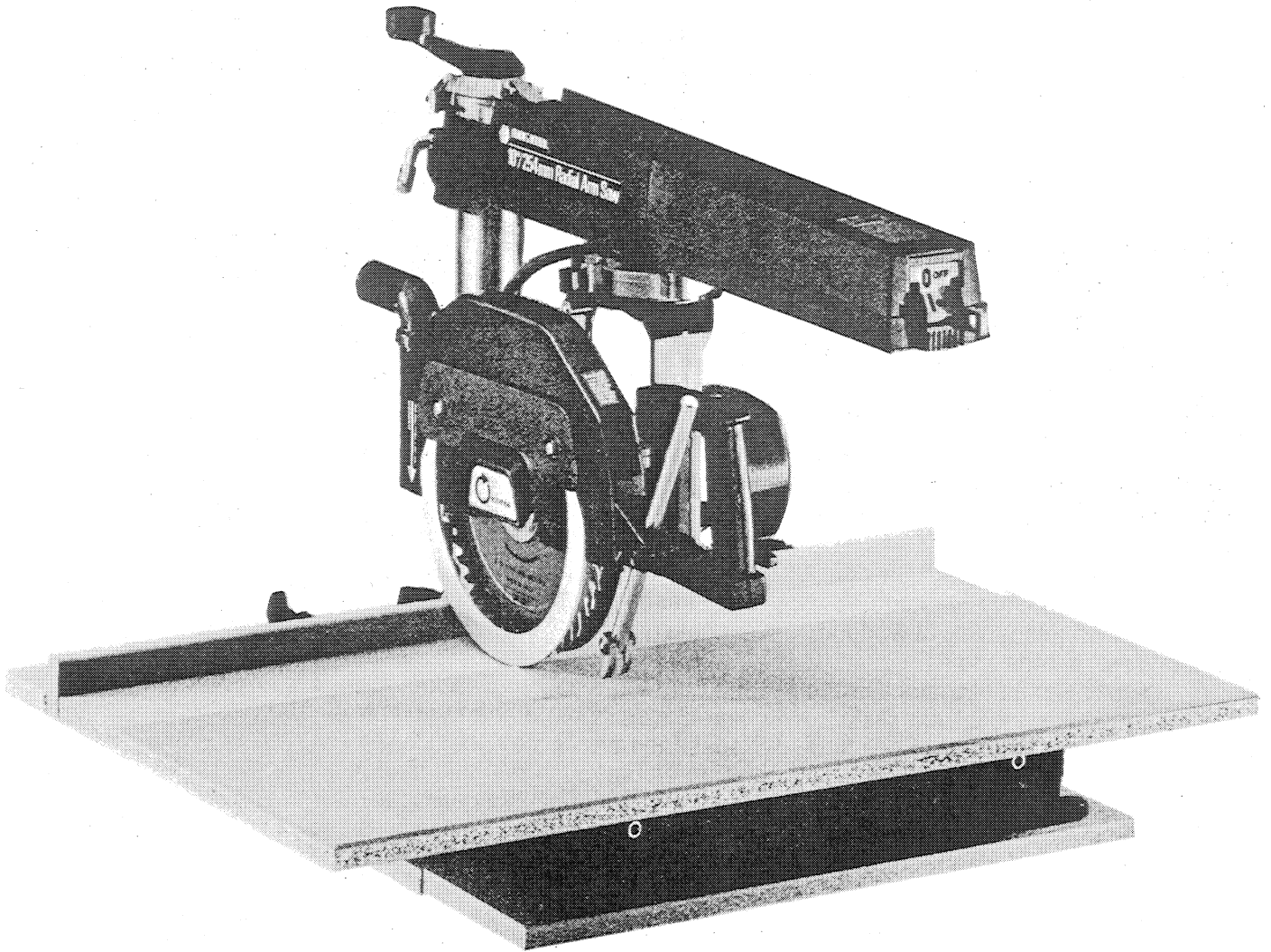




BLACK & DECKER™

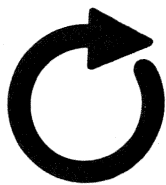


Instruction Manual

**10" (254 mm) Radial Arm Saw
Cat. #1712**

Observe And Comply With The Warning Labels On The Saw

DANGER:
• FOR YOUR OWN SAFETY DO NOT FEED MATERIAL INTO CUTTING TOOL FROM THIS END.



ROTATION

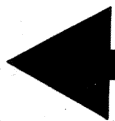


WARNING:
**SHIM FRONT SAW LEGS
TO PREVENT CARRIAGE FROM
CREEPING TOWARD OPERATOR.**

WARNING

FOR YOUR OWN SAFETY READ INSTRUCTION MANUAL BEFORE OPERATING SAW

1. WEAR EYE PROTECTION.
2. KEEP HANDS OUT OF PATH OF SAW BLADE.
3. RETURN CARRIAGE TO FULL REAR POSITION AFTER EACH CROSSCUT TYPE OF OPERATION.
4. KNOW HOW TO REDUCE RISK OF KICKBACK.
5. USE PUSHER BOARD FOR NARROW WORK.
6. DO NOT PERFORM ANY OPERATION FREEHAND.
7. NEVER REACH AROUND MOVING SAW BLADE.
8. SHUT OFF POWER BEFORE CLEARING A STALL OR JAM.
9. SHUT OFF POWER AND WAIT FOR BLADE TO STOP BEFORE SERVICING TOOL.
10. DO NOT OPERATE WITHOUT USING PROPER GUARDS.
11. HAVE ANTI-KICKBACK IN PLACE FOR ALL CUTS.
12. DO NOT WEAR GLOVES, JEWELRY, OR LOOSE CLOTHING.



DANGER:

RIP ONLY FROM THIS END

Maintenance and Operation

1. DO—Connect to a supply circuit protected by a circuit breaker or time-delay fuse.
2. DO—Be sure blade rotates clockwise when facing arbor.
3. DO—Be sure all clamp handles and thumb screws are tight before starting any operation. Push handles back to tighten. Pull to loosen.
4. DO—Be sure blade and arbor collars are clean and recessed side of collars are against blade. Tighten arbor nut securely, using both wrenches provided. See safety rule 18.
5. DO—Keep saw blade sharp and properly set.
6. DO—Use anti-kickback attachment or guard.
7. DO—Keep arm tracks and bearing surfaces clean and dry. Periodic cleaning with dry cleaner is recommended.
8. DO—Periodically recheck alignment.
9. DO—Remove blade but not arbor collars and nut when using rear shaft. Tighten nut securely. (1712 Saw is not equipped with rear shaft.)
10. DO—Keep motor air slots clean and free of chips.
11. DO—Remove switch key and store in a safe place to prevent unauthorized operation.
12. DO—Use lower guard whenever applicable.
13. DO—Return carriage to full rear after each operation. A return reel is available.
 1. DON'T—Attempt to operate on anything but designated voltage.
 2. DON'T—Operate unless all clamp handles are tight.
 3. DON'T—Use blades of larger diameter than recommended.
 4. DON'T—Remove anti-kickback from guard. Adjust it to just clear the workpiece when crosscutting.
 5. DON'T—Rip from wrong direction—observe caution tag on guard.
 6. DON'T—Oil or grease arm tracks or motor.
 7. DON'T—Wedge anything against fan to hold motor shaft.

