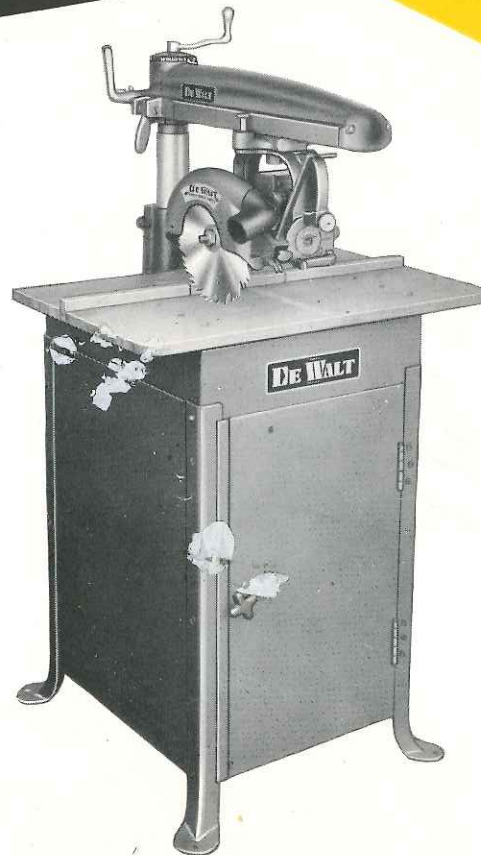


Instructions given in this manual
also apply to
Model GW DeWalt

INSTRUCTION BOOK



DeWALT INC. • LANCASTER, PENNSYLVANIA, U. S. A.

SUBSIDIARY OF AMERICAN MACHINE & FOUNDRY COMPANY

Introduction

The DeWalt Cutting Machine you are about to operate culminates the progress made in woodworking machinery design and manufacture during the past decade. In developing this modern machine, we are greatly indebted to practical users, like yourself, who told us what they needed in an "all purpose" machine . . . then we had the finest machine tool engineering talent to design it. Today . . . your DeWalt machine is manufactured to do its various cutting jobs with a precision heretofore unknown.

ONE DeWalt machine is actually MANY machines combined in a compact, flexible unit . . . the number of its operations limited only by the ingenuity of the operator himself. Any ordinary workman can quickly learn to master its simple operating features, and attains maximum operating efficiency in relatively short time.

To handle this machine, all you have to do is remember that its flexible operation is based on three simple radial adjustments. The arm can be

swung horizontally through 360° around its column . . . the motor yoke can be revolved horizontally through 360° under its roller carriage . . . and the motor can be tilted within the yoke to any angle desired. These three adjustments enable you to easily place the cutting tool in any position.

With so flexible a machine, you'll soon be performing operations which you had never thought possible . . . perhaps duplicated in no other installation, because of the special nature of your job. But . . . you may not be interested in a variety of operations . . . have just one operation to perform. The DeWalt will perform any one of its many operations as efficiently as any manually-fed, single-purpose machine. And if a change in your design or a change in your method is effected, the DeWalt can be changed quickly, and perform with equal efficiency on another job.

Follow the pages . . . see how easily this modern machine can be operated . . . and what saving can be effected in your setup time.

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The Floor Space Required

The floor space required for the installation of the Model GW, GS and MMB varies according to the model machine you decide to use.

The floor space required for the installation of the Model MMB and the Model GS is 18" x 21½".

The floor space required for the installation of the Model GW is 26" x 34".

To Uncrate the Machine

To uncrate the machine, begin by removing the top and the sides of the crate. Then unbolt the table frame, which is held to the crate by the bolts located at both ends of the frame. In a separate box, enclosed in the crate, is the saw carriage, motor switch and saw guard. If you ordered any tools or accessories, they would be found in the same box. The machine legs are strapped inside the crate.

Recommended Wire Sizes

To obtain the maximum efficiency from your DeWalt motor, the wire from the source of power to the machine should be a number twelve (12) size (B & S Gauge).

To Put Legs on the Machine

To put legs on the Model GW machine, pull the motor to the end of the arm and lock it in that position. Then turn the arm and lock it in the posi-

tion shown in figure 1. With the arm in that position, it will be easiest to tilt the machine so the legs can be put on it. Tilt the table until it rests on the floor and you can bolt legs A and B to the table. Then reverse the position of the arm. Raise the table and securely prop the unsupported end with a wooden brace. With the machine in that position, securely bolt legs C and D to the machine frame.

