Save This Manual For Future Reference



owners manual

MODEL NO. 113.29884

SAW WITH LEGS TWO CAST IRON TABLE EXTENSIONS MOTOR AND QUICK RELEASE RIP FENCE

#### Serial Number

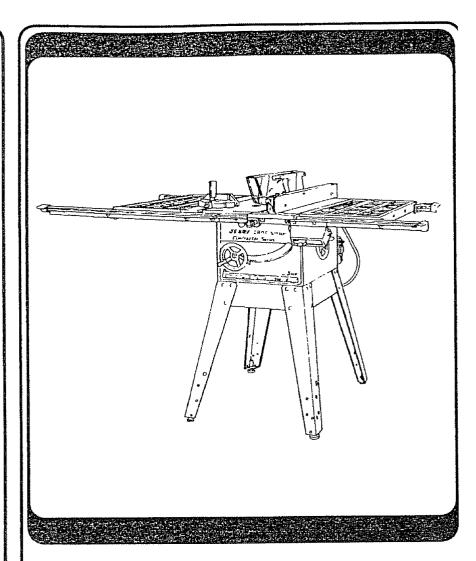
Model and serial number may be found

at the right-hand side 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.



# CRAFTSMAN Contractor

10" Belt Drive Saw

- assembly
- operating
- repair parts

Sold by SEARS, ROEBUCK AND CO., Hoffman Estates, IL. 60179 U.S.A.

Part No SP5624 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 fails 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/817 WA Hoffman Estates, IL 60179

#### 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 13 34).
- 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 35)
- 3. Review and understanding of all safety instructions and operating procedures in this manual.
- 4. Review of the maintenance methods for this saw. (See page 56)

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. Put the saw on 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 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 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 nor bystanders must stand in line with the saw blade.

- 4. GROUND THE SAW-This saw has an approved 3conductor 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 or use recommended casters when you need 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, mounting, and any other conditions that may affect the way it works. If any part is missing, bent, or broken in any way, or any electrical parts don't 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.

#### **ADANGER**

- Read manual before using saw Wear safety goggles that meet
- AMSI ZR71 standards
- 3. Do not reach around or over saw
- 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
- 6. Keep hands out of path of saw 8. Know how to reduce the risk of kickback. See instructions for ripping.
- When ripping, use push block and auxiliary fence when fence is set to stop before adjusting or between 1/2 and 2 inches from

blade. Do not make rip cuts

narrower than 1/2 inch

to stop before adjusting or servicing.

- 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):
  - USE ONLY "RECOMMENDED ACCESSO-RIES" (See page 58). Follow the instructions that come with the accessories. The use of improper accessories may cause risk of injury to persons.
  - Choose the right blade or cutting accessory for the material and the type of cutting you plan to do.
  - 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 3450 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 in closest to the blade.
    - d. Do not overtighten arbor nut. Use arbor wrenches to "snug" it securely.
    - e. Use only sharp blades with properly setteeth. 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:

- 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.
- 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 THROW-BACKS when a part or all of the workpiece binds on the blade and is thrown violently back toward the front of the saw.
  - 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.
  - 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

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. Neverturn 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.
  - 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

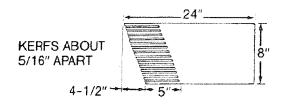
WARNING: Don't let familiarity (gained from frequent use of your table saw) cause a careless mistake. Always remember that a careless fraction of a second is enough to cause a severe injury.

 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.
- 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. Checkblade, 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.
- 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.
- A FEATHERBOARD can help guide the workpiece.
   See "BASIC SAW OPERATION USING THE RIP FENCE." Always use Featherboards for any non thru rip type cuts.



#### **BEFORE STARTING**

- To avoid kickbacks and slips into the blade, make sure the Rip Fence is parallel to the sawblade.
- 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

 To avoid kickbacks and slips into the blade, always pushforward 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.
- 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.

 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 37.)

#### WHILE CUTTING

 To avoid blade contact, always hold the Miter Gauge as shown in the "BASIC SAW OPERATIONS - US-ING THE MITER GAUGE."

#### BEFORE LEAVING THE SAW

- 1. Turn the saw off.
- 2. Wait for blade to stop spinning.
- 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.

#### SAFETY SIGNAL WORDS

DANGER: means if the safety information is not followed, someone will be seriously injured or killed.

WARNING: means if the safety information is not followed, someone could be seriously injured or killed.

CAUTION: means if the safety information is not followed, someone might be injured.

### glossary of terms for woodworking

#### Anti-Kickback Pawis (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.

#### Rabbe

A notch in the edge of a workpiece.

#### Resin

A sticky, sap base substance that has hardened.

### glossary of terms for woodworking

#### 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.

#### 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 though 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**

This saw is designed to use a 3450 RPM motor only. Do not use any motor that runs faster than 3450 RPM. The A-C motor used in this saw is a capacitor start, capacitor run, non-reversible type motor. It is wired at the factory for operation on 120v AC, 60 Hz., alternating current. It may be converted to operate on 240v AC. Listed below are the motor specifications.

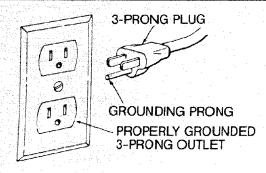
WARNING: Do not use blower or washing machine or any motor with an automatic reset overload protector. They can start up by themselves and you could get injured.

### CONNECTING TO POWER SOURCE OUTLET

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

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.

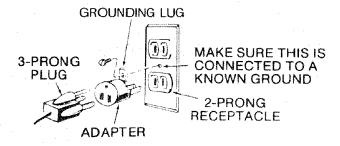
WARNING: Electric shock can kill. Not all outlets are properly grounded. If you are not sure that your outlet is properly grounded, have it checked by a qualified electrician.



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 a grounding prong, approved by Underwriter's Laboratories and Canadian Standards Association. The ground conductor has a green lug 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 grounded type outlet as shown above.

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

Atemporary adapter, as shown, is available for connecting plug 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. This adapter should be used only until a properly grounded outlet can be installed by a qualified electrician.

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 GROUND-ING PRONG IN ANY MANNER. Use an adapter, as shown, and always connect the grounding lug to a known 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.

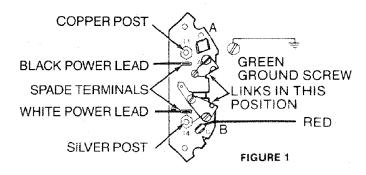
#### **CHANGING MOTOR VOLTAGE**

WARNING: Electric shock can kill. To avoid shock, never connect plug to power source outlet until all assembly steps are completed. Unplug saw before making or changing any connections.

#### 1. Connections for 120v AC Operation

- a. For operation on 120 volts, the black power lead is connected to spade terminal beside copper post. The white power lead is connected to spade terminal beside silver post. The two movable links must be in position shown in Figure 1. The red motor lead is connected to terminal "B."
- b. The movable links pivot on the centermost screws. After links have been correctly positioned, be sure to tighten these screws to insure a good electrical connection.

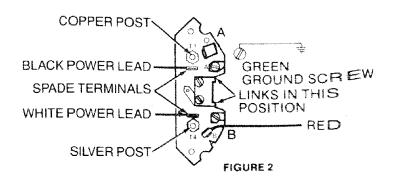
#### **120 VOLT CONNECTION**



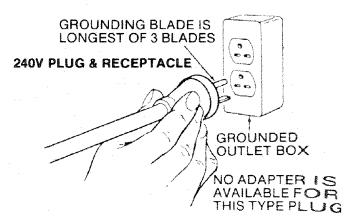
#### 2. Connection for 240v AC Operation

a. For operation on 240 volts, the black power lead is connected to spade terminal beside copper post. The white power lead is connected to spade terminal beside silver post. The two movable links must be in position shown in Figure 2. The red motor lead is connected to terminal "B." b. The movable links pivot on the center most screws. After links have been correctly positioned, be sure to tighten these screws to insure a good electrical connection.

#### 240 VOLT CONNECTION



c. Replace the 120v power cord plug with a (3 blade) 240v 15 Amp U.L. listed plug (see illustration below). Connect the power cord white and black leads, respectively, to the two "hot" plug blades and connect the power cord grounding wire to the plug ground prong.

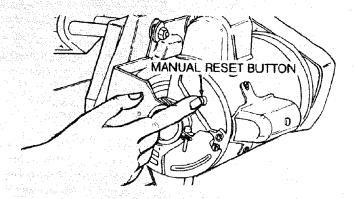


- d. Plug your saw into a 240v, 15-Amp, 3-blade receptacle.
- e. Make certain the receptacle is connected to a 240v AC power supply through a 240v branch circuit having at least a 15-amp capacity and protected by a 15-amp, time-delay fuse or circuit breaker.

#### **Motor Thermal Overload Protector**

**IMPORTANT:** To avoid motor damage, this motor should be blown out or vacuumed frequently to prevent sawdust buildup which will interfere with normal motor ventilation.

Your saw is equipped with a manual-reset thermal overload protector designed to open the power line circuit when the motor temperature exceeds a safe level, motor is overloaded or a low voltage condition exists.



WARNING: Avoid thrown objects or blade contact from unexpected starting. If the protector stops the saw motor, immediately turn the saw switch "OFF", remove the key and allow motor time to cool.

 After cooling to a safe operating temperature, the overload protector can be closed manually by pushing the red button on the end of the motor. If the red button will not click into place immediately, the motor is still too hot and must be allowed to cool for a while longer.

The time required for the motor to cool may be equal to the length of time the saw was used before the thermal overload protector opened, to shut off electrical flow. An audible click will indicate the protector is closed.

- As soon as the red button will click into running position, the saw may be started and operated normally.
- 3. Frequent "blowing" of fuses or tripping of circuit

breakers may result if:

- a. MOTOR IS OVERLOADED Overloading can occur if you feed too rapidly or if saw is misaligned
- b. MOTOR CIRCUIT IS FUSED DIFFERENTLY FROM RECOMMENDATIONS Always follow instructions for the proper fuse/breaker. Do not use a fuse/breaker of greater capacity without consulting a qualified electrician.
- c. LOW VOLTAGE Although the motor is designed for operation on the voltage and frequency specified on motor nameplate, normal loads will be handled safety on voltage not more than 10% above or below the nameplate voltage. Heavy loads, however, require that voltage at motor terminals equals the voltage specified on nameplate.
- 4. Most motor troubles may be traced to loose or incorrect connections, overloading, reduced input voltage (such as small size wire in the supply circuit) or to overly long supply circuit wire. Always check the connections, the load and the supply circuit whenever motor fails to perform satisfactorily. Check wire sizes and length with the Wire Size Chart below.

#### Wire Sizes

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 table below 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-pole receptacles which accept the tools plug.

**IMPORTANT:** For circuits that are farther away from electrical service box, the wire size must be increased proportionately in order to deliver ample voltage to the saw motor.

Length of the	Wire Sizes Required (American Wire Gage Number)		
001100001	120V Line	240V Line	
0 - 25 Feet 26 - 50 Feet 51 - 100 Feet	No. 16 No. 14 No. 12	No. 16 No. 14 No. 12	

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### UNPACKING AND CHECKING CONTENTS



3/8, 7/16, 1/2, 9/16

COMBINATION SQUARE MUST BE TRUE.

STRAIGHT EDGE OF BOAR D 3/4" THICK. THIS EDGE MUST BE PERFECTLY STRAIGHT.

DRAW LIGHT LINE ON BOARD ALONG @ @ THIS EDGE.

SHOULD BE NO GAP OR OVERLAP HERE WHEN SQUARE IS FLIPPED OVER IN DOTTED POSITION.

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 or plug in the power cord or turn the switch on until the missing parts are obtained and are installed correctly.

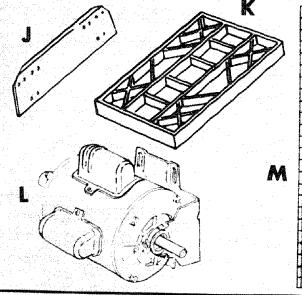
Remove the protective oil that is applied to the table top and edges of the table. Use any ordinary household type grease and spot remover. WARNING: To avoid fire or health hazard, never use gasoline, naptha or similar highly volatile solvent.

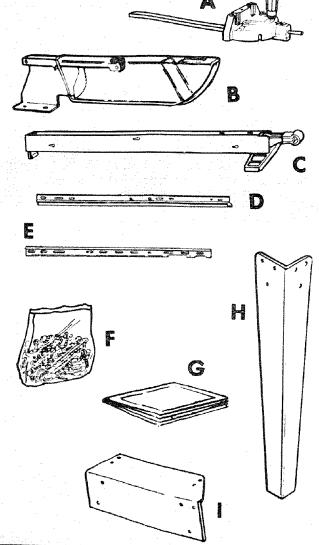
Apply a coat of automobile wax to the table.

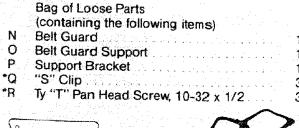
Wipe all parts thoroughly with a clean, dry cloth.

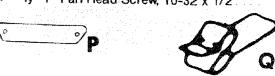
WARNING: For your own safety, never connect plug to power source outlet until all assembly steps are complete, and you have read and understand the safety and operating instructions.

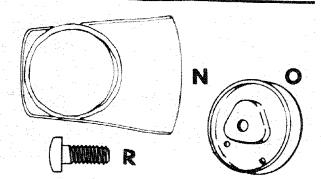
#### LIST OF LOOSE PARTS ALL ITEMS MARKED WITH AN ASTERIC (\*) HAVE BEEN DRAWN FULL SIZE FOR EASY **IDENTIFICATION** Item Part Name Qty. Miter Gage Assembly A Saw Guard Assembly В C Fence Assembly Front Fence Guide Bar D E Rear Fence Guide Bar F Bag of Loose Parts G Owners Manual H Leg 1 End Stiffener Side Stiffener Table Extension 12 x 27 K Motor . Fence Tape



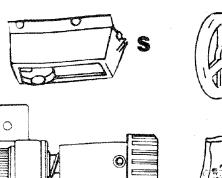


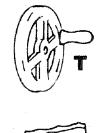






	Bag of Loose Parts	
	(containing the following items)	
S	Switch Assembly	1
T	Hand Wheel	2
U	Micro Adjust Knob Assembly	1
٧	Bag of Loose Parts	4







Bag of Loose Parts
(containing the following items)

W	Leveling Foot 3/8	4
*X	Hex Jam Nut 3/8-16	8
*Y	Truss Head Screw, 1/4-20 x 1/2	24
*Z	External Lockwasher 1/4	24
*AA	Hex Nut 1/4-20	24
*AB	Hex Head Screw, 5/16-18 x 1-1/4	.,4
*AC	External Lockwasher 5/16	4
*AD	Washer, 11/32 x 11/16 x 1/16	8
*AE	Heavy Hex Jam Nut 5/16-18	4



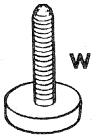










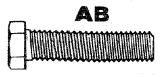








Bag of Loose Parts	
(containing the following items)	
Hex Head Screw, 5/16-18 x 1-1/4	8
External Lockwasher 5/16	8
Washer 11/32 x 11/16 x 1/16	8
Heavy Hex Jam Nut 5/16-18	8
	Bag of Loose Parts (containing the following items) Hex Head Screw, 5/16-18 x 1-1/4 External Lockwasher 5/16 Washer 11/32 x 11/16 x 1/16 Heavy Hex Jam Nut 5/16-18

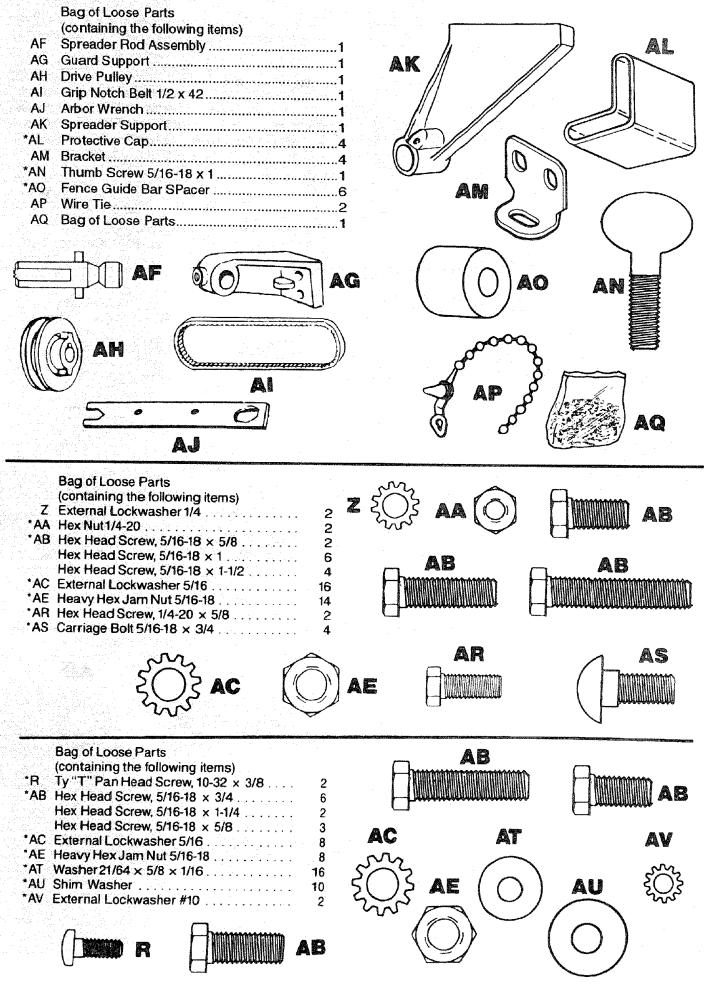










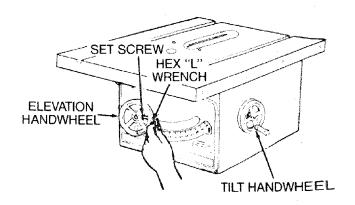


#### **ASSEMBLY**

Before mounting the saw on legs or a stand or a bench, the Table Insert and Blade Squareness must be checked at this time.