8. DON'T—Subject table top to variable humidity conditions (keep away from dampness).
9. DON'T—Force cutting action. Stalling or partial stalling of motor can cause major damage to motor.
10. DON'T—Remove saw blade guard when boring.
11. DON'T—Remove arbor collars and nut when using rear shaft. Tighten nut securely. (1712 Saw is not equipped with rear shaft.)
12. DON'T—Remove ground prong from plug. Never operate saw unless it is properly grounded.
13. DON'T—Remove small scraps from table with fingers.

SAVE THESE INSTRUCTIONS

Caution to Follow When Using Lower Guard

The lower blade guard covers the side of the teeth when the blade is behind the fence. READ THE FOLLOWING PRECAUTIONS.

1. The lower blade guard will provide additional protection from contact with the side of the blade—BUT NOT FROM CONTACT WITH THE FRONT OR REAR OF THE BLADE. When the lower guard touches the fence or material being cut, it will rise up over the material—thus exposing the blade teeth. Be careful, keep your hands out of the line of cut!
2. Lower blade guards may become caught in prior kerfs in the fence or table. Replace guide fence frequently.
3. Short cut-off pieces of wood may become caught between the lower guard and the blade. If this happens shut off power, wait until blade stops before removal of piece.
4. The lower blade guard's effectiveness is limited in bevel operations. It may have to be raised out of the way when setting bevel angle to prevent bending. BE SURE THAT POWER IS OFF AND BLADE IS COMPLETELY STOPPED BEFORE MAKING ANY ADJUSTMENT.

5. Catching the lower guard in saw kerfs when changing the saw set-up can be avoided by elevating the saw until the bottom of the guard clears the fence.
6. When ripping narrow strips, the lower guard may have to be raised to rest on top of the fence. Be sure to use a pusher stick to feed the work.
7. Do not use the lower guard with any accessory other than the correct size saw blade.
8. To summarize, when in doubt about whether to use the lower guard and when practical, make a "dry run" with power off to determine if it is a help or hindrance.

Grounding Instructions

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

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

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

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

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's and extension cord's plugs.

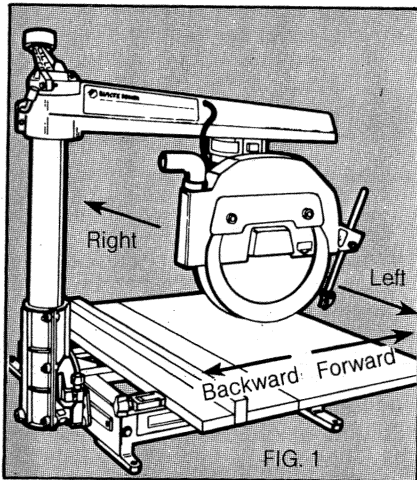
Repair or replace damaged or worn cord immediately.

Assembly

In addition to the special tools supplied with the machine, you will need one #2 Phillips head and one ordinary screwdriver, a small adjustable wrench, and a large square to enable you to set up the machine correctly.

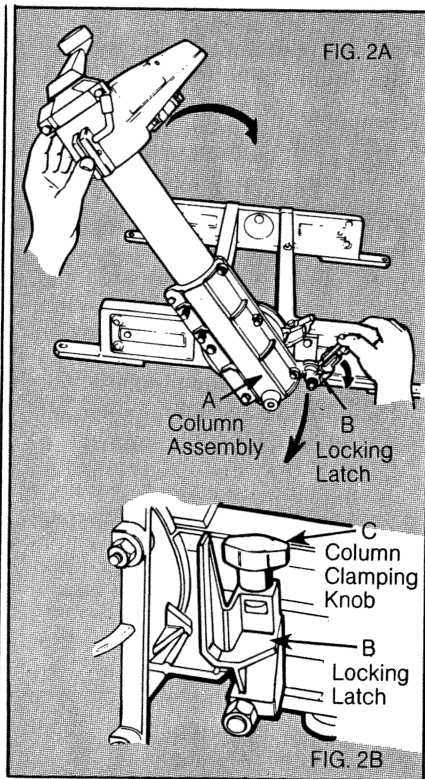
During assembly procedures reference will be made to the directions forwards, backwards, right, left which are indicated in Figure 1.

Also, a 13 mm socket wrench is necessary if the roller head bearings ever need adjustment. (See Page 12).

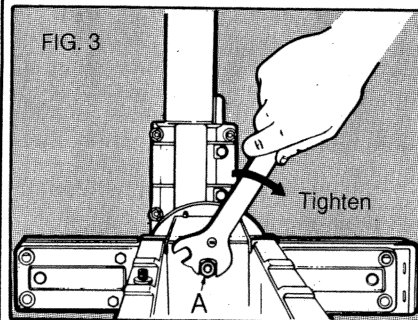


ADJUSTING TABLE TOP PARALLEL WITH ARM (FIG. 2)

1. Release locking latch B at the base of column A and raise the column to its vertical position as shown in figure 2A. When your saw was packed the column clamping knob (figure 2B) may have been tightened down. Back off the column clamping knob until the end of the screw completely engages the column casting surface. Tighten the column clamping knob securely. Check by attempting to move the locking latch. It should not move.



2. Check that nut A on the pivot-bolt at the bottom of the column is secure (Fig. 3). If necessary, correctly tighten the nut, bearing in mind that if you tighten it too much the column is difficult to move.



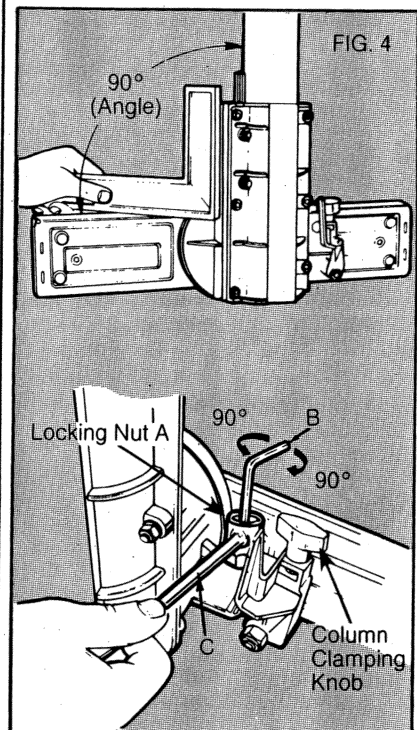
3. The next step is to check that the column is at right angles (90°) to the table frame. Looking at the rear of the machine hold a square in the 90° angle formed by the casting on the pivot bracket at the base of the column and by the top of the table base (Fig. 4).