To Install the Saw Carriage in the Arm

To install the saw carriage in the arm, remove the arm end plate and front stop bolt from the end of the arm. The machined ways inside the arm (Figure 2) should be thoroughly cleaned and grease and oil removed from them. THE WAYS SHOULD BE KEPT IN THAT CONDITION DURING THE ENTIRE LIFE OF THE MACHINE. GREASE AND OIL SHOULD NOT BE USED ON THE WAYS. CARBON TETRACHLORIDE IS THE BEST CLEANSER TO USE INSIDE THE WAYS.

After the ways have been wiped, hold the yoke handle of the saw carriage (Figure 2) with your right hand and support the carriage with your left hand. Insert the roller head assembly into the arm. Tilt the rip lock (D) until it does not interfere with the insertion of the roller head assembly. Replace the arm end plate and the stop bolt.

Recommended Fuses

30 amp. fuses should be used with 1 h.p. motors.
25 amp. fuses should be used with ½ h.p. motors.

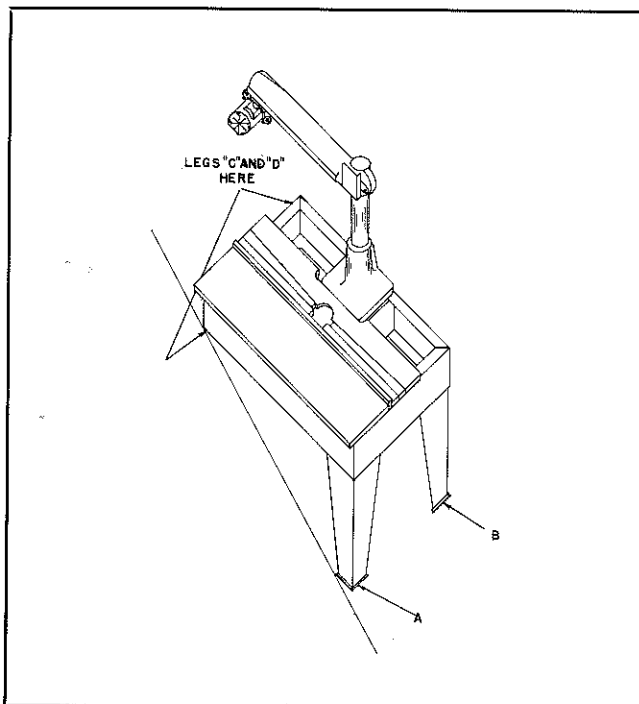


FIGURE 1

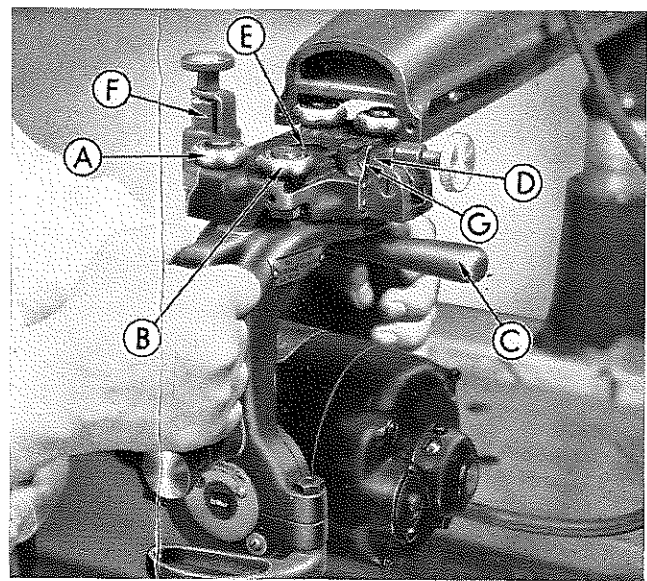


FIGURE 2

A—Ball Bearing
(on permanent studs)
B—Ball Bearing
(on eccentric shaft)
C—Yoke Clamp Handle

D—Rip Lock Assembly ("C" type)
E—King Bolt
F—Swivel Latch Assembly
G—Rip Scale Pointer

To Check Arbor Rotation

To check the rotation of the arbor, a precaution that must be taken before you operate the saw, remove the arbor nut and arbor collar. Then turn on the starting switch. The rotation of the arbor must be **CLOCKWISE**. If the rotation of the motor is not as it should be, the incoming wires are, in all probability, not properly hooked up to the switch box. To change the rotation of a three phase motor, reverse any two of the wires leading into the switch box.