#### INSTALLING HANDWHEELS

1. Slide the elevation handwheel onto its shaft. Line up the **flat spot** on the shaft with the set screw in the handwheel. Using a hex "L" wrench - tighten the set screw securely against the flat spot on the shaft. Repeat this same procedure to install the tilt handwheel.

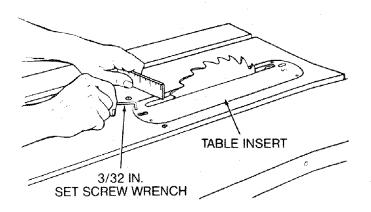


WARNING: To avoid injury from accidental start, make sure switch is "OFF" and plug is not connected to power source outlet.

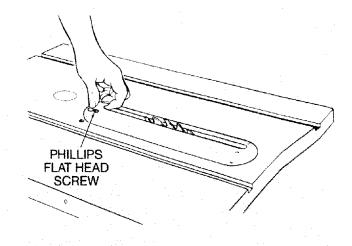
#### CHECKING TABLE INSERT

 Insert should be flush with table top. Check as shown. Loosen flat head screw that holds insert and adjust the four set screws as necessary. Tighten flat head screw. Do not tighten screw to the point where it deflects the insert.

CAUTION: Insert must be even with the table surface. Inserts too high or low can let the workpiece "snag" or catch on uneven edges. Workpiece could twist and kick back.



- 2. To remove Insert.
  - A. Make sure saw is off and unplugged.
  - B. Loosen screw.
  - C. Lift Insert from front end, and pull toward front of saw.
- 3. To replace Insert.
  - A. Make sure saw is off and unplugged.
  - B. Place Insert into insert opening in table and push toward rear of saw to engage spring clip and until keyslot in Insert will drop over screw. Tighten screw.
  - C. Do not tighten screw to the point where it will deflect the Insert.



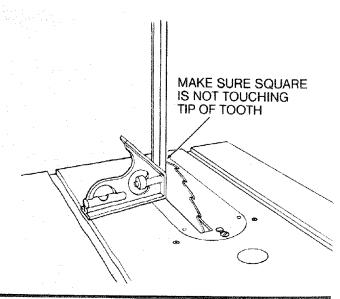
### CHECKING BLADE SQUARENESS TO TABLE

IMPORTANT: BLADE must be SQUARE (90°) to TABLE, in order to proceed with assembly.

- 1. Turn ELEVATION handwheel clockwise until blade is up as high as it will go.
- 2. Check for BLADE SQUARENESS . . . if blade is not square to table, adjust it at this time.

**NOTE:** The combination square must be "true" - see start of "Unpacking and Checking Contents" section for checking method used to check square.

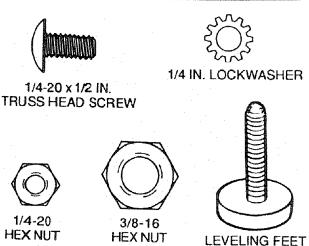
Refer to "BLADE TILT, OR SQUARENESS OF BLADE TO TABLE" in the "ADJUSTMENT" section of this manual for instructions on how to square blade to table.



#### **ASSEMBLING STEEL LEGS**

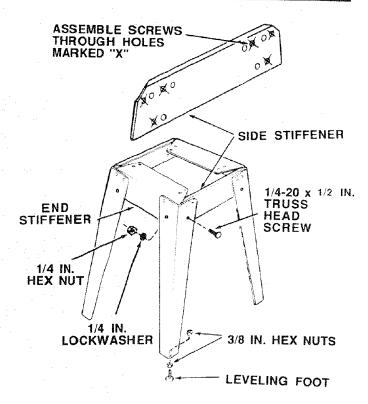
From among the loose parts, find the following Hardware:

- 24 Truss Head Screws, 1/4-20 x 1/2 in. long (top of screw is rounded)
- 24 Lockwashers, 1/4 in. External Type (approx. dia. of hole 1/4 in.)
- 24 Hex Nuts, 1/4-20 (approx. dia. of hole 1/4 in.)
- 8 Hex Nuts, 3/8-16 (approx. dia. of hole 3/8 in.)
- 4 Leveling Feet



#### Assemble the legs as shown:

- Insert the Truss Head Screws through the holes in the legs, then through the holes in the stiffeners.
   MAKE SURE THE SCREWS GO THROUGH THE HOLES IN THE SIDE STIFFENERS MAKED "X".
- Install the lockwashers. Screw on the nuts but do not tighten until completely assembled.
- 3. Install leveling feet.
- 4. Adjust leveling feet as follows:
  - A. Move saw to desired location.
  - B. With 9/16 inch wrench loosen bottom nut.
  - C. Back off top nut by hand.
  - D. Raise or lower foot by adjusting bottom nut using 9/16 inch wrench.
  - E. Snug top nut against inside of leg by hand.
  - F. Tighten all four bottom nuts using 9/16 inchwrench.



#### **MOUNTING SAW**

- 1. From among the loose parts, find the following hardware:
  - 4 Hex Head Screws, 5/16-18 x 1-1/4 in. long.
  - 4 Hex Nuts, 5/16-18 (approx. dia. of hole 5/16 in.)
  - 4 Lockwashers, 5/16 in. External Type (approx. dia. of hole, 5/16 in.)
  - 8 Flat Washers, (dia. of hole 11/32 in.)

WARNING: The saw is heavy. To avoid back injury, get help to lift the saw. Hold the saw close to your body. Bend your knees so you can lift with your leas, not your back.



HEX HEAD SCREW



**HEX NUT** 

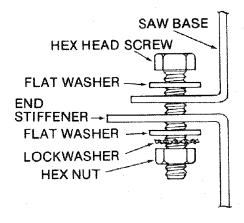


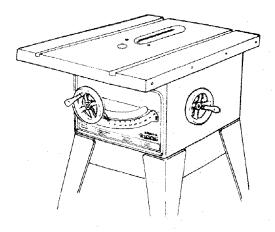
11/32 IN FLAT WASHER

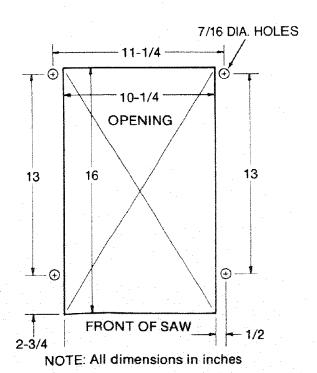
5/16 IN LOCKWASHER

- 2. Place saw on legs so that holes in bottom of saw line up with holes in top of assembled leg set.
- 3. Install screws, washers, lockwashers and nuts as shown below.

If you mount the saw on any other bench, make sure 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. Recommended working height is 33 to 37 inches from the top of the saw table to the floor.





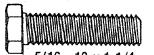


### ATTACHING AND ASSEMBLING TABLE EXTENSIONS

From among the loose parts find the following hardware: (Quantity indicated is for 2 extensions)

Description	Qty.
Hex Hd. Screw, 5/16-18 x 1-1/4	8
Flat Washer (Dia. of Hole 11/32)	8
External Lockwasher, 5/16	8
Hex Nut, 5/16-18	8

- 1. Insert four (4) 5/16-18 x 1-1/4 in. long screws through holes in each EXTENSION.
- 2. Position an extension against table so screws extend through holes in table.
- 3. Install flat washer, lockwashers, and nuts on the screws .... DO NOT TIGHTEN.



5/16 - 18 x 1-1/4 HEX HEAD SCREW

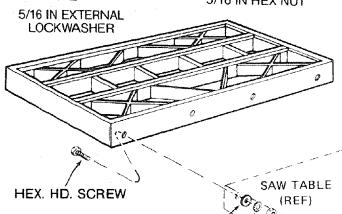


**FLAT WASHER** 



(16 IN HEY AIL

5/16 IN HEX NUT

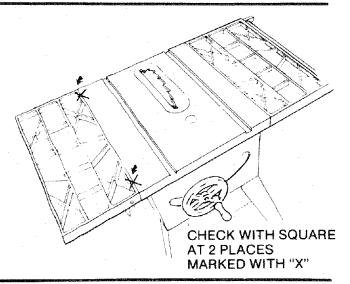


FLAT WASHER / EXTERNAL

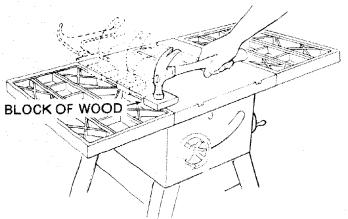
EXTERNAL HEX NUT LOCKWASHER

4. Line up rear edge of extension with rear edge of table. Line up top surface of extension with top surface of table at the locations indicated by the "X's" (see illustration).

Use a combination square to line up these edges and surfaces. Slightly tighten nuts with a 1/2" wrench.



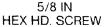
- 5. If adjustment is necessary you should tap the extension into position using a hammer and a block of wood. Make sure rear edge of extension is lined up with rear edge of table. Then firmly tighten nuts.
- 6. Repeat the same procedure to install the other extension.



#### MOUNTING SWITCH

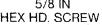
1. From among loose parts find the following: 2 Hex Head Screws, 5/16-18 x 5/8 in. long 2 External 5/16" Lockwashers 2 Hex Nuts, 5/16-18

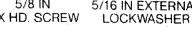




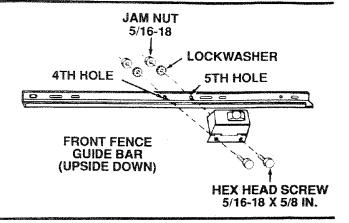








- 2. Select one front fence guide bar.
- 3. Insert two 5/8 inch screws through holes in switch.
- 4. Insert screws through fourth and fifth holes in front fence guide bar as illustrated.
- 5. Install two lockwashers and nuts. Tighten nuts.



#### **INSTALLING RIGHT FRONT RIP FENCE GUIDE BAR**

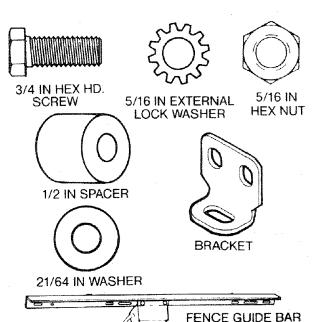
- 1. From among the loose parts find the following hardware:
  - 2 Hex Head Screws, 5/16-18 x 1-1/2 in. long
  - 1 Hex Head Screw, 5/16-18 x 1-1/4 in. long
  - 2 Hex Head Screws, 5/16-18 x 3/4 in. long
  - 5 External Lockwashers, 5/16 in. (approx. dia. of hole 5/16 in.)
  - 5 Hex Nuts, 5/16-18 (approx. dia. of hole 5/16 in.)
  - 3 Spacers, 3/4 in. dia. x 1/2 in. long
  - 5 Washers (dia. of hole 21/64 in.)
  - 1 Front Fence Guide Bar (with switch attached)
  - 2 Brackets





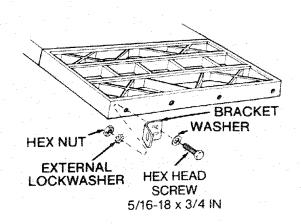


1-1/4 IN HEX HD. SCREW

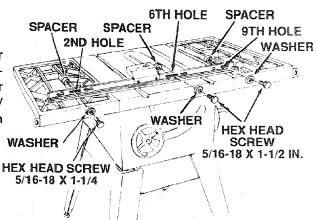


WITH SWITCH

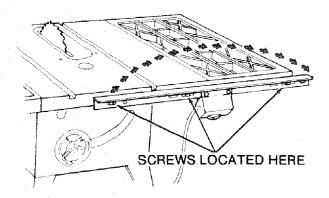
- 2. Put one of the brackets against the right edge of the right extension so the bracket is lined up with the FIRST hole near the front of the extension. Insert a 3/4 inch long screw through a flat washer, through top hole in the bracket, and through the FIRST hole in the extension. Install a lockwasher and nut on the screw. Tighten the nut only slightly.
- 3. Install the other bracket against the left side of left extension using the same procedure explained above.



- 4. Insert a 1-1/4 inch long screw through a flat washer and the SECOND hole IN THE FRONT BAR as illustrated. Insert a 1-1/4 inch long screw through a washer and through the SIXTH hole in bar. Insert another 1-1/ 2 inch long screw through a flat washer and through the NINTH hold in bar.
- 5. Place spacers on screws.

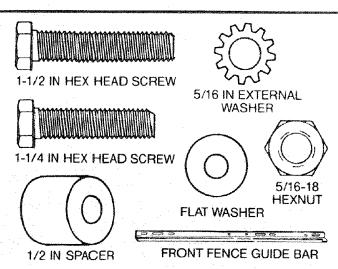


6. Turn front bar end for end and insert two screws through holes in right front edge of table. The third screw is inserted through the elongated slot in the bracket you installed earlier. Install lockwashers and nuts. DON'T SCREW NUTS ON ALL THE WAY, just get them started on the screws.

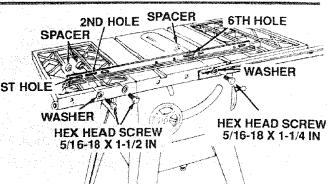


#### INSTALLING LEFT FRONT RIP FENCE GUIDE BAR

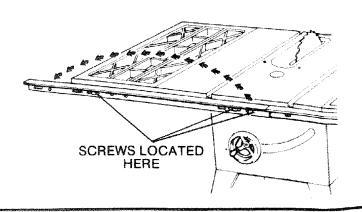
- 1. From among the loose parts find the following hardware:
  - 2 Hex Head Screws, 5/16-18 x 1-1/2 in, long
  - 1 Hex Head Screw, 5/16-18 x 1-1/4 in. long
  - 3 External Lockwashers 5/16 in.
  - 3 Hex Nuts, 5/16-18
  - 3 Flat Washers (dia. of hole 21/64 in.)
  - 3 Spacers, 3/4 in. dia. x 1/2 long
  - 1 Front Fence Guide Bar



- 2. Lay guide bar on saw table as illustrated.
- 3. Insert a 1-1/2 inch long screw through a flat washer and then through the FIRST hole in the bar as illustrated. Insert a 1-1/2 inch long screw through a flat 1ST HOLE washer and then through the SECOND hole in bar. Insert another 1-1/4 inch long screw through a flat washer and then through the SIXTH hole in bar.
- Place spacers over threaded end of screw as illustrated.



- Turn front bar end for end and insert two of the bolts through holes on left side of front edge on saw table. The third screw is inserted through the bracket installed earlier.
- Install lockwashers and nuts on bolts. DO NOT SCREW NUTS ON ALL THE WAY, just get them started on the screws.