NOTE: This setting is performed in the factory. It is good practice to check it during assembly.

If the angle is not 90°, adjust the position of the stop as follows:

- a - Release the column locking latch. (Fig. 2A).
- b - Hold locking nut A with wrench C (10 mm) and use Allen key (3 mm) to adjust the position of the stop, turning clockwise if the angle between the column and table frame is greater the 90° and counterclockwise if the angle is less than 90°. (See Figure 4). Tighten locking nut (clockwise).
- c - Lock the column clamping knob.

This level of accuracy is all that is necessary, since the remaining table adjustment procedure will compensate for any slight misalignment.



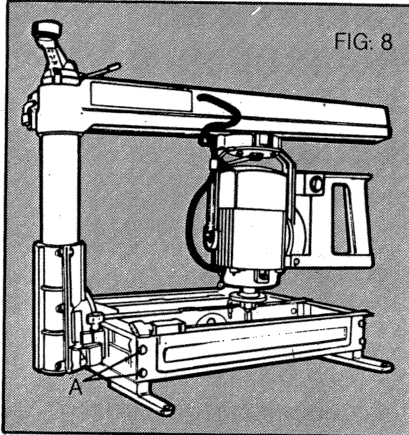


FIG. 8

- e. Without altering the height of the arm, adjust the position of the right-hand side adjusting support with the tip of the motor arbor. Tighten bolts.
- f. Carry out a final check, running the tip of the motor arbor along the top of both supports and make sure that all nuts are tightened securely.

NOTE: If either of the side adjusting supports cannot be adjusted far enough to touch the tip of the motor arbor, then start again at the left front support. Move the front of the left hand adjusting side support up or down to provide enough adjustment for the other strip.

ASSEMBLY OF TABLE ONTO SUPPORTS

- The worktable consists of four elements (Fig. 9):
- table which attaches to the front of the base frame
 - wooden fence against which the material being worked is held
 - narrow movable board and wide movable board which are used to adjust the position of the fence in relation to the saw blade to ensure the different types/depth of cut can be performed safely.

Assemble the table as follows:

1. Secure table to the side adjusting support using the four screws and the relative washers and nuts (Fig. 9) (the screws, washers, nuts are in Hardware bag C) making sure that the holes in the middle of the board locate over the central support flanges of the table adjusting screws in the base frame.

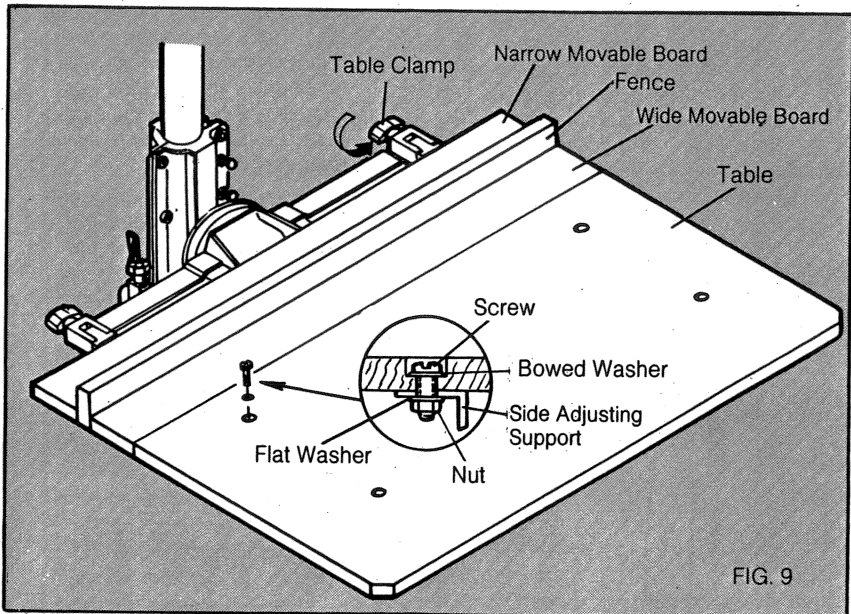


FIG. 9

2. Mount the sawblade as follows (Fig. 10):
 - a. Unscrew the left-hand threaded nut A and remove outer flange B from motor arbor E. Take great care not to move the inner flange D so key doesn't come out.
 - b. Mount the blade. The lower teeth must point towards the back of the saw, and lock it by tightening nut A (counterclockwise). Use 8 mm Allen wrench (Hardware bag "D") and flat wrench (Item D).

NOTE: Nut A must be mounted with its inner circular ring facing the blade.

CAUTION: FOR PURPOSES OF CLARITY, GUARDS ARE OMITTED FROM MANY ILLUSTRATIONS IN THIS MANUAL. NEVER ATTEMPT TO MAKE ANY CUT WITHOUT THE UPPER AND LOWER GUARDS IN PLACE.

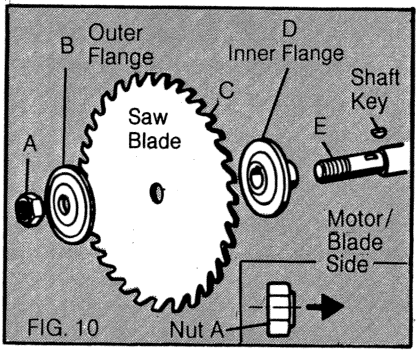


FIG. 10

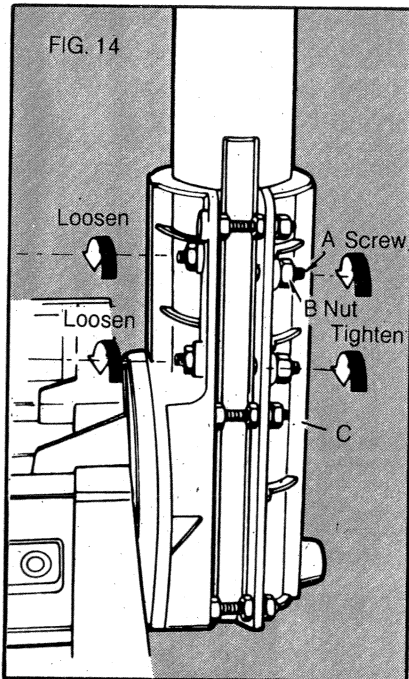
- Then, by turning the elevating handle, lower the arm so that the sawblade almost touches the surface of the table in front of the wooden fence.
- Place a rectangular piece of board (approx. $\frac{3}{4}$ " thick) in front of the fence alongside the blade and lay a square flat on top of it as illustrated. (Fig. 13).