To Place the Saw Blade on the Arbor

After you have checked the rotation of the arbor, place an arbor collar on the arbor in such a way that the recessed side of the collar will be against the saw blade when you put it on the arbor. Then place the saw blade on the arbor. Figure 9 will serve to show you the direction in which the teeth of the saw blade must point when the saw blade is in the proper operating position. Then place a second arbor collar, recessed side against the saw blade on the arbor. Then tighten the arbor nut, which has a left-hand thread.

To Adjust the Saw Guard

To adjust the saw guard, loosen the wing nut that holds the guard to the bracket, slide the guard to the desired position and tighten the wing nut.

To Confine Sawdust

To confine sawdust, construct a dust hood similar to the dust hood (B) shown in figure 3. The dust hood was designed to confine a large percentage of the sawdust that normally results from the opera-

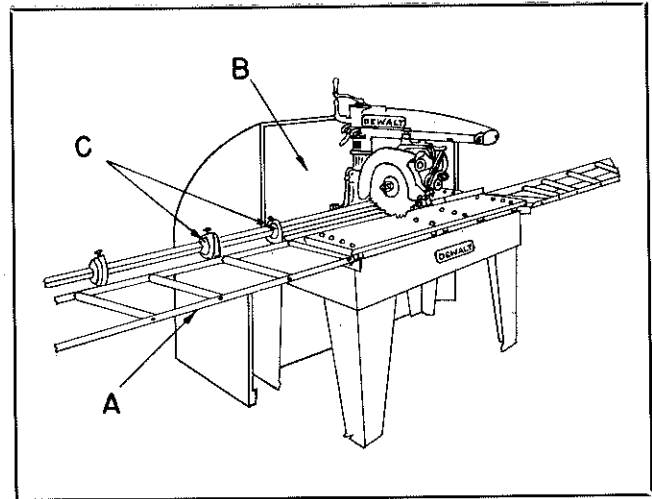


FIGURE 3

tion of a DeWalt Radial Arm Saw. For further information about the construction of a dust hood such as the one shown in figure 3, write to Department D, DeWalt Inc., Lancaster, Pennsylvania.

NOTE

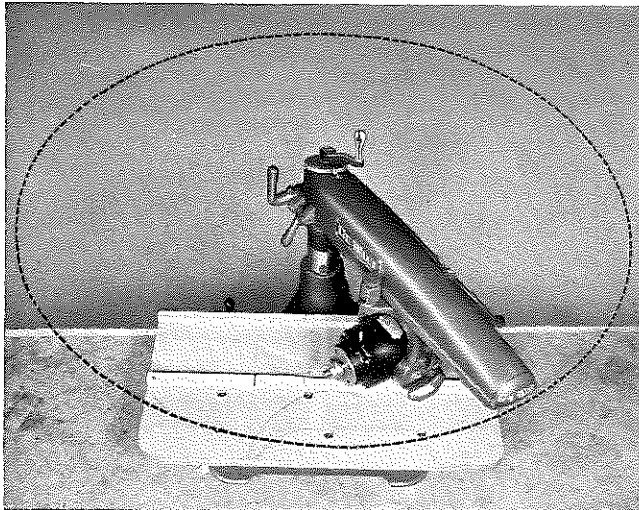
Your DeWalt Radial Arm Saw should now be set-up and ready to be operated. The first two pages of this manual should have shown you how to do that. However, now that you have finished with that fundamental job, do not put this book aside or forget about it. Remember that this manual has another important—a money saving—use. The next few pages of this manual show you how to maintain your DeWalt in the perfect mechanical condition you have a right to expect from it.

CAUTIONS

1. Always feed material from the side opposite the anti-kickback device. **Observe the caution tag on the guard.**
2. Always use the anti-kickback attachment when ripping.
3. Be sure that the electrical current being used is the current specified on the motor plate.
4. Before operating the machine, be sure that all clamp handles are tight.
5. Keep the saw blade sharp and properly filed.
6. The guard should be adjusted to clear the material by approximately $\frac{3}{8}$ " on the in-feed side.
7. Material must be held firmly against the fixed guide strip during all operations.