#### **INSTALLING REAR FENCE GUIDE BARS**

- 1. From among the loose parts find the following:
  - 2 Brackets
  - 4 Hex Head Screws 5/16-18 × 1 in. long
  - 4 Hex Head Screws 5/16-18 × 3/4 in. long
  - 8 Flat Washers (dia. of hole 21/64 in.)
  - 8 External Lockwashers, 5/16 in.
  - 8 Hex Nuts, 5/16-18
  - 2 Rear Fence Guide Bars
  - 4 Protective Caps





5/16-18 x 1 IN HEX HD. SCREW



5/16-18 x 3/4 HEX HEAD SCREW



FLAT WASHER

**REAR FENCE GUIDE BAR** 

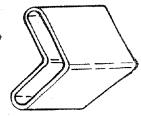
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5/16 IN EXTERNAL LOCKWASHER

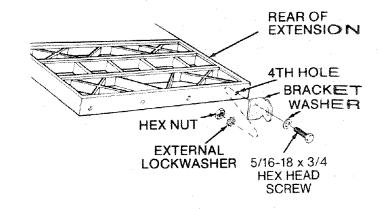


5/16-18 HEX NUT

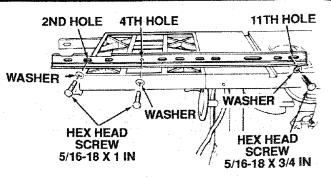


PROTECTIVE CAP

- Put one of the brackets against the right rear edge of the right extension so the bracket is lined up with the FOURTH hole near the rear of the extension (see illustration).
- Insert one of the 3/4 inch long screws through a flat washer, through the bracket, and through the FOURTH hole in the extension. Install a lockwasher and nut on the screw. Tighten the nut only slightly.
- 4. Install the other bracket against the left side of the left extension using the same procedure explained above.



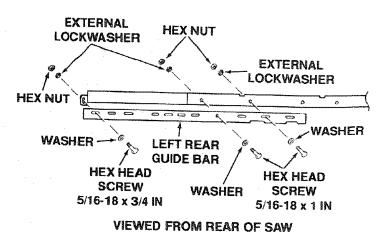
5. Lay one rearfence guide bar on the left rear side of the saw table as illustrated (as viewed from rear of the saw). Insert a 1 inch long screw through a flat washer and through the SECOND hole of the rearfence guide bar. Insert a 1 inch long screw through a flat washer and through the FOURTH hold. Insert a 3/4 inch long screw through a flat washer and through the ELEVENTH hole.



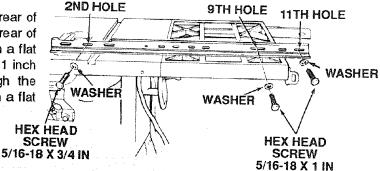
**BACK OF SAW** 

6. Turn the fence guide bar end for end and insert two of the 1 inch long screws through the two holes in the left rear edge of the table. Insert the other 3/4 inch long screw through the bracket. Install a lockwasher and nut on bolts. DO NOT SCREW NUTS ON ALL THE WAY, just get them started on the screws.

Push the fence guide bar as far toward the rear center of the saw as it will go. It must remain as close to the rear center of the saw as possible through the rest of this adjusting procedure.

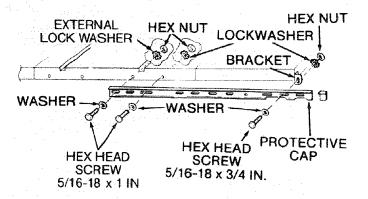


7. Lay the other rear fence guide bar on the right rear of the saw tabel as illustrated (view is shown from rear of table saw). Insert a 3/4 inch long screw through a flat washer and through the SECOND hole. Insert a 1 inch long screw through a flat washer and through the NINTH hole. Insert a 1 inch long screw through a flat washer and through the ELEVENTH hole.



**VIEWED FROM REAR OF SAW** 

- 8. Turn the fence bar end for end and insert two of the 1 inch long screws through the two holes in the right rear edge of the saw table. Insert the other 3/4 inch long screw through the bracket. Install a lockwasher and nut on the screws. DO NOT SCREW NUTS ON ALL THE WAY, just get them started on the screw.
- Push a protective cap over the exposed end of all four (4) fence guide bars as illustrated. You may want to secure these to the fence bars using household type glue.



#### ADJUSTING RIP FENCE GUIDE BARS

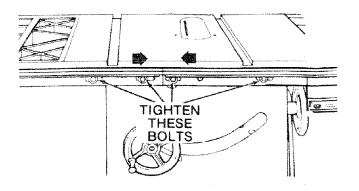
WARNING: Misadjusted fence guide bars can misalign the fence. A misaligned fence can cause kickbacks and jams. You could be cut or hit. Properly adjust fence guide bars before using saw.

 From among the loose parts find the following hardware:

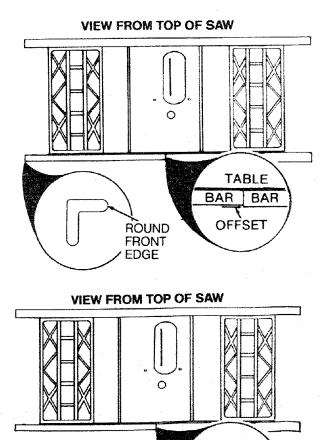
10 each very thin shim washers



2. Move the two front fence guide bars toward each other until their ends touch. Using a 1/2 inch wrench tighten the four nuts and bolts that pass through saw table to hold guide bars in place. (Do not tighten the two bolts that pass through the brackets.)



3. Check the rounded front edges of rip fence guide bars to see if they are even with each other. If they are even, go on to step 5. If they are uneven (offset from each other) find the very thin shim washers. Begin stacking these washers against rounded front edge of the guide bar whose rounded edge is farthest away from the operator. Continue stacking washers until the top of the stack is even with round front edge of the other guide bar. Count the number of washers in the stack and make two stacks containing this number of washers.

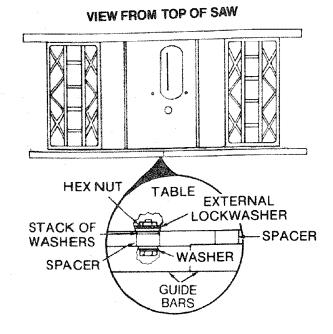


**TABLE** 

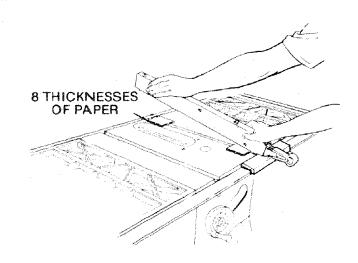
BAR

BAR

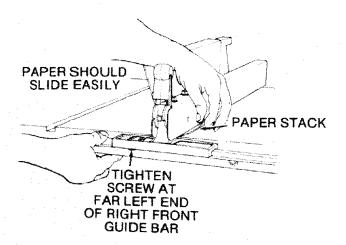
 4. The guide bar you stacked washers against in step 3 must now be removed so stacks of washers can be installed. To do so remove nuts and lockwashers from two screws that hold the guide bar to front edge of table. Pull guide bar away from table and put one stack of washers on each bolt between spacer and front edge of table - see illustration. Put guide bar back in place on front of table and reinstall lockwashers and nuts on two bolts - do not tighten at this time.



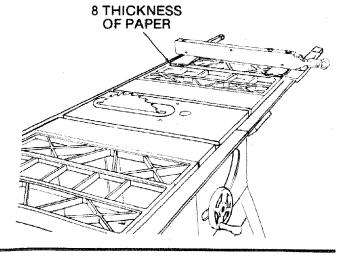
- 5. Any of the six (6) screws holding the two (2) front rip fence guide bars in place, that were earlier tightened using a wrench, must now be loosened and retightened so they are only hand tight.
  - Position rip fence over the right miter gauge groove. While holding up rear end of rip fence, engage front end of rip fence onto rip fence guide bar. Now lower rip fence down onto table.
- 6. Cut up a piece of newspaper into 16 equally sized pieces about 4 inches square. Separate these pieces into two stacks containing 8 pieces in each stack. Put one stack under rear end of rip fence and other stack under front end of rip fence see illustration.



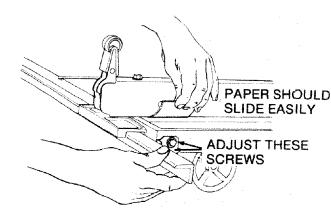
- 7. Raise or lower left end of right front rip fence guide bar just enough to allow paper stack (at front of rip fence) to slide back and forth under rip fence. Keep guide bar in this position and tighten screw at the far left of this guide bar.
- 8. Push the left rear (as viewed from rear of saw) fence guide bar as far toward the rear center of the saw as it will go. Raise or lower right end of left rear rip fence guide bar (as viewed from rear of saw) just enough to allow stack of paper (at rear of fence) to slide back and forth under the rip fence. Hold guide bar in this position and tighten screw at far right of this guide bar.



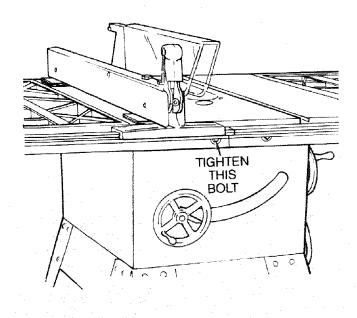
9. Move the rip fence to the right so it is even with the outside edge of the extension (as viewed from front of saw) and put the two stacks of paper under the front and rear of the rip fence with the paper setting on the front and rear edge of the table.



- 10. Raise or lower right end of front guide bar just enough so paper stack will slide back and forth under front of rip fence - see illustration. Hold guide bar in this position and tighten both screws that pass through the bracket.
- 11. Raise or lower left end of left rear guide bar (as viewed from rear of saw) just enough to allow paper stack to slide back and forth under rear of rip fence. Hold guide bar in this position and tighten both screws that pass through the bracket.
- 12. Move paper stack and rip fence back to the position explained in step 5 above, and recheck clearance between rip fence and table top at front and rear of rip fence. If necessary readjust rip fence guide bars to get proper clearance.

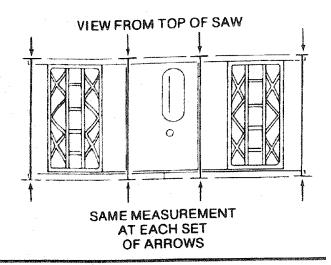


- 13. Position rip fence over left miter gauge groove (as viewed from front of saw). Put one stack of paper under front of rip fence and other stack under rear of rip fence see illustration.
- 14. Raise or lower right end of left front guide bar just enough to allow paper stack to slide back and forth under rip fence. Hold fence in this position and tighten bolt at far right of left front guide bar.
- 15. Make sure the right rear fence guide bar is correctly positioned from left to right. Refer to Page 20. Raise or lower left end of right rear guide bar (as viewed from rear of saw) just enough to allow the stack of paper to slide back and forth under rear of rip fence. Hold guide bar in this position and tighten bolt at far left end of guide bar.
- 16. Move rip fence and stacks of paper to left side of left extension (as viewed from front.) Position the stacks of paper under the rip fence and on top of the extensions just as you did on the right extension. Raise or lower left end of left front rip fence guide bar just enough to allow paper stack to slide back and forth under rip fence. Hold fence and guide bar in this position and tighten both bolts that pass through the bracket.
- 17. Raise or lower right end of right rear rip fence guide bar (as viewed from rear of saw) just enough to allow stack of paper to slide back and forth under rip fence. Hold the guide bar and fence in this position and tighten both bolts that pass through bracket.



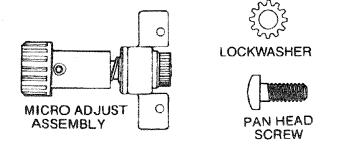
18. Move stacks of paper and rip fence back to position explained in step 13 above. Recheck clearance between rip fence and table top. If necessary readjust rip fence guide bars to get proper clearance. Tighten all bolts and nuts holding guide bars in place.

19. Using a tape rule measure distances from rear edge of back rip fence guide bars to front edge of front rip fence guide bars. Make measurements at each mitter gauge groove and at the end of each extension. All four measurements must be the same. If adjustment is necessary loosen bolt that passes through bracket and extension. Now move the front bar until distance is correct and retighten bolt.

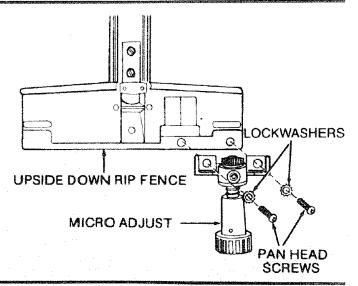


#### **Assembling Rip Fence**

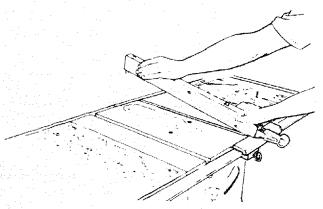
- 1. From loose parts find:
  - 1 Micro Adjust Assembly
  - 2 Pan Head Screws, 10-32 x 1/2 in. long
  - 2 Lockwashers #10



 Turn rip fence upside down on table. Position micro adjust assembly on rip fence head as illustrated and install two 10-32 x 1/2 pan head self tapping screws through two lockwashers and through holes in micro adjust assembly. Screw into holes in rip fence head. Tighten both screws.

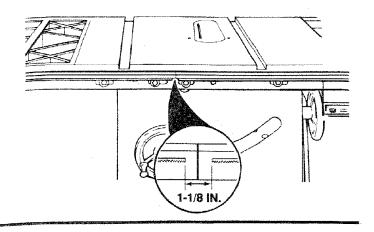


- Install rip fence on saw. Do so by holding up rear end
  of rip fence while engaging rip fence head onto front
  rip fence guide rail. Now lower rear end of rip fence
  onto back rip fence guide bar.
- Push micro adjust knob toward rear of saw and rotate knob. This should cause rip fence to move right or left depending on which way you rotate the knob. If fence does not move, make this adjustment.



#### A. Adjusting Fence Racks

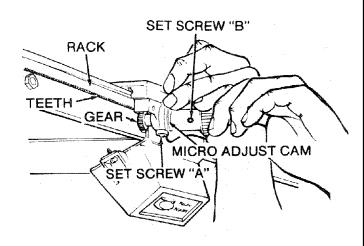
- Look under front fence guide bars. The racks should be approximately 1-1/8 inch apart between the ends of both racks as illustrated.
- Adjust the racks by loosening the four screws that mount each rack. Slide both racks to the 1-1/8 inch measurement and tighten all screws.



#### B. Adjusting Micro Adjust Cam

Look under rip fence head and find micro-adjust gear and rack. Teeth on this gear must mesh with teeth on the rack. Using a 1/8" Hex "L" wrench loosen set screw "A". Now rotate micro-adjust cam until gear can be pushed underneath teeth on rack. Line up teeth on rack with the middle of the gear. Hold gear in this position and rotate micro-adjust cam until the gear is raised up and meshes with teeth on the rack. Tighten set screw "A".

- C. If you were unable to line up the teeth on the rack with the middle of the gear, then another adjustment is required:
  - 1. Push knob in toward rear of saw and hold knob in this position.
  - 2. Using a Hex "L" wrench, loosen set screw "B".
  - Move gear straight backward or straight forward until teeth on the rack are positioned in the middle of the gear. (DO NOT ROTATE GEAR.)
  - While holding the gear in this position, push micro-adjust knob all the way in toward the gear and tighten set screw "B".

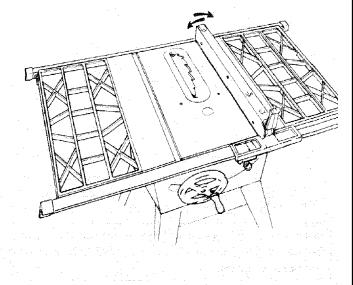


### RIP FENCE SELF ALIGNING PAD ADJUSTMENT

WARNING: A misaligned fence can cause kickbacks and jams. To avoid injury, follow these instructions until the fence properly self aligns.

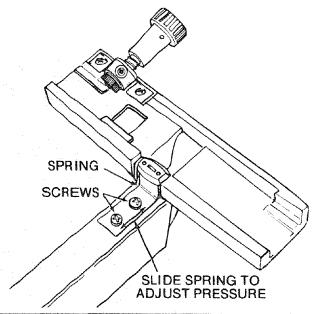
- Check the fence to be sure it slides easily along the bars and always remains in alignment (parallel to sawblade and miter gauge grooves).
  - The alignment is maintained by a spring underneath the fence which presses against the front guide bar.
- To see if fence needs adjustment place fence on saw but DO NOT LOCK IT.

Move the REAR END of the fence slightly to the right or left...when you release it, the fence should "spring" back to its original position.



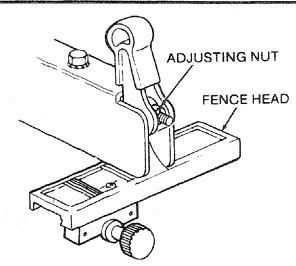
- 3. If fence does not spring back, the spring pressure must be INCREASED. To do so:
  - A. Loosen the screws.
  - B. Move spring slightly toward front of fence.
- 4. If fence does not slide easily along the bars, the pressure of the spring can be REDUCED.
  - A. Loosen the screws.
  - B. Move spring slightly toward rear of fence. . . tighten screws.

