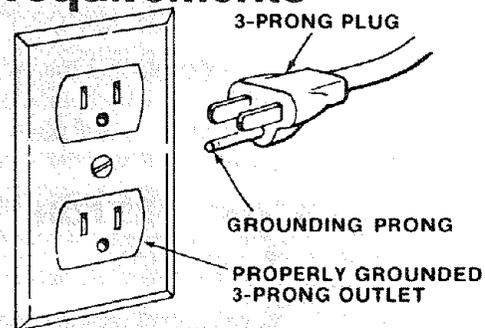
1. Frequent opening of fuses or circuit breakers may result if motor is overloaded, or if the motor circuit is fused with a fuse other than those recommended. Do not use a fuse of greater capacity without consulting the power company.
2. Although the motor is designed for operation on the voltage and frequency specified on motor nameplate, minimal loads will be handled safely at voltages 10% above or below the nameplate voltage. Heavy loads, however, require that voltage at the motor be the voltage specified on nameplate.
3. Most motor troubles may be traced to loose or incorrect connections, overloading, reduced input voltage (which results when small size wires are used in the supply circuit) or when the supply circuit is extremely long. Always check connection, load and supply circuit when the motor fails to perform satisfactorily. Check wire sizes and lengths with table at end of this section.

CONNECTING TO POWER SOURCE OUTLET

This saw must be grounded while in use to protect the operator from electrical shock.

Your saw is wired for 120 volts and it has a plug that looks like the one shown.

Plug power cord into a 110-120V properly grounded type outlet protected by a 15 amp. time delay or Circuit-Saver fuse or circuit breaker.



WARNING: Damaged power cords can cause shock or fires. If the power cord is worn, cut, or damaged in any way, have it replaced immediately.

WARNING: Electric shock can kill. Not all outlets are properly grounded. If you are not sure that your outlet is properly grounded, have it checked by a qualified electrician.

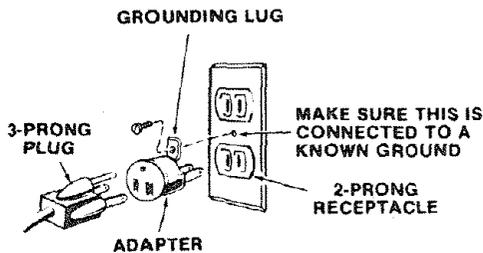
WARNING: To avoid electrical shock, do not permit fingers to touch the terminals of the plug, when installing or removing the plug to or from the outlet.

WARNING: Failure to properly ground this power tool can cause electrocution or serious shock, particularly when used in damp locations, or near metal plumbing. If shocked, your reaction could cause your hands to hit the cutting tool.

This saw is equipped with a 3-conductor cord and grounding type plug which has been approved by Underwriters' Laboratories. The ground conductor has a green jacket and is attached to the tool housing at one end and to the ground prong in the attachment plug at the other end.

This plug requires a mating 3-conductor grounding type outlet as shown.

WARNING: Avoid electric shock. If the outlet you are planning to use for this saw is of the two prong type, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER. Use an adapter, as shown, and always connect the grounding lug to a known ground.



It is recommended that you have a qualified electrician replace the TWO prong outlet with a properly grounded THREE prong outlet.

An adapter, as shown, is available for connecting plugs to 2-prong receptacles. The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician.

WARNING: To help avoid electric shock, the green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box. Not all outlet boxes are properly grounded. If you are not sure the outlet box is properly grounded, have it checked by a qualified electrician.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the following table to determine the minimum wire size (A.W.G.) extension cord.

Use only 3 wire extension cords which have 3-prong grounding type plugs and 3-prong receptacles which accept the plug on the saw.

Extension Cord Length	Wire Size A.W.G.
0 - 25 Feet	No. 16
26 - 50 Feet	No. 14
51 - 100 Feet	No. 12

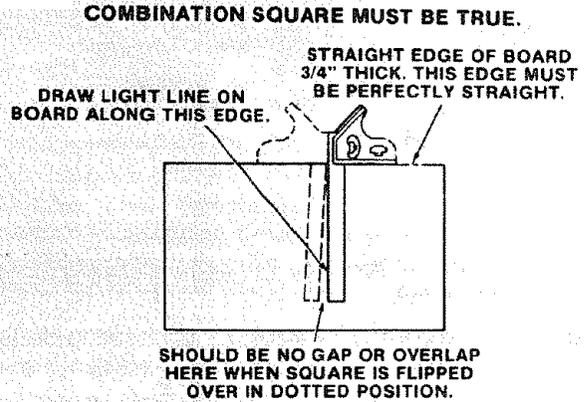
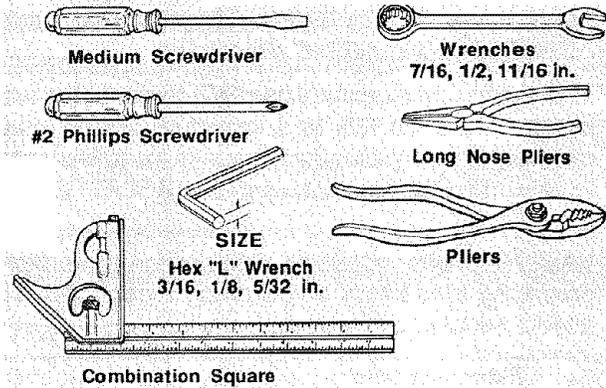
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unpacking and checking contents

TOOLS NEEDED



Model 113.221720 Table Saw with extensions is shipped complete in one carton.

Separate all parts from packing materials and check each one with the illustration and the list of Loose Parts to make certain all items are accounted for, before discarding any packing material.

WARNING: If any parts are missing, do not attempt to assemble the table saw, plug in the power cord or turn the switch on until the missing parts are obtained and are installed correctly.

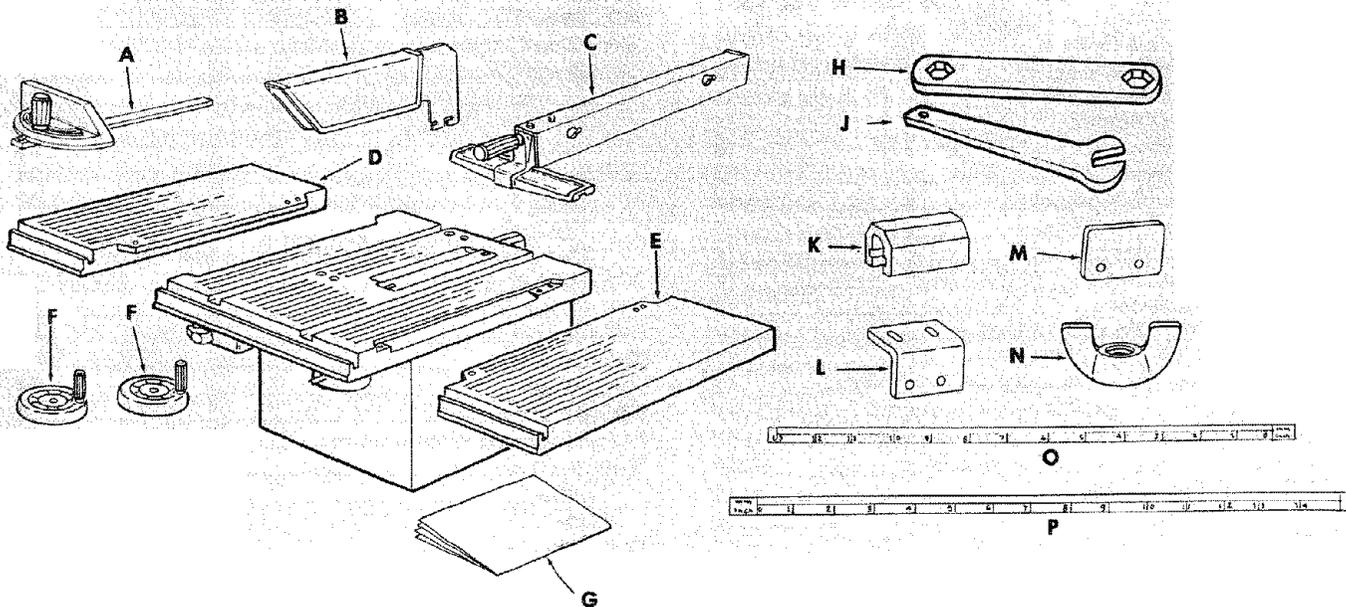
Apply a coat of automobile wax to the table.

Wipe all parts thoroughly with a clean, dry cloth.

WARNING: For your own safety, never connect plug to power source outlet until all assembly steps are complete, and you have read and understand the safety and operating instructions.

LIST OF LOOSE PARTS

Item	Part Name	Qty.
A	Miter Gauge Assembly	1
B	Guard Assembly	1
C	Rip Fence Assembly	1
D	Extension, Table L.H.	1
E	Extension, Table R.H.	1
F	Handwheel	2
G	Owner's Manual	1
	Bag of Loose Parts	1
	Containing the following:	
H	Arbor Wrench	1
J	Shaft Wrench	1
K	Support, Spreader	1
L	Bracket, Spreader	1
M	Clamp, Spreader	1
N	Nut, Wing 1/4-20	2
O	Tape, Fence Left	1
P	Tape, Fence Right	1

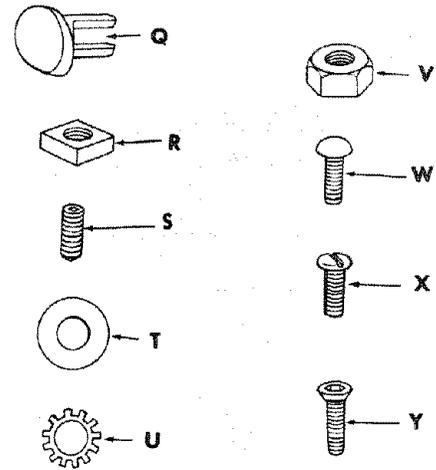


assembly

Bag of Loose Parts

Containing the following:

Q	Key, Switch	1
R	Nut, Square 1/4-20	2
S	Screw, Soc. Set 1/4 x 7/8	4
T	Washer, Flat 17/64 x 9/16 x 3/64	4
U	Lockwasher, External 1/4	4
U	Lockwasher, External #8	2
V	Nut, Hex 1/4-20	2
W	Screw, Truss Hd. 1/4-20 x 5/8	2
X	Screw, Pan Hd. 8-32 x 3/8	2
Y	Screw, Flat Hd. 1/4-20 x 5/8	14

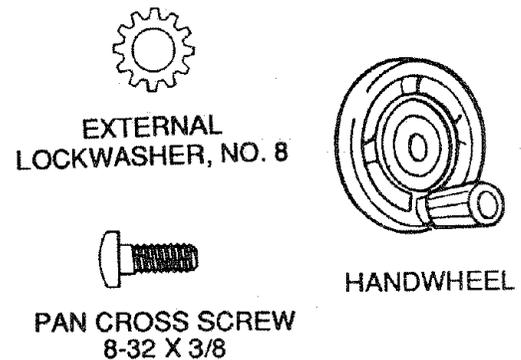


INSTALLING HANDWHEELS

1. From among the loose parts, find the following hardware:

- * 2 Lockwasher, External #8
- * 2 Screw, Pan Cross 8-32 x 3/8
- 2 Handwheels

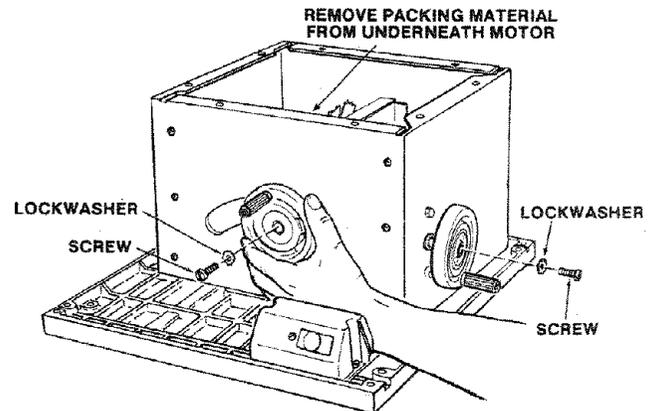
Items marked with an asterisk (*) are shown actual size.



2. Install Elevation Handwheel onto elevation shaft by lining up FLAT on shaft with flat inside Handwheel. Install screw and lockwasher.
3. Install Bevel Handwheel onto bevel shaft by lining up FLAT on shaft with flat inside handwheel. Install screw and lockwasher.

CAUTION: Failure to complete the following two steps could result in damage to your saw.

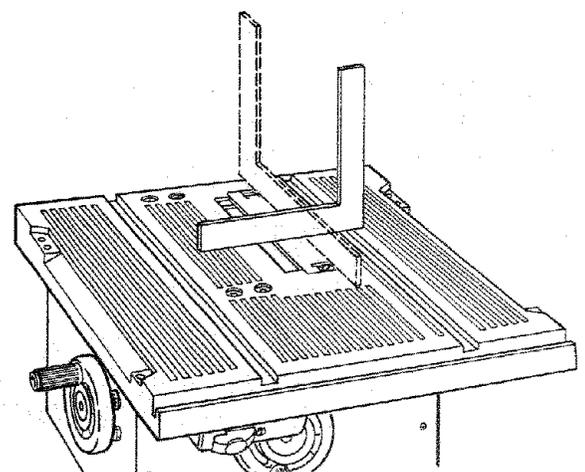
4. Turn Bevel Handwheel counterclockwise to pull motor away from inner packing styrofoam.
5. Remove styrofoam.



CHECK BLADE INSERT

1. Turn saw over.
2. Check blade insert to make sure it is flush with table. If blade insert is satisfactory, proceed to "Checking Heeling or Parallelism of Sawblade to Miter Gauge Groove". If insert is not flush, go on to "Adjusting Blade Insert".

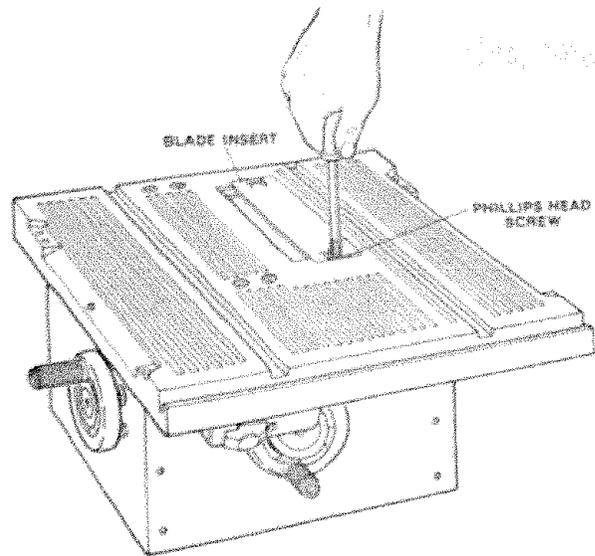
CAUTION: Insert must be even with the table surface. An insert higher than the table top can "snag" the front edge of the workpiece, making it harder to safely feed the work into the blade.



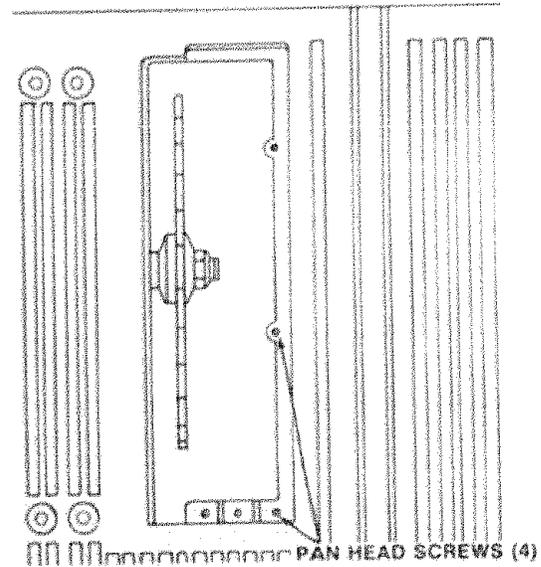
assembly

ADJUSTING BLADE INSERT

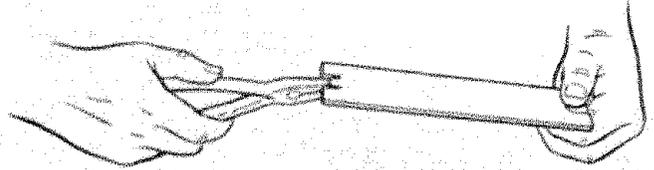
1. Loosen Phillips screw in blade insert. Do not remove.
2. Remove blade insert by lifting slightly and pulling insert toward front of saw to disengage rear tab.



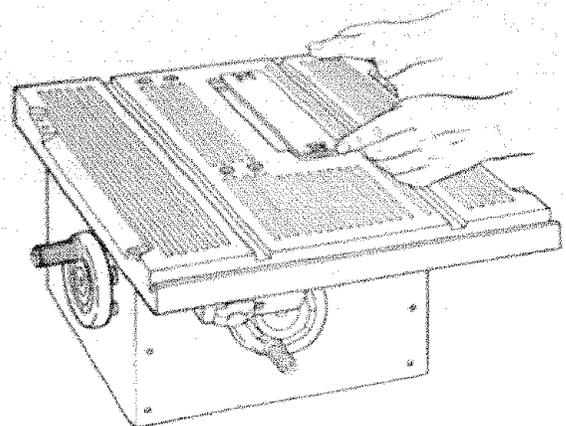
3. To bring insert to table level, adjust the (4) pan head screws. Screws should be adjusted so insert rests on screws and is flush with table.



4. Tab at rear of insert should engage in saw table firmly. It may be necessary to bend tab slightly using pliers.



5. Install blade insert and check insert to be flush with table surface. If insert is not flush, repeat adjusting procedure.



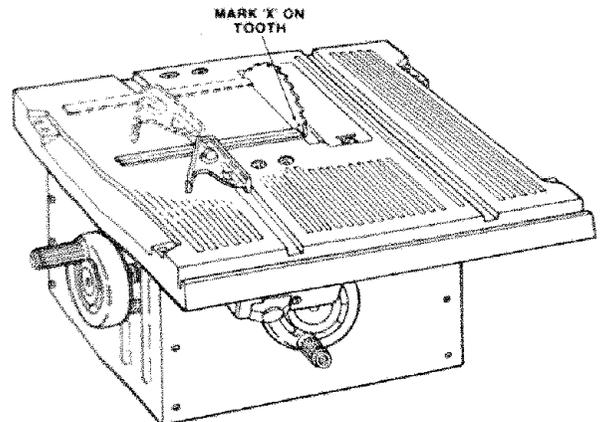
CHECKING HEELING OR PARALLELISM OF SAWBLADE TO THE MITER GAUGE GROOVE

While cutting, the material must move in a straight line PARALLEL to the SAWBLADE, therefore, both the Miter Gauge GROOVE and the RIP FENCE must be PARALLEL to the SAWBLADE.

WARNING: If the sawblade is NOT parallel with the Miter Gauge Groove, it is said to have 'HEEL'. This condition can cause the workpiece to bind or move away from the Rip Fence at the end of a rip cut, possibly causing a kickback.

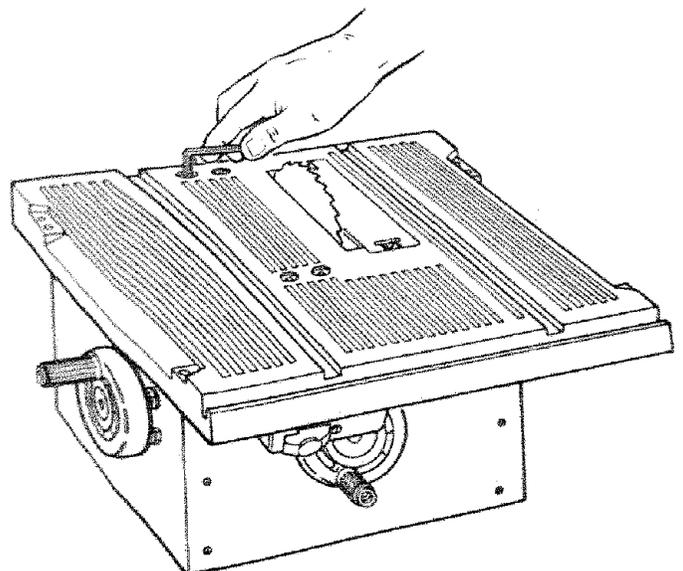
WARNING: To avoid injury from accidental start, make sure switch is "OFF" and plug is not connected to power source outlet.

1. Elevate blade to maximum height by turning Elevation Handwheel counterclockwise.
2. Mark an "X" on one tooth which is SET (bent) to the LEFT.
3. Place the head of a combination square in the left MITER GROOVE. Adjust blade of square so that it just touches the tip of the MARKED tooth.
4. Move square to REAR, rotate blade to see if MARKED tooth again touches blade of square.
5. If tooth touches square the same amount at FRONT and REAR, sawblade is PARALLEL to MITER GAUGE GROOVE.
6. If tooth does not touch front and rear, the mechanism underneath must be adjusted to make the blade PARALLEL to Miter Gauge Groove.