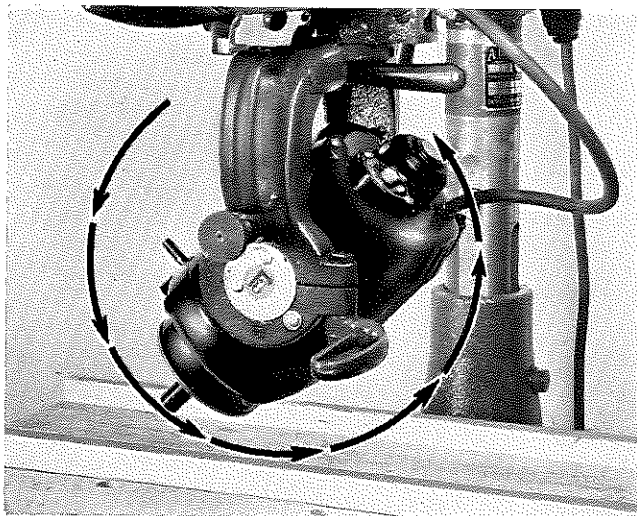
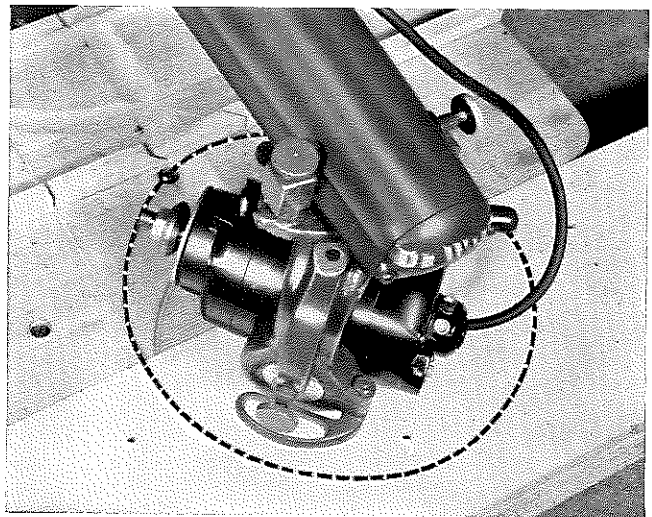
OPERATING INSTRUCTIONS

Before operating the DeWalt, clean dust and dirt from the saw blade or other tools and from the arbor face and collar. Then mount the tool for clockwise rotation when facing the arbor.



Swinging the Arm for Mitering

For angle cutting, release the arm clamp handle and the miter latch handle and push the arm to the desired angle. Slots have been milled on the column flange for locating positions for straight cut-off and 45° positions to the right or left of the cut-off. The arm, however, can be locked at any angle by tightening the arm clamp handle.

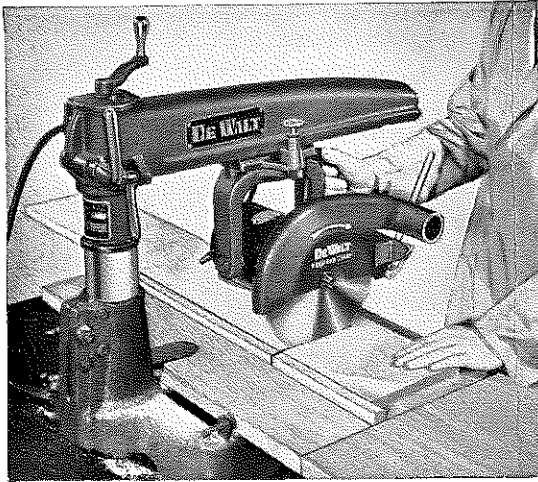


Tilting the Motor for Beveling

For all bevel operations, and for shaping and routing, release the bevel clamp and disengage the bevel plunger pin. Then, with hands on each end of the motor, tilt it to the desired angle, which can be determined on the etched dial indicator. Locating holes have been provided in the dial plate to locate the bevel plunger pin for quick location of 45° and 90° angles, but the motor can be held rigid at any angle by tightening the bevel clamp handle.