- Pull the carriage and blade away from the fence, and check that a single tooth follows a path parallel to the square.

NOTE: At this stage, do not worry if the face of the blade itself is not parallel with the square. This will be adjusted afterwards. We are now merely checking that the line of the blade across the table is at 90° to the fence.

To Adjust (FIG. 14).

- Loosen nuts B at the base of the column with 10 mm wrench (Hardware bag "D").
- Refer to Fig. 14. Loosen or tighten brass screws A with 3 mm Allen wrench to move the arm in desired direction.



NOTE: First, loosen the screw(s) that are to be loosened, and then proceed to tighten the other(s).

- When the cross-cut travel is parallel to the square, tighten locking nuts B taking care not to move the brass screws while doing so.

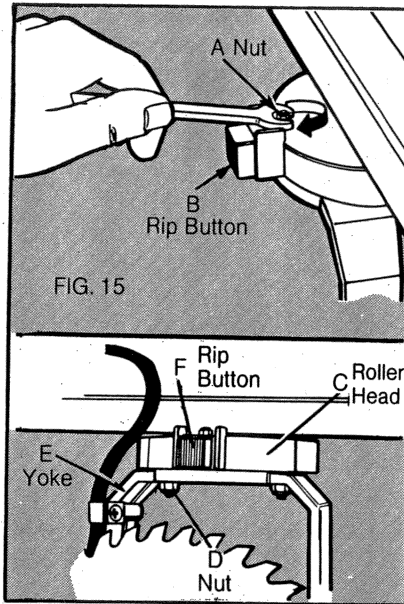
CHECKING THAT THE SAW BLADE IS PARALLEL TO THE ARM TRACKS. (FIG. 13 - 15)

This check is to ensure that, in the straight 90° cross-cut position, the blade runs true across the table. If the blade is incorrectly adjusted in this way, it will produce a cut wider than the set of the blade (width of blade across the tips of the teeth).

To check (Fig. 13)

- Place the arm in the 90° cross-cut position and lock it with the miter latch A and the miter clamp B.
- Push the carriage towards the column until the sawblade is near the fence. Lock the carriage in this position with the rip lock.
- Place a rectangular piece of board (approx. $\frac{3}{4}$ " thick) in front of the fence alongside the blade and lay a square flat on top of it as illustrated.

To Adjust. (FIG. 15)



- Eliminate any rotational play between roller head C and yoke E. (Fig. 15)
 - Hold the yoke and try to rotate it left and right to check whether there is any play between roller head and yoke.
 - To eliminate any play, tighten nut A with 8 mm or adjustable wrench as necessary.

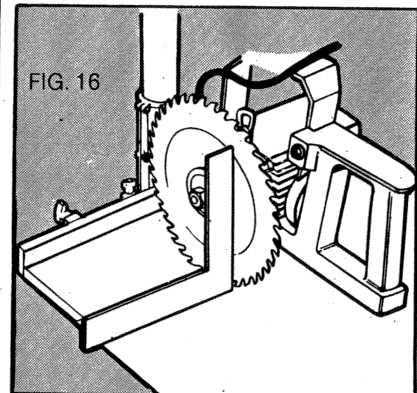
NOTE: Do not tighten nut A too much to avoid locking rip button B. Rip button must move freely but with minimum side motion.

- If the sawblade is still not parallel to the square, release the yoke clamp lever and loosen nuts D with 10 mm wrench. Turn yoke until the blade is parallel to the square and consequently to the arm. (Fig. 15)
- Once adjustment has been made, tighten nuts D. Check by using a piece of paper. If the tooth hits the square at the front, you should, at the most, just barely be able to slide a piece of paper between the blade tooth and the square at the rear - or vice-versa.
- Check by turning blade 90° and bringing it into contact with the fence. Lock the yoke clamp. The sawblade surface should now be parallel to the fence.
- If this is not the case, return the sawblade to the 90° cross-cut position and repeat the adjustment procedure described in steps 1 to 3.

CHECKING THAT THE BLADE IS PERPENDICULAR TO WORKTABLE. (FIG. 16, 17)

For accurate woodworking, it is also necessary that the sawblade cuts a precise 90° vertical line when intended to do so.

To check (Fig. 16)



- Bring the arm to the cross-cut position and tighten all the latches/clamps.
- Using a steel square, check that the side face of the sawblade is perpendicular to the worktable. If it is not, adjust.

NOTE: Be sure the square is not against the tip of any tooth, but rather in the gullet (recess) between the teeth and against the flat side of the blade.

To Check

1. Lock the arm with the miter latch and the miter clamp.
2. Check that the end of the arm does not move sideways due to the column rotating in the base. If it does not have excessive play, proceed to the next step. If this occurs, adjust as follows.

To Adjust (Fig. 20)

NOTE: All nuts and bolts involved in this adjustment operation are 10 mm.

1. Loosen the four lock nuts C.
2. Lift and lower column F with elevating handle.
 - a. If base E is seen to be too slack around the column, adjust by loosening nuts A and tightening nuts B for the correct fit. Avoid binding column and base.
 - or -
 - b. If the base is too tight around the column adjust by unscrewing nuts B and tightening nuts A for correct fit.
3. Tighten lock nuts C to prevent the column from rotating inside the base. Hold screw in place with 3 mm Allen wrench. After this adjustment it may be necessary to readjust the cross-cut travel squareness. See page 10.

NOTE: Do not tighten the bolts too much as this may result in difficult arm lifting and lowering. Once this adjustment has been completed, recheck the cross-cut travel and adjust if necessary (see: Checking That the Cross-cut Travel is 90° to the Fence) (Pages 10 and 11).

Location and Adjustment of Scales

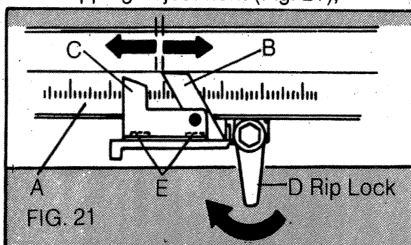
RIP SCALE (FIG. 21)

Location

Rip scale A is located on the right side of the radial arm.

The following adjustments apply with the movable table boards in position "A", Fig. 12, page 10.