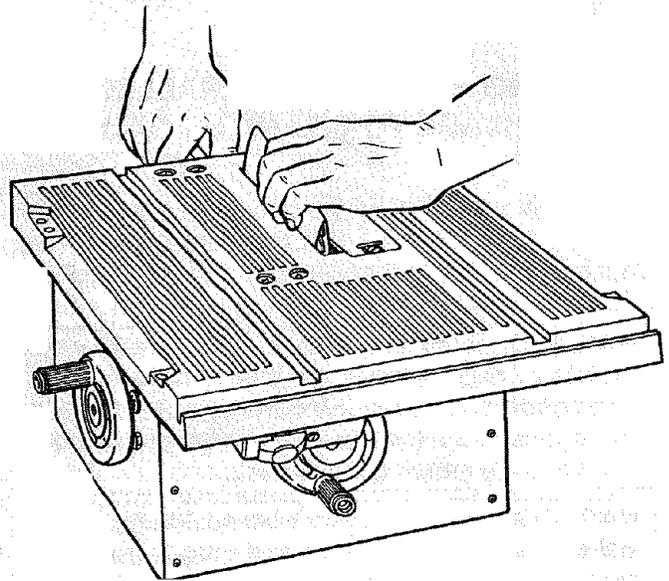
ADJUSTING PARALLELISM OF SAW BLADE TO MITER GAUGE GROOVE

1. Loosen 1/2 turn four hex socket screws in the top of table next to the saw blade using a 3/16 inch hex 'L' wrench. This will allow the mechanism below the table to be shifted sideways.



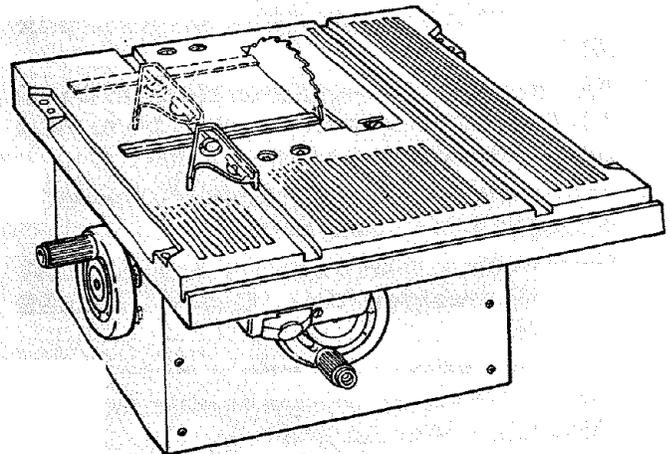
assembly

2. Fold a piece of cardboard or heavy paper over the blade to protect your hands.
3. Grasp the blade and the cradle rod and move the mechanism right or left a small amount as needed to make the square touch the same amount front and rear. Tighten one screw.



4. Check with square to determine if MARKED tooth touches square the same amount at front and rear.
If it does - alternately tighten other three screws slowly.
If it does not - loosen screw and move blade the required amount.
5. Recheck blade clearance to table and table insert to make sure blade does not hit.

NOTE: Use the hex 'L' wrench as shown. Do not use a pair of pliers or any other tool to gain more leverage on the set screw wench.

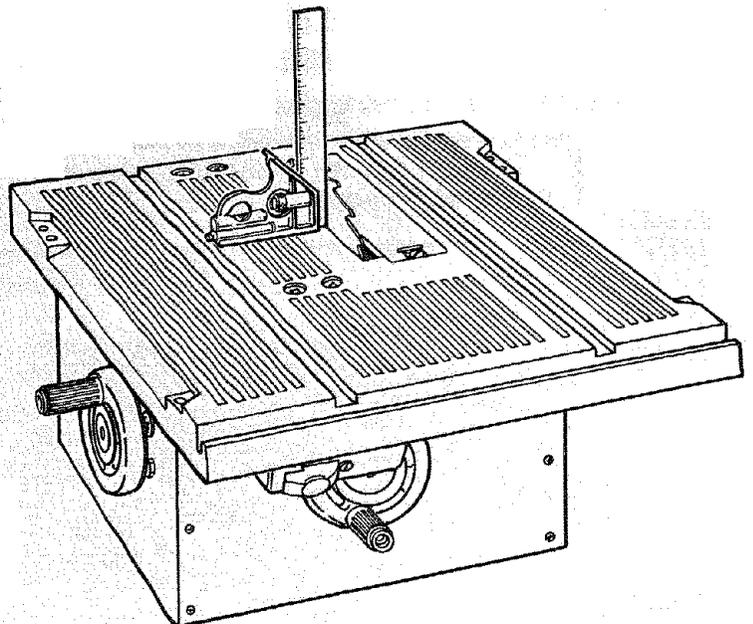


CHECKING 90° BEVEL STOP

IMPORTANT: Blade must be square (90°) to table in order to accurately align the saw. Using care in the following adjustments will help assure accurate woodworking cuts.

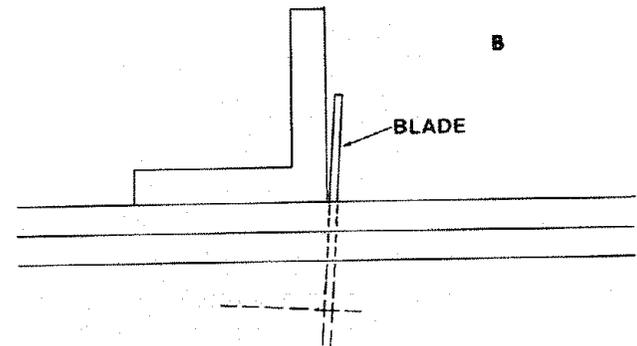
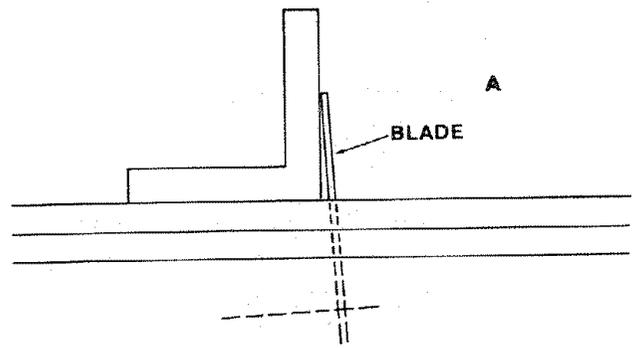
WARNING: To avoid injury from accidental start, turn switch "OFF" and remove plug from power source outlet before adjusting bevel stop.

1. Place a square against the blade. Make sure square is not touching the TIP of one of the saw TEETH.
2. The 90° bevel stop is set during manufacturing. If adjusting is needed, proceed to "Adjusting 90° Bevel Stop". If stop adjustment is satisfactory, go on to "Checking the 45° Bevel Stop".

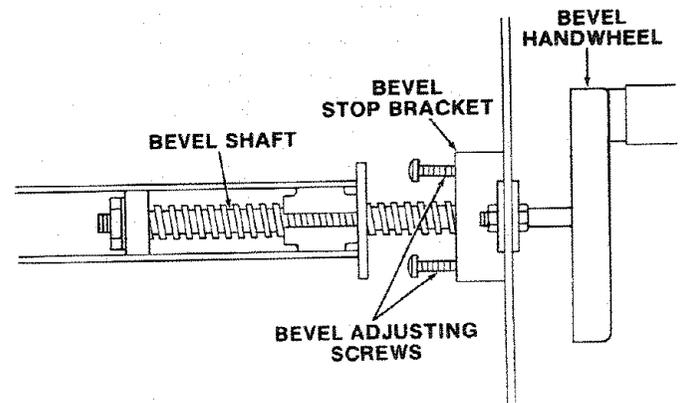


ADJUSTING 90° BEVEL STOP

1. On the stop bracket are two 10-32 pan head screws which set 90° stop position. If condition A exists, the two screws need to be turned clockwise to obtain 90° setting. If condition B exists, the screws should be turned counterclockwise.

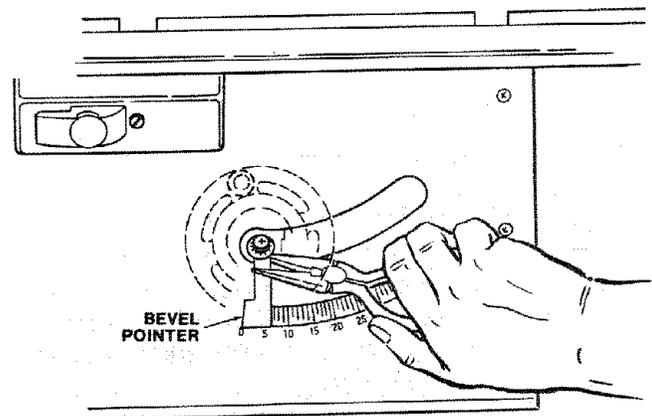


2. Turn saw over.
3. Rotate bevel crank until blade is in approximately 40° bevel position and using phillips screwdriver, rotate screws slightly in direction necessary to correct gap, (rotate screws equally). Recheck blade position and readjust if necessary.
4. When 90° stop position is adjusted to your satisfaction, re-adjust pointer to 0° position.



ADJUSTING BEVEL POINTER

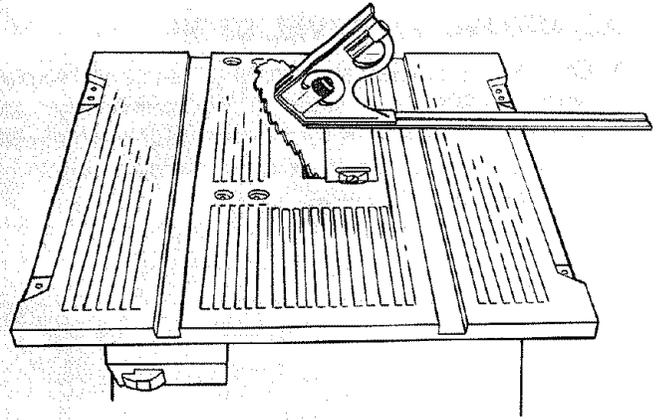
Using a pair long nose pliers, carefully bend the Bevel Pointer so that it points to the "0" mark.



assembly

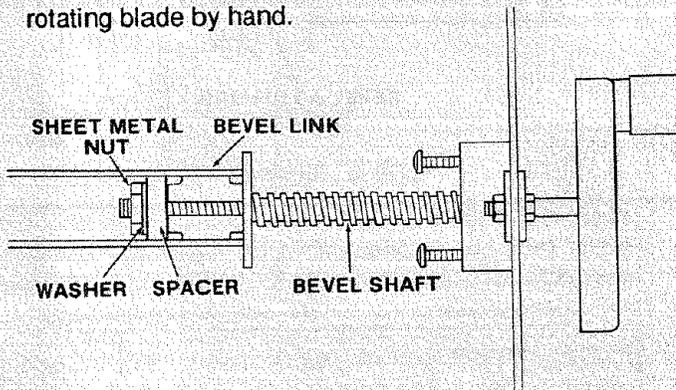
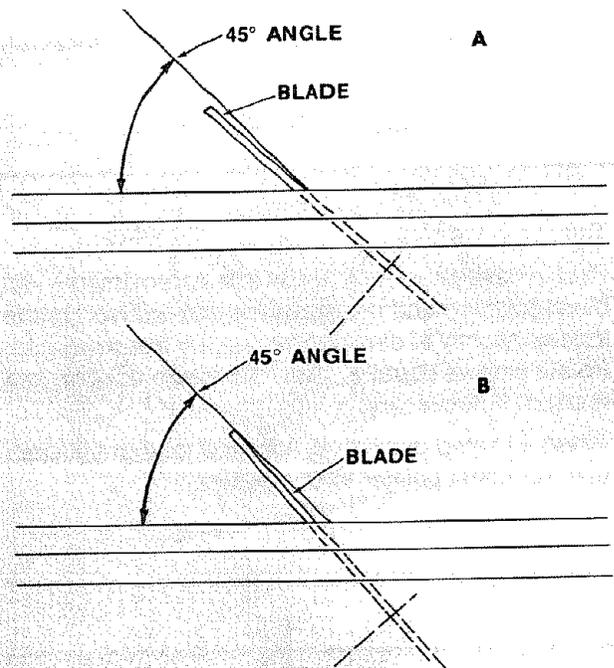
CHECKING 45° BEVEL STOP

1. Turn Elevation Handwheel counterclockwise to raise blade as high as it will go.
2. Turn Bevel Handwheel clockwise to tilt blade to 45°.
3. Lay head of combination square on the blade of square, as illustrated, and place head against the blade. Make sure square is not touching TIP of one of the saw TEETH.
4. The 45° blade stop is set during manufacturing. If adjustment is needed, proceed to next step. If bevel adjustment is satisfactory, go on to "Installing Table Extensions".



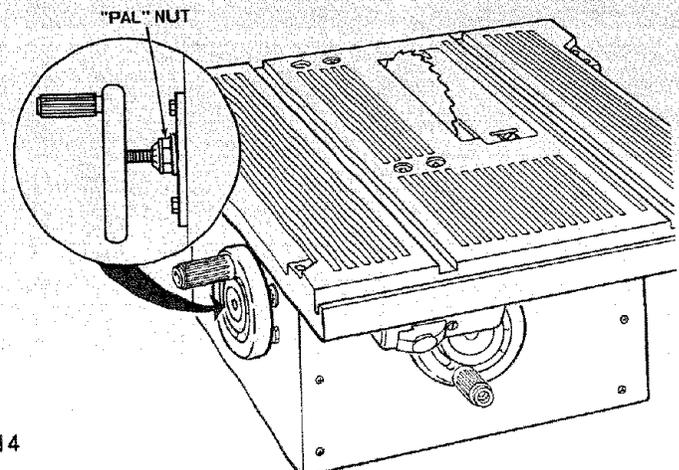
ADJUSTING 45° BEVEL STOP

1. The 45° blade position is controlled by the location of the sheet metal nut on end of bevel shaft.
2. If condition A exists, the sheet metal nut needs to be turned clockwise to obtain 45° setting. If condition B exists, the nut should be turned counterclockwise.
3. **To correct condition A** - Rotate Bevel Handle counterclockwise approximately two turns. Place 11/16 inch wrench on sheet metal nut and hold in place while rotating handle counterclockwise in small increments. Recheck blade position after each rotation.
4. **To correct condition B** - Same procedure as No. 3, except, rotate handle clockwise while holding nut.
5. Check blade clearance to table and table insert by rotating blade by hand.



ADJUSTING BEVEL SCREW TENSION

The tension on the Bevel Screw must be tight for the blade to hold its position. The tension can be increased by tightening the Pal Nut on the bevel shaft using an 11/16 inch wrench. The nut should be adjusted so the shaft is somewhat difficult to turn.

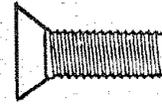


INSTALLING TABLE EXTENSIONS

1. Lower blade to below the table top.
2. From among the loose parts, find the following hardware:

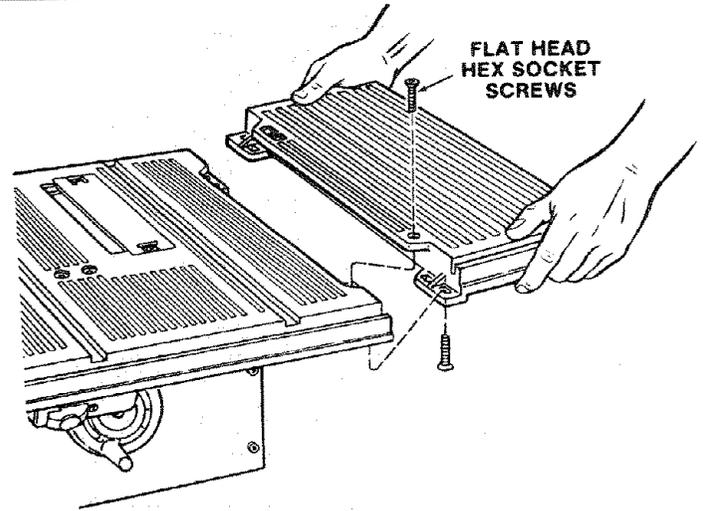
* 14 Flat Hd. Socket Screws 1/4-20 x 5/8

Items marked with an asterisk (*) are shown actual size.

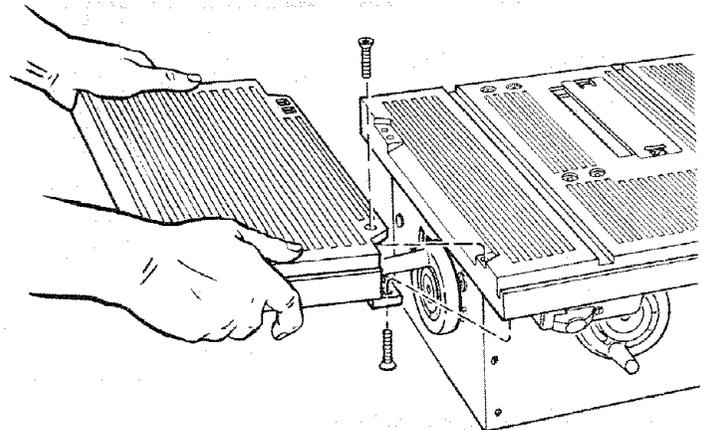


FLAT HEAD SOCKET SCREW
1/4-20 X 5/8

3. Install right table extension and install seven screws using 5/32 inch hex 'L' wrench. Just start screws into threaded holes.



4. Install left table extension and install seven screws using 5/32 inch hex 'L' wrench. Just start screws into threaded holes.

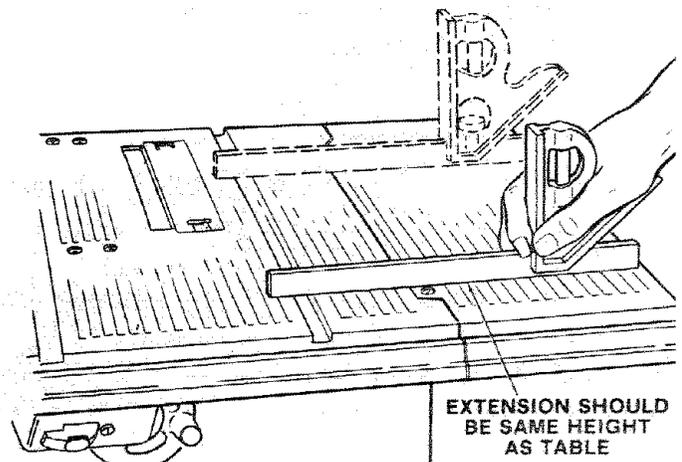


ALIGNING TABLE EXTENSIONS

NOTE: The table extensions must be the same height as the table and level to the table.

Place combination square on table and extension.

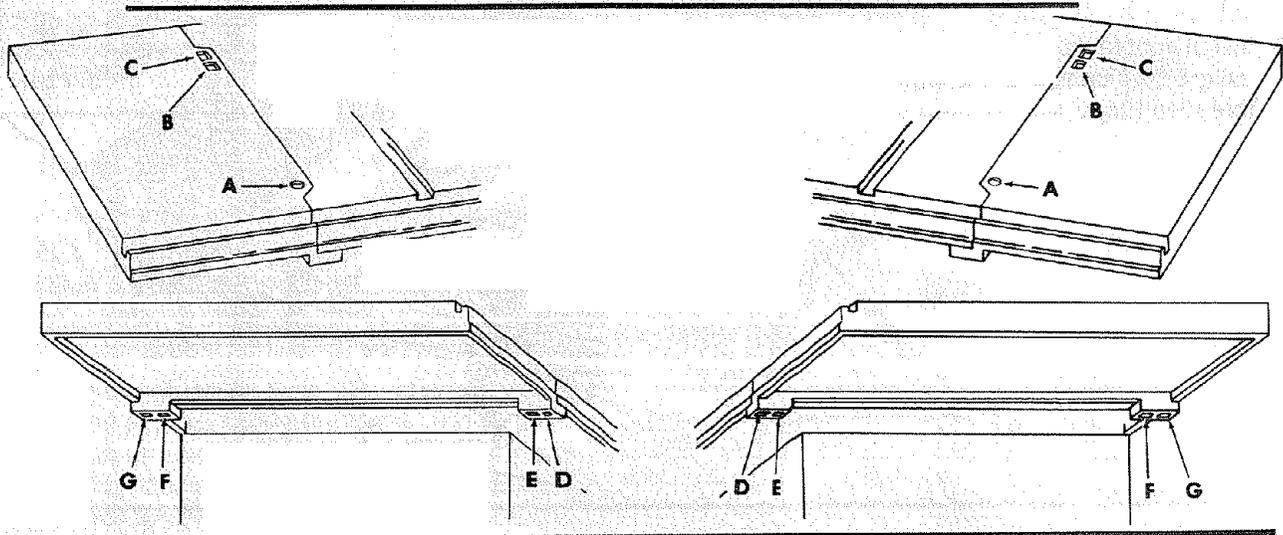
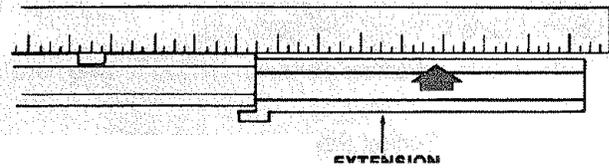
NOTE: When aligning the table extensions, the 1/4-20 x 5/8 inch flat head hex socket screws may "bottom out". If this occurs, simply loosen the screws and restart the process for proper alignment.



assembly

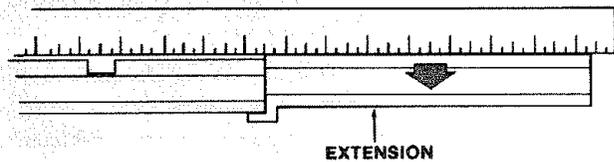
TO RAISE EXTENSION

1. If extension is low, loosen three screws on top of the table extension A, B, and C. See illustration.
2. Tighten screws D, E, F, and G underneath table extension to raise extension even with table top front and rear.
3. Check height with square and tighten A, B and C.
4. Repeat for left extension.