Swiveling the Yoke for Ripping

For ripping, ploughing and like operations, pull the saw out to the full extent of the arm, release the swivel clamp by pulling the yoke clamp handle forward, disengage the swivel finder pin by lifting the finder pin knob which is located on the left side of the roller head. Swing the yoke to the left so that the saw blade is parallel with the guide strip and between the guide strip and the motor. The swivel finder pin should then be pushed down so that it engages in the hole in the yoke, after which the swivel clamp should be tightened. Set the saw blade to the desired distance from the guide strip and lock the carriage with the rip lock. For wide ripping, swivel the yoke to the right, so that the motor is between the guide strip and the saw blade. Another locating hole in the yoke secures the yoke and roller head in exact position. **WHEN MACHINE IS SET IN THIS POSITION MATERIAL MUST BE FED FROM THE OPPOSITE END OF THE TABLE.** Before ripping the material adjust the guard downward until it just clears the top of the material, after which the KICKBACK should be set in proper position.

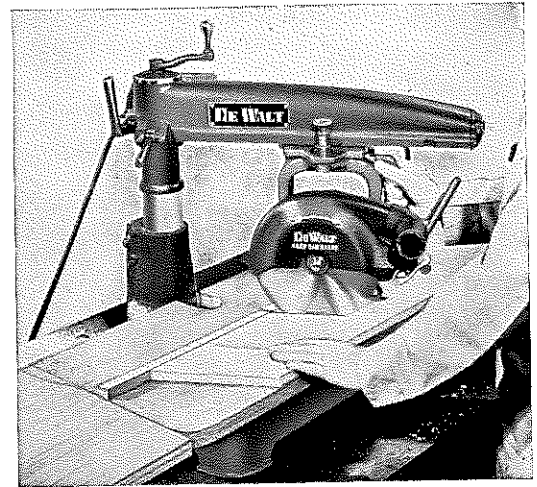


← CROSS CUT

Your first operation will undoubtedly be the ordinary, straight cross cut. The arm must be at right angles with the guide strip . . . indicated as 0° on the miter scale. First, locate miter latch in the column slot at 0° position . . . then securely lock arm with arm clamp handle. Place material on work table . . . against guide strip . . . draw saw blade across for the cut. After completing cut . . . return saw blade behind guide strip . . . then continue this routine for successive straight cross cuts.

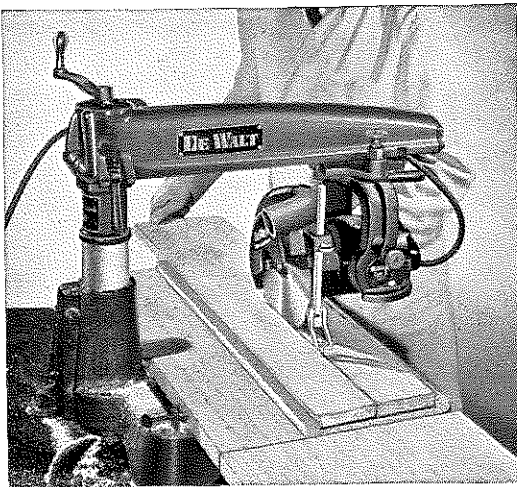
MITER →

The next operation is the common miter or angle cut . . . easily made by you as the arm can be swung 360° around the column. Release the arm clamp and miter latch . . . swing the arm to desired angle . . . using the easily visible miter scale. For 45° miter cuts, right or left, locate the arm latch in the column slot for quick setup. Securely lock arm with clamp handle . . . start cutting. The cutting routine is same as cross cut.