Out-ripping adjustment (Fig. 21);



The pointer indicating the ripping width on the scale is adjustable as follows:

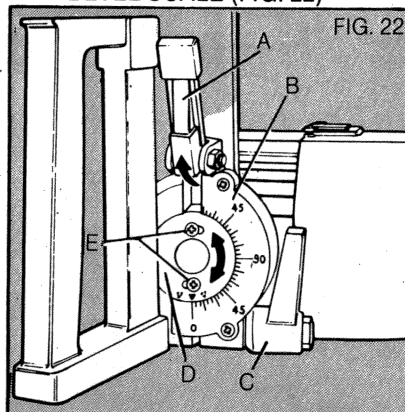
1. Place a board of known width against the fence. (Position the fence as shown in Fig. 12, page 10, "C".)
2. Position the motor in its "out-rip" position (blade towards the front of the machine and parallel to fence) and move the yoke assembly along the arm until the blade just touches the forward edge of the material. See "yoke assembly rotation," page 15.
3. Lock the yoke assembly by turning rip lock D clockwise. (Fig. 21)
4. Loosen the two screws E on the pointer assembly (Fig. 21) and move the pointer until the edge of the "out-rip" pointer C lines up with the known width of the board on the lower scale. Tighten the two screws.

In-ripping adjustment (Fig. 21).

1. Release the yoke assembly by turning rip lock D counterclockwise.
2. Remove the board and bring the motor to the "in-rip" position. (Fig. 32) (blade between motor and fence; parallel to fence)
3. Move the yoke assembly along the arm until the saw blade just touches the fence (still in position A) (see Fig. 12).
4. Move the pointer until the straight edge of the "in-rip" pointer D corresponds to point "0".

NOTE: It is good practice to check the width of cut with a tape rather than relying solely on the scale, although the scale can be used with complete confidence when making several cuts at differing widths. When ripping wide panels with the fence in "B" position (see Fig. 12, Page 10), the out-rip scale does not apply and a measuring tape must be used.

BEVEL SCALE (FIG. 22)



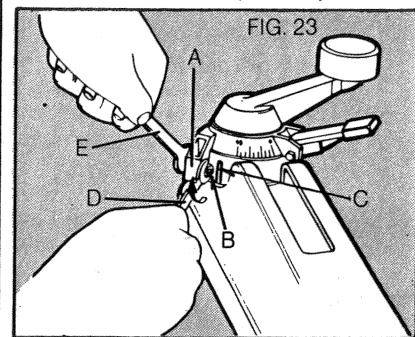
Location

The bevel scale is located on the front of the motor to the right of the handle assembly.

Adjustment (Fig. 22)

1. Position the sawblade for the vertical cross-cut. Lock bevel latch A and tighten with bevel clamp C. In this position the bevel pointer must point to "0" on the bevel scale B.
2. If it is not, adjust the position of the pointer disc D:
 - a. Lift bevel latch A and loosen screws E.
 - b. Turn pointer disc D and bring pointer to "0" on bevel scale.
 - c. Tighten screws E.

MITER SCALE (FIG. 23)



Location

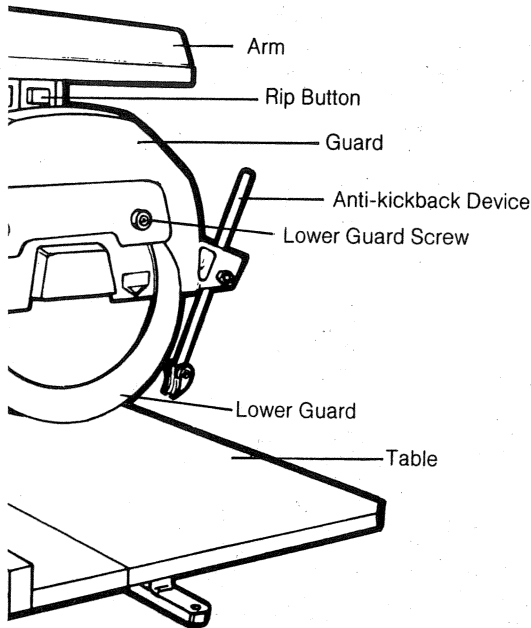
The miter scale is located on the top of the arm beneath the elevating handle. On each side of the miter latch, there is a pointer on the arm which indicates that the arm is in the 0° position when set for a straight cross-cut. The scale is then marked left and right in 5° graduations from 0°.

Adjustment of miter stops

The arm can be correctly positioned at 45° by suitably adjusting the position of the two stops A (right and left).

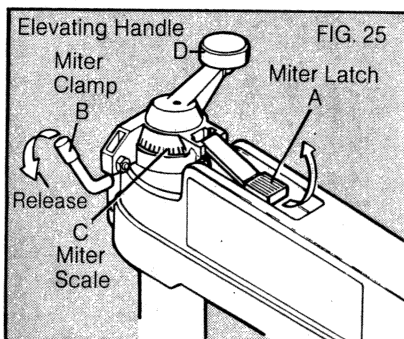
Proceed as follows to do this:

1. Loosen screw B of the left-hand (& right-hand) stop with the 10 mm flat wrench.
2. Move the arm 45° to the left (right) while referring to the miter scale.
3. Rescrew screw B, until the tip of it comes into contact with ridge C located on the arm.
4. Keep the screw in position with 10 mm socket wrench E and tighten the securing nut with flat wrench D.
5. Repeat the operation for the second stop.



The Various Operating Adjustments of Basic Machine

ARM ROTATION (FIG. 25)



Proceed as follows to release the radial arm for rotation:

1. Release miter latch A and miter clamp B as illustrated.
2. Position the radial arm correctly by referring to miter scale C which indicates the angle of the arm relative to the "0" straight cross-cut position.

3. Lock the arm in the required position by reversing the procedure illustrated for step 1.

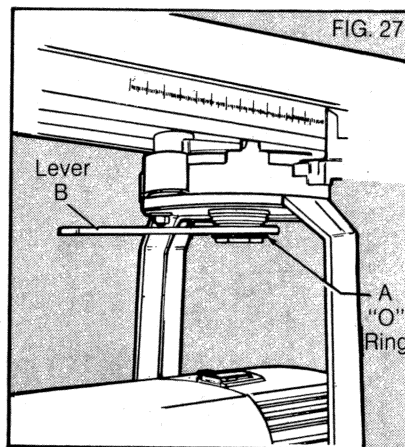
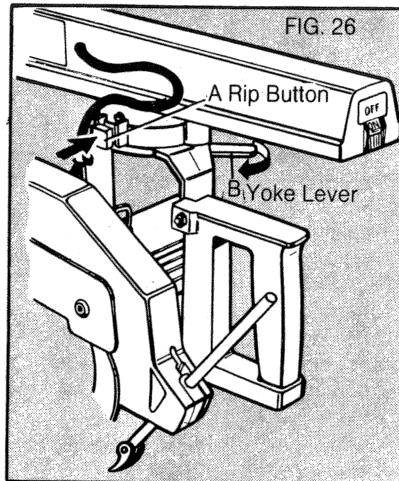
NOTE: The miter latch is only used to locate the arm in the 0° position.

BLADE HEIGHT (FIG. 25)

The Radial Arm, and hence also the Saw blade, can be raised or lowered by turning elevating handle D on top of the column.

YOKE ASSEMBLY ROTATION (FIG. 26, 27)

The yoke assembly rotation permits the cross-cut position to be changed to the rip position.