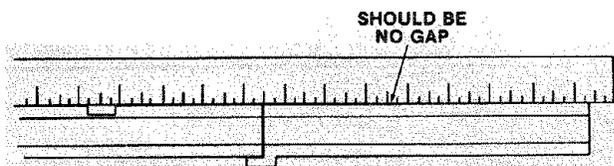
TO LOWER EXTENSION

1. If extension is too high, loosen four screws on underside of the extension D, E, F, and G. See illustration.
2. Tighten screws A, B, and C on top of table extension to lower extension even with table top front and rear.
3. Check height with square and tighten screws D, E, F and G.
4. Repeat for left extension.



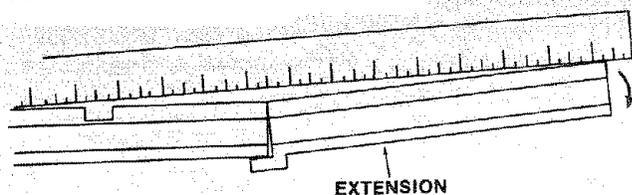
LEVELING EXTENSIONS

Place combination square on table and extension so that end of blade extends over edge of extension. Hold square firmly on saw table and check for gap between extension and blade of square.



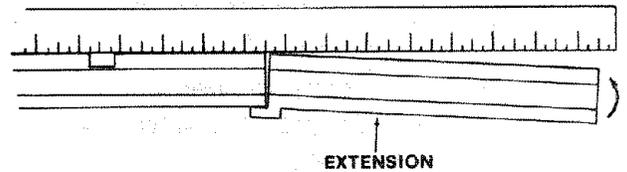
TO LOWER OUTER EDGE OF EXTENSION

1. Loosen screws B, E and F on right extension. See illustration.
2. Tighten screws C, D and G until table extension is level.
3. Snug down screws B, E and F.
4. Repeat for left extension.



TO RAISE OUTER EDGE OF EXTENSION

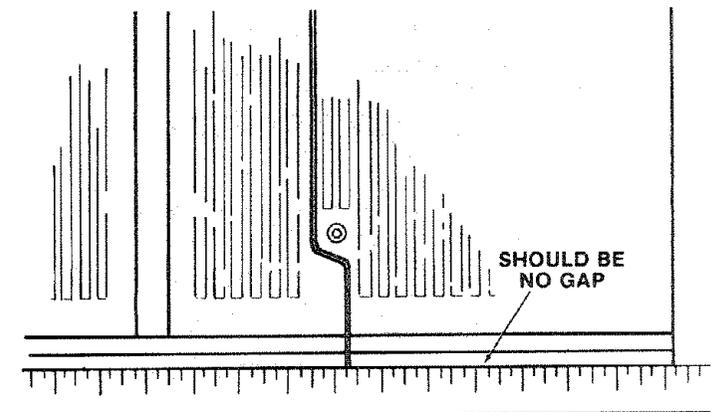
1. Loosen screws C, D, and G on right extension.
2. Tighten screws B, E, and F until table extension is level.
3. Snug down screws C, D, and G.
4. Repeat for left table extension.



ALIGNING TABLE EXTENSIONS WITH FRONT OF TABLE

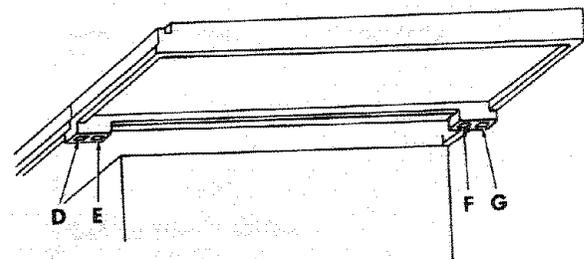
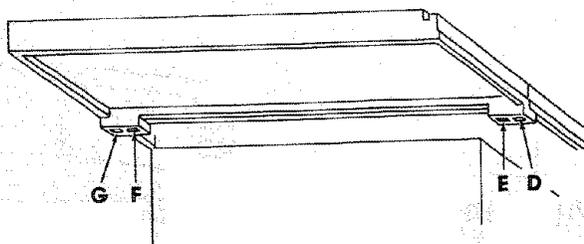
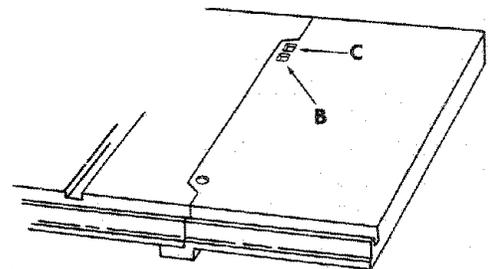
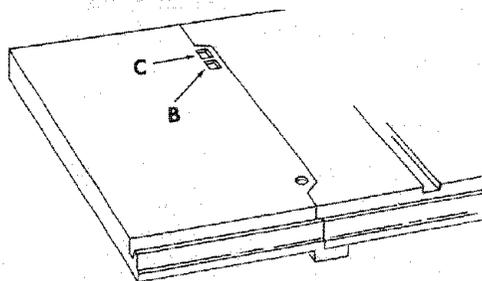
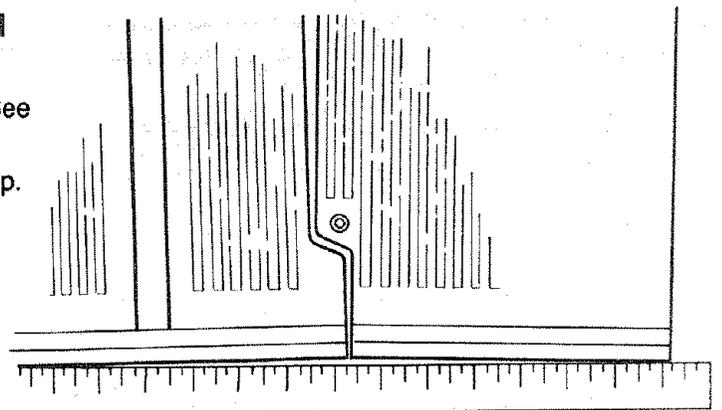
1. Place blade of combination square on front of table and table extension.
2. Extension should line up with table.

WARNING: Front edges must line up to help prevent workpiece kickback when the fence is mounted to the table extension.



TO MOVE OUTER EDGE OF EXTENSION BACK

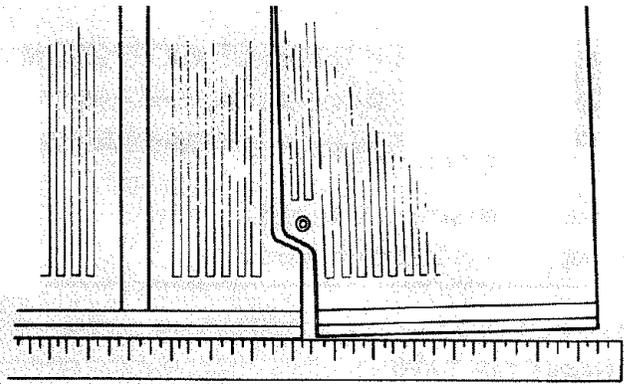
1. Loosen screws C and F in right extension. See illustration.
2. Tighten screws B and G until extension is lined up.
3. Snug down screws C and F.
4. Recheck level and flatness to table.
5. Check left extension.
6. Adjust left extension in same manner.



assembly

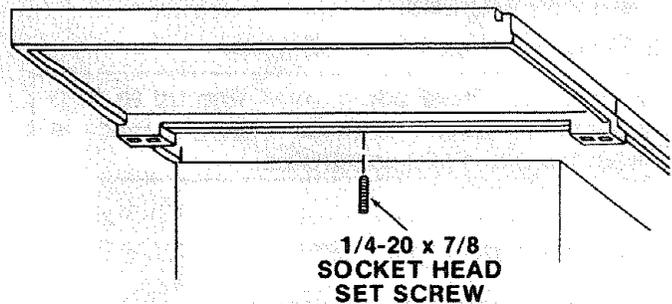
TO MOVE OUTER EDGE OF EXTENSION FORWARD

1. Loosen screws **B** and **G** in right extension.
2. Tighten screws **C** and **F** until extension is lined up.
3. Snug down screws **B** and **G**.
4. Recheck level and flatness to table. Check left extension.
5. Check left extension.
6. Adjust left extension in same manner.

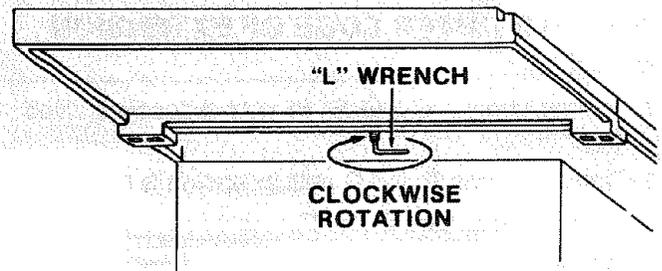


LEVELING CENTER OF EXTENSION TO TABLE

1. Locate two (2) 1/4-20 x 7/8 socket head set screws and install on bottom side of table.



2. From the top side check the center of table extension joint. If extension is lower, adjust socket set screw with socket 'L' wrench in clockwise motion.
3. If extension is not lower, adjust socket set screw snug without raising extension.



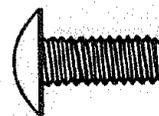
INSTALLING BLADE GUARD

1. From among the loose parts, find the following:

- *2 Square Nut, 1/4-20
- *2 Truss Head Screw 1/4-20 x 5/8
- *2 Socket Head Setscrew, 1/4-20 x 7/8
- *4 Flat Washer, 17/64 I.D.
- *2 Hex Nut, 1/4-20
- *2 Lockwasher, External 1/4
- *2 Wing Nut, 1/4-20
- 1 Spreader Clamp
- 1 Spreader Bracket
- 1 Spreader Support



SQUARE NUT



TRUSS HEAD SCREW
1/4-20 X 5/8



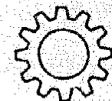
SOCKET HEAD
SETScrew,
1/4-20 X 7/8



FLAT WASHER, 17/64



HEX NUT, 1/4-20

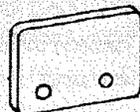


EXTERNAL
LOCKWASHER

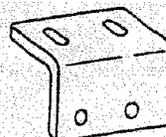
Items marked with an asterisk (*) are shown actual size.



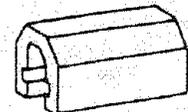
WING NUT, 1/4-20



SPREADER CLAMP

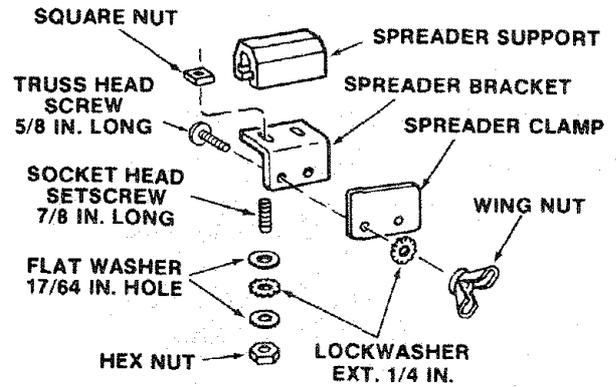


SPREADER BRACKET

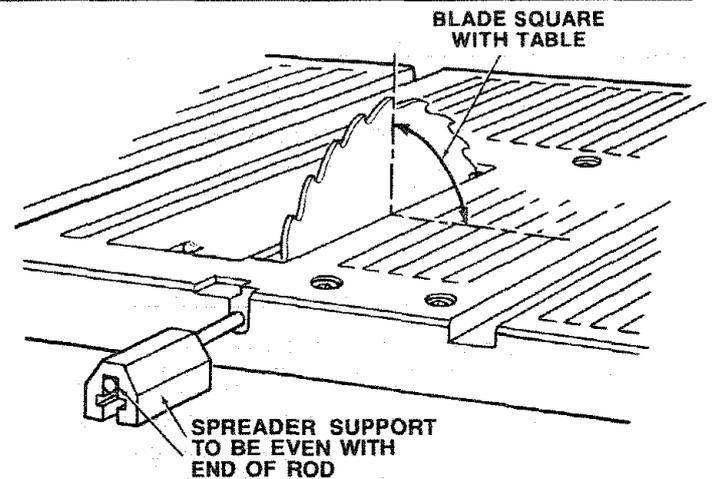


SPREADER SUPPORT

2. Parts are assembled as shown in illustration. Follow steps below.
3. **MAKE SURE THE BLADE IS ALL THE WAY UP AND SQUARE WITH THE TABLE.**

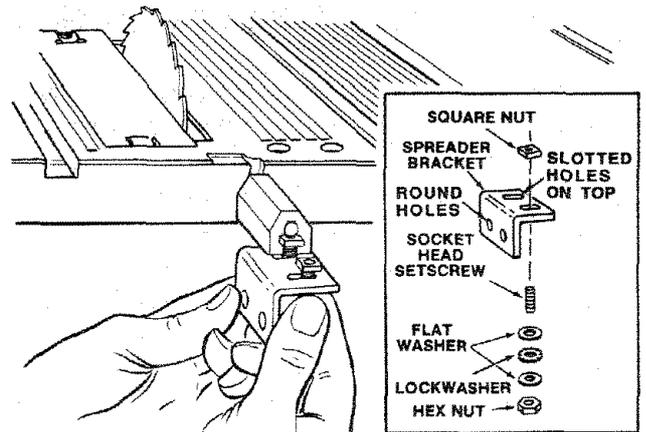


4. Position Spreader Support on rod with end even with end of rod.



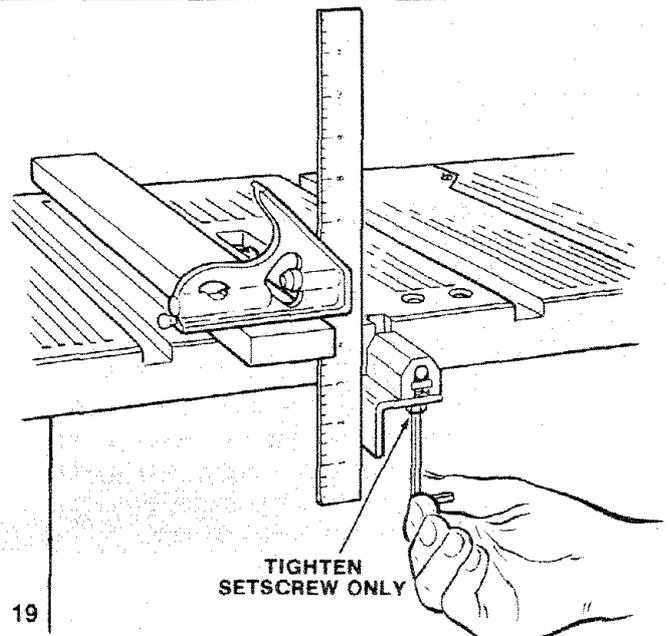
5. Assemble the 7/8 in long set screws, nuts, lockwashers and washers to the Spreader Support Bracket and slip the nuts into the slot in the Spreader Support.
6. Finger tighten ONLY THE HEX NUTS.

NOTE: Be sure to put the socket head set screw through the slot shaped holes in the Spreader Bracket (see illustration). This allows the guard and spreader to be lined up with the blade. Be sure the socket end of the setscrew is at the hex nut end of the assembly.



7. Lay a piece of flat straight wood and a square on the saw table and rotate the Spreader Support until the bracket is aligned with square.

Using an 1/8 inch Hex 'L' wrench, tighten the set screws only. Check that Spreader Support cannot be rotated on the Spreader Rod.

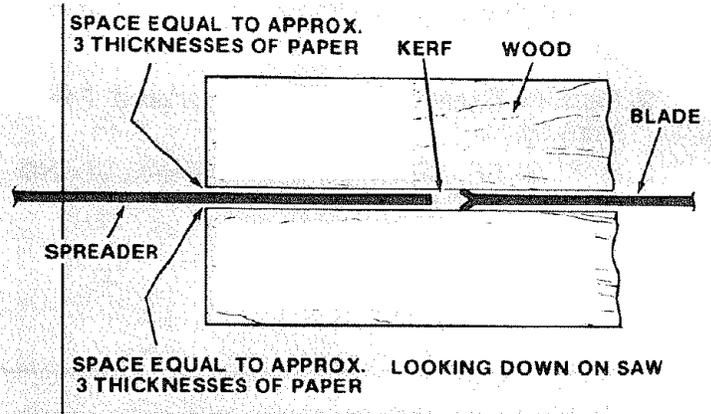


assembly

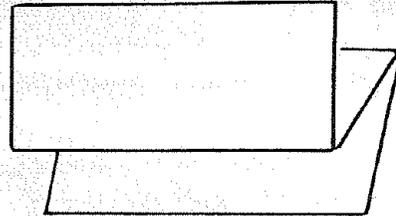
ALIGNING SPREADER

IMPORTANT: To work properly, the Spreader must always be adjusted so the cut workpiece will pass on either side of the Spreader without binding or skewing to the side.

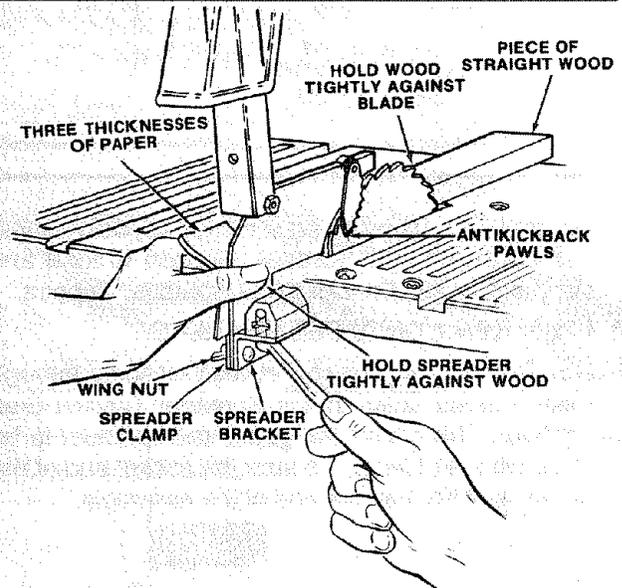
NOTE: The Spreader is thinner than the width of the KERF by approximately six thicknesses of paper.



1. Make two folds in a small piece (6 x 6 in) of ordinary NEWSPAPER making three thicknesses. The folded paper will be used as a "spacing gauge".



2. Raise blade to maximum height and make sure blade is square to the saw table.
3. Install the Spreader Clamp using truss head screws, lockwashers and wing nut. Place Spreader between Spreader Clamp and Bracket. Move Spreader forward until all three are in line. **TIGHTEN WING NUTS.**
4. Lay a piece of straight flat wood against the saw blade. Insert folded paper between Spreader and strip of wood.
5. **MAKE SURE THE HEX NUTS UNDERNEATH ARE LOOSE.**
6. Lift the anti-kickback pawl to clear the wood and hold the Spreader tightly against the wood. Make sure the wood is against the saw blade. **TIGHTEN THE HEX NUTS.**



This will align the Spreader in the middle of the cut (KERF) made by saw blade.

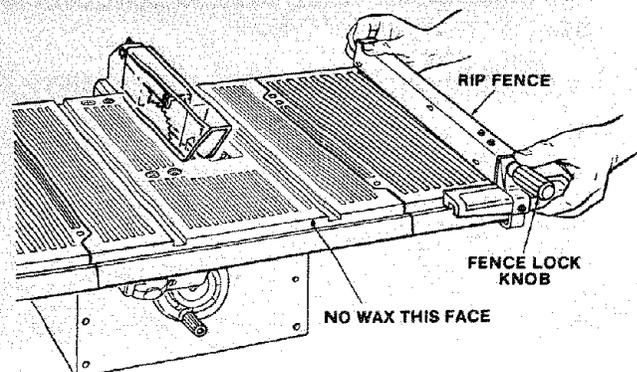
NOTE: To remove the Guard for non-through cuts, loosen the wing nuts and slide the Guard back and upward off the Spreader Bracket. Do not disturb the setting of the Spreader Bracket.