WARNING: To avoid injury from jams or kick-backs, be sure to push properly adjusted lock lever all the way down until the lever rests on the stop before using this rip fence.



#### RIP FENCE LOCK LEVER ADJUSTMENT

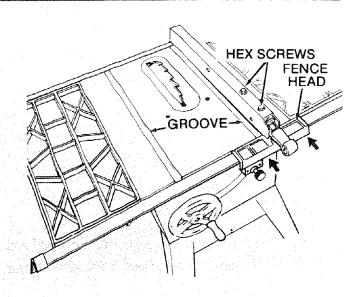
- Check the Rip Fence Lock Lever, when locked down, to be sure it will hold the Rip Fence securely. It should not be difficult to push down and lock.
  - If lock lever does not lock fence securely:
  - A. Raise Lock Lever.
  - B. Tighten the adjusting nut using a small screwdriver until the lever, when locked, holds the Rip Fence securely.
  - If Lock Lever is difficult to push down:
  - A. Raise Lock Lever.
  - B. Loosen the adjusting nut using a small screwdriver until the lever is easy to push down and holds the Rip Fence securely.



#### RIP FENCE ALIGNMENT ADJUSTMENT

- The Rip Fence must be PARALLEL with the sawblade and Miter Gauge Grooves. Move Fence until it is along side of groove. DO NOT LOCK IT. It should be parallel to groove. If it is not:
  - A. Loosen the two Hex Head Screws.
  - B. Hold fence head tightly against bar in direction of arrows on illustration. Move end of fence so that it is parallel with Groove.
  - C. Lock the fence in place by pushing down on lock handle.
  - D. Alternately tighten the hex head screws.
  - E. Unlock and then re-lock fence. If fence is not parallel with groove, repeat above steps until fence is parallel with groove.

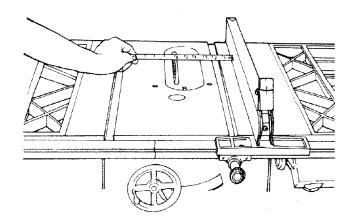
WARNING: A misaligned fence can cause kickbacks. Follow these instructions until the fence is properly aligned.



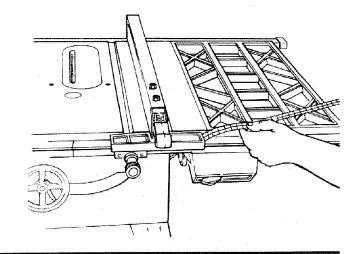
#### **INSTALLING MEASURING TAPES**

1. From the loose parts find: 2 Measuring Tapes

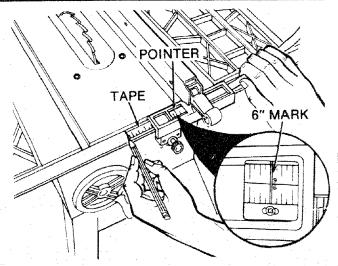
- 2. Place rip fence on saw table to the right side of the blade.
- 3. Using a tape rule measure six inches out from the right side of the blade. Position the rip fence so the left side of the fence is at this six inch mark.
- 4. Lock the fence in this position.



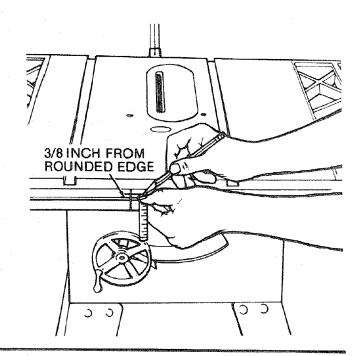
5. Find the "0" inch mark on the end of one of the measuring tapes. Slide this end of the measuring tape under right side of rip fence head and push tape along top surface of rip fence guide bar.



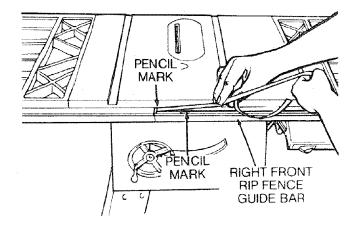
- 6. Move measuring tape under plastic window of rip fence head until six inch mark on measuring tape is straight under red line (pointer) on the plastic window.
- 7. Hold measuring tape in this position and draw a pencil mark across rip fence guide bar at left end of measuring tape.



- 8. Remove rip fence from saw. Remove measuring tape from saw but keep it separate from other measuring tape. It must later be attached to this same rip fence guide bar. At the left end and right end of right rip fence guide bar, measure back 3/8" from the front rounded edge and put pencil marks on the guide bar at these points. Using a straight edge draw a pencil line that passes through both of these points.
- Repeat this same operation on left front rip fence guide bar so it also has a straight pencil line drawn along its full length and 3/8" back from the rounded front edge of the guide bar.



- 10. Find the measuring tape you set aside earlier. It must be attached to the right front rip fence guide bar. To do so:
  - A. Find the end of measuring tape with "0" inch mark. Place this end of measuring tape on pencil mark you drew across left end of guide bar earlier. Now place front edge of measuring tape on line you drew along full length of guide bar earlier.
  - B. While holding measuring tape in this position pick up left end of measuring tape and peel off about six inches of protective coating from underside of measuring tape. This will expose adhesive on underside of measuring tape. Very carefully lower left end of measuring tape back down on rip fence guide bar making sure the measuring tape is lined up properly with pencil marks. Press left end of measuring tape down against guide bar so adhesive will hold measuring tape in place.
  - C. Raise measuring tape and peel back another six inch section of protective covering. Now carefully lower measuring tape against guide bar so it remains lined up with pencil mark and then press it against guide bar so adhesive holds tape in place.
  - D. Continue this procedure until the full length of measuring tape is in place on guide bar.
- 11. Place rip fence on left side of blade.
- Using a tape rule measure six (6) inches out (away) from left side of blade. Position rip fence so right side of fence is at this six inch mark.
- 13. Lock rip fence in this position.
- 14. Follow the same procedure used to install the first measuring tape EXCEPT:
  - A. The pencil mark you make across the guide bar should be made at RIGHT END of measuring tape.



- B. The end of measuring tape with "0" inch mark must be pushed under left side of rip fence head.
- C. When peeling back protective coating to expose adhesive work from the right end of measuring tape.
- 15. The measuring tapes can now be used together with the rip scale pointer to provide a quick method for positioning the rip fence to produce boards of the width you desire. If you want to rip a board four (4) inches wide, simply slide the rip fence along the front guide rail until the red line (rip scale pointer) is positioned straight above the four inch line on the measuring tape. Lock the fence in this position and rip the board.

**NOTE:** If extreme accuracy is required when ripping, you should not use this method to position the fence. Instead, use a precision measuring instrument to set the rip fence the exact distance away from the blade.



- 1. From among the loose parts, find
  - 2 Hex Head Screws, 1/4-20 x 5/8 in. long
  - 3 Hex Head Screws, 5/16-18 x 5/8 in. long
  - 2 Hex Head Screws, 5/16-18 x 1 in. long
  - 2 Hex Nuts, 1/4-20 (approx. dia. of hole 1/4 in.)
  - 2 Lockwashers, 1/4 in. External Type (approx. dia. of hole 1/4 in.)
  - 2 Lockwashers, 5/16 in. External Type (approx. dia. of hole 5/16 in.)
  - 1 Thumbscrew

Blade Guard Support

Spreader Support

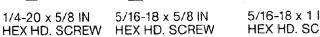
Spreader Rod

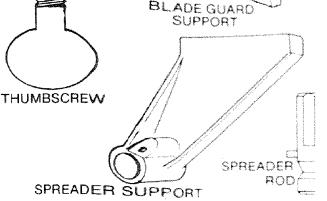






5/16-18 x 1 IN HEX HD. SCREW



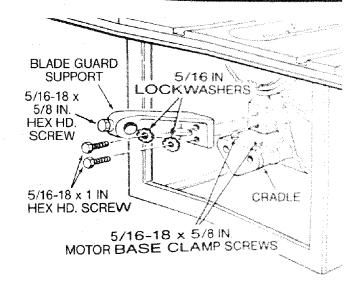


LOCKWASHER

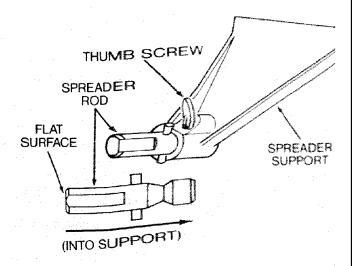
2. Before installing the blade guard, you must check the heeling adjustment (parallelism of sawblade to miter gauge groove). The procedure for making this check and adjusting it are found in the "Adjustments" section of this manual. Refer to "Heeling Adjustment or Parallelism of Saw Blade to Miter Gauge Groove."

WARNING: The blade must be parallel to Miter Gauge Groove. Misaligned blades could bind on workpiece. Workpiece could suddenly kick back. You could be cut or hit.

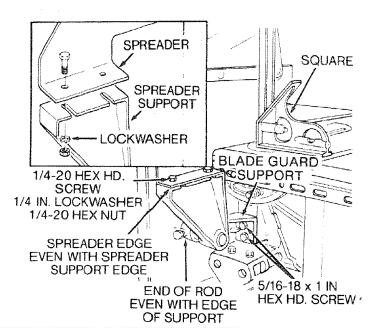
- 3. Lower the blade.
- 4. Screw the MOTOR BASE CLAMP SCREWS part way into cradle. Screw the 5/16-18 x 5/8 inch Hex Hd. screw into the blade guard support.
- 5. Attach BLADE GUARD SUPPORT...DO NOT TIGHTEN screws.



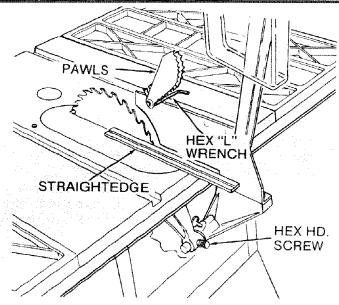
6. Insert SPREADER ROD into SPREADER SUP-PORT until pin fits into notch. Insert Thumb-screw and tighten it.



- Slide SPREADER ROD into BLADE GUARD SUP-PORT until end of ROD is even with edge of SUP-PORT...Tighten Hex Head Screw in support.
- 8. Attach SPREADER to SPREADER SUPPORT so that the edge of the spreader is even with the edge of the spreader support...tighten screws.
- 9. Raise blade guard and lift both antikick-back pawls. Insert a hex "L" wrench in the notches to hold pawls out of the way as shown in the next illustration. Align the spreader square to table. Tighten both 5/16-18 × 1 inch hex head screws to hold blade guard support in this position.

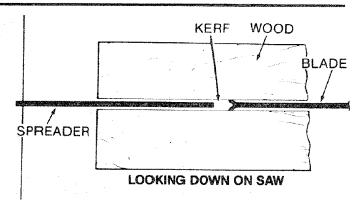


- 10. Raise blade all the way up...make sure it is square with table.
- Lay blade of square or other straightedge alongside of blade.
- 12. Loosen Hex Head Screw in BLADE GUARD SUP-PORT and move spreader so that it touches blade of square...tighten screw.
- 13. NOTE: The spreader is now square with the table and approximately in line with the sawblade. The spreader requires further adjustment to align it PAR-ALLEL to the blade and in the MIDDLE of the cut (KERF) made by the sawblade.

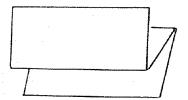


14. IMPORTANT: To work properly, the SPREADER must always be PARALLEL to the sawblade and adjusted so the cut workpiece will pass on either side at the spreader without binding or skewing to the side.

**NOTE:** The spreader is thinner than the width of the cut (KERF) made by the sawblade by approximately six thicknesses of paper.

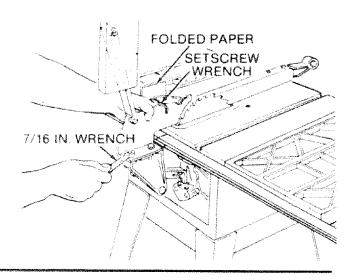


15. Make two folds in a small piece (6 × 6 in.) of ordinary NEWSPAPER making three thicknesses. The folded paper will be used as a "spacing gauge."

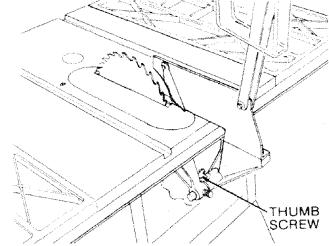


- 16. Place RIP FENCE on table...

  CAREFULLY move it against blade so that it is parallel to the blade, and just TOUCHES tips of saw teeth ...tighten RIP FENCE LOCK LEVER.
- 17. Insert folded paper between SPREADER AND FENCE.
- 18. Using a 7/16 in, wrench, loosen the 1/4-20 hex head screws so the spreader can slide sideways.
- 19. Hold spreader flat against fence...tighten screws using 7/16 in. wrench. Remove Hex "L" wrench and lower antikickback pawls.



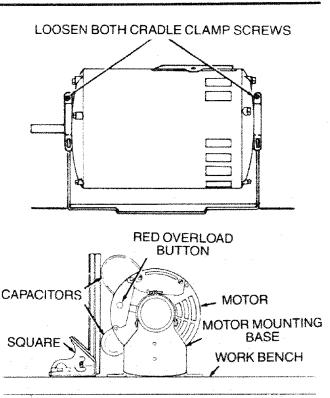
20. To remove BLADE GUARD AND SPREADER, loosen THUMBSCREW. DO NOT LOOSEN OTHER SCREWS. This lets you remove and replace the guard without disturbing the spreader alignment.



### POSITIONING MOTOR ON MOTOR MOUNTING BASE

- 1. Put the motor mounting base against the flat surface of a workbench.
- 2. Position the motor so the end containing the red overload button is facing you.
- 3. Loosen both cradle clamp screws.
- 4. Put a square against the LEFT side of the motor and against the top of the workbench.
- 5. Turn the motor inside the cradle clamps until the top of both capacitors touch the square.
- 6. Tighten both cradle clamp screws to hold the motor in this position.

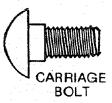
WARNING: Failure to properly install motor may let workpiece strike capacitor cover during bevel or compound miter cuts. Workpiece could bind and kick back. You could be cut or hit.



#### **MOUNTING THE MOTOR**

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

4 Carriage Bolts, 5/16-18 x 3/4 in. long 4 Hex Nuts, 5/16-18 (approx. dia. of hole 5/16 in.) 4 Lockwashers, 5/16 in. External Type (approx. dia. of hole 5/16 in.)
1 Cast Iron Motor Pulley

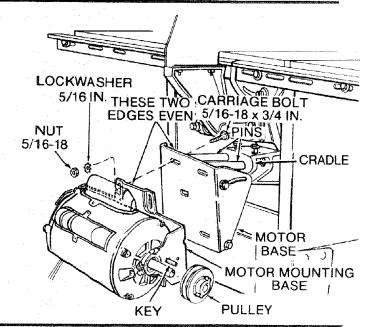




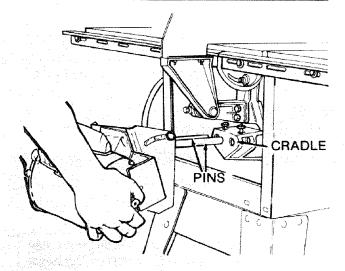




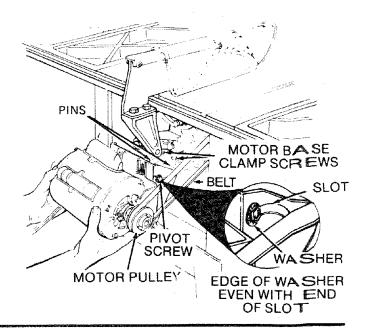
- 2. The motor base is installed in the cradle for shipment. Pull the motor base away from the cradle and put it on the floor before mounting the motor to it.
- 3. Place motor on MOTOR BASE...insert bolts through holes in MOTOR BASE...then through the motor MOUNTING BASE. Install lockwashers and nuts.
- 4. Position motor so that edge of MOTOR MOUNTING BASE and MOTOR BASE are even as illustrated... slide motor all the way to the RIGHT...tighten the four nuts.
- 5. Loosen set screw in motor pulley using 5/32 in. Hex "L" wrench. Slide pulley onto shaft with HUB away from motor DO NOT TIGHTEN SET SCREW.
- 6. Install 3/16 in. square key (furnished with motor) in grooves in pulley and motor shaft. DO NOT TIGHTEN SET SCREW.