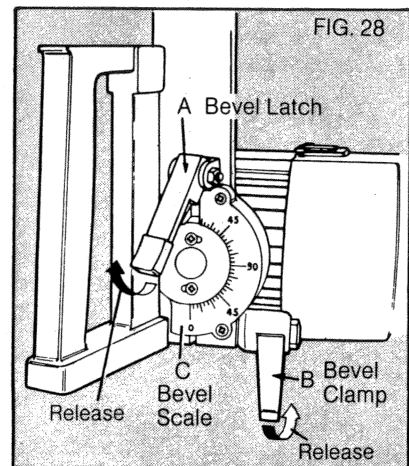
To do this, proceed as follows:

1. Rotate yoke lever B toward you to loosen. (Fig. 26)
2. Press rip button A and bring the yoke assembly to the required position.
3. Lock the yoke assembly in the rip position required by bringing lever B back to the initial position rearward.

NOTE: (Fig. 27) If you find that the yoke lever has insufficient movement to satisfactorily clamp the yoke securely, carefully remove rubber "O" ring A immediately beneath clamp lever B with a screwdriver. Use the lever as a wrench on the large center nut and rotate it until it is possible to slacken and tighten the lever within the normal arc of the lever without moving its position. Replace the "O" ring in position beneath the lever to hold it in place.

BLADE TILTING (FIG. 28)

Bevel cross-cutting can be performed by tilting the blade. If bevel clamp B does not tighten or loosen adequately, then bevel clamp B can be adjusted by pulling out to the right and rotating the lever downward.



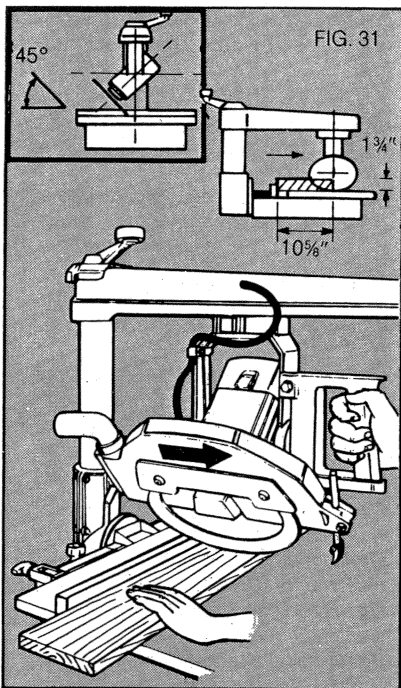
To do this, proceed as follows:

1. Release bevel latch A and bevel clamp B as illustrated.
2. Use bevel scale C to indicate the angle necessary for performing the required cut.
3. Lock the motor in this position by reversing the procedure illustrated for step 1.

NOTE: Bevel latch A is only used to locate the motor in the 0°, 45° and 90° positions.

BEVEL CUT (FIG. 31)

1. Set arm as for cross cut (see cross cut).
2. Use the elevating handle to raise the blade well above the surface of the table.
3. Release the bevel clamp handle and the bevel latch. See Figure 28, page 15.
4. Tilt the motor in the yoke to the required angle on the bevel scale.
5. Lock the yoke in the working position.
 - a. The yoke is locked in the 0°, 45° and 90° positions with the bevel clamp and the bevel latch.
 - b. For the angles in between, the yoke is locked with the bevel clamp only.
6. Fix the fence in position "A" or "C" (Fig. 12, Page 10) according to the depth of the cut (see diagram Fig. 31).



7. Then, with the sawblade still behind the fence, carefully lower the arm with the motor running until the blade just cuts into the table surface. The blade can then be drawn through the fence and into the material. Hold or clamp material firmly.

To prevent having many different cuts in your fence, you can slide the fence endways so that the blade cuts the fence at the same location as one of the existing cuts. Be sure to tighten the table clamps.

RIPPING (FIG. 32)

Start with arm locked in cross-cut position. Pull out motor to end of arm. Loosen yoke clamp lever and push in the rip button to allow yoke to rotate. Revolve the yoke/motor for out-rip or in-rip position. Lock the yoke clamp lever.

NOTE: Turning the blade 90 degrees toward the column positions the blade in the "in-rip" position. Similarly, turning the blade 90 degrees away from the column positions the blade in the "out-rip" position. Use the "out-rip" position for extra wide rip cuts. In both rip positions the blade is parallel to the fence.

Adjust saw for desired width of rip, using rip scale, and lock saw carriage by tightening rip lock against side of arm. If the rip lock does not clamp tightly, the rip lock can be adjusted by pulling out and rotating the lever counter-clockwise. Loosen the guard clamping nut and rotate the guard so that infeed end almost touches material. **LOWER ANTI-KICKBACK ASSEMBLY SO THAT THE TIPS OF THE ANTI-KICKBACK FINGERS ARE APPROXIMATELY 1/8 INCH LOWER THAN MATERIAL. SLIDE THE PIECE OF MATERIAL TO BE CUT UNDER THE ANTI-KICKBACK FINGERS. TRY PULLING MATERIAL IN OPPOSITE DIRECTION. THE ANTI-KICKBACK FINGERS SHOULD GRAB IT. IF THEY DO NOT, READJUST ANTI-KICKBACK ASSEMBLY.**

For ripping **ALWAYS** feed the work against the blade rotation. **ALWAYS** use the upper guard with the anti-kickback device. **DO NOT FORCE. DO NOT FEED FROM**

ANTI-KICKBACK SIDE OF GUARD. FOLLOW INSTRUCTIONS ON CAUTION LABEL.

CAUTION: When in-ripping, feed wood from the right only. When out-ripping, feed wood from the left only.

IMPORTANT: - Use a notched "push-stick" (Fig. 32) to feed the wood through the blade and hold it down at the same time, thereby keeping your hands at a safe distance from the blade.

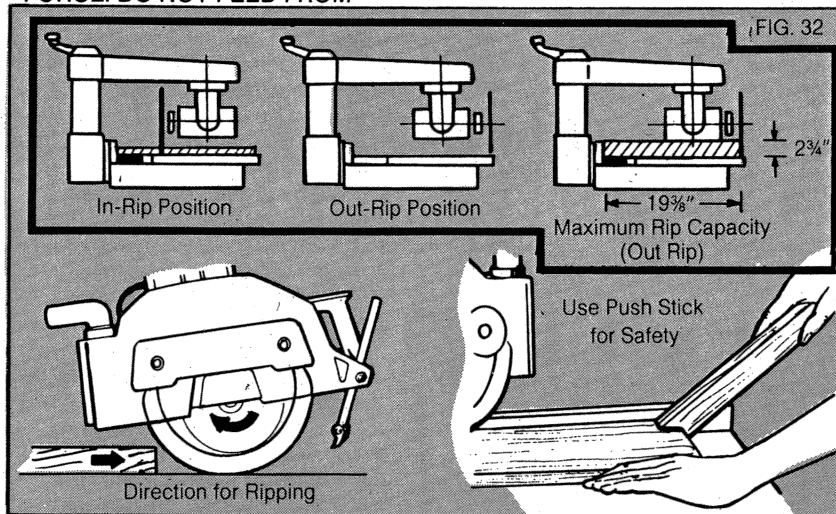
After the ripping operation has been completed, you may find that sawdust has collected in the arm tracks and on the yoke assembly's bearings. To clean, refer to Routine Maintenance.