When replacing the Guard, slide the Spreader down and forward between the Spreader Clamp and Spreader Bracket. Make sure the wing screws are tightened securely. This lets you remove and replace the Guard without disturbing the Spreader alignment.

ATTACHING RIP FENCE

Apply a coat of paste wax to the top surface and front ledge of the saw table. This will allow the fence to slide more easily.

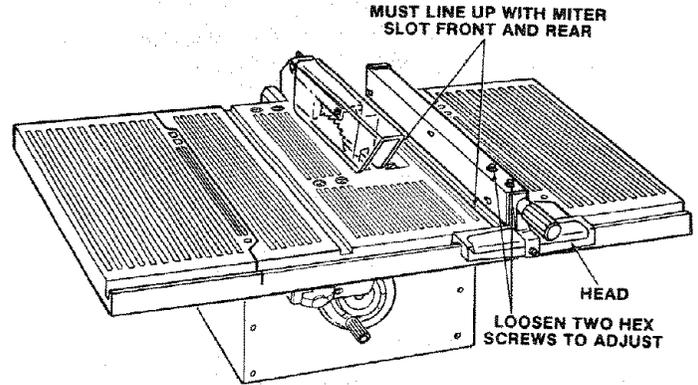
1. Loosen fence lock knob by turning counterclockwise.
2. To attach fence, tilt until front tab slides under front edge of table. Engage fence head into table rail slot and lower fence to the table. Slide fence on table to make sure fence head is properly engaged in rail, then tighten handle to secure fence to table.



ALIGNING RIP FENCE

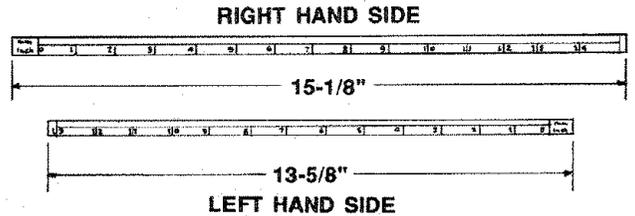
WARNING: A misaligned Fence can cause kick-backs and jams. To avoid injury, follow these instructions until fence is properly aligned.

1. Hold head of Rip Fence and slide on table until the edge of the fence lines up with the right miter slot.
2. Turn fence lock knob clockwise to lock fence.
3. If fence does not line up with miter slot front and rear:
 - A. Loose the two hex screws in top of fence.
 - B. While holding head of Rip Fence, move rear of Rip Fence right or left until edge lines up with miter slot.
 - C. Tighten hex screws alternately being careful not to move fence.
 - D. Recheck alignment.
 - E. Repeat steps as needed.

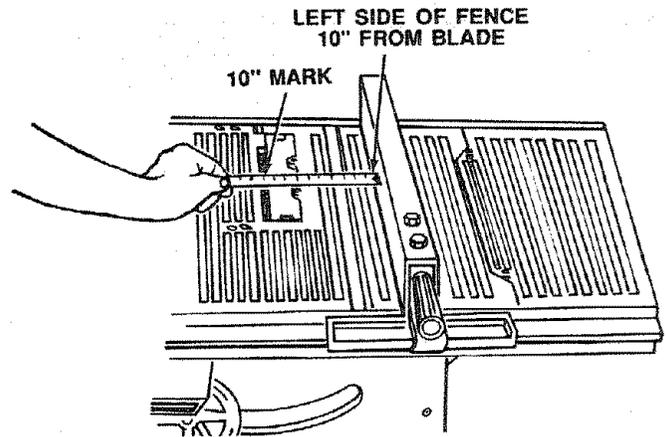


INSTALLING MEASURING TAPES

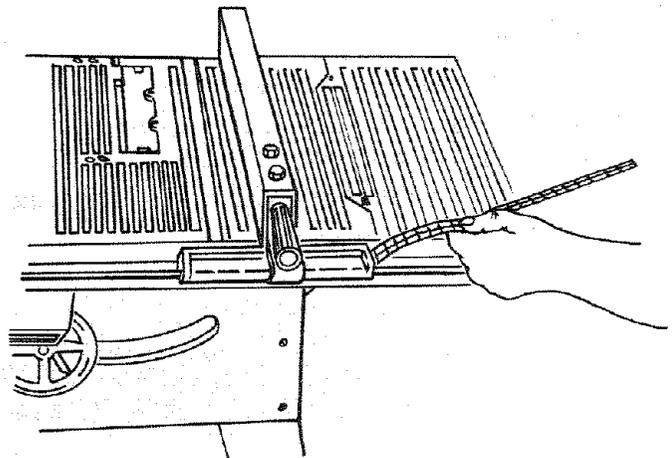
1. From the loose parts, find:
 - 2 Measuring Tapes



2. Place Rip Fence on saw table to the right side of the blade.
3. Using a tape rule, measure 10 inches out from the right side of the blade. Position the Rip Fence so the left side of the fence is at this 10 inch mark.
4. Lock the fence in this position.

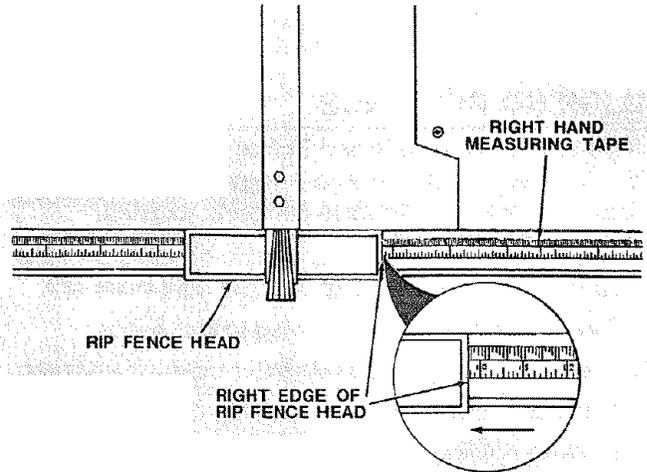


5. Find the "0" inch mark on the end of R.H. measuring tape. Slide this end of the measuring tape under right side of Rip Fence head and slide tape into groove on Rip Fence Guide Bar.

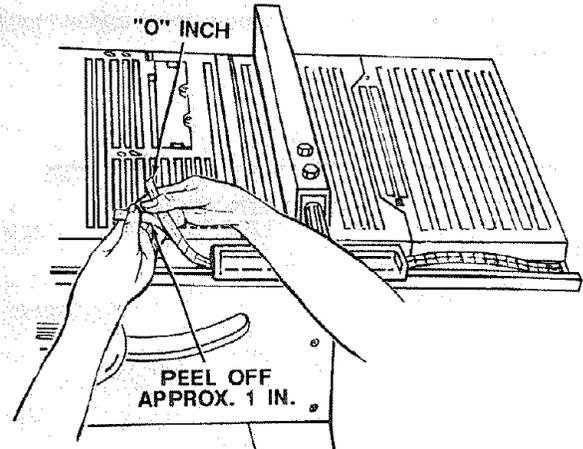


assembly

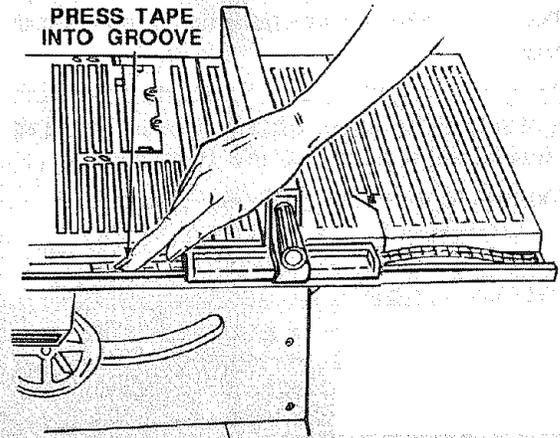
6. Move the measuring tape under head of Rip Fence until the 10 inch mark on the measuring tape is lined up with the right edge of the Rip Fence head.



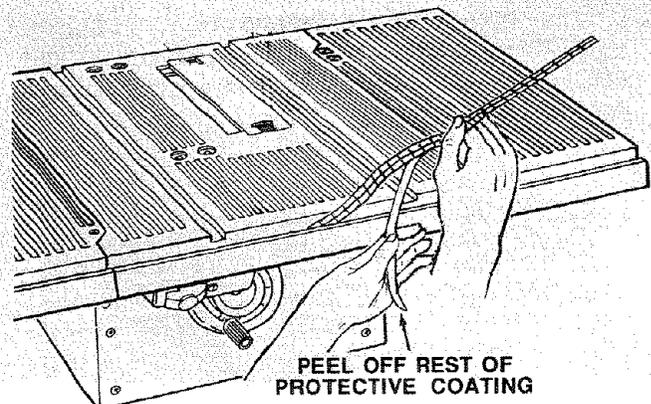
7. Hold the measuring tape in this position with one hand, while using the other hand to peel off approximately one inch of protective coating from underside of tape on the left end ("0" inch).



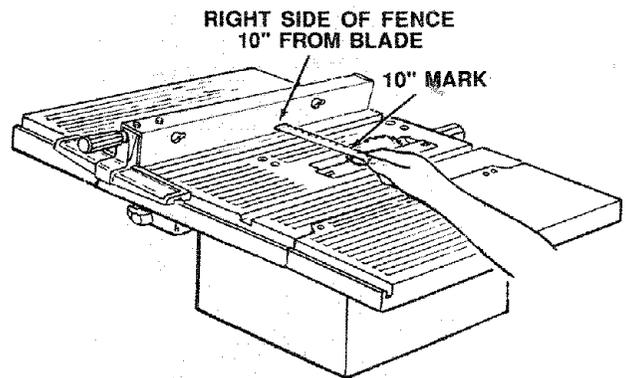
8. Press measuring tape down against groove in Rip Fence Guide Bar so adhesive will hold tape in place.
9. Carefully, so as not to disturb measuring tape, unlock Rip Fence and remove from saw.



10. Carefully raise the rest of the measuring tape, and peel off the rest of the protective coating.
11. Lower the tape against the groove in the Rip Fence Guide Bar and firmly press in place.
12. Place Rip Fence on saw table on the left side of the blade.



13. Use a tape rule to measure 10 inches out from the left side of the blade. Position the Rip Fence so the right side of the fence is at this 10 inch mark.
14. Lock Rip Fence in this position.
15. Follow the same procedure used to install the first measuring tape, EXCEPT:
 - A. The end of L.H. measuring tape with "0" inch mark must be pushed under left side of Rip Fence head.
 - B. Move the measuring tape under head of Rip Fence until the 10 inch mark is lined up with the left edge of the Rip Fence head.
 - C. When peeling back protective coating to expose adhesive, work from the right end of measuring tape.



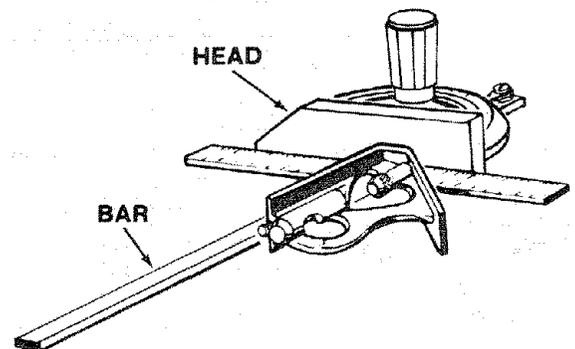
ADJUSTING MITER GAUGE

NOTE: The graduations are manufactured to very close tolerances which provide suitable accuracy for average woodworking. In some cases where extreme accuracy is required, make a trial cut and then recheck it. If necessary, the Miter Gauge head can then be swiveled slightly to compensate and then locked.

The HEAD should be SQUARE (90°) with the bar when the pointer points to "0".

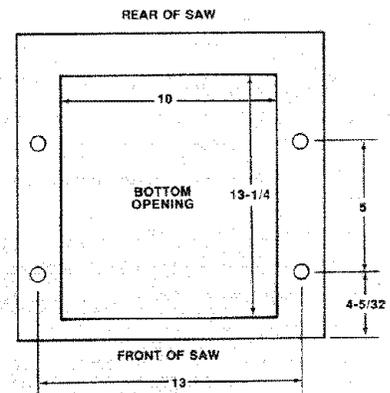
To check for squareness, place an accurate square on the Miter Gauge. If the head is NOT SQUARE with the bar:

1. Loose the lock handle.
2. Position the head square with the bar, tighten the handle.
3. Loosen the screw and adjust the pointer, so it points to zero.



MOUNTING SAW TO BENCH OR LEGS

If you mount the saw on a bench, make sure that there is an opening in the top of the bench the same size as the opening in the bottom of the saw so that the sawdust can drop through.

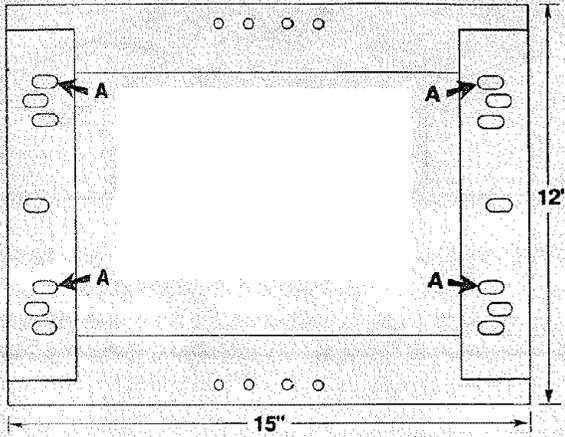


NOTE: All dimensions in inches

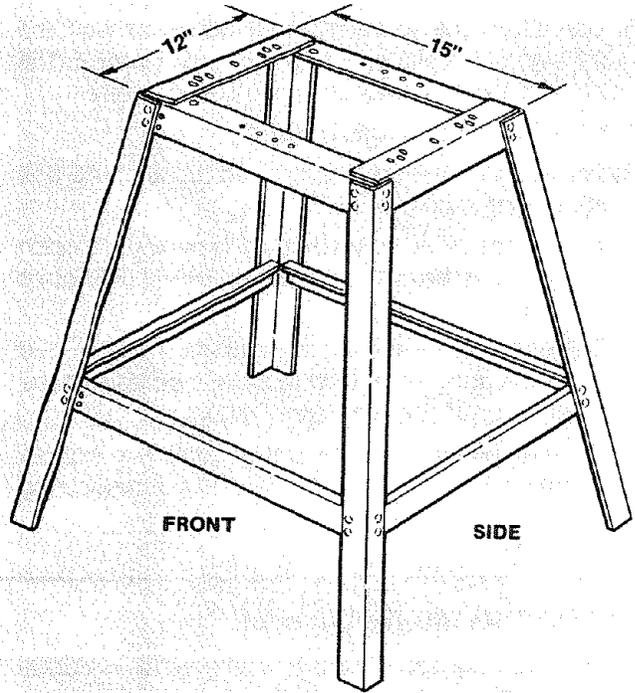
assembly

If you purchase Craftsman Steel Legs for your saw, assemble them according to the directions furnished with them.

Holes in table saw base will line up with holes marked "A" (4 holes). Base will overhang stand when mounted correctly.



FRONT OF TABLE SAW



FRONT

SIDE

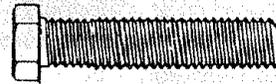
CATALOG NO. 9-22244 LEG SET

(not included with table saw)

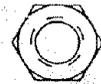
Recommended hardware (not included) for mounting table saw to leg set:

- *4 Hex Hd Bolts, 1/4-20 x 1-1/2
- *4 Hex Nuts, 1/4-20
- *4 Lockwashers, 1/4
- *4 Flat Washers, 1/4

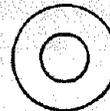
Items marked with an asterisk as shown actual size.



HEX HEAD BOLT
1/4-20 X 1-1/2



HEX NUT 1/4-20



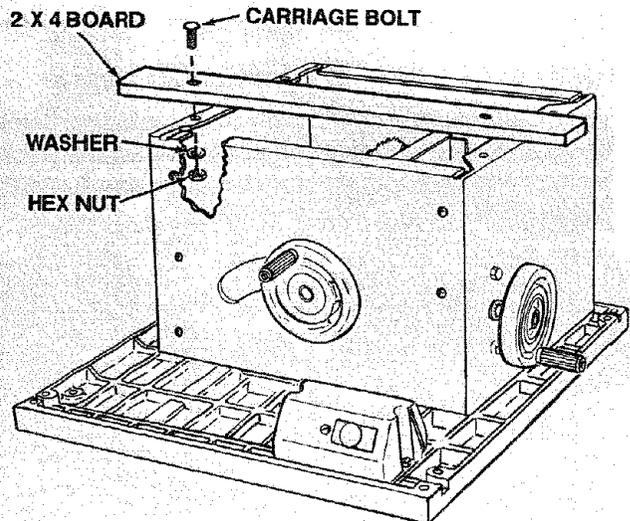
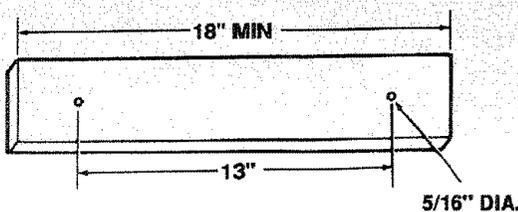
LOCKWASHER, 1/4



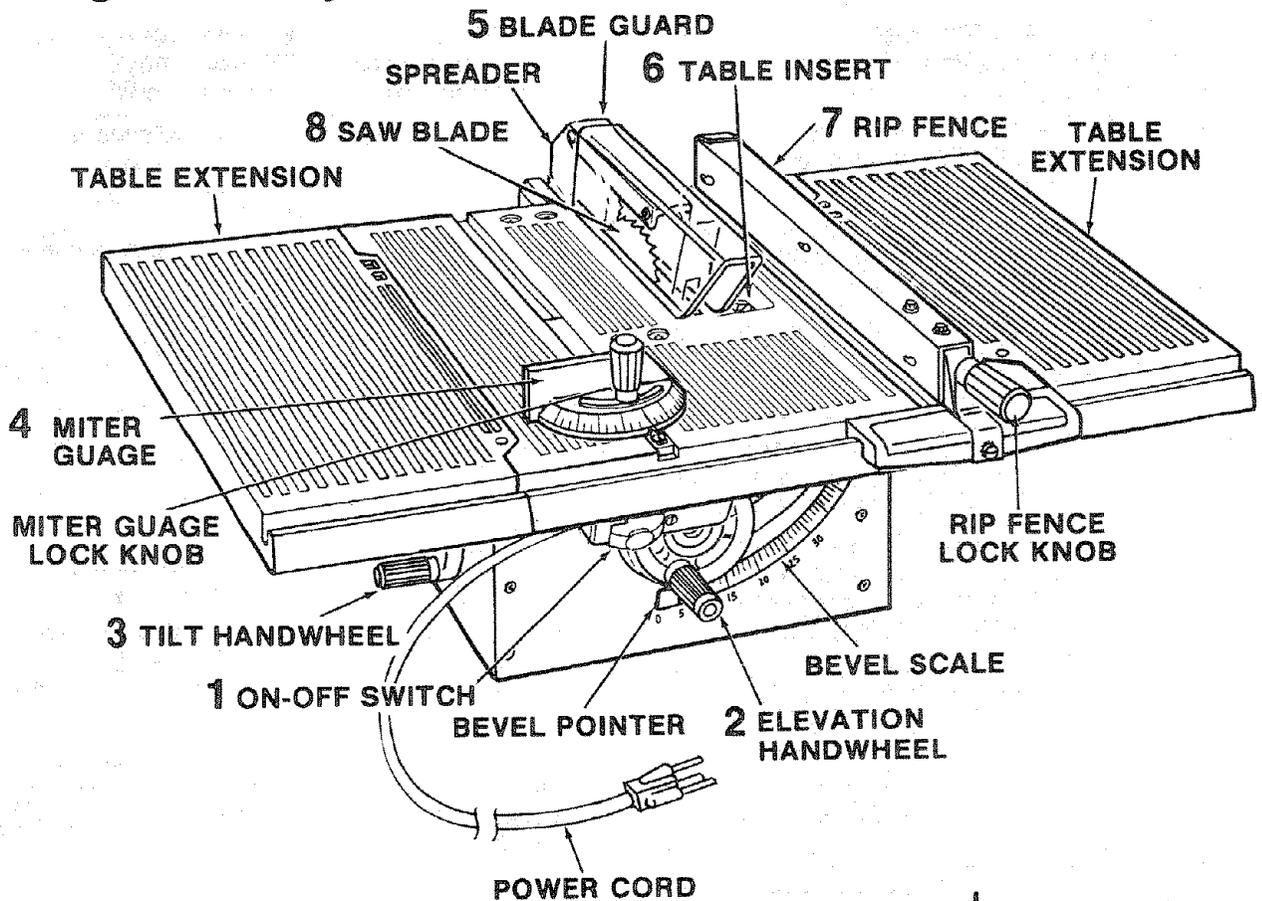
FLAT WASHER, 1/4

MOUNTING SAW WITH "C"-CLAMPS

To make saw mountable with "C"-clamps, fasten two boards to the underside of base, as shown. These boards should be made from 2 x 4 finished lumber cut to at least 18" long. Drill two 5/16" diameter holes at equal distance from the ends and 13" apart along the centerline of the board. Mount these boards across the underside of base, using the holes in the bottom flange of base. Use 4 carriage bolts at least 3/4" longer than the thickness of the mounting boards. Insert the bolts from the underside of the board, up through the holes in the base. Secure with washers and nuts. The saw can then be set on a flat, stable surface and held in place with "C"-clamps, holding each end of the 2 x 4 boards to the support surface.



getting to know your saw



1 ON-OFF SWITCH

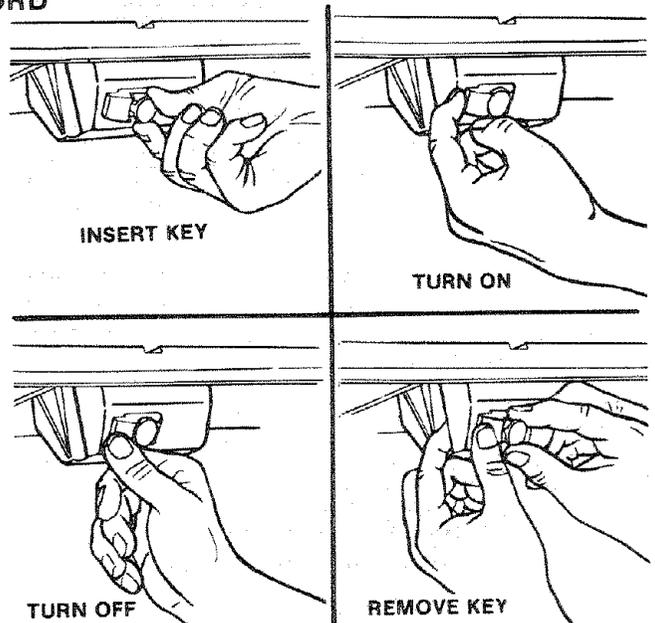
CAUTION: Before turning switch "ON", make sure the blade guard is correctly installed and operating properly.