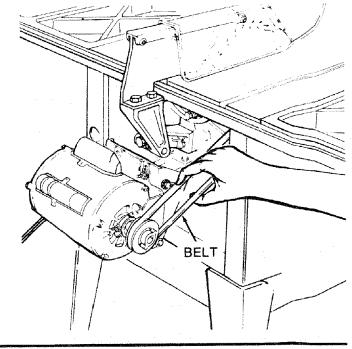
7. Lift motor and insert the TWO PINS on motor base into HOLES IN cradle...push motor in as far as it will go.



- 8. Lower the blade...install belt on saw pulley and motor pulley.
- Sight along edges of both pulleys and move motor pulley so that belt is parallel to the edges of both pulleys...tighten the set screw in the motor pulley.
- IMPORTANT: Measure the distance from end of motor shaft to pulley....mark this dimension down; you will need it later when reinstalling the pulley.
- 11. Make sure blade is 90° to table...raise it all the way up.
- 12. Lift motor until edge of washer (see illustration) is even with end of slot. In this position, pull motor toward you (pins will slide in the cradle) until belt is TIGHT...make sure washer is still even with end of slot...tighten the two MOTOR BASE CLAMPS SCREWS.

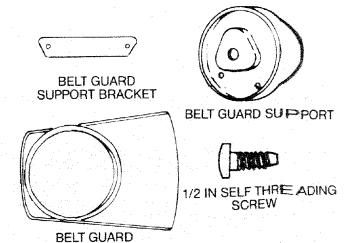


13. Put your hand around the belt half way between the two pulleys and squeeze belt until two sides of belt touch. The motor should move freely as you squeeze the belt. If motor does not move freely belt tension must be readjusted.

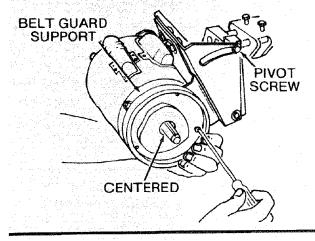


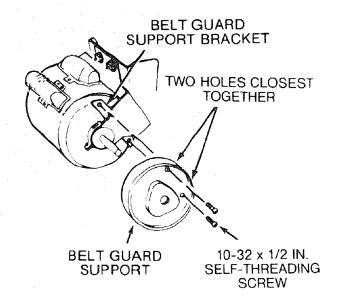
#### **INSTALLING BELT GUARD**

- 1. From loose parts find:
  - 1 Belt Guard Support Bracket
  - 1 Belt Guard Support
  - 1 Belt Guard
  - 2 Self Threading Screws, 10-32 x 1/2 in. long

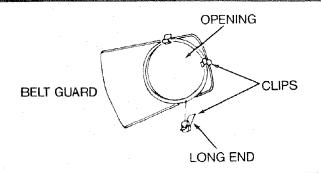


- 2. Remove the belt and motor pulley.
- Screws furnished with guard are "self-threading"
   screw them into holes in BELT GUARD SUPPORT BRACKET to cut threads, then remove them.
- 4. Position BELT GUARD SUPPORT BRACKET and BELT GUARD SUPPORT as shown and install the screws... make sure motor shaft is in CENTER of hole in SUPPORT.

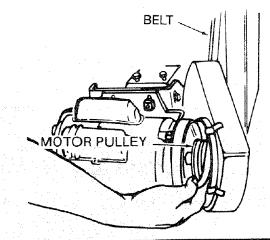




5. Install three CLIPS (furnished with guard) 90° apart starting with one clip at the end of the guard as shown... LONG END of clip must be on outside of guard pointing away from opening in guard.

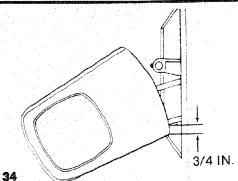


- 6. Reinstall motor pulley the same way it was when you aligned the belt.
- Place belt on SAW PULLEY ... insert end of belt through opening in END of guard.
- 8. Lift motor and slip belt over motor pulley.



9. Press guard onto support so that bottom of guard is approximately 3/4 in. away from belt.

**NOTE:** To remove guard, lift up on LONG TABS of clips — pull guard outward. The clips should remain on the BELT GUARD SUPPORT.



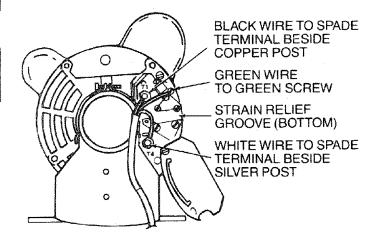
#### MOTOR CONNECTIONS

WARNING: For your own safety, never connect plug to power source outlet until all assembly steps are completed.

 Open motor connector box cover located on side of motor using a flat blade screwdriver.

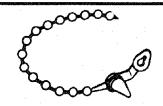
WARNING: To avoid electrocution, never connect anything but the ground wire (colored green) to the green screw.

- Remove GREEN SCREW and insert through round metal terminal on the end of the GREEN wire of power cord.
- 3. Reinsert GREEN SCREW in threaded hole that it was removed from and tighten securely.
- Insert terminal end of BLACK wire on spade terminal next to copper post on the motor. Push terminal firmly until seated.
- Insert terminal end of WHITE wire on spade terminal next to silver post on the motor. Push terminal firmly until seated.
- Close motor connector box being sure that power cord is seated in strain relief groove and tighten box cover screws.
- 7. Do not plug in power cable.

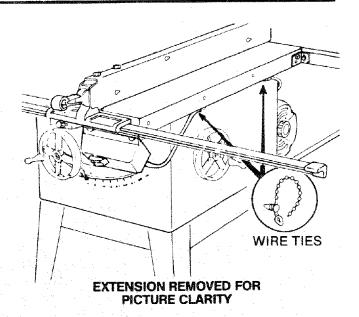


#### PLUGGING IN MOTOR

From among the loose parts, find:
 Wire Ties



2. Route motor cord along right side of cabinet and snap ties in 1/4" hole in side of cabinet. Secure two cords in wire ties.



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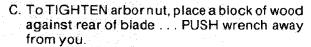
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NEVER OPERATE THE SAW WITHOUT THE PROPER INSERT IN PLACE. USE THE SAW BLADE INSERT WHEN SAWING, USE THE COMBINATION DADO MOLDING INSERT WHEN DADOING OR MOLDING.

#### 9 REMOVING AND INSTALLING SAWBLADE.

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

- A. Raise Blade Guard . . . remove insert.
- B. To REMOVE blade, place a block of wood against front of blade . . . PULL arbor wrench toward you to LOOSEN arbor nut.



When installing the blade... make sure the 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.

Always tighten the arbor nut securely.

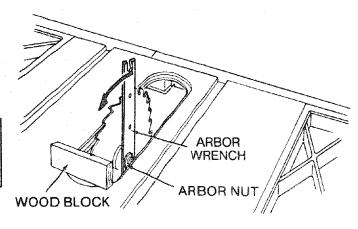
**NOTE:** When using the Dado or Molding Head, it is not necessary to install the loose collar.

To replace insert.

Place insert into insert opening in table and push toward rear of saw to engage spring clip and until keyslot in insert will drop over screw. Tighten screw.

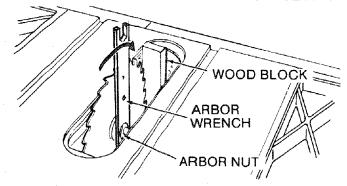
Do not tighten screw to the point where it will deflect the insert.

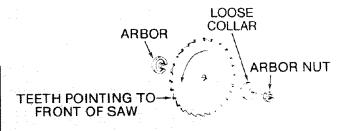
WARNING: To avoid injury from a thrown workpiece, blade parts, or blade contact, NEVER operate saw without the proper insert in place. Use the sawblade insert when sawing. Use the proper size Dado/Molding insert for dado blades and molding heads.



**BLADEGUARD NOT SHOWN FOR PICTURE CLARITY** 

#### **BLADE GUARD NOT SHOWN FOR PICTURE CLARITY**



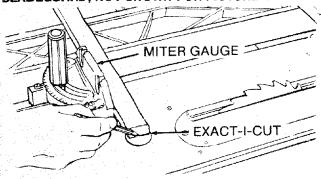


#### 10 EXACT-I-CUT

The "yellow" plastic disc imbedded in the table in front of the sawblade, is provided for marking the location of the "sawcut" on the workpiece.

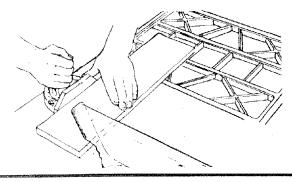
- A. Check disc...if it is above table surface, place a piece of hardwood on top of it and tap it down.
- B. With blade 90° (square to table) and miter gauge 90° (square to blade) cut off a piece of wood.
- C. Pull miter gauge back until wood is over Exact-I-Cut. Using very sharp pencil, mark a line on Exact-I-Cut.
- D. With miter gauge in right hand groove, follow same procedure and mark another line on Exact-I-Cut.

#### BLADEGUARD, NOT SHOWN FOR PICTURE CLARITY

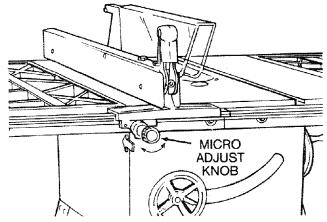


E. These lines indicate the "path" of the cut (kerf) made by the sawblade.

F. When cutting the workpiece, line up mark on workpiece with line on Exact-I-Cut.



11 MICRO-ADJUST RIP FENCE . . . allows the operator to accurately adjust the rip fence using only one hand. To move the fence push in on the micro-adjust knob and rotate the knob. Rotating the knob clockwise moves the fence to the right. Rotating it counterclockwise moves the fence to the left.



#### **BASIC SAW OPERATION**

#### **WORK FEED DEVICES**

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

As you learn new table saw woodworking techniques, you'll see that many types of cuts need different supporting devices, known as jigs or fixtures. They can help you make cuts more accurately. By helping to steady the workpiece and keep you away from the blade, they can help you safely use your saw for certain cuts.

Many people custom build their own jigs and fixtures. Jigs and fixtures are often unique, designed for a particular cut.

You can use your table saw to easily make many jigs and fixtures. To get you started, we've included instructions for some simple ones. After you have made a few practice cuts, make up these jigs before starting any projects. Make the push stick first.

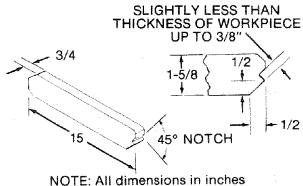
#### PUSH STICK AND PUSH BLOCK

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

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

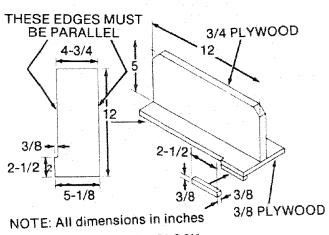
The small piece of wood 3/8 x 3//8 x 1-1/2 inches should be GLUED to the plywood. DO NOT USE NAILS. This is to prevent dulling the sawblade in the event you mistakenly cut into the Push Block.

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



OTE: All dimensions in inches

PUSH STICK



#### **AUXILIARY FENCE/WORK SUPPORT**

Make one using a piece of 3/8 inch and 3/4 inch plywood. Fasten together with glue and flat head woodscrews. Tighten the screws so the flat head is even with the bottom of the wood.

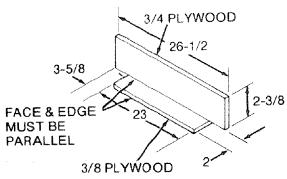
# THIS FACE AND THIS 3/8 PLYWOOD NOTE: All dimension in inches PLATHEAD

3/4 PLYWOOD

AUXILIARY FENCE/WORK SUPPORT

#### **AUXILIARY PANEL WORK SUPPORT**

Make using a piece of 3/4" and 3/8" plywood. Fasten together with glue and wood screws. Use this auxiliary panel work support only when cutting large panels that require the rip fence to be positioned past the exposed side of the extension.



NOTE: All dimension in inches **AUXILIARY PANEL/WORK SUPPORT** 

#### SAFETY INSTRUCTIONS FOR BASIC SAW OPERATIONS

#### **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, mounting, and any other conditions that may affect the way it works. If any part is missing, bent, or broken in any way, or any electrical parts don't 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 antikickback 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.
- 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 ACCES-SORIES (See page 58) - 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.

- 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 3450 rpm or higher.
  - b. Always use unbroken, balanced blades designed to fit this saw's 5/8" 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 in 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.
- Adjust table inserts flush with the table top. NEVER use the saw without the proper insert.
- 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.

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

a. To avoid injury from accidental blade contact, 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 in "OFF" position before plugging saw in.

#### Plan your work

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

- 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.



- For dusty operations, wear a dust mask along with the safety goggles.
- 3. Inspect your workpiece. Make sure there are no nails or foreign objects in the part of the workpiece to be cut.
- 4. Plan your cut to avoid KICKBACKS and THROW-BACKS when a part or all of the workpiece binds on the blade and is thrown violently back toward the front of the saw:
  - 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.
  - Make sure there's no debris between the workpiece and its supports.
  - When cutting irregularly shaped workpieces, plan your work so it will not slip and pinch the blade.
    - 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, fixtures where needed to prevent workpiece shifting.
    - Use a different, better suited type of tool for work that can't be made stable.
  - Use extra caution with large, very small or awkward workpieces:
    - Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down of 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 then the basic saw table, or to help feed, support or pull the workpiece.

- 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.
- Never cut more than one workpiece at a time.
- Never turn your table saw "ON" before clearing everything except the workpiece and related support devices off the table.

#### Plan the way you will push the workpiece through.

- NEVER pull the workpiece through. Start and finished the cut from the fron of the tabel saw.
- NEVER put your fingers or hands in the path of the sawblade or other cutting tool.
- 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.
- Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into a sawblade or other cutting tool.
- DON'T OVERREACH. Always keep good footing and balance.
- Push the workpiece against the rotation of the blade. NEVER feed material into the cutting tool from the rear of the saw.
- Always push the workpiece all the way past the sawblade.
- As much as possible, keep your face and body to one side of the sawblade, out of line with a possible kickback or throwback.
- 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.

#### WHENEVER SAW IS RUNNING

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.

- Before actually cutting with the saw, watch it while it runs for a short while. If it makes an unfamiliar noise or vibrates excessively, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and correcting 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.
- 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. Tum 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 saw off.
- 2. Wait for blade to stop spinning.
- 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.

#### USING THE MITER GAUGE

THE MITER GAUGE IS USED WHEN CROSSCUTTING, MITER CUTTING, BEVEL CUTTING, COMPOUND MITER CUTTING, DADOING and when RABBETTING 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, 6, 40, 41, and 42.

## ADDITIONAL SAFETY INSTRUCTIONS FOR CROSS CUT TYPE CUTS

#### Before starting

- NEVER use the rip fence when crosscutting.

- 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.
- 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

 To avoid blade contact, always hold the miter gauge as shown in the BASIC SAW OPERA-TIONS - USING THE MITER GAUGE.

#### CROSSCUTTING

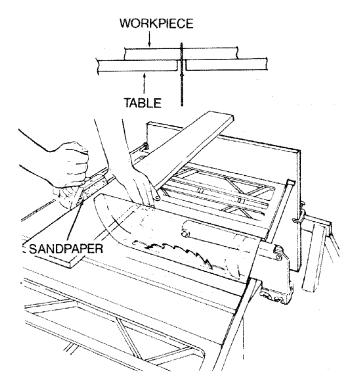
#### Crosscut

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



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

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.

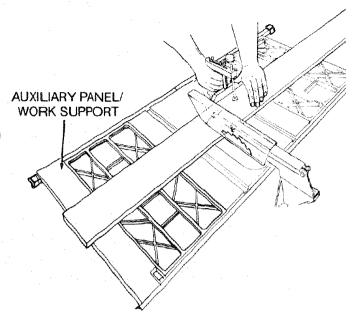
The Hold-Down Clamp (Optional Accessory) should be used on the miter gauge for greater accuracy.

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

When using the Miter Ggauge 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. When cutting long workpieces, invert AUXILIARY FENCE/WORK SUPPORT and position it on top of the guide bars to support the workpiece as near to the end as possible. If this does not adequately support the workpiece, you can make a simple support by clamping a piece of plywood to a sawhorse. See 1st illustration under "Crosscutting."

Use the Hold-Down Clamp (Optional Accessory) on the miter gauge for greater accuracy.