ANTI-KICKBACK WITH SPLITTER

NOTE: For ease and safety in ripping, use accessory anti-kickback with spreader. (See page 26, Accessory #30034).

INSTRUCTIONS FOR USE OF ANTI-KICKBACK WITH SPLITTER.

1. Disconnect the electrical power.
2. Rotate the splitter adjusting screw to center the splitter blade in the kerf made by the saw blade.
3. Adjust the upper guard to just barely clear the top surface of the workpiece. Lock it securely in this position.
4. Lower the splitter and anti-kickback until the anti-kickback fingers are about 1/8" below the top surface of the workpiece. Lock it securely in this position.
5. Slide the workpiece under the anti-kickback fingers in the normal rip direction. Try to pull the workpiece backwards. If the fingers do not prevent backwards movement repeat step 3.



Move the rollerhead back along the arm until the shaper head is slightly behind the shaper fence. Lower the arm and move the rollerhead until the shaper is in desired position.

Check that the rip button is latched and the yoke lever is tight.

Lock the rollerhead in place by tightening the rip lock lever.

Plug tool in, make a trial cut in a scrap piece of wood. Use a push stick when working close to knives. **NEVER TRY TO SHAPE A PIECE OF WOOD THAT IS TOO SMALL TO HOLD SAFELY.** A rule of thumb is to never shape a piece shorter than 12 inches.

If adjustments to set-up are necessary, unplug saw from power outlet before making any changes.

To shape the end of a piece of wood **ALWAYS** push with a back up piece which is at least 12 inches long. This will prevent splintering of your work and keep your hands clear of the blade. For more detail refer to the book "The Magic of your Radial Arm Saw."

DADO CUTS

WARNING: DO NOT OPERATE SAW WITHOUT BLADE GUARD IN PLACE. UNPLUG SAW BEFORE ADJUSTING OR CHANGING DADO SET OR SAW BLADES.

Dado cuts allow you to easily make professional wood joints which are stronger than ones fastened with screws or nails alone. See "attachments and accessories" in the Instruction Manual for our book "The Magic of Your Radial Arm Saw," (Black & Decker #35601-15). This excellent book describes not only dado cuts but also the full range of applications for your Radial Arm Saw.

To make dado cuts you need the following items:

1. Dado set. See "Attachments and Accessories" in your Instruction Manual.
2. For stacking dado blades wider than 1/2" a special internal flange (Black & Decker #30035) must be used to replace the one supplied with the saw. Also, grooves wider than 1/2", can be cut by making several passes with a maximum of 1/2" dado blade stock.

After assembling the dado set securely on the saw motor shaft, replace the blade guard. Then turn the dado set by hand to check for clearance. If the dado set contacts the guard, remove the guard and

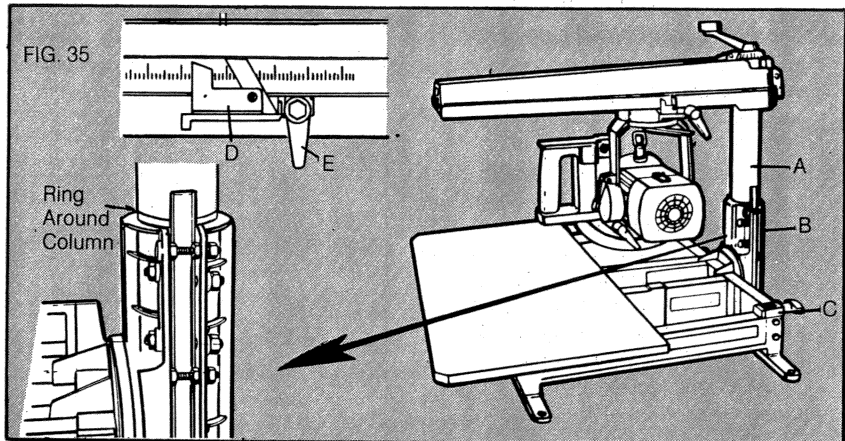
check that correct internal flange washer is being used. See instructions above.

After any changes, replace blade guard and recheck for clearance.

Folding For Storage

The 1712 has a unique feature in that it folds down flat for easy transport and storage.

1. Loosen rear table clamps C and remove the movable table components, fence, wide movable strip and narrow movable strip (Fig. 35).



2. Position the yoke assembly on the arm by making pointer D correspond with the white square on the rip scale (Fig. 35). Lock the yoke in this position with the rip lock E. If the rip lock does not clamp tightly, the rip lock can be adjusted by pulling out and rotating the lever.

3. Use the elevating handle to lower the radial arm completely. In this position the ring around column A will line up with or be below the edge of column base B (Fig. 35).

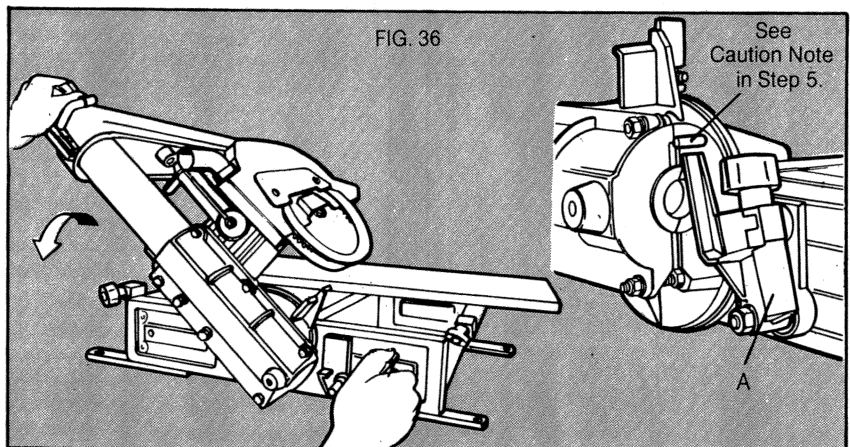
NOTE: When folding your Radial Arm Saw, adjust the bevel latch and bevel clamp so that it will not foul against the fixed table.

4. Move column clamp to one side and fold the column down until it is horizontal. (Fig. 36).
5. Release the column clamp, and the column is locked in a horizontal position.