The On-Off Switch has a locking feature. THIS FEATURE IS INTENDED TO PREVENT UN-AUTHORIZED AND POSSIBLE HAZARDOUS USE BY CHILDREN AND OTHERS.

- A. Insert Key into switch.
- B. To turn saw ON, stand to either side of the blade, never in line with it, insert finger under switch lever and pull END of lever out.

After turning switch ON, always allow the blade to come up to full speed before cutting.

Do not cycle the Motor Switch on and off rapidly, as this may cause the sawblade to loosen. In the event this should ever occur, allow the sawblade to come to a complete stop and re-tighten the arbor nut normally, not excessively. Never leave the saw while the power is "ON".
- C. To turn saw OFF, PUSH lever in. Never leave the saw until the cutting tool has come to a complete stop.
- D. To lock switch in OFF position, hold switch IN with one hand, REMOVE key with other hand.



WARNING: For your own safety, lower blade or other cutting tool below table surface. (If blade is tilted, return it to vertical, 90°, position). Always lock the switch "OFF". When saw is not in use, remove key and keep it in a safe place. Also, in the event of a power failure (all of your lights go out) turn switch off, lock it by removing the key. This will prevent the saw from starting up again when the power comes back on.

getting to know your saw

2 ELEVATION HANDWHEEL . . . elevates or lowers the blade. Turn counterclockwise to elevate, clockwise to lower.

3 TILT HANDWHEEL . . . tilts the blade for bevel cutting. Turn counterclockwise to tilt toward left, clockwise to tilt toward right.

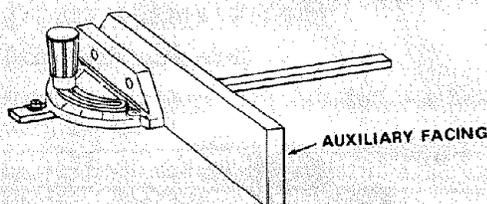
When the blade is tilted to the LEFT as far as it will go, it should be at 45° to the table and the bevel indicator should point to 45°.

NOTE: There are LIMIT STOPS inside the saw which prevent the blade from tilting beyond 45° to the LEFT and 90° to the RIGHT. (See "Adjustments" section "Blade Tilt, or Squareness of Blade to Table").

4 MITER GAUGE . . . head is locked in position for crosscutting or mitering by tightening the Lock Knob. ALWAYS LOCK IT SECURELY WHEN IN USE.

Holes are provided in the Miter Gauge for attaching an Auxiliary Facing to make it easier to cut long pieces. Be positive Facing does not interfere with the proper operation of the Sawblade Guard.

Select a suitable piece of smooth straight wood, drill two holes through it and attach it with screws.



5 BLADEGUARD . . . must always be in place and working properly for all thru-sawing cuts. That is, all cuts where the blade cuts completely through the top of workpiece.

To remove the Guard for special operations, loosen the both Wing Nuts and slide the Spreader back and up. DO NOT DISTURB THE SETTING OF THE SPREADER BRACKET.

When replacing the Guard, insert Spreader between the Spreader Clamp and Spreader Bracket and slide down and forward. HAND TIGHTEN BOTH WING NUTS SECURELY.

6 TABLE INSERT . . . is removable for removing or installing blades or other cutting tools.

WARNING: To avoid injury from accidental start, push switch "OFF" and remove plug from power source outlet before removing insert.

A. Lower the blade below the table surface.

B. Raise Blade Guard.

C. Loosen screw. Do not remove.

D. Lift insert from front end, and pull toward front of saw.

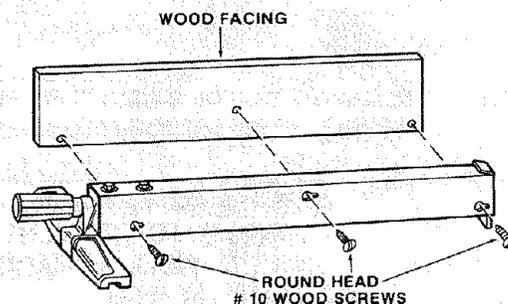
NEVER OPERATE THE SAW WITHOUT THE PROPER INSERT IN PLACE. USE THE SAW BLADE INSERT WHEN SAWING. USE THE DADO INSERT WHEN CUTTING A DADO.

7 RIP FENCE . . . is locked in place by tightening the Lock Knob. To move the Fence, loosen the Knob and grasp the Fence with one hand at the front.

Holes are provided in the Rip Fence for attaching a wood facing when using the Dado Head.

Select a piece of smooth straight wood approximately 3/4 inch thick, at least as long as the Rip Fence, and at least 7-1/2 inches wide (high) to permit clamping of Featherboards.

Attach it to the Fence with three Round Head #10 Wood Screws, 2 inches long. To remove the facing, loosen the screws, slide the facing forward and pull the screws through the round holes.



WARNING: When positioning Fence for maximum rip, make sure end of fence HEAD is even with edge of table extension. Fence cannot be locked securely beyond the edge of the table extension. The workpiece could bind and kick back.

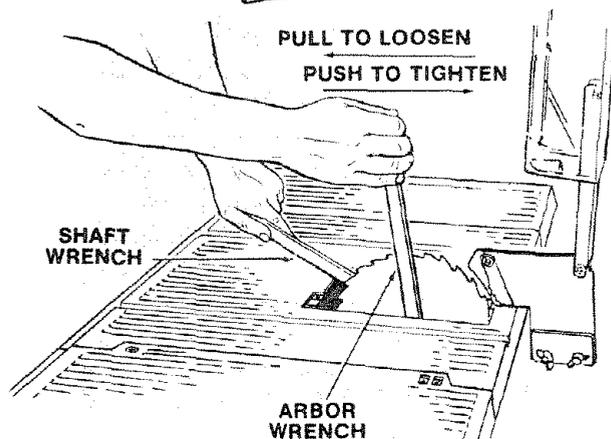
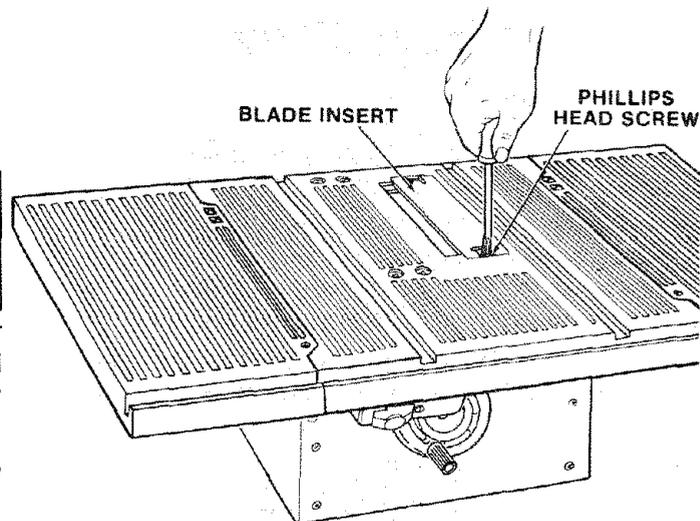
REMOVING AND INSTALLING SAWBLADE

WARNING: To avoid injury due to accidental start, push switch "OFF" and remove plug from power source outlet before removing or installing sawblade.

NOTE: When installing the blade, make sure the upper saw teeth are pointing toward the front of the saw and that the blade and collars are clean, and free from any burrs.

The HOLLOW side of the collar must be against the blade.

1. Loosen Phillips head screw in blade insert. Do not remove.
2. Remove blade insert by lifting slightly and pulling insert toward front of saw to disengage from key hole slot.
3. Turn Elevation Handwheel counterclockwise to raise motor shaft as high as it will go.
4. Insert shaft wrench over flat portions of motor spacer and arbor wrench over arbor nut.
5. Hold shaft wrench and loosen arbor nut with arbor wrench.

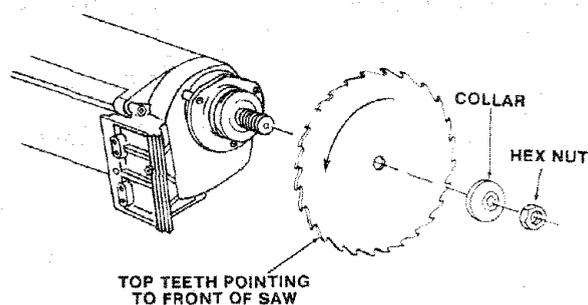


TO INSTALL SAWBLADE

1. Install saw blade onto shaft with top teeth pointing toward front of saw.
2. Install blade collar with flat surface toward blade.
3. Install arbor nut.

NOTE: Arbor nut should just be snug. Do not overtighten.

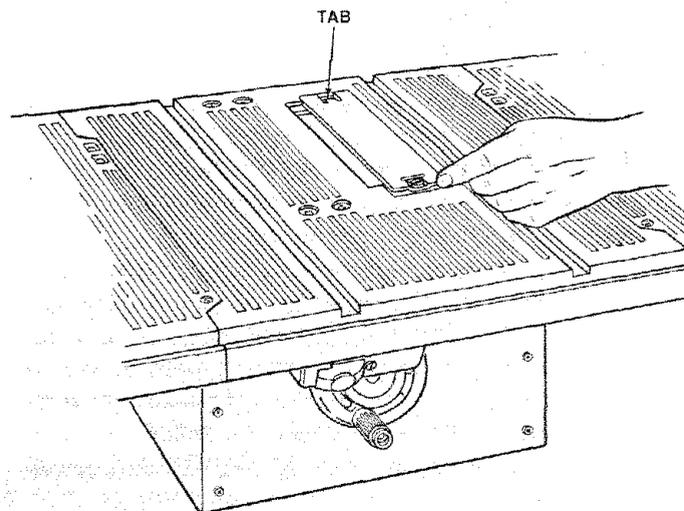
IMPORTANT: Do not attempt to run saw without blade collar properly installed.



4. Install blade insert by placing key hole slot in insert over screw head in saw table and pushing insert to rear of saw table, engaging tab of insert onto saw table ledge.

Tighten screw.

WARNING: To avoid injury from a thrown work-piece, blade parts, or blade contact, NEVER operate saw without the proper insert in place. Use the saw blade insert when sawing. Use the DADO INSERT when using a Dado blade.



basic saw operations

WORK HELPERS

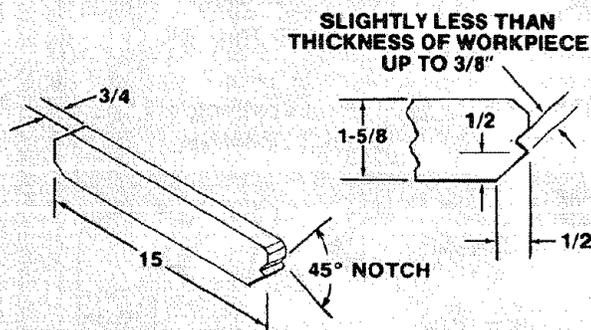
Before cutting any wood on your saw, study all of the "Basic Saw Operations."

Notice that in order to make some of the cuts, it is necessary to use certain devices, "Work Helpers", like the Push Stick, the Push Block and the Auxiliary Fence/Work Support, which you can make yourself.

After you have made a few practice cuts, make up these "helpers" before starting any projects. Make the "Push Stick" first.

PUSH STICK AND PUSH BLOCK

Make the Push Stick using a piece of 1 x 2.



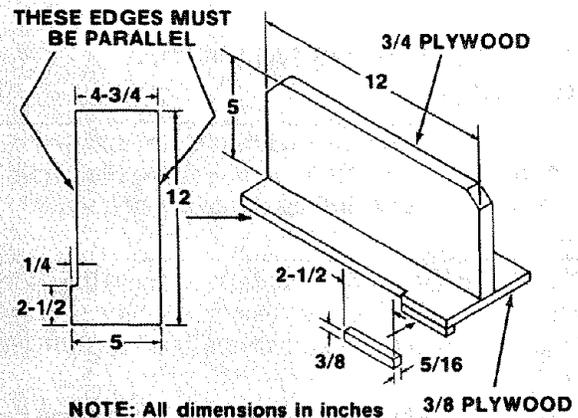
NOTE: All dimensions in inches

PUSH STICK

Make the Push Block using a piece of 3/8 in. and 3/4 in. plywood.

The small piece of wood 3/8 x 3/8 x 2-1/2 inches should be GLUED to the plywood. DO NOT USE NAILS. This is to prevent dulling the sawblade in the event you mistakenly cut into the Push Block.

Position the handle in the center of the plywood and fasten together with glue and woodscrew.



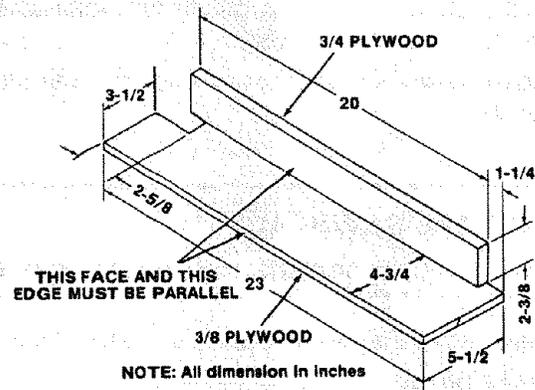
NOTE: All dimensions in inches

PUSH BLOCK

AUXILIARY FENCE/WORK SUPPORT

Make one using a piece of 3/8 inch and 3/4 inch plywood. Fasten together with glue and woodscrews.

NOTE: Since the Push Block is used with the Auxiliary Fence, the 4-3/4 inches dimensions must be held identical on both the pieces.



NOTE: All dimension in inches

AUXILIARY FENCE/WORK SUPPORT

safety instructions for basic saw operations

BEFORE EACH USE:

1. Inspect your saw

- To avoid injury from accidental starting, unplug the saw, turn the switch off and remove the Switch Key before raising or removing the Guard, changing the cutting tool, changing the setup or adjusting anything.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, saw stability, and any other conditions that may affect the way the saw works. If any part is missing, bent, or broken in any way, or any electrical part does not work properly, turn off and unplug the saw.
- Replace damaged, missing, or failed parts before using the saw again.

- Use the Sawblade Guard, Spreader, and Anti-Kickback Pawls for any thru-sawing (whenever the blade comes through the top of the workpiece). Make sure the Pawls work properly. Make sure the Spreader is in line with the sawblade.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking for and removing keys and adjusting wrenches from tool before turning it on.
- To avoid injury from jams, slips or thrown pieces (kickback and throwback):
 - USE ONLY RECOMMENDED ACCESSORIES (See page 40). Follow the instructions that come with the accessories. Using other accessories may be dangerous.

safety instructions for basic saw operations

2. Choose the right blade or cutting accessory for the material and the type of cutting you plan to do.
3. Never use grinding wheels, abrasive cut-off wheels, friction wheels (metal slitting blades) wire wheels or buffing wheel. They can fly apart explosively.
4. Choose and inspect your cutting tool carefully.
 - a. To avoid cutting tool failure and thrown shrapnel (broken pieces of blade), use only 10" or smaller blades or other cutting tools marked for speeds of 5000 rpm or higher.
 - b. Always use unbroken, balanced blades designed to fit this saw's 5/8 inch arbor.
 - c. When thru-sawing (making cuts where the blade comes through the workpiece top), always use a 10 inch diameter blade. This keeps the Spreader closest to the blade.
 - d. Do not overtighten arbor nut. Use arbor wrenches to "snug" it securely.
 - e. Use only sharp blades with properly set teeth. Consult a professional blade sharpener when in doubt.
 - f. Keep blades clean of gum and resin.
5. Adjust table inserts flush with the table top. NEVER use the saw without the proper insert.
6. Make sure all clamps and locks are tight and no parts have any excessive play.

2. Keep work area clean

- A. Cluttered areas and benches invite accidents. Floor must not be slippery from wax or sawdust.
- B. To avoid burns or other fire damage, never use the saw near flammable liquids, vapors or gases.
- C. To avoid injury, don't do layout, assembly, or setup work on the table while the blade is spinning. It could cut or throw anything hitting the blade.
AVOID ACCIDENTAL STARTING - Make sure switch is "OFF" before plugging saw in.

Plan ahead to protect your eyes, hands, face, ears.

3. Plan your work

- A. USE THE RIGHT TOOL - Don't force tool or attachment to do a job it was not designed for.
- B. Dress for safety:
 1. Do not wear loose clothing, gloves, neckties or jewelry (rings, wristwatches). They can get caught and draw you into moving parts.
 2. Wear nonslip footwear.
 3. Tie back long hair.
 4. Roll long sleeves above the elbow.
 5. Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using saw for long periods of time.

6. Any power saw can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.



7. For dusty operations, wear a dust mask along with the safety goggles.
- C. Inspect your workpiece. Make sure there are no nails or foreign objects in the part of the workpiece to be cut.
- D. Plan your cut to avoid **KICKBACKS** and **THROWBACKS** - when a part or all of the workpiece binds on the blade and is thrown violently back toward the front of the saw.
 1. Inspect your workpiece. Make sure there are no nails or foreign objects in the part of the workpiece to be cut.
 2. Never cut **FREEHAND**: Always use either a Rip Fence, Miter Gauge or fixture to position and guide the work, so it won't twist, bind on the blade and kickback.
 3. Make sure there's no debris between the workpiece and its supports.
 4. When cutting **irregularly shaped workpieces**, plan your work so it will not slip and pinch the blade:
 - a. A piece of molding, for example, must lie flat or be held by a fixture or jig that will not let it twist, rock or slip while being cut. Use jigs or fixtures where needed to prevent workpiece shifting.
 - b. Use a different, better suited type of tool for work that can't be made stable.
5. Use extra caution with large, very small or awkward workpieces:
 - a. Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top. NEVER use another person as a substitute for a Table Extension, or as additional support for a workpiece that is longer or wider than the basic saw table, or to help feed, support or pull the workpiece.

safety instructions for basic saw operations

- b. Never confine the piece being cut off. That is, the piece NOT against the Fence, Miter Gauge or fixture. Never hold it, clamp it, touch it, or use length stops against it. It must be free to move. If confined, it could get wedged against the blade and cause a kickback or throwback.
 - c. Never cut more than one workpiece at a time.
 - d. NEVER turn the saw "ON" before clearing the table or all tools, wood scraps, etc., except the workpiece and related feed or support devices for the cut planned.
4. Plan the way you will push the workpiece through
- A. NEVER pull the workpiece through. Start and finish the cut from the front of the table saw.
 - B. NEVER put your fingers or hands in the path of the sawblade or other cutting tool.
 - C. NEVER reach in back of the cutting tool with either hand to hold-down or support the workpiece, remove wood scraps, or for any other reason.
 - D. Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into a sawblade or other cutting tool.
 - E. DON'T OVERREACH. Always keep good footing and balance.
 - F. Push the workpiece against the rotation of the blade. NEVER feed material into the cutting tool from the rear of the saw.
 - G. Always push the workpiece all the way past the sawblade.
 - H. As much as possible, keep your face and body to one side of the sawblade, out of line with a possible kickback or throwback.