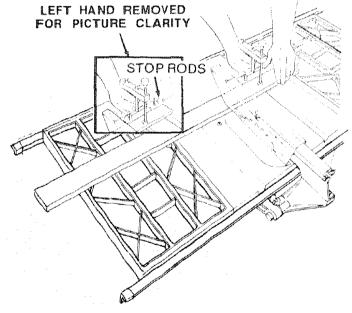
#### REPETITIVE CUTTING

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

- 1. Use the Stop Rods (optional accessory) only for cutting duplicate pieces 6 in, long and longer.
- 2. Follow all safety precautions and operational instructions for cross cutting.

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

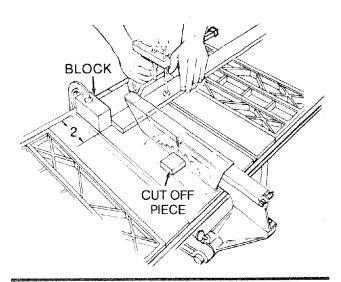
Use the Hold-Down Clamp (Optional Accessory) on the miter gauge for greater accuracy.



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

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 or clamp it with the Hold-Down Clamp (optional accessory).



 Make the cut...turn the saw off...remove the piece after the blade has stopped and before cutting the next piece.

#### MITER CUTTING

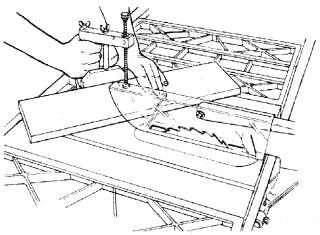
MITER CUTTING is known as cutting wood at an angle other than 90° with the edge of the wood. Follow the same procedure as you would for crosscutting.

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 handle with your right.

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



Use the Hold-Down Clamp (Optional Accessory) on the miter gauge for greater accuracy.

#### **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 lockhandle with your left hand.

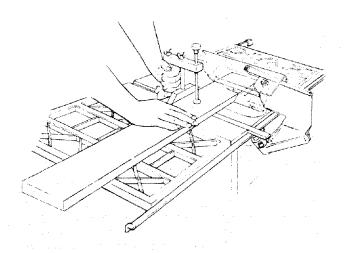
Use the AUXILIARY FENCE/WORK SUPPORT for additional support of the workpiece.

Lay it across the guide bars to support the workpiece as near to the end as possible.

Use the Hold-Down Clamp (Optional Accessory) on the miter gauge for greater accuracy.

#### **COMPOUND MITER CUTTING**

COMPOUND MITER CUTTING is a combination of miter cutting and bevel crosscutting. The cut is



made at an angle other than  $90^{\circ}$  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.

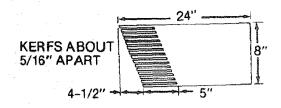
#### **USING THE RIP FENCE**

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, 27, 28, & 29.



- 1. NEVER use the Miter Gauge when ripping.
- 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.
- 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. A FEATHERBOARD can help guide the workpiece.



#### Before starting

- To avoid kickbacks and slips into the blade, make sure the rip fence is parallel to the sawblade.
- Check the antikickback pawls. The pawls must stop a kickback once it has started. Replace or sharpen antikickback pawls when points become dult.
- Plastic and composition (like hardboard)
  materials may be cut on your saw. However,
  since these are usually quite hard and slippery,
  the antikickback pawls may not stop a kickback.
  Therefore, be especially careful in your set-up
  and cutting procedures.

#### While cutting

- 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.

#### RIPPING

#### Ripping

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

- A. Rip Fence is parallel to sawblade.
- B. Spreader is properly aligned with sawblade.
- C. Antikickback 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 NARROW WORK**

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.



#### USING FEATHERBOARDS FOR THRU-SAWING

Featherboards are not employed for thru-sawing operations when using the miter gauge.

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

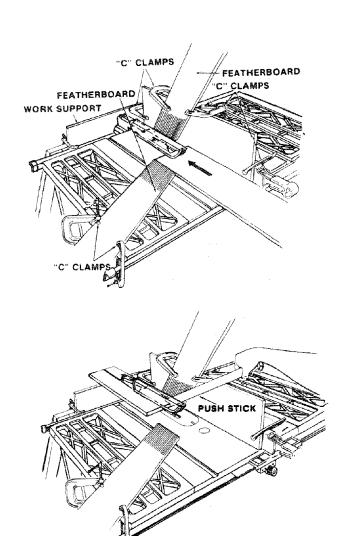
Add 7-1/2 inch high flat facing board to the fence, the full length of the fence.

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 portion (forward 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):

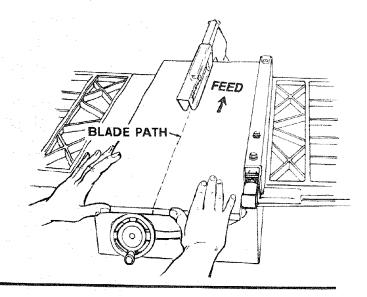
- (a) Install featherboards so they exert pressure on the workpiece; be positive they are secure, and
- (b) Make sure by trial that the featherboards will stop a kickback if one should occur.



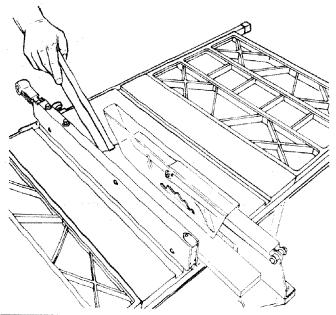
Keep your hands out of the blade path.

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

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

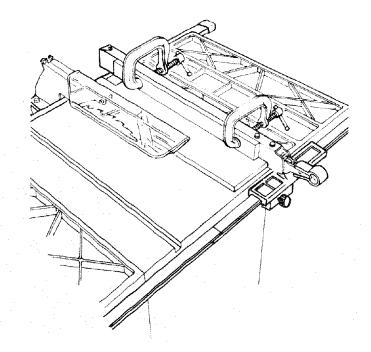


When "WIDTHOF RIP" is 2 in. or wider, USETHEPUSH STICK to finish pushing the work all the way past the blade.



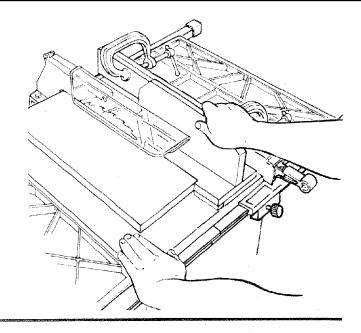
When WIDTH OF RIP is 1/2" to 2 in., the push stick CANNOT be used because the guard will interfere. USE the AUXILIARY FENCE/WORK SUPPORT and PUSH BLOCK.

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



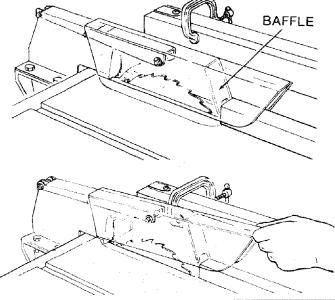
Feed the workpiece by hand along the AUXILIARY FENCE until the end is approx. 1 in. past the front edge of the table. Continue to feed using the PUSH BLOCK.

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).



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.

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

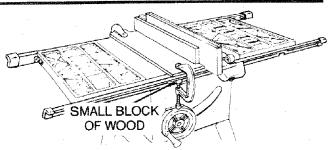


#### RESAWING

RESAWING is known as 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 inch... 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.



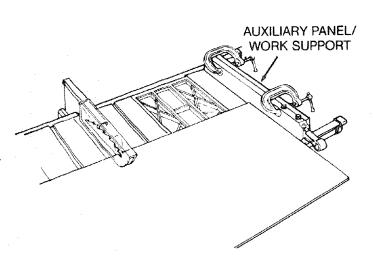
WARNING: For your own safety...

- 1. Do not "Back Up" (reverse feeding) while resawing because this could cause a kickback.
- Make first pass to a depth slightly more than one-half the width of the board; keep the same face of the board against fence for the second pass.
- 3. Install blade guard immediately upon completion of the resawing operation.

#### **CUTTING PANELS**

When cutting panels (whenever fence is positioned outside of table surface), ALWAYS use the AUX-ILIARY PANEL/WORK SUPPORT.

- 1. Unlock fence and raise rear end.
- Position AUXILIARY FENCE/WORK SUPPORT as shown and attach it with two "C" clamps.



## USING FEATHERBOARDS FOR NON-THRU SAWING

Featherboards are **not** employed during non thrusawing 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 7-1/2 inch high flat facing board to the fence, the full length of the fence.

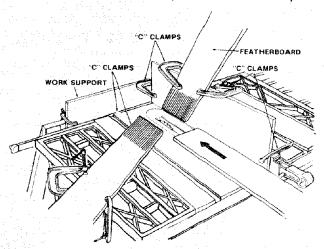
Mount featherboards to fence and table as shown, so that leading edges of featherboards will support workpiece until cut is complete, and the workpiece

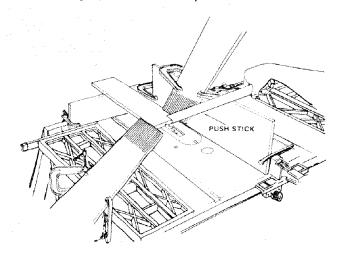
has been pushed completely past the cutter (sawblade, dado head, molding head, etc.) with a pushstick, as in ripping.

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

- (a) Install featherboards so they exert pressure on the workpiece; be positive they are secure, and
- (b) Make sure by trial that the featherboards will stop a kickback if one should occur.

Replace the sawblade guard as soon as the non thru-sawing operation is complete.





#### RABBETING

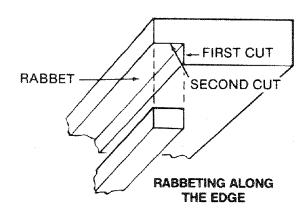
**RABBETING** is known as cutting out a section of the corner of a piece of material, across an end or along an edge.

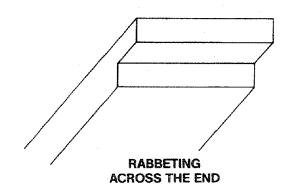
To make a RABBET requires cuts which do not go all the way through the material. Therefore the blade guard must be removed.

- 1. Remove blade guard.
- 2. For rabbeting along an edge (long way of work-piece) 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 feather boards and push stick, etc.
- 3. For rabbeting across an end, for workpiece 10-1/2" 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.

Rabbet cuts can also be made in one pass of the workpiece over the cutter using the dado head or molding head.





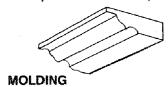
#### PLOUGHING AND MOLDING

**PLOUGHING** is grooving with the grain the long way of the workpiece, using the fence. USE feather-boards and push sticks as required.



**PLOUGHING** 

**MOLDING** is shaping the workpiece with the grain the long way of the workpiece, using the fence. Use featherboards and push sticks as required.



#### 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 13/16" wide.

It is not necessary to install the outside loose collar before screwing on the arbor nut. Make sure the arbor nut is tight.

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 OR PUSH STICKS AS REQUIRED.

WARNING: For your own safety, always replace the blade, guard and spreader when you are finished dadoing.

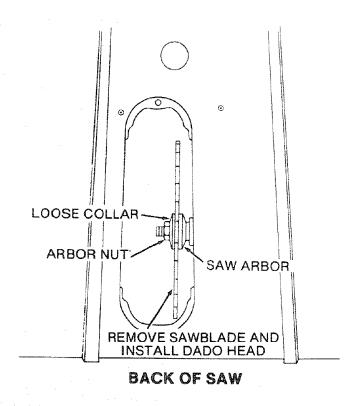
#### MOLDING CUTTING

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

Always use the Molding Insert listed under Recommended Accessories.

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

WARNING: For your own safety, always replace the blade guard and spreader when you are finished molding.



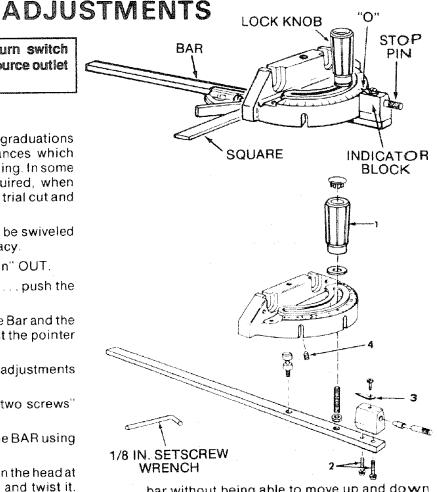
WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before making any adjustments.

#### MITER GAUGE

**NOTE:** The slots for the stop pin and the graduations are manufactured to very close tolerances which 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.

If necessary, the miter gauge head can be swiveled slightly to compensate for any inaccuracy.

- 1. Loosen the "knob" and pull "stop pin" OUT.
- 2. Swivel the head ... position it at "0" ... push the stop pin IN ... lock the handle.
- 3. The HEAD should be square with the Bar and the pointer should point to "0". Readjust the pointer if necessary.
- 4. If the head is not square with the bar, adjustments are required.
  - A. Loosen the "knob" (1) and the "two screws" (2).
  - B. Position the HEAD square with the BAR using a combination square.
  - C. PUSH the STOP PIN into the slot in the head at "0" . . . push the pin into the slot and twist it. Lock the knob.
  - D. Recheck with the square. If the head is still not square, loosen the screws (2) and readjust the INDICATOR BLOCK.
  - E. With the head square with the bar and the pin pushed into the slot adjust the pointer (3) to point to "0".
  - F. The miter gauge head must rest on top of the



bar without being able to move up and down ... yet it must swivel freely.

G. The swiveling movement of the head can be adjusted by tightening or loosening the setscrew (4) ... using the 1/8 in. Hex "L" wrench.

NOTE: The setscrew is located inside of the head. To reach it, swivel the head to 60 degrees and turn the miter gauge upside down.

#### HEELING ADJUSTMENT or PARALLELISM OF SAWBLADE TO MITER GAUGE GROOVE

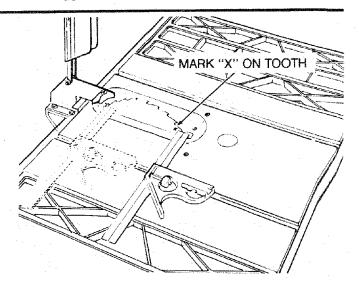
WARNING: The blade must be parallel to the miter gauge groove. Misaligned blades could bind on workpiece. Workpiece could suddenly kickback. You could be cut or hit.

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.

If the sawblade IS NOT parallel to the miter gauge groove, the blade will bind at one end of the cut. (This is known as "HEELING").

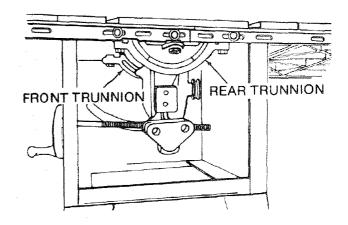
#### To check for parallelism:

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



- 1. Raise blade all the way up...raise blade guard.
- 2. Make an "X" on one of the teeth which is SET (be nt) to the LEFT.

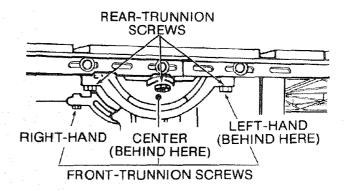
- 3. Place the head of a combination square in the GROOVE... adjust blade of square so that it just touches the tip of the MARKED tooth.
- Move square to REAR, rotate blade to see if MARKED tooth again touches blade of square.
- 5. If tooth touches square at FRONT and REAR ... sawblade is PARALLEL to MITER GAUGE GROOVE.
- 6. If tooth does not touch the same amount ... the mechanism underneath must be adjusted to make the blade PARALLEL to GROOVE.
  - A. Rear trunnion must be moved TOWARD the combination square if there is a space between marked tooth and end of square in step 4.
  - B. Rear trunnion must be moved AWAY from the square if marked tooth pushes square out of position in the groove.



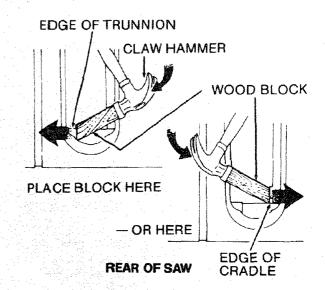
**VIEWED FROM REAR OF SAW** 

7. Loosen all three screws that hold the rear trunnion and all three screws that hold the front trunnion.

**NOTE:** All six screws can be reached through back of saw. Use a 9/16 in. wrench. To reach left-hand front trunnion screw, tilt blade to 45°. After loosening screws reposition blade at 90°.



8. Using a wood block and mallet as shown, move rear trunnion to right or left as required to realign the blade. If necessary, shift front trunnion in similar manner; but do NOT move front trunnion unless necessary. Recheck the alignment with the square, then securely retighten all six trunnion screws.