CAUTION: When folding be sure that locking latch A (Fig. 36) latches the column base to prevent

accidental release when carrying. If it does not latch, readjust the yoke location on the arm allowing the arm and motor to fully fold down.

6. The folded Radial Arm Saw should be carried by the handle at the yoke.



Alignment Guide For Accurate Cutting

Notes

Problem	Possible Cause	Solution
3. Saw blade scores lumber, not giving a good finished cut.	Saw blade is heeling.	Make heel adjustment.
	Column too loose in base.	Make proper adjustments.
	Too much play between arm and column.	
	Roller head loose in arm.	
	Yoke too loose when clamped to roller head.	
	Bent blade or dull.	Replace blade.
	Not feeding saw properly.	Draw saw blade across lumber with a slow steady pull.
Using improper blade for finish cut desired.	Change blade.	
4. Saw blade or Dado blades tend to push lumber to one side when cross cutting.	Saw blade is heeling.	Make heel adjustment
	Column too loose in base.	Make proper adjustments.
	Too much play between arm and column.	
	Roller head too loose in arm.	
	Yoke too loose when clamped to roller head.	
	Fence not straight.	Replace.
Dull blade or cutters.	Replace or sharpen.	
5. Cut depth varies from one end of stock to the other.	Table top not parallel with arm.	Adjust table top parallel with arm.
	Column too loose in base.	Make proper adjustments.
	Too much play between arm and column.	

Trouble Shooting Chart—Motor

Problem	Possible Cause	Solution
Motor will not run.	Undersize wires or circuit too long.	See chart for extension cords on page 27, or contact a qualified electrician.
	Low voltage.	Check power line for proper voltage.
Motor will not run and fuses "BLOW".	Short circuit in line cord or plug.	Inspect line cord and plug for damaged insulation and shorted wires.
Motor fails to develop full power. (Power output of motor decreases rapidly with decrease in voltage at motor terminals.	Power line overloaded with lights, appliances and other motors.	Reduce line load.
	Undersize wires or circuit too long.	Increase wire sizes, or reduce length of wiring.
	General overloading of power company's facilities. (In many sections of the country, demand for electrical power exceeds the capacity of existing generating and distribution systems.)	Request a voltage check from the power company.
	Incorrect fuses in power line.	Install correct fuses.
	Dull blade.	Replace or sharpen blade.
Motor starts slowly or fails to come up to full speed.	Low Voltage.	Correct low voltage condition.
Motor overheats.	Motor overloaded.	Correct overload condition.
	Improper cooling. (Air circulation restricted through motor due to sawdust, etc.)	Clean out sawdust to provide normal air circulation through motor.
	Dull blade.	Replace or sharpen blade.
Motor stalls (resulting in blown fuses or tripped circuit breakers).	Voltage too low to permit motor to reach operating speed.	Correct the low line voltage condition.
	Fuses or circuit breakers do not have sufficient capacity.	Replace fuses or circuit breakers with proper capacity units.
	Dull blade.	Replace or sharpen blade.
Frequent opening of fuses or circuit breakers.	Motor overloaded.	Reduce motor load.
	Fuses or circuit breakers do not have sufficient capacity.	Replace fuses or circuit breakers.
	Dull blade.	Replace or sharpen blade.

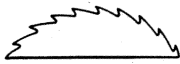


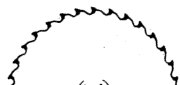
Notes

Required Equipment

Internal Flange B&D #30035	Tool Guard B&D #30033	Shaper/ Jointer Fence B&D #30025	Shaper Head B&D #R6501	8" Disc Sander B&D #R7470	Drum Sanders 3" B&D #30092 2" B&D #30091 1" B&D #30090	Automatic Return Device B&D #35026
						Recommended Recommended Recommended Recommended
Yes						Recommended Recommended
	Yes Yes	Yes Yes	Yes Yes			
	Yes			Yes		
					Yes	

RECOMMENDED READING: "THE MAGIC OF YOUR RADIAL ARM SAW" BLACK & DECKER #35601-16

DON'T RUSH: WORKING QUICKLY IS NEVER GOOD PRACTICE WITH A RADIAL ARM SAW

	Cat. Number	Size	Type	No. of Teeth	Quality
	R1426	254.0 mm (10")	Rip	36	Standard
	73-372	254.0 mm (10")	Carbide Teeth, General Purpose	28	Professional
	73-377	254.0 mm (10")	Carbide Teeth, Smoother Cutting	40	Professional
	73-740	254.0 mm (10")	Carbide Teeth, Piranha™ Fast, Moderately Smooth Cutting	32	Professional

Extension Cords

Tools that have 3-wire cords requiring grounding must only be used with extension cords that have 3-prong grounding type plugs and 3-pole receptacles. Make sure which construction your tool is before choosing an extension cord. Only round jacketed extension cords should be used, and we recommend that they be listed Underwriters Laboratories (U.L.) (C.S.A. in Canada). If the extension will be used outside, the cord must be suitable for outdoor use. Any cord marked as outdoor can also be used for indoor work. The letters "WA" on the cord jacket indicate that the cord is suitable for outdoor use.

An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size.

Important: Servicing

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by Black & Decker Service Centers or other qualified service organizations, always using Black & Decker replacement parts.

To determine the minimum wire size required, refer to the chart below.

NAMEPLATE RATING-AMPS	CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS							
	25	50	75	100	125	150	175	200
0 - 10.0	18	18	16	16	14	14	12	12
10.1 - 13.0	16	16	14	14	14	12	12	12
13.1 - 15.0	14	14	12	12	12	12	12	—

Before using an extension cord, inspect it for loose or exposed wires, damaged insulation, and defective fittings. Make any needed repairs or replace the cord if necessary. Black & Decker has extension cords available that are U.L. listed for outdoor use.

Connect to a supply circuit protected by a circuit breaker or time-delay fuse.

INDEX	
ITEM	PAGE
Alignment Guide For Accurate Cutting	20-22
Assembly	7-10
Attachments and Accessories	24-26
Basic Cuts	16-18
Caution To Follow When Using Lower Guard	5
Checks and Adjustments To Ensure Accuracy	10-13
Dado Cuts	19
Disc Sanding	18
Extension Cords	27
Folding For Storage	19
Grounding Instructions	5
Home Use Warranty (A Limited Warranty)	28
Maintenance (General)	20
Maintenance and Operation	5
Making a Trial Cut	14
Operating Adjustments of Basic Machine	15
Removal of Saw Blade	18
Rules For Safer Operation of Stationary Power Tools	4
Sanding	18
Saw Brake	14
Scales Location and Adjustment of	13
Servicing	27
Shaping/Joining Cuts	18-19
Table Top	14
The Saw Blade Guard	14
Trouble Shooting Chart - Motor	23
Unpacking: Carton Contents	6