WHENEVER SAW BLADE IS SPINNING

WARNING: Don't let familiarity (gained from frequent use of your table saw) cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

1. Before actually cutting with the saw, watch it while it runs for a short while. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and fixing the problem.
2. Make sure the top of the arbor or cutting tool turns toward the front of the saw.
3. Set the cutting tool as low as possible for the cut you're planning.
4. KEEP CHILDREN AWAY. All visitors should be kept a safe distance from work. Make sure bystanders are clear of the saw and workpiece.
5. Let the blade reach full speed before cutting.
6. DON'T FORCE TOOL. It will do the job better and safer at its designed rate. Feed the workpiece into the blade only fast enough to let it cut without bogging down or binding.
7. Before freeing any jammed material:
 - A. Turn switch "OFF".
 - B. Unplug the saw.
 - C. Wait for all moving parts to stop.
 - D. Check blade, Spreader and Fence for proper alignment before starting, again.
8. To avoid throwback of cut off pieces:
 - A. Use the Guard Assembly.
 - B. To remove loose pieces beneath or trapped inside the Guard:
 1. Turn saw "OFF".
 2. Remove Switch Key.
 3. Wait for blade to stop before lifting the Guard.

BEFORE LEAVING THE SAW

1. Turn the saw off.
2. Wait for blade to stop spinning.
3. Make workshop child-proof. Lock the shop. Disconnect master switches. Remove the yellow Switch Key. Store it away from children and others not qualified to use the tool.
4. Unplug the saw.

basic saw operation – using the miter gauge

The MITER GAUGE IS USED when CROSSCUTTING, MITER CUTTING, BEVEL CUTTING, COMPOUND MITER CUTTING, DADOING and when RABBETING AND MOLDING across the end of a narrow workpiece.

WARNING: For your own safety, always observe the following safety precautions in addition to the safety instructions on pages 2, 3, 4, 5, 28, 29 & 30.

ADDITIONAL SAFETY INSTRUCTIONS FOR CROSS CUT TYPE CUTS.

Before starting:

1. Never use the Rip Fence when crosscutting.
2. An auxiliary wood facing attached to the Miter Gauge

CROSSCUTTING

Crosscut is known as a cutting or shaping operation made across the width of a workpiece.

The graduations on the Miter Gauge provide accuracy for average woodworking. In some cases where extreme accuracy is required, when making angle cuts, for example, make a trial cut and then recheck it with an accurate square, or protractor.

If necessary, the Miter Gauge head can be swiveled slightly to compensate for any inaccuracy.

NOTE: The space between the Miter Gauge Bar and the groove in the table is held to a minimum during manufacturing.

For maximum accuracy when using the Miter Gauge, always "favor" one side of the groove in the table. In other words, don't move the Miter Gauge from side to side while cutting, but keep one side of the bar riding against one side of the groove.

NOTE: Glue a piece of sandpaper to the face of the Miter Gauge head. This will help prevent the workpiece from "creeping" while it is being cut.

The Miter Gauge may be used in either of the grooves in the table. Make sure it is locked.

WARNING: To avoid blade contact or kickback, hold Miter Gauge properly.

When using the Miter Gauge in the LEFT hand groove, hold the workpiece firmly against the Miter Gauge head with your left hand, and grip the lock handle with your right.

When using the RIGHT hand groove, hold the workpiece with your right hand and the Lock Handle with your left hand.

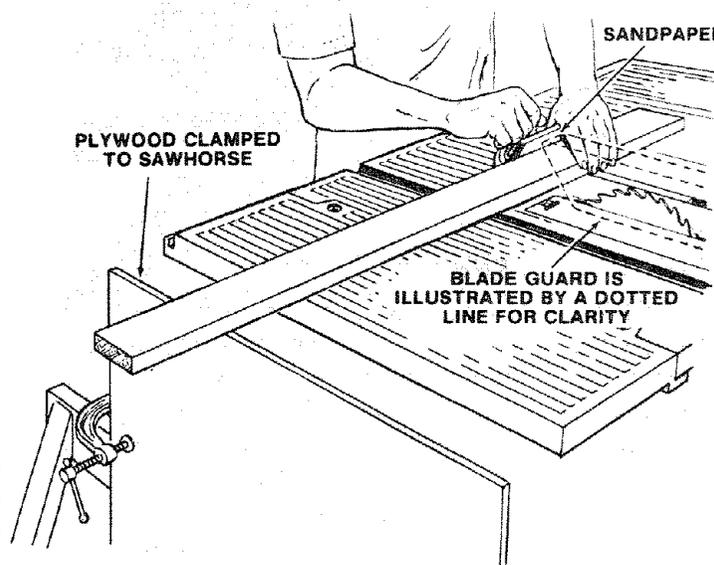
MITER GAUGE . . . head is locked in position for crosscutting or mitering by tightening the Lock Knob. ALWAYS LOCK IT SECURELY WHEN IN USE.

can help prevent workpiece twisting and throwbacks. Attach it to the holes provided. Make the facing long enough and big enough to support your work. Make sure, however, it will not interfere with the sawblade guard.

3. Use jigs or fixtures to help hold any piece too small to extend across the full length of the Miter Gauge face during the cut. This lets you properly hold the Miter Gauge and workpiece and helps keep your hands away from the blade.

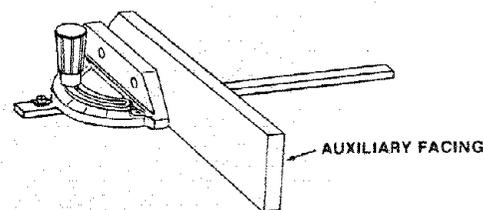
While cutting:

1. To avoid blade contact, always hold the Miter Gauge as shown in this section.



Holes are provided in the Miter Gauge for attaching an Auxiliary Facing to make it easier to cut long pieces. Be positive Facing does not interfere with the proper operation of the Sawblade Guard.

Select a suitable piece of smooth straight wood, drill two holes through it and attach it with screws.



basic saw operations

REPETITIVE CUTTING

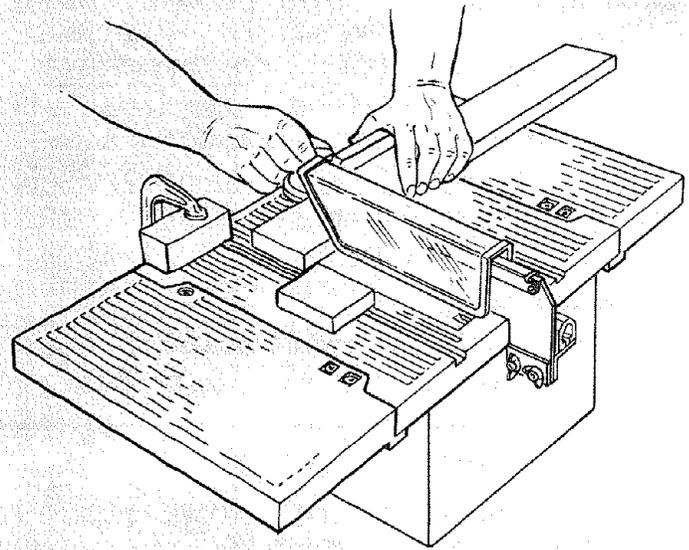
REPETITIVE CUTTING is cutting a quantity of pieces the same length without having to mark each piece.

NOTE: When making repetitive cuts from a long workpiece, make sure it is supported.

1. NEVER USE THE RIP FENCE AS A LENGTH STOP BECAUSE THE CUT OFF PIECE COULD BIND BETWEEN THE FENCE AND THE BLADE CAUSING A KICKBACK.
2. When making repetitive cuts shorter than 6 inches, clamp a block of wood 3 inches long to the table to act as a length stop.

CAUTION: Avoid kickback from twisting the workpiece. When clamping the block, make sure that the end of the block is well in front of the sawblade. Be sure it is clamped securely

3. Slide the workpiece along the Miter Gauge until it touches the block, hold it securely.
4. Make the cut, pull the workpiece back, turn the saw off and wait for the blade to stop. Remove cut off piece before continuing.



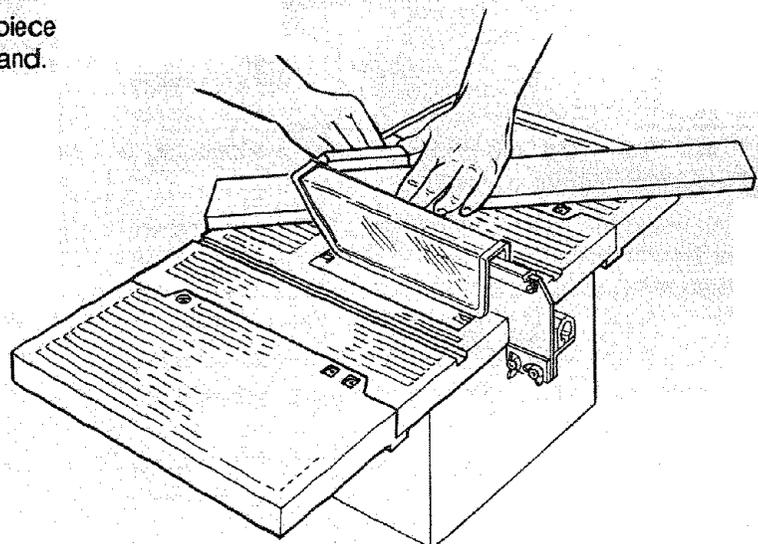
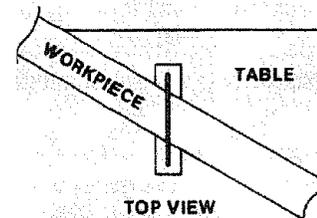
MITER CUTTING

MITER CUTTING is cutting wood at an angle other than 90° with the edge of the wood. Follow the same procedure as you would for crosscutting.

Adjust the Miter Gauge to the desired angle, and lock it. The Miter Gauge may be used in either of the grooves in the table.

When using the Miter Gauge in the LEFT hand groove, hold the workpiece firmly against the Miter Gauge head with your left hand, and grip the Lock Knob with your right.

When using the RIGHT hand groove, hold the workpiece with your right hand and the Knob with your left hand.

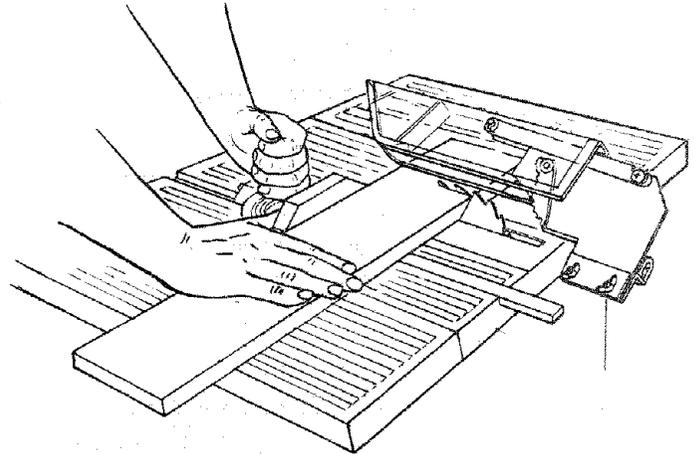
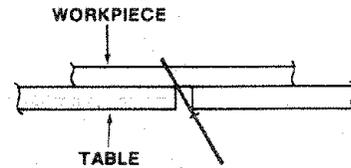


BEVEL CROSSCUTTING

BEVEL CROSSCUTTING is the same as crosscutting except that the wood is also cut at an angle, other than 90° with the flat side of the wood.

Adjust the blade to the desired angle.

Use the Miter Gauge in the groove to the RIGHT of the blade. It cannot be used in the groove to the LEFT because the Blade Guard will interfere. Hold the workpiece with your right hand and the Lock Handle with your left hand.



COMPOUND MITER CUTTING

COMPOUND MITER CUTTING is a combination of miter cutting and bevel crosscutting. The cut is made at an angle other than 90° to both the edge and the flat side of the wood.

Adjust the Miter Gauge and the blade to the desired angle. Make sure Miter Gauge is locked.

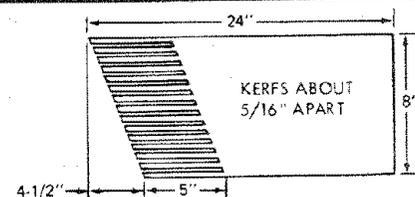
using the rip fence

RIPPING, BEVEL RIPPING, PLOUGHING, MOLDING, RESAWING AND RABBETING are performed using the RIP FENCE together with the AUXILIARY FENCE/WORK SUPPORT, PUSH STICK OR PUSH BLOCK.

WARNING: For your own safety, always observe the following safety precautions in addition to the safety instructions on pages 2, 3, 4, 5, 28, 29 & 30.

ADDITIONAL SAFETY INSTRUCTIONS

1. NEVER use the Miter Gauge when ripping.
2. Use a Push Stick whenever the fence is 2 or more inches from the blade. When thru-sawing, use an auxiliary fence and push block whenever the fence must be between 1/2 and 2 inches of the blade. Never thru-saw rip cuts less than 1/2 inch wide.
3. When using a Push Stick or Push Block, the trailing end of the board must be square. A Push Stick or Block against an uneven end could slip off or push the work away from the fence.
4. Never rip anything shorter than 10" long.
5. A FEATHERBOARD can help guide the workpiece.



Before starting:

1. To avoid kickbacks and slips into the blade, make sure the Rip Fence is parallel to the sawblade.
2. Check the Anti-Kickback Pawls. (See "Basic Saw Operation - Using the Rip Fence".) The Pawls must stop a kickback once it has started. Replace or sharpen Anti-Kickback Pawls when points become dull.
3. Plastic and composition (like hardboard) materials may be cut on your saw. However, since these are usually quite hard and slippery, the Anti-Kickback Pawls may not stop a kickback. Therefore, be especially careful in your set-up and cutting procedures.

While cutting:

1. To avoid kickbacks and slips into the blade, always push forward on the section of the workpiece between the saw blade and the Rip Fence. Never push forward on the piece being cut off.

basic saw operations

RIPPING

Ripping is known as a cutting operation along the length of the workpiece.

Position the Fence to the desired **WIDTH OF RIP** and lock in place.

Before starting to rip, be sure:

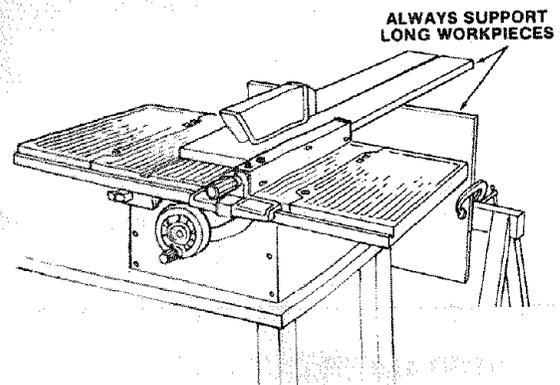
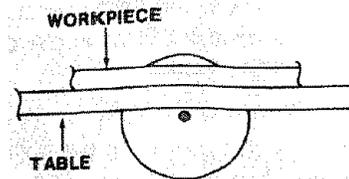
1. Rip Fence is parallel to sawblade.
2. Spreader is properly aligned with sawblade.
3. Anti-Kickback Pawls are functioning properly.

When ripping **LONG BOARDS** or **LARGE PANELS**, always use a work support.

A simple one can be made by clamping a piece of plywood to a sawhorse.

BEVEL RIPPING

When bevel ripping material 6 in. or narrower, use fence on the right side of the blade **ONLY**. This will provide more space between the fence and the sawblade for use of a push stick. If the fence is mounted to the left, the sawblade guard may interfere with proper use of a push stick.

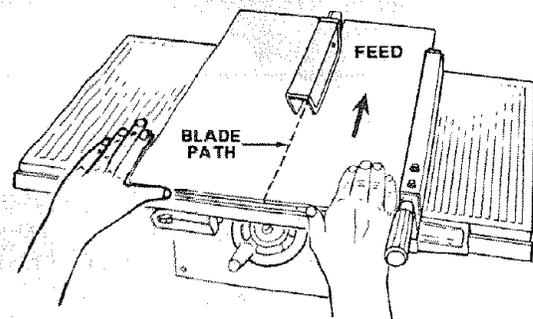


Keep your hands out of the blade path.

WARNING: To avoid kickback, push forward only on the part of the workpiece that will pass between the blade and the fence.

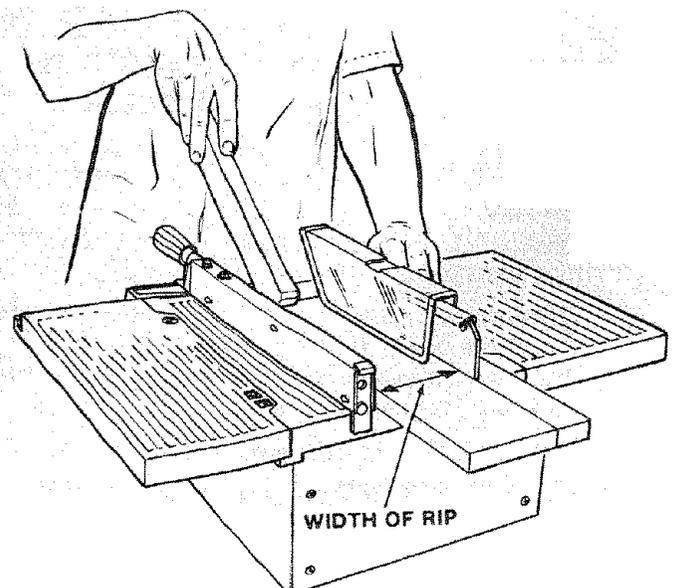
Stop your left thumb at the front edge of the table. Finish the cut with the appropriate pusher.

Feed the workpiece by pushing forward only on the part of the workpiece that will pass between the blade and the fence.



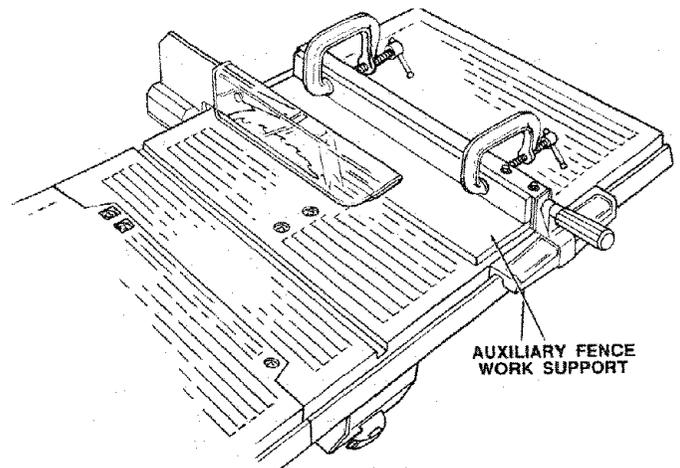
Once the trailing end is on the table:

When "WIDTH OF RIP" is 2 inches or wider, use the Push Stick to finish pushing the work all the way past the blade.

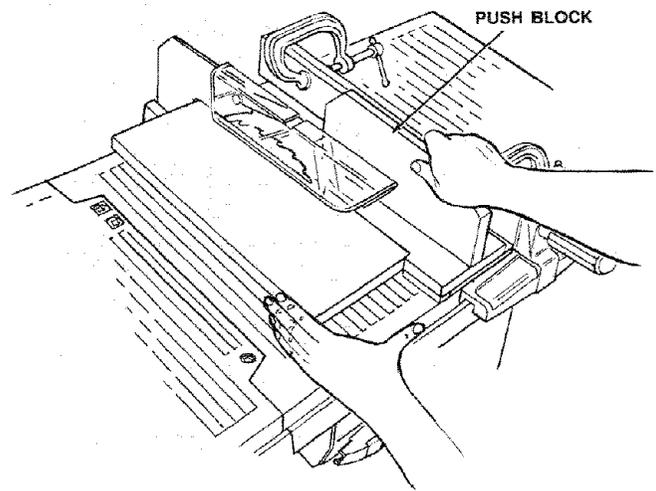


When WIDTH OF RIP is 1/2 inch to 2 inches, the Push Stick CANNOT be used because the Guard will interfere. USE the Auxiliary Fence/Work Support and Push Block.

Attach Auxiliary Fence/Work Support to Rip Fence with two "C" clamps.