# BLADE TILT, OR SQUARENESS OF BLADE TO TABLE

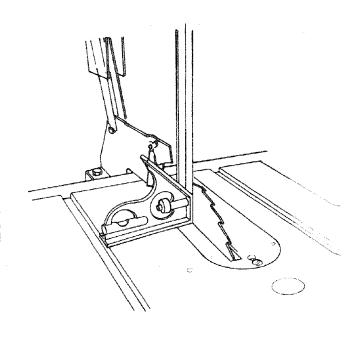
When the bevel pointer is pointing directly to the "0" mark on the bevel scale, the sawblade should make a SQUARE cut 90° to the table.

#### 90° POSITION

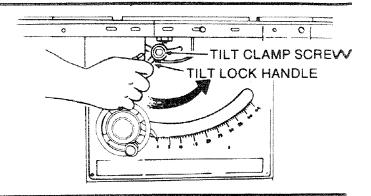
#### To check for SQUARENESS:

WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet.

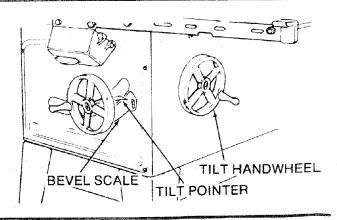
- 1. Raise blade all the way UP...raise blade guard.
- TILT blade a few degrees to the LEFT...now tilt blade back to the RIGHT as far as it will go.
- Place the square against the blade. Make sure square is not touching the TIP of one of the saw TEETH.



- Operate the tilt-lock handle (COUNTER-CLOCKWISE) to loosen the tilt clamp screw.
- 5. NOTE: Handle is spring loaded for engagement with screw head - must be pushed inward for disengagement whenever necessary to obtain a new grip on screw head.



6. Rotate tilt handwheel CLOCKWISE a few turns to tilt blade. Now rotate handwheel COUNTERCLOCKWISE until it stops. Blade should now be square with table and pointer should point to "0".

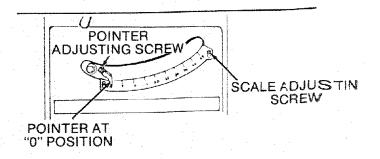


If blade is SQUARE to table;

A. Check pointer

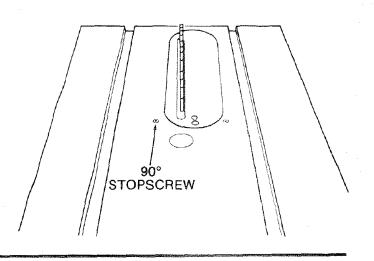
IF POINTER DOES NOT point to the "0" mark on the bevel scale;

- A. Remove Elevation Handwheel.
- B. Loosen screw and adjust pointer . . . using medium screwdriver.
- C. Install Elevation Handwheel.



If blade is NOT SQUARE to table . . . the 90° stop screw must be ADJUSTED.

- A. Unscrew 90° STOP SCREW three to four turns using 3/16 in. Hex "L" wrench.
- B. Turn tilt handwheel clockwise one turn, then turn handwheel counterclockwise until blade is square with table.
- C. Screw 90° stop screw IN until it stops . . . check once again for squareness and readjust screw, if necessary.



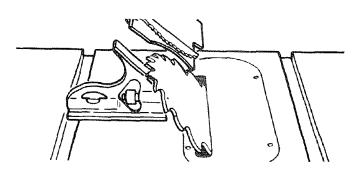
#### 45° POSITION

TILT blade to LEFT as far as it will go.

A. Place an ACCURATE square against blade. Make sure square is not touching the TIP of one of the saw TEETH.

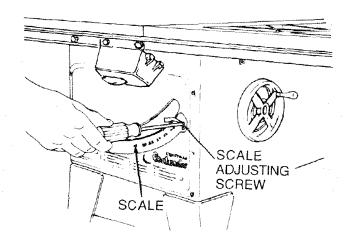
If blade is 45° to table;

A. Check pointer.



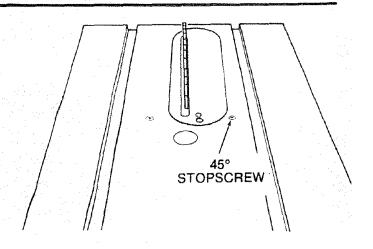
If POINTER DOES NOT point to the 45° mark on the scale;

- A. Remove Elevation Handwheel.
- B. Loosen two screws on scale and adjust scale until POINTER points to 45° mark.
- C. Install Elevation Handwheel.

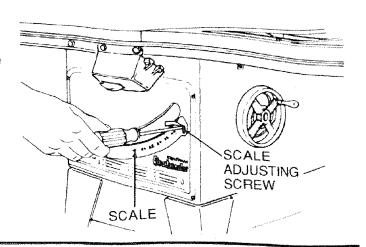


If blade is NOT 45° TO TABLE ... STOP SCREW and SCALE must be ADJUSTED.

- 1. Unscrew 45° STOP SCREW three to four turns using 3/16 in. setscrew wrench.
- 2. Turn tilt handwheel until blade is 45° to the table.
- 3. Screw 45° stop screw IN until it stops . . . check once again and readjust screw, if necessary.



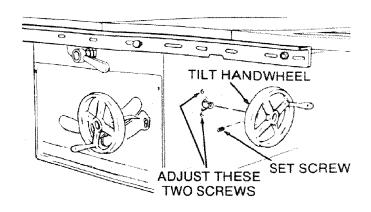
- 4. Loosen two screws on scale and adjust scale until POINTER points to 45° mark.
- 5. Install Elevation Handwheel.



#### TILT MECHANISM

The handwheel should turn freely without binding. The turning action can be adjusted by tightening or loosening the screws in the bearing retainer.

**NOTE:** Tilt Handwheel must be removed to adjust. When adjusting the screws in the bearing retainer, hold the nut inside using a 3/8 in. wrench.



#### MAINTENANCE

WARNING: For your own safety, 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.

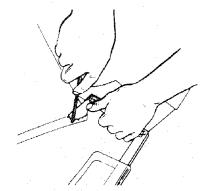
Frequently clean your cutting tools with Craftsman Gum and Pitch Remover.

A coat of furniture 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 or 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. Remove blade guard.

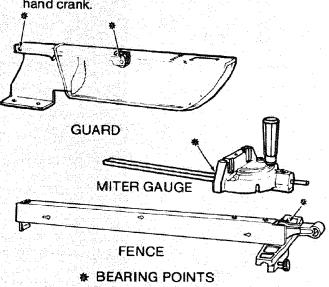


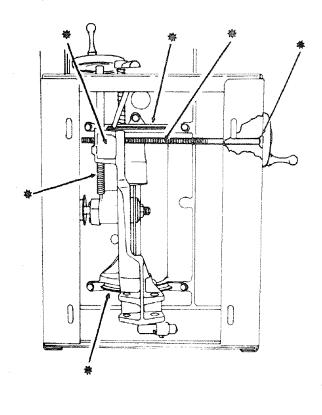
- 2. Rotate pawl toward rear of spreader so that teeth are above top of spreader.
- 3. Hold spreader with left hand and place pawl over corner of workbench.
- 4. Using a small round file (Smooth Cut) sharpen the teeth.

#### LUBRICATION

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

- 1. Tilt screw threads and pivot nut. (First Clean with Craftsman Gum & Pitch Remover.)
- 2. Elevation screw threads and pivot nut. (First Clean with Craftsman Gum & Pitch Remover.)
- 3. Cradle bearing points.
- 4. Bearing points in guard assembly, miter gauge and rip fence.
- Grease bearing and bearing retainer behind bevel hand crank.





# SEARS RECOMMENDS THE FOLLOWING ACCESSORIES

ITEM	CAT. NO.	ITEM	CAT. NO.
Caster Set	9-22221 9-22222 See Catalog See Catalog	7 In. Dia. 16 Tooth Adj. Dado	See Catalog See Catalog See Catalog See Catalog See Catalog
Molding or Dado Head Molding/Dado Insert for 8 In. Dia. Molding or Dado Head Work Light Safety Goggles	9-29997 9-22287 See Catalog	Miler Gauge Stop Bods	9-29924 9-29928 See Catalog See Catalog

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

#### TROUBLE SHOOTING

WARNING: For your own safety, turn switch "OFF" and always remove plug from power source outlet before troubleshooting.

#### 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.	Miter gauge not adjusted properly.	1. See "Adjustments" section "Miter Gauge."
Cut binds, burns or stalls motor when	Dull blade or improper tooth set.	1. Sharpen or replace blade.
ripping.	2. Blade is Heeling.	2. See "Adjustments" section, "Heeling Adjustment.
	3. Warped board.	3. Make sure concave or hollow side is facing "down," feed slowly.
	Rip fence not parallel     to blade.	4. See "Assembly" section, "Aligning Rip Fence"
	5. Spreader out of alignment	5. See "Assembly" section, "Installing Blade Guard."
Cut not true at 90° or 45° positions.	Stop screws not properly adjusted	See "Adjustments" section, "Blade Tilt, or "Squareness of Blade to Table."
Tilt and elevating handwheel turn hard.	Sawdust on threads of tilt screw or elevating screw.	See "Maintenance and Lubrication" section.
	Bearing retainers     to tight.	2. See "Maintenance" section "Tilt and Elevation Mechanism."

#### TROUBLE SHOOTING -- MOTOR

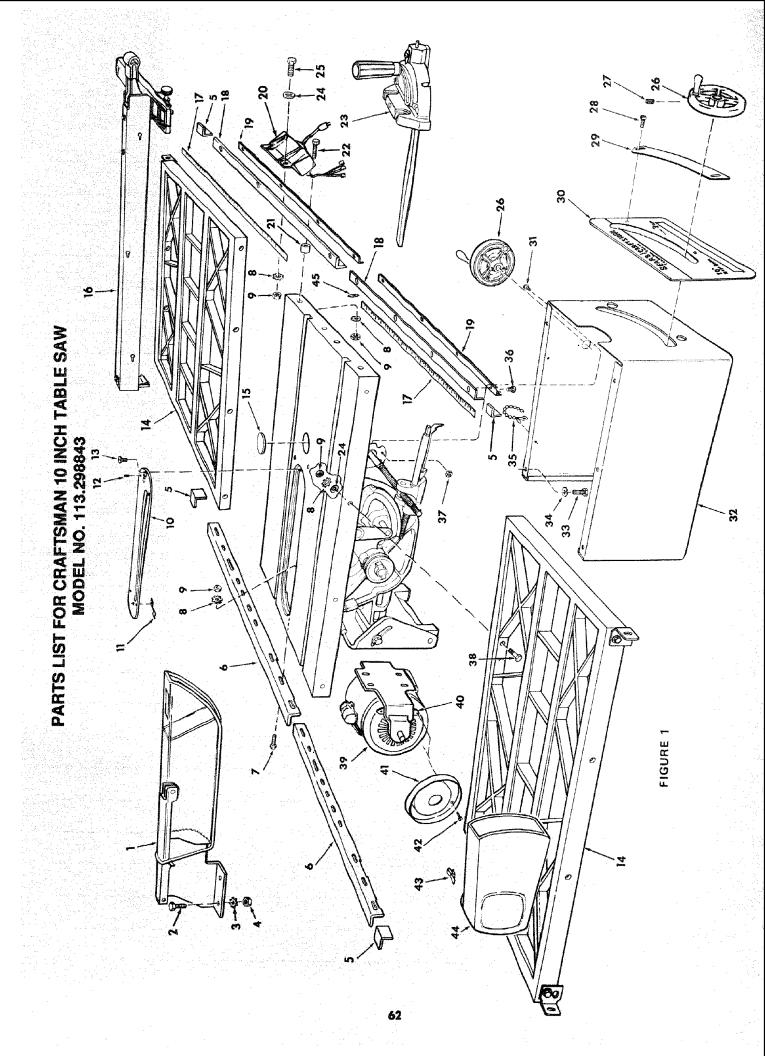
NOTE: Motors used on wood-working tools are particularly susceptible to the accumulation of sawdust and wood chips and should be blown out or "vacuumed" frequently to prevent interference with normal motor ventilation.

TROUBLE	PROBABLE CAUSE	REMEDY
Excessive noise.	1. Motor.	Have motor checked by qualified service technician. Repair service is available at your nearest Sears store.
Motor fails to develop full power. (Power output of motor decreases rapidly with decrease in	Circuit overloaded with lights, appliances and other motors.	Do not use other appliances or motors on same circuit when using the saw.
voltage at motor terminals.  For example, a reduction of 10% in voltage causes	Undersize wires or circuit too long.	Increase wire sizes, or reduce length of wiring.  See "Motor Specification and Electrical Requirements" section.
a reduction of 19% in maximum power output of which the motor is capable, while a reduction of 20% in voltage causes a reduction of 36% in maximum power output.)	3. General overloading of power company facilities. (In some sections of the country, demand for electrical power may exceed the capacity of existing generating	3. Request a voltage check from the power company.
	and distribution systems.) 4. Incorrect fuses or circuit	4. Install correct fuses or circuit breakers.
	breakers in power line.	

#### TROUBLE SHOOTING -- MOTOR (Continued)

TROUBLE	PROBABLE CAUSE	REMEDY
Motor starts slowly or fails to come up to full speed.	Low voltage.     Windings burned out or open.     Starting switch not operating.	Request voltage check from the power company.     Have motor repaired or replaced.      Have motor repaired.
Motor overheats.	1. Motor overloaded. 2. Improper cooling. (Air circulation restricted through motor due to sawdust, accumulating inside of saw).	1. Feed work slower into blade. 2. Clean out sawdust to provide normal air circulation through motor.  See "Maintenance and Lubrication" section.
Starting switch in motor will not operate.	1. Burned switch contacts (due to extended hold-in periods caused by low line voltage, etc.) 2. Shorted capacitor (when equipped) 3. Loose or broken	<ol> <li>Have switch replaced and request a voltage check from the power company.</li> <li>Test capacitor and replace if defective.</li> <li>Have wiring checked and repaired.</li> </ol>
Motor stalls (resulting in blown fuses or tripped circuit breakers).	connections.  1. Starting switch not operating. 2. Voltage too low to permit motor to reach operating speed. 3. Fuses or circuit breakers do not have sufficient capacity.	1. Have switch replaced.  2. Request voltage check from the power company.  3. Install proper size fuses or circuit breakers.
Frequent opening of fuses or circuit breakers.	1. Motor overloaded. 2. Fuses or circuit breakers do not have sufficient capacity. 3. Starting switch not operating (motor does not reach speed).	1. Feed work slower into blade. 2. Install proper size fuses or circuit breakers. 3. Have switch replaced.