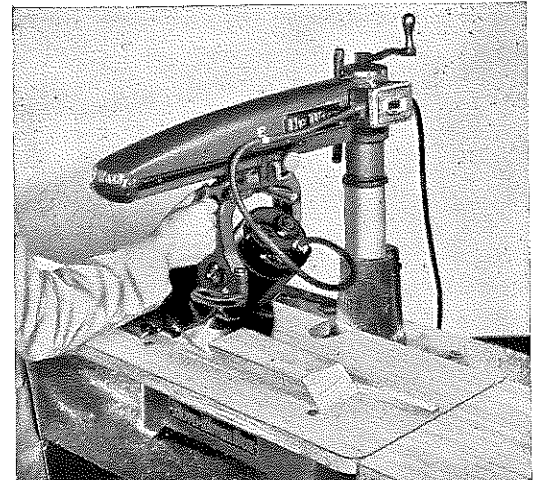
← RIP

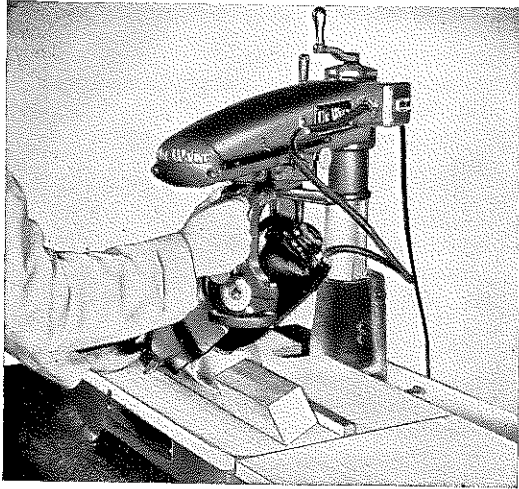
There's nothing complicated about setting up the machine for your ripping operations. Arm must be in CROSS CUT position and clamped in place. Pull entire motor carriage to front of arm . . . lift spring latch and release swivel clamp . . . so that you can revolve the motor yoke 360° under its carriage. Holes are drilled in the yoke to receive spring latch and hold motor in cut-off, in-rip, or out-rip positions. Use rip scale on the arm . . . locate position desired . . . lock swivel clamp and secure rip lock on the arm. Adjust safety guard so that in-feed end almost touches material . . . then lower kick-back device on opposite end so that it holds down material and prevents kick-back. Keep material against guide strip and feed evenly into saw blade . . . give it a chance to cut. **DO NOT FEED MATERIAL INTO KICK-BACK END OF SAW GUARD . . . FOLLOW CAUTION TAG INSTRUCTIONS**



BEVEL CUT-OFF →

This angle cut-off appears difficult . . . but it's no trick at all for you to tilt the motor with machine in CROSS CUT position. Put machine in CROSS CUT position. Elevate the column by rotating crank on top of column. Release spring bevel latch and bevel clamp handle . . . turn the motor in the yoke . . . follow the easily visible dial scale to set angle. The spring latch quickly locates 45° or 90° positions. If any other angle is desired . . . the bevel clamp will hold the motor rigidly in position. Lower the column . . . make sure saw blade cleanly cuts through material. Follow same routine as cross-cut . . . for successive bevel cuts.



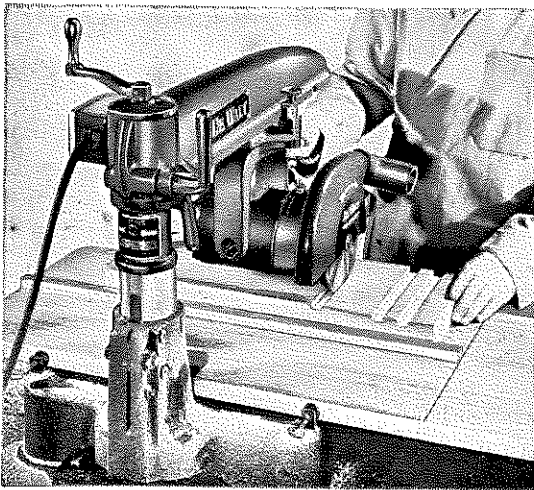
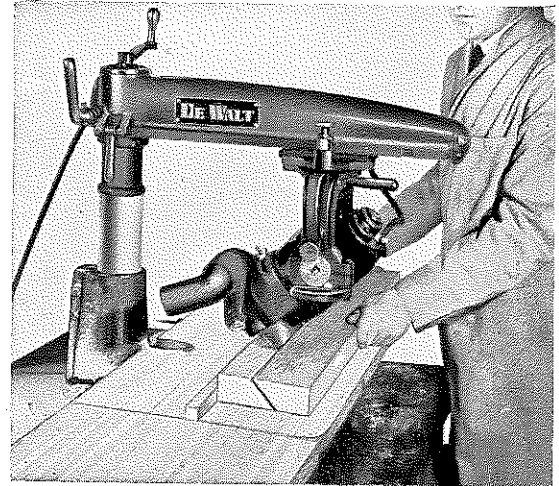


← DOUBLE MITER

Here's a cut that looks tough . . . but you can make it without much effort. First, set up machine for BEVEL CUT-OFF. Release arm latch and clamp handle . . . swing the arm into desired miter position . . . following the same routine as miter cuts. The double miter cut is simply a combination bevel and miter cut. Follow normal operating routine described under CROSS CUT. DeWalt is the first machine designed to make this cut in one operation from above the material. BRING SAW BLADE