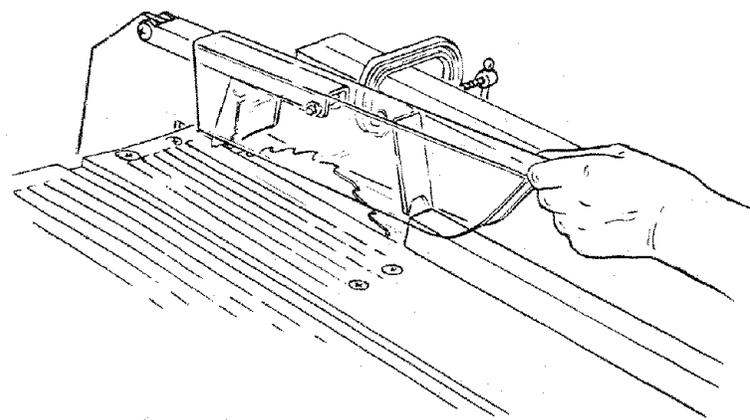
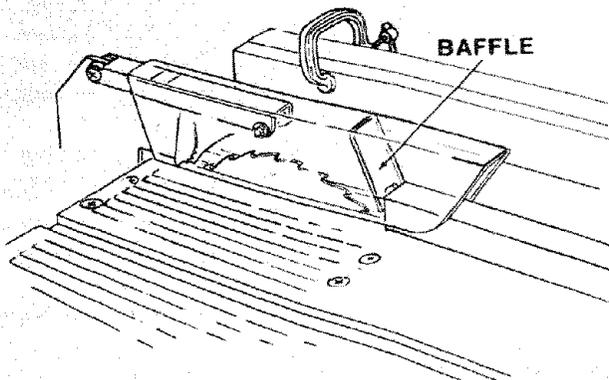


Feed the workpiece by hand along the Auxiliary Fence until the end is approximately 1 inch past the front edge of the table. Continue to feed using the Push Block. Hold the workpiece in position and install the Push Block by sliding it on top of the Auxiliary Fence/Work Support (this may raise Guard).



WARNING: To avoid injury from blade contact, never thru-saw cuts narrower than 1/2 inch wide.

Narrow strips thicker than the Auxiliary Fence/Work Support may enter the Guard and strike the Baffle. CAREFULLY raise Guard only enough to clear the workpiece. Use Push Block to complete cut.



basic saw operations

USING FEATHERBOARDS FOR THRU SAWING

Featherboards are NOT employed for thru-sawing operations when using the Miter Gauge.

Featherboards are used to keep the work in contact with the Fence and table as shown, and to help stop kickbacks.

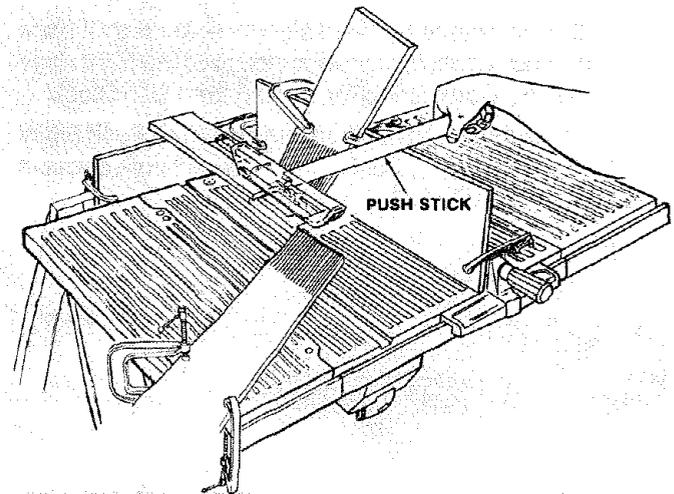
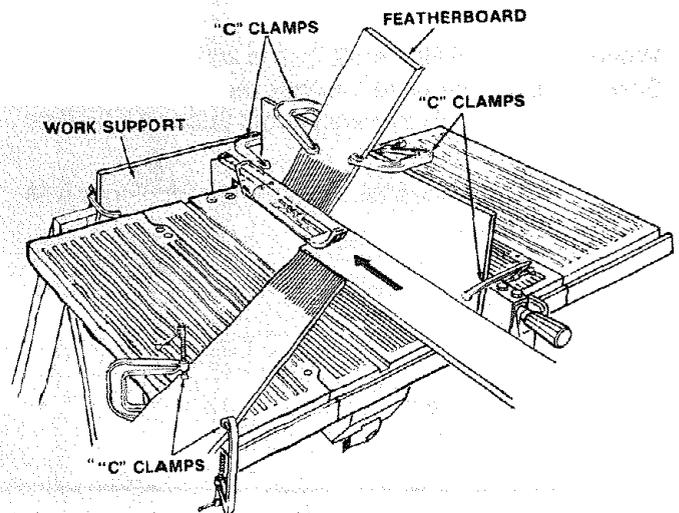
Add a 7-1/2 inch high flat facing board to the Fence, the full length of the Fence.

Mount Featherboards to Fence and table as shown, so that leading edges of Featherboards will support workpiece.

WARNING: Make sure the Featherboard against the edge presses only on the uncut position (in front of the blade). It might otherwise pinch the blade in the kerf and cause a kickback.

Before starting the operation (switch "OFF" and cutter below table surface):

1. Install Featherboards so they exert pressure on the workpiece; be positive they are secure, and
2. Make sure by trial that the Featherboards will stop a kickback if one should occur.



RESAWING

RESAWING is a thru-sawing cut made by ripping a piece of wood through its thickness. Do not attempt to resaw BOWED or WARPED material.

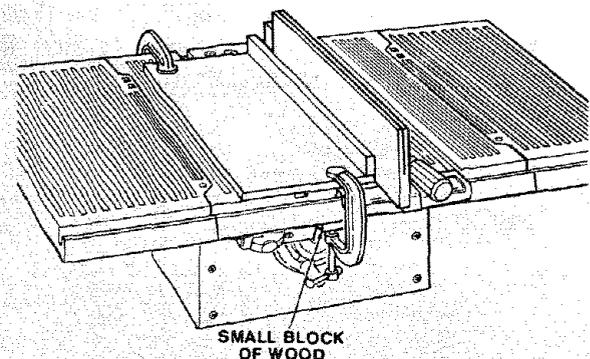
NOTE: To RESAW a piece of wood wider than 3-3/8 inches, it will be necessary to remove the blade guard and use the Auxiliary Fence/Work Support. (See "Work Helpers").

Clamp it to the table so that the workpiece will SLIDE EASILY but not TILT or MOVE SIDEWAYS without BINDING between the two Fences.

Do not clamp directly to the bottom edge of the table because the "swivel" of the clamp will not grip properly. Place a small block of wood between the bottom edge of the table and the "C" clamp.

WARNING: For your own safety

1. Do not "Back up" (reverse feeding) while re-sawing because this could cause a kickback.
2. Make first pass to a depth slightly more than one-half the width of the board; keep same face of board against Fence for second pass.



WARNING: For your own safety, install Blade Guard immediately upon completion of the resawing operation.

USING FEATHERBOARDS FOR NON-THRU SAWING

Featherboards are NOT employed during non thru-sawing operations when using the Miter Gauge.

USE FEATHERBOARDS FOR ALL OTHER NON THRU-SAWING OPERATIONS (when Sawblade Guard must be removed). Featherboards are used to keep the work in contact with the Fence and table as shown, and to stop kickbacks.

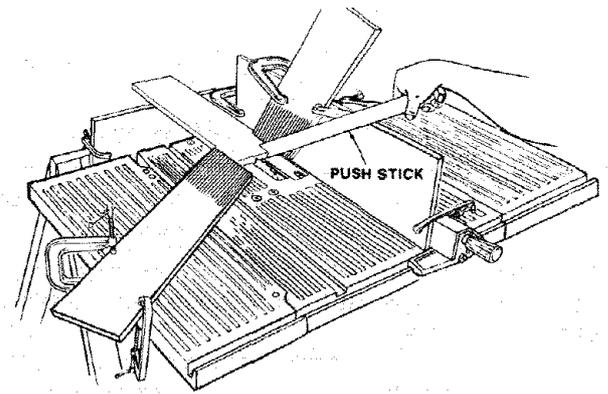
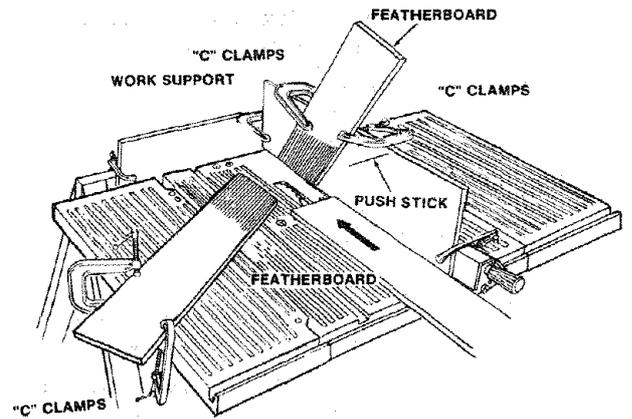
Add a 7-1/2 inch high flat facing board to the Fence, the full length of the Fence.

Mount Featherboards to Fence and table as shown, so that leading edges of Featherboards will support workpiece until cut is complete, and the workpiece has been pushed completely past the cutter (sawblade, Dado Head, Molding Head, etc.) with a Push Stick, as in ripping.

Before starting the operation (switch "OFF" and cutter below table surface):

1. Install Featherboards so they exert pressure on the workpiece; be positive they are secure, and
2. Make sure by trial that the Featherboards will stop a kickback if one should occur.

WARNING: For your own safety, replace the Sawblade Guard as soon as the non thru-sawing operation is complete.

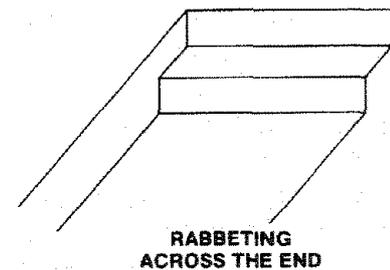
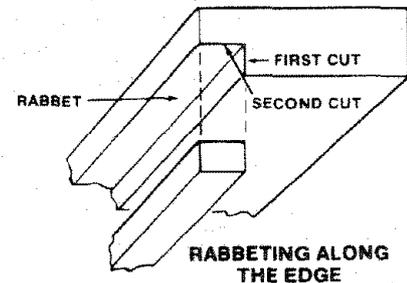


RABBETING

RABBETING is known as cutting out a section of the corner of a piece of material, across an end or along an edge.

To make a RABBET requires cuts which do not go all the way through the material. Therefore, the Blade Guard must be removed.

1. Remove Blade Guard.
2. For rabbeting along an edge (long way of workpiece) as shown, add facing to Rip Fence approximately as high as the workpiece is wide. Adjust Rip Fence and blade to required dimensions; then make first cut with board flat on table as any rip (type) cut; make second cut with workpiece on edge. Follow all precautions, safety instructions, and operational instructions as for ripping, or rip type operations, including Featherboards and Push Stick, etc.
3. For rabbeting across an end, for workpiece 10-1/2 inches and narrower, make the rabbet cut with the board flat on the table. Using the Miter Gauge fitted with a Facing, follow the same procedures and instructions for cross cutting making successive cuts across the width of the workpiece to obtain the desired width of cut. DO NOT use the Rip Fence for rabbeting across the end.



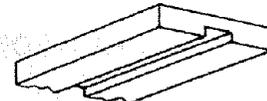
WARNING: For your own safety, install blade guard immediately upon completion of rabbeting operation.

Some rabbet cuts can also be made in one pass of the workpiece over the cutter using the Dado Head.

basic saw operations

PLOUGHING

PLOUGHING is grooving with the grain the long way of the workpiece, using the Fence. USE proper hold-downs and feed devices.



PLOUGHING

DADOING

Instructions for operating the Dado Head are contained in booklet furnished with the Dado Head.

The arbor on the saw, is only long enough so that the widest cut that can be made is 1/2 inch wide.

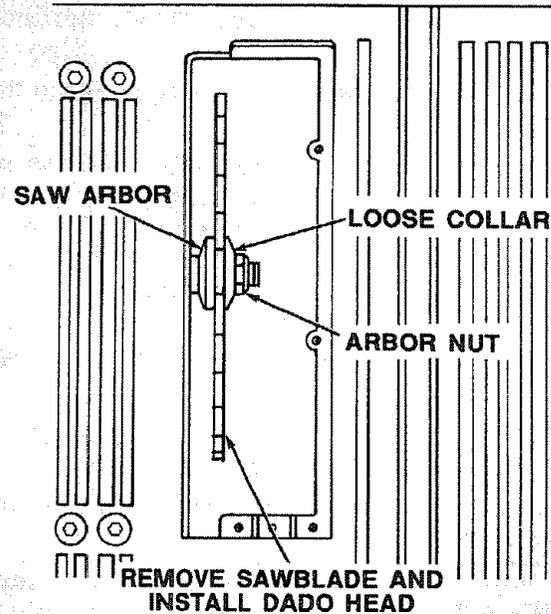
It is not necessary to install the outside loose collar before screwing on the arbor nut. Make sure the arbor nut is tight and at least one thread on the arbor sticks out past the nut.

ALWAYS USE DADO INSERT LISTED UNDER "RECOMMENDED ACCESSORIES."

When using the Dado Head it will be necessary to remove the Blade Guard and Spreader. USE CAUTION. USE MITER GAUGE, FENCE, FEATHER-BOARDS AND PUSH STICKS AS REQUIRED.

WARNING: For your own safety, always replace the blade, Guard and Spreader when you are finished Dadoing.

BACK OF SAW



maintenance

WARNING: To avoid injury from accidental start, turn switch "OFF" and remove plug from power source outlet before maintaining or lubricating your saw.

Do not allow sawdust to accumulate inside the saw.

Frequently blow out any dust that may accumulate inside the saw cabinet and the motor.

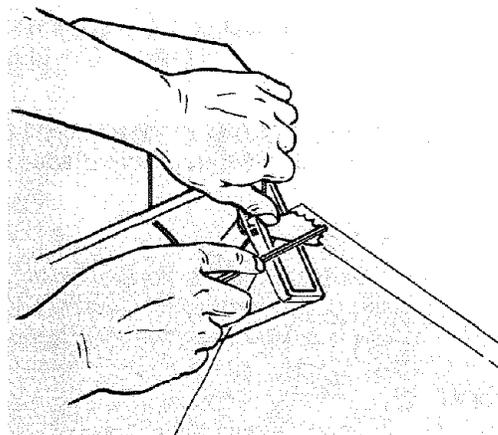
Frequently clean your cutting tools with Craftsman Gum and Pitch Remover.

A coat of automobile-type wax applied to the table will help to keep the surface clean and allow workpieces to slide more freely.

If the power cord is worn, cut, or damaged in any way, have it replaced immediately.

Make sure the teeth of the Anti-Kickback Pawls are always sharp. To sharpen:

1. Identify the dull tooth or teeth. Remove Blade Guard.
2. Rotate Pawl toward rear of Spreader so that teeth are above top of Spreader.
3. Hold Spreader with left hand and place Pawl over corner of workbench.
4. Sharpen the dull tooth using a few light strokes of a fine-cut file.



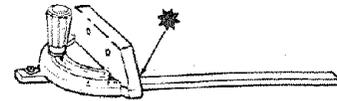
Lubrication

The saw motor bearings have been packed at the factory with proper lubricant and require no additional lubrication.

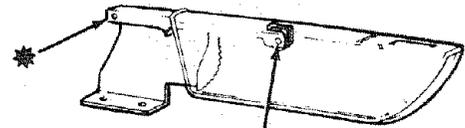
The following parts should be oiled occasionally with SAE No. 20 or No. 30 engine oil.

1. Elevation guide slot and pivot.
2. Elevation screw threads and support bearings.
3. Bevel screw threads and support bearings. (First clean with Craftsman Gum & Pitch Remover.)
4. Bevel and elevation link pivot points.
5. Cradle pivot pin bearing points.
6. Bearing points in Miter Gauge and Rip Fence.

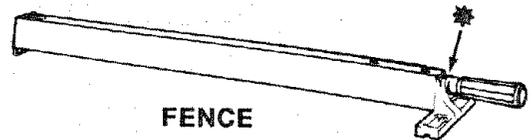
The saw table and other major parts are made of aluminum and require no special care. A coat of automobile-type wax applied to the table will help to keep the surface clean and allow workpieces to slide more freely. Treat unplated and unpainted steel parts and surfaces with Sears "Stop Rust".



MITER GAUGE

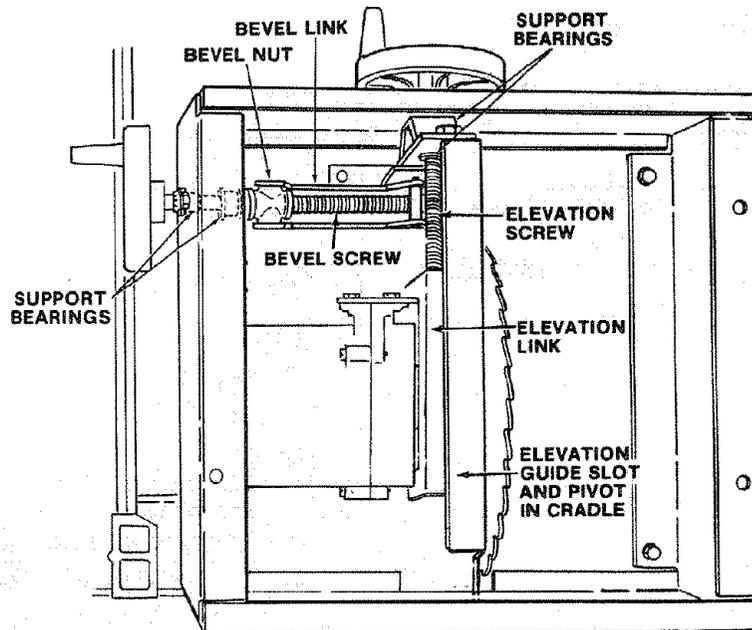


GUARD

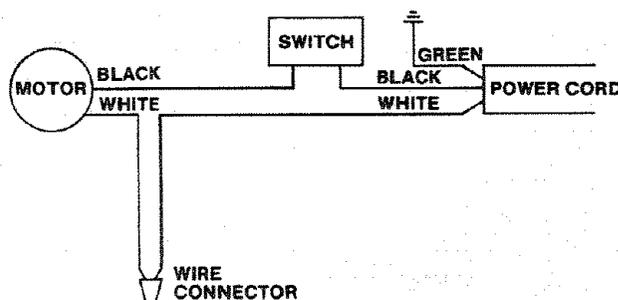


FENCE

* BEARING PARTS



wiring diagram



sears recommends the following accessories

ITEM	CAT. NO.
Saw Blades	See Catalog
Dado Insert	9-22273
Taper Jig	See Catalog
Dado Set	See Catalog

WARNING: Do not use adjustable (wobble) type dados or carbide tipped dado blades on this saw. Maximum dado width is 1/2 inch.

Steel Legs	9-22244
"Power Tool Know How Handbook"	9-29117

Sears may recommend other accessories not listed in manual.

See your nearest Sears Store or Catalog Department for other accessories.

Do not use any accessory unless you have received and read complete instructions for its use.

WARNING: Use only accessories recommended for this saw. Using other accessories may be dangerous.

trouble shooting

WARNING: To avoid injury from accidental start, turn switch "OFF" and always remove plug from power source outlet before trouble shooting.

TROUBLE SHOOTING - GENERAL

TROUBLE	PROBABLE CAUSE	REMEDY
Excessive vibration.	1. Blade out of balance.	1. Discard Blade and use a different blade.
Cannot make square cut when crosscutting.	1. Miter Gauge not adjusted properly.	1. See "Adjustments" section "Miter Gauge."
Cut binds, burns or stalls motor when ripping.	1. Dull blade or improper tooth set. 2. Warped board. 3. Rip fence not parallel to blade. 4. Spreader out of alignment.	1. Sharpen or replace blade. 2. Make sure concave or hollow side is facing "down," feed slowly. 3. See "Assembly" section, "Aligning Rip Fence." 4. See "Assembly" section, "Installing Blade Guard."
Cut not true at 90° or 45° positions.	1. Stop screw not properly adjusted.	1. See "Adjustments" section, "Blade Tilt, or Squareness of Blade to Table."
Tilt and elevating handwheel turn hard.	1. Sawdust on threads of tilt screw or elevating screw.	1. See "Maintenance and Lubrication" section.
Excessive blade wobble. (Causes oversize kerf and unsmooth cut.)	1. Blade has excessive wobble.	1. Replace blade.

TROUBLESHOOTING - MOTOR

NOTE: Motors used on wood working tools are particularly susceptible to the accumulation of sawdust and wood chips and should be blown out or "vacuumed" frequently to prevent interference with normal motor ventilation.