NOTES

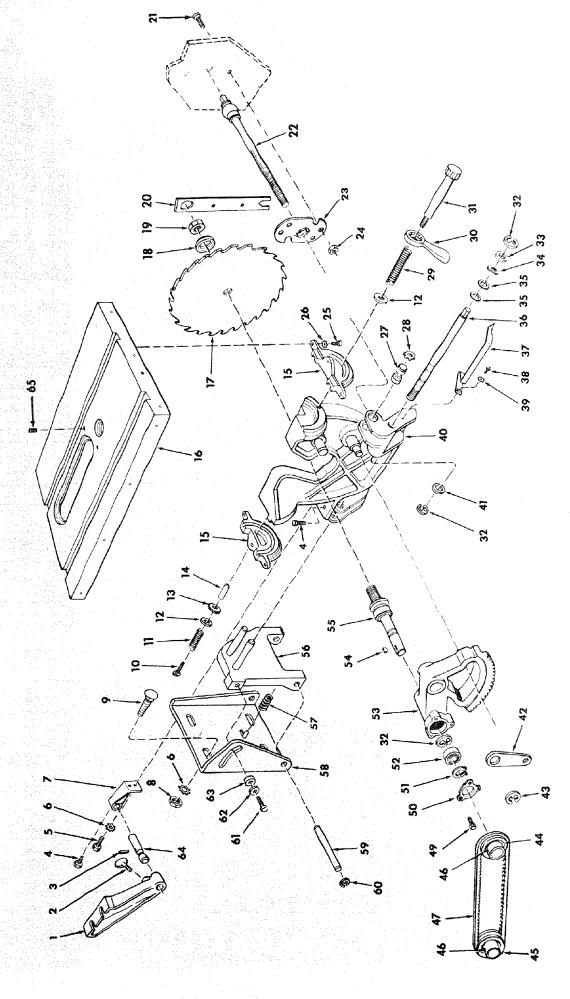


# Always Order by Part Number - not by Key Number FIGURE 1 - PARTS LIST

						AND THE PROPERTY OF THE PROPER
L	Key No.	Part No.	Description	Key No	Part No.	Description
н	-		Guard Assembly (See Fig. 5)	24	STD551031	* Washer, 21/64 x 5/8 x 1/16
	8	STD522506	* Screw, Hex Hd. 1/4-20 x 5/8	25	STD523106	* Screw, Hex Hd. 5/16-18 x 5/8
	භ	STD551225	* Lockwasher, External 1/4	56	818526	Handwheel
	4	STD541025	* Nut, Hex 1/4-20	27	STD503103	* Screw, Cup Pt. Set 5/16-18 x 5/16
	5	813108	Cap, Protective	28	STD610805	* Screw, Pan Hd. Ty "AB" No. 8 x 1/2
	တ	818315	Bar, Fence Rear	29	818548	Scale, Adjustable Bevel
	7	STD523110	* Screw, Hex 5/16-18 x 1	30	820049	Panel, Front
	ω	STD551231	* Lockwasher, External 5/16	31	STD511103	* Screw, Pan Hd. 10-32 x 3/8
	0	STD541231	* Nut, Hex 5/16-18	32	62700	Base
	10	62703	Insert Assembly (Includes Key Nos. 11 & 12)	88	22009	Screw, Hex Hd. 3/8-16 x 1/2
	· ·	62718	Clip, Retaining	34	STD551237	* Lockwasher, External 3/8
	7	STD501102	* Screw, Locking Set 10-32 x 3/16	35	71165	Tie, Wire
٠.	13	133645	Screw, Flat Hd. 10-32 x 1	36	STD601103	* Screw, Pan Hd. Ty "T" 10-32 x 1/4
	14	-	Extension, Table (See Fig. 8)	37	STD541411	* Nut, Lock 10-32
	τ. C	62493		38	STD523112	* Screw, Hex Hd. 5/16-18 x 1-1/4
	19		Fence Assembly, Rip (See Fig. 3)	36	818320	<ul><li>Motor</li></ul>
	17	818314	Tape Fence	40	80254	Bracket, Support
	8	818353	Bar, Front Fence	41	60253	Support, Belt Guard
	5	818313	Rack, Fence	42	STD601105	* Screw, Pan Hd. Ty "T" 10-32 x 1/2
	20	-	Switch Assembly, Box (See Fig. 6)	43	60255	Olip, "S"
******	2	62539	Spacer, Fence Guide Bar	44	60252	Guard, Belt
	2	STD523115	*Screw, Hex 5/16-18 x 1-1/2	45	818309	Washer, Shim
	23		7.0	1	SP5624	Owners Manual (Not Illus.)
				***************************************		

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\* Standard Hardware Item - May be purchased locally.



#### 65

# PARTS LIST BOR CRAFTSMAN 10 INCH TABLE SAW MODEL NO. 113.298843 FIGURE 2 PARTS LIST

Key No.	Part No.	Description	Key No.	Part No.	
-	62587	Support, Spreader	34	60178	_
2	60204	Screw, Thumb 5/16-18 x 1	35	STD302111	*
6	STD571812	* Pin Roll 3/16 x 1-1/4	36	62697	
4	STD523106	* Screw, Hex Hd 5/16-18 x 5/8	37	65699	<u></u>
ťΩ	STD523110	* Screw, Hex Hd 5/16-18 x 1	38	STD601103	· (C)
9	STD551231	* Lockwasher, External 5/16	36	STD551210	ئــــ *
7	62292	Support, Guard	40	62489	
∞	STD541031		7	30767	
6	STD532507	* Bolt, Carriage 5/16-18 x 3/4	42	62312	
10	60206	Screw, Hex Wash, Hd. Ty "T" 1/4-20 x 1-1/2	43	6527	<b>L</b>
<del>-</del>	60205	Spring	7	818307	Li
12	STD551037	* Washer, .380 x 47/64 x 3/32	45	818524	<b></b>
₹	63011	Washer, Knob Clamp	46	STD503103	*
4	62295	Spacer	47	818523	ш
15	62833	Table, Trunnion			
16	818319	Table, 10 ln. Saw	49	STD600803	ري *
17	9-32531	+ Blade, Saw 10 In.	20	3508	LL
18	62498	Collar, Blade	51	37158	<u>u</u> .
6	6362	Nut, Arbor	52	820015	ш
50	3540	Wrench, Arbor	53	30420	-1-
2	STD511103	*Screw, Pan Hd. 10-32 x 3/8	54	STD580025	*
22	62698	Screw, Tilt	55	820048	⋖.
23	62437	Retainer, Bearing	56	37825	S
24	STD541411	* Nut, Lock 10-32	57	818527	S
25	STD523710	* Screw, Hex Hd. 3/8-16 x 1	28	37824	Φ)
26	STD551237	* Lockwasher, External 3/8	59	37823	۵
27	37899	Nt, Ti	09	STD581037	<u>a</u>
28	63054	Ring, Retaining 3/4	50	30628	Ø
58	37828	Spring, Clamp Screw	82	STD551025	A .
98	\$	Handle, Clamp Screw	63	818528	Ø
₩ m	37829	Screw, Clamp	3	62585	Sales .
8	STD581062	* Ring, Retaining	ಬ್	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Ŏ
8	37838	Washer, .529 x 7/8 x f/64			
Stanc	lard Hardware Itt	Standard Hardware Item - May be purchased locally.	+ Stock	Stock Item - May be secure	cure
			5		

Description	Washer, Spring  O-Ring Screw, Lift Pointer  Screw, Pan Hd. Type "T" 10-32 x 3/8  Lockwasher, External No. 10 Cradle (Includes Key No.s 42 & 43) Washer, End Plan (.010 Thick) Link Ring, Retaining 3/4 Pulley, Motor, 5/8 x 2-1/4 (Includes Set Screw)  Pulley, Motor, 5/8 x 2-1/4 (Includes Set Screw)  Screw, Soc Set Oval 5/16-18 x 5/16 Belt, Gripnotch 1/2 x 42  * Screw, Pan Hd. Type "T" 8-32 x 3/8 Retainer Arbor Bearing Ring, Retaining 5/8 Bearing, Saw Arbor Housing, Arbor  * Key, Woodruff Arbor Spring Base, Motor Pin hinge Spring Screw, Pivot Arm  * Washer, 17/64 x 1/16 Spacer Rod. Spreader Spring Screw, Soc. Set Oval 3/8-16 x 3/4
Part No.	60178 STD302111 62697 62699 STD601103 STD601103 STD551210 62489 30767 62312 6527 818307 818524 STD503103 818523 STD503103 818524 STD580025 820048 37825 820048 37825 818527 37825 818527 37825 818527 37825 818527 37825 818527 37825 818527 37825
Key No.	388 398 398 398 398 398 398 398 398 398
	0 × 1-1/2

† Stock Item - May be secured through the Hardware Department of most Sears Retail Stores.

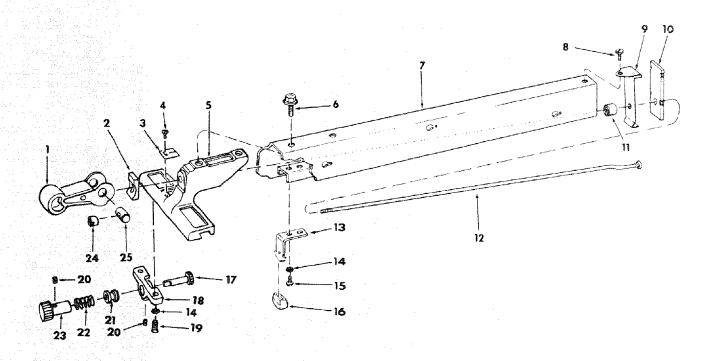


FIGURE 3 — RIP FENCE ASSEMBLY

	Part No.	Description
1	62942	Handle, Assembly Fence
2	62945	Shoe
3	62775	Indicator
4	9404336	Screw, Pan Cross Type "T" 4-40 x 1/4
5	62941	Head, Fence
6	423567	Screw, Sems 3/8-16 x 1/2
7	62946	Channel, Assembly Fence
8	STD600805	*Screw, Pan Cross Type "T" 8-32 x 1/2
9	62528	Spring, Fence Lock
10	62529	Lock, Rear Fence
11	62531	Roller, Rear Fence
12	62944	Rod, Fence Lock
13	508112	Spring, Head Alignment (Includes Key #16)

. "	Part No.	Description
1 1	STD551210 STD611005	*Lockwasher, External No. 10 *Screw, Hex Head Type "A" 10-16 x 1/2
16	62532	Pad, Alignment
17	62129	Shaft Assembly
18	818311	Mount, Micro Adjust
19	STD601105	Screw, Pn. Cr. Type "T" 10-32 x 1/2
20	STD502502	*Screw, Hex Soc. Cup Pt. Set 1/4-20 x 1/4
21	62130	Bushing, Fence Adi. Shaft
22	62131	Spring, Fence Adj. Shaft
	62132	Knob, Fence Adjusting
24	62943	Nut, Adjustment
25	62940	Cam

<sup>\*</sup>Standard Hardware Item-May be purchased locally.

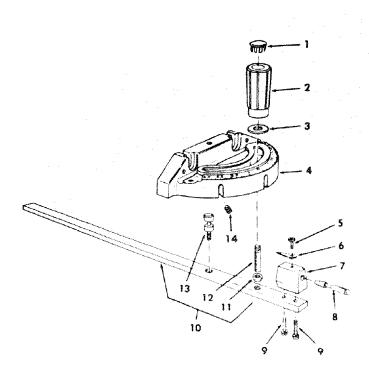


FIGURE 4 + 9-29929 MITER GAUGE ASSEMBLY

Key No.	Part No.	Description
1	62693	Plug, button
2	62692	Knob, Miter Gauge
		(includes Key No. 1)
3	STD551031	*Washer, 21/64 x 1 x 1/16
4	37893	Gauge, Miter
5	STD510803	*Screw, Pan Hd. 8-32 x 5/16
6	135	Indicator
7	37895	Block, Miter Gauge Indicator
8	37896	Pin, Miter Gauge Stop
9	9417295	*Screw, Pan Hd.,
		w/Lockwasher, 8-32 x 5/8
10	62230	Rod Assembly, Miter Gauge
-		Consisting of Items 11, 12, 13
11	STD541231	*Nut, Hex., 5/16-18
12	62225	Stud, Clamp
13	62383	Stud, Pivot
14	60288	Screw, Locking Set
		1/4-20 x 3/8

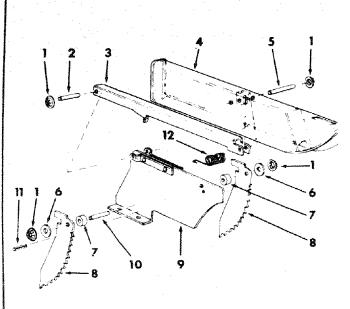
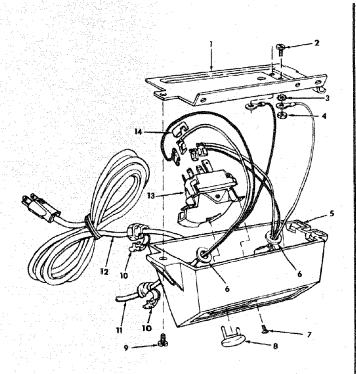


FIGURE 5 - GUARD ASSEMBLY

Key No.	Part No.	Description
1	60208	Nut, Push
2	62391	Pin, 1/4 x 1-1/2"
3	62395	Support, Guard
4	62389	Guard, Saw
5	62390	Pin, 1/4 x 1-3/4"
6	STD551025	* Washer, 17/64 x 5/8 x 1/16"
7	62520	Spacer, Pawl
8	62396	Pawl
9	62580	Spreader, Assembly Blade
10	62410	Pin, 1/4 x 1"
11	STD571810	* Pin, Roll, 3/16 x 15/16"
12	62519	Spring, Pawl

<sup>\*</sup> Standard Hardware Item - May Be Purchased Locally.





	Part No.	Description
1	62466	Bracket, Housing
2	STD511103	*Screw, Pan Hd. 10-32 x 3/8"
3	STD551210	*Lockwasher, External No. 10
4	STD541010	*Nut, Hex, 10-32 x 3/8
5	818317	Box. Switch
	60290	Washer, 3/4 x 1 x 1/64"
7	STD600603	*Screw, Pan Hd. 6-32 x 3/8"
8	9-22255	†Key, Switch
9	STD601105	*Screw, Pan Hd. Type "T" 10-32 x 1/2"
10	61086	Relief, Strain
11	818305	Cord
12	62484	Cord with Plug
13	60267	Switch, Locking
14	63467	Cap, Insulator

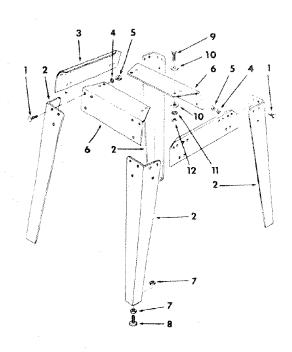


FIGURE 7 - LEGS

Key No.	Part No.	Description		
1	805589-5	Screw, Serrated Truss Hd.		
		1/4-20 x 1/2		
2	819441	Leg		
3	62554	Stiffener, Side		
4	STD551225	* Lockwasher, Ext. 1/4		
5	STD541025	* Nut, Hex 1/4-20		
6	62553	Stiffener, End		
7	STD541237	* Nut, Hex 3/8-16		
8	803835-1	Foot, Leveling		
HARDWARE FOR ATTACHING LEGS TO SAW				
9	STD523112	* Screw, Hex Hd. 5/16-18 x 1-1/4		
10	STD551031	* Washer, 11/32 x 11/16 x 1/16		
11	STD551131	* Lockwasher, Ext. 5/16		
12	STD541231	* Nut, Hex 5/16-18		

<sup>\*</sup>Standard Hardware Items-May be Purchased Locally.

<sup>†</sup>Stock item-May be secured through the Hardware Department of most Sears retail stores.

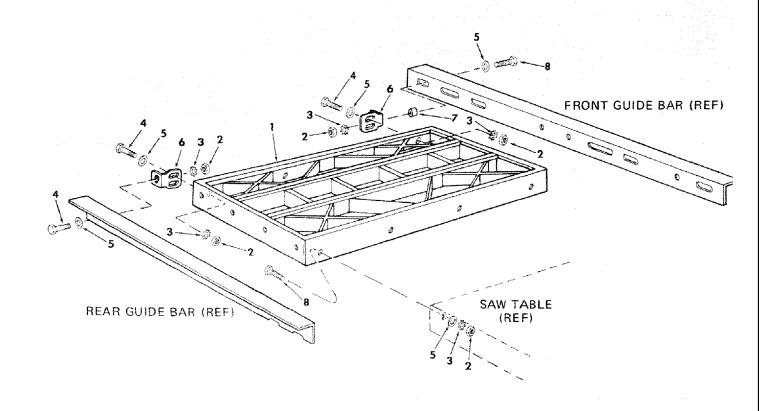


FIGURE 8 — TABLE EXTENSIONS

Key No.	Part No.	Description
1	62947	Extension, Table 12 x 27
2	STD541231	* Nut, Hex 5/16-18
3	STD551231	* Lockwasher, External 5/16
4	STD523107	* Screw Hex Head 5/16-18 x 3/4
5	STD551031	* Washer, 21/64 x 5/8 x 1/16
6	818308	Bracket
7	62539	Spacer, Fence Guide Bar
8	STD523112	
		x 1-1/4

<sup>\*</sup> Standard Hardware Items - May be purchased locally.

- Park Andrews (1997年)。 - Park Andrews (1997年)。 The Park Andrews (1997年)。 <b>NOTES</b> (1997年)。 Park Andrews (199	
는 이 사용하는 생각하는 사용하는 것이 되었다. 이 전에 가장 보고 있는 것이 되었다. 그런 그 것이 되었다. 	
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NOTES

## SEARS

### owners manual

#### SERVICE

MODEL NO. 113.298843

# HOW TO ORDER REPAIR PARTS

#### IF YOU NEED REPAIR SERVICE OR PARTS:

For Repair Service, Call this Toll Free Number:

1-800-4-REPAIR (1-800-473-7247)

For replacement parts information and ordering, call this toll free number:

1-800-FON-PART (1-800-366-7278)

#### 10 INCH TABLE SAW

Now that you have purchased your 10-inch 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 right-hand side of the base.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

PART NUMBER

PART DESCRIPTION

MODEL NUMBER 113.298843 NAME OF ITEM Contractors 10 Inch 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., Hoffman Estates, IL. 60179 U.S.A.

Part No. SP5624 Form No. SP5624-4 Printed in U.S.A. 2/95