TROUBLE	PROBABLE CAUSE	REMEDY
Excessive noise.	1. Motor	1. Have motor checked by qualified service technician. Repair service is available at your nearest Sears store.
Motor fails to develop full power. NOTE: Low Voltage: (Power output of motor decreases rapidly with decrease in voltage at motor terminals. For example, a reduction of 10% in voltage causes a reduction of 19% in maximum power output of which the motor is capable, and a reduction of 20% in voltage causes a reduction of 36% in maximum power output.)	<ol style="list-style-type: none"> 1. Circuit overloaded with lights, appliances and other motors. 2. Undersize wires or circuit too long. 3. General overloading of power company facilities. (In some sections of the country, demand for electrical power may exceed the capacity of existing generating and distribution systems.) 4. Incorrect fuses or circuit breakers in power line. 	<ol style="list-style-type: none"> 1. Do not use other appliances or motors on same circuit when using the saw. 2. Increase wire sizes, or reduce length of wiring. See "Motor Specifications and Electrical Requirements" section. 3. Request a voltage check from the power company. 4. Install correct fuses or circuit breakers.
Motor starts slowly or fails to come up to full speed.	1. Low voltage.	1. Request voltage check from the power company.
Motor overheats.	<ol style="list-style-type: none"> 1. Motor overloaded 2. Improper cooling. (Air circulation restricted through motor due to sawdust, accumulating inside of saw.) 	<ol style="list-style-type: none"> 1. Do not cut so fast - feed work slower into blade. 2. Clean out sawdust to provide normal air circulation through motor. See "Maintenance and Lubrication" section.
Motor stalls (Resulting in blown fuses or tripped circuit breakers.)	<ol style="list-style-type: none"> 1. Voltage too low to permit motor to reach operating speed. 2. Fuses or circuit breakers do not have sufficient capacity. 	<ol style="list-style-type: none"> 1. Request voltage check from the power company. 2. Install proper size fuses or circuit breakers.
Frequent opening of fuses or circuit breakers.	<ol style="list-style-type: none"> 1. Motor overloaded 2. Fuses or circuit breakers do not have sufficient capacity. 	<ol style="list-style-type: none"> 1. Don't cut so fast - feed work slower into blade. 2. Install proper size fuses or circuit breakers.

repair parts

PARTS LIST FOR CRAFTSMAN 10 INCH DIRECT DRIVE SAW MODEL NO. 113.221720

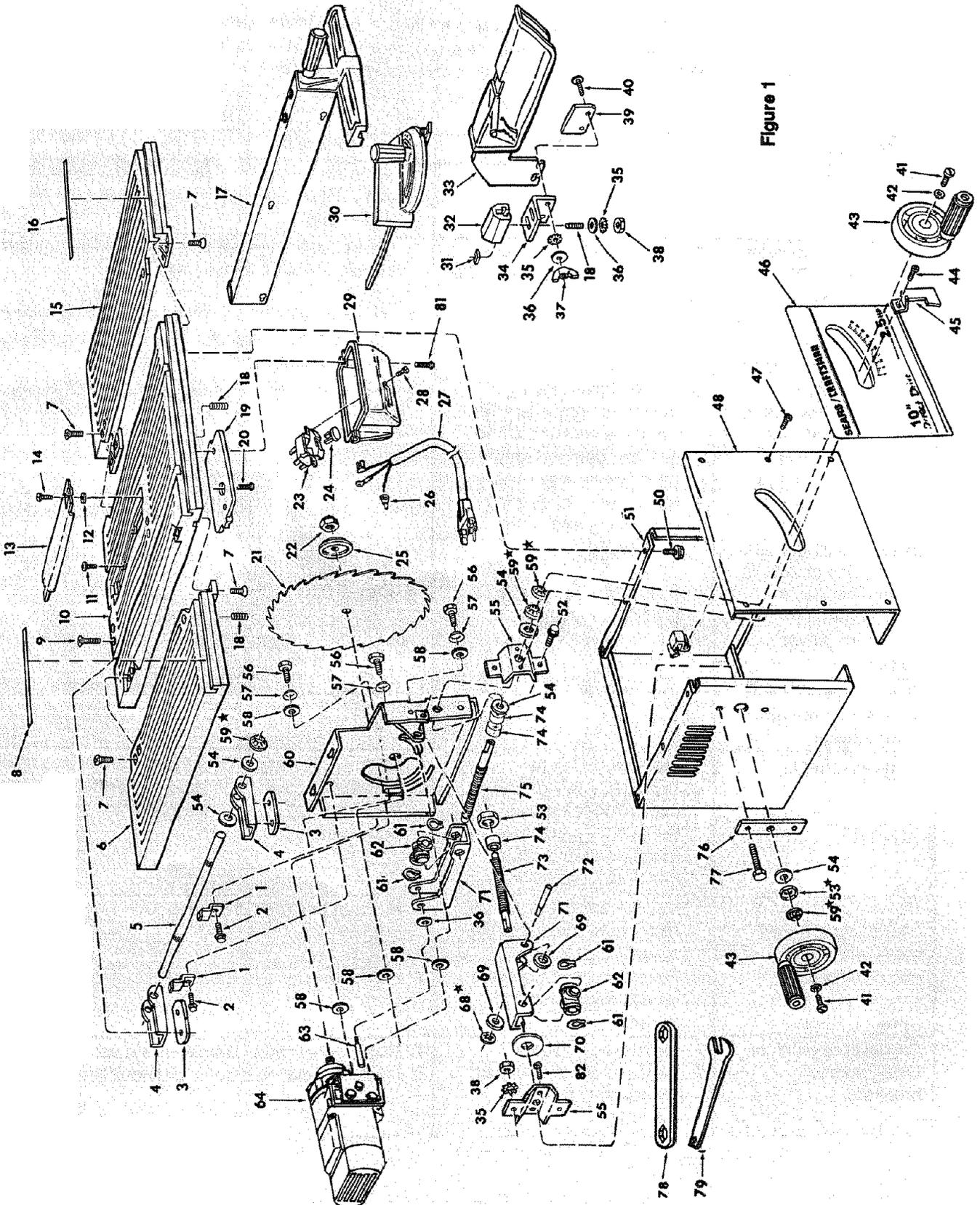


Figure 1

PARTS LIST FOR CRAFTSMAN 10 INCH DIRECT DRIVE SAW MODEL NO. 113.221720
Always Order by Part Number - Not by Key Number

FIGURE 1 PARTS LIST

Key No.	Part No.	Description	Key No.	Part No.	Description
1	62905	Bracket, Cradle	43	62912	Handwheel 3-5/8
2	STD601103	* Screw, Hex Washer Hd. Type "T" 10-32 x 3/8	44	STD601105	* Screw, Pan Cross Type "T" 10-32 x 1/2
3	62436	Nut, Twin	45	62997	Indicator, Bevel
4	62625	Hanger	46	820811	Panel, Trim
5	816075-1	Rod, Cradle	47	STD611005	* Screw, Pan Rec. Type "AB" No. 10-32 x 1/2
6	62993	Extension, Table L.H.	48	820812	Panel, Front
7	805297-9	Screw, Socket Flat Hd. 1/4-20 x 5/8	49	62204	Clip, Cord
8	820861	Tape, Fence L.H.	50	9420417	Screw, Washer Type "T" 1/4-20 x 5/8
9	805297-1	Screw, Flat Hd. 5/16-18 x 1-1/4	51	820809	Base
10	820807	Table	52	60548	Screw, Hex Washer Type "T" 1/4-20 x 3/8
11	STD600805	* Screw, Pan Cross Type "T" 8-32 x 1/2	53	60551	Nut, Pal 3/8
12	60552	Washer, Rubber	54	STD551037	* Washer, .380 x 47/64 x 1/16
13	820813	Insert, Table	55	62989	Bracket, Lead Screw
14	STD510807	* Screw, Pan Hd. Type "T" 8-32 x 3/4	56	60541	Screw, Hex Locking 1/4-20 x 3/4
15	62994	Extension, Table R.H.	57	60546	Washer, Spring
16	820862	Tape, Fence R.H.	58	60545	Washer, Nylon
17	—	Fence Assembly, Rip (See Fig. 3)	59	60240	* Nut, Push 3/8
18	60074	Screw, Socket Hd. 1/4-20 x 7/8	60	820808	Cradle
19	62924	Plate, Switch	61	60540	Ring, Retaining 11/16
20	STD601005	* Screw, Pan Hd. Type "T" 10-32 x 1/2	62	62919	Nut, Elevation
21	9-32138	Blade, 10"	63	62922	Pin, Guide
22	820818	Nut, Saw Arbor	64	508849	* Motor (Includes Key #56)
23	62442	Switch, Locking	65	—	—
24	9-22255	Key, Locking	66	—	—
25	60547	Collar, Blade	67	—	—
26	803954-3	Connector, Wire	68	60539	* Ring, Retaining 1/4
27	805920	Cord with Plug	69	STD551010	* Washer, 13/64 x 9/16 x 1/32
28	STD600603	* Screw, Pan Rec. Type "T" 6-32 x 3/8	70	805562-1	* Washer, .507 x 1-1/4 x 1/8
29	62970	Housing, Switch	71	814770	Link
30	—	Gauge Assembly, Miter (See Fig. 4)	72	62923	Pin, Guide
31	62636	Nut, Square 1/4-20	73	814663-1	Screw, Lead
32	62642	Support, Spreader	74	62991	Collar, Stop
33	—	Guard Assembly (See Fig. 2)	75	814663	Screw, Lead
34	62809	Bracket, Spreader (Includes Keys #35, 37, & 40)	76	814638	Plate, Thrust
35	STD551225	* Lockwasher, External 1/4-20	77	STD522506	* Screw, Hex Hd. 1/4-20 x 5/8
36	STD551025	* Washer, 17/64 x 9/16 x 3/64	78	820815	Wrench, Arbor
37	STD541625	* Nut, Wing 1/4-20	79	820816	Wrench, Shaft
38	STD541425	* Nut, Hex Lock 1/4-20	80	—	—
39	62643	Clamp, Spreader	81	816333-3	Screw, Pan Hd. Ty "TT" 10-32 x 5/8
40	STD522506	* Screw, Truss Hd. 1/4-20 x 5/8	82	60338	Screw, Pan Hd. Ty "T" 10-32 x 1-1/4
41	STD510903	* Screw, Pan 8-32 x 3/8	—	SP5537	Owners Manual (Not Illustrated)
42	STD551208	* Lockwasher, No. 8	—	—	—

* Standard Hardware Item - May be purchased locally.
† Stock Item - May be secured through the Hardware Department of most Sears Retail Stores and Catalog Order Houses.
★ If this part is removed, discard and replace with a new Push Nut.
• Any attempt to repair this motor may create a hazard unless repair is done by a qualified service technician. Repair service is available at your nearest Sears Store.

repair parts

PARTS LIST FOR CRAFTSMAN 10 INCH TABLE SAW MODEL NO. 113.221720

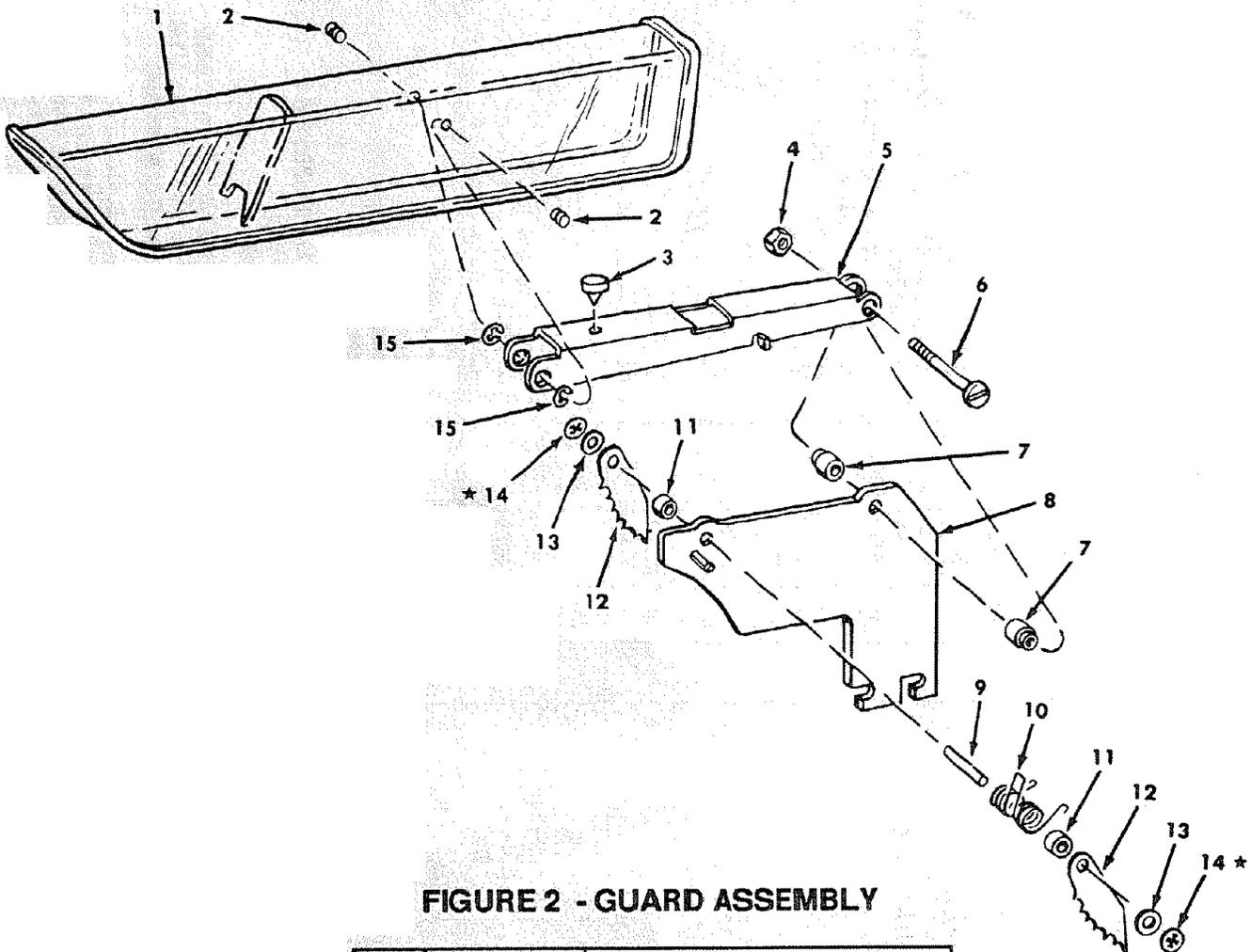


FIGURE 2 - GUARD ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	62415	Guard
2	62516	Pin
3	62650	Bumper, Snap In
4	STD541425	* Nut, Lock 1/4-20
5	62517	Link, Guard
6	STD512515	* Screw Pan Hd. 1/4-20 x 1-1/2
7	62522	Spacer, Link
8	62810	Blade, Spreader
9	62410	Pin, 1/4 x 1-3/64
10	62519	Spring, Pawl
11	62520	Spacer, Pawl
12	62974	Pawl
13	STD551012	* Washer, 17/64 x 1/2 x 1/32
14	60208	* Nut, Push
15	STD581025	* Ring, Retaining 1/4

★ If this part is removed, discard and replace with a new push nut.

**PARTS LIST FOR CRAFTSMAN 10 INCH TABLE SAW
MODEL NO. 113.221720**

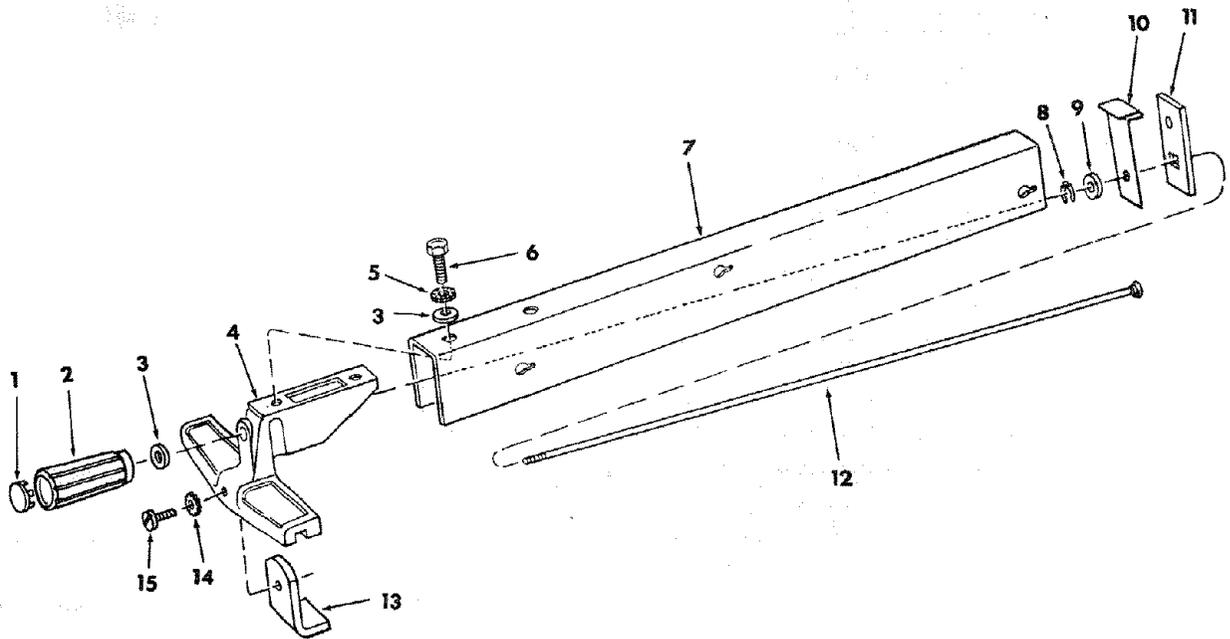


FIGURE 3 - FENCE ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	62693	Plug, Button
2	62692	Knob (Includes Key No. 1)
3	STD551031	* Washer, 21/64 x 5/8 x 1/32
4	62996	Head, Fence
5	STD551231	* Lockwasher, External 5/16
6	60078	Screw, Hex Hd., 5/16-18 x 1/2
7	814646	Channel, Fence
8	808844-1	Ring, Retaining
9	814657	Spacer
10	62501	Spring, Fence Lock
11	62603	Lock, Fence
12	814647	Rod, Fence Lock
13	815227	Bracket, Retainer
14	STD551208	* Lockwasher, External No. 8
15	STD600803	* Screw, Pan Hd. Type "T" No. 8 x 3/8

* Standard Hardware Item - May be purchased locally.

repair parts

PARTS LIST FOR CRAFTSMAN 10 INCH TABLE SAW MODEL NO. 113.221720

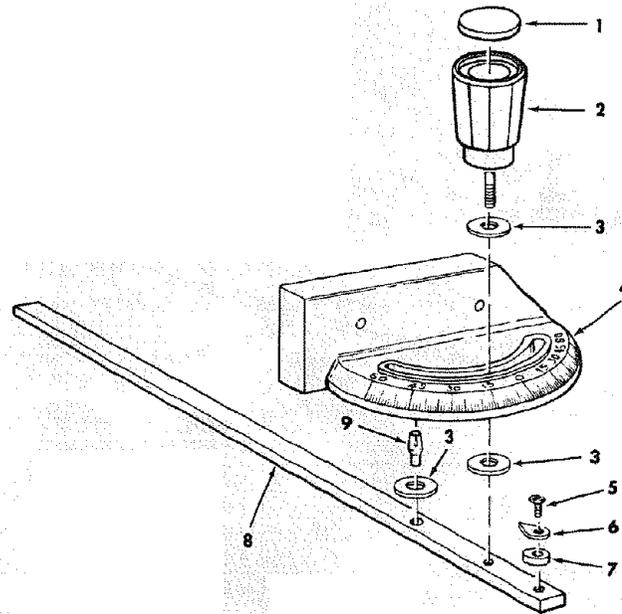


FIGURE 4 - MITER GAUGE ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	62693	Plug, Button
2	62999	Knob (Includes Key #1)
3	STD551010	* Washer, 13/64 x 5/8 x 1/32
4	62173	Gauge, Miter
5	STD510803	* Screw, Pan Hd. 8-32 x 3/8
6	38724	Pointer
7	60544	Spacer
8	820863	Rod, Miter Gauge
9	62175	Pin, Miter Pivot

* Standard Hardware Item - May be purchased locally.

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SERVICE

MODEL NO.

113.221720

**SAW WITH
TABLE EXTENSIONS**

**HOW TO ORDER
REPAIR PARTS**

**10-INCH
DIRECT DRIVE TABLE SAW**

Now that you have purchased your 10-inch direct drive table saw, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your 10-inch table saw will be found on a plate attached to your saw, at the rear of the base.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

PART NUMBER PART DESCRIPTION

MODEL NUMBER	NAME OF ITEM
113.221720	10-Inch Direct Drive Table Saw

All parts listed may be ordered from any Sears Service Center and most Sears stores. If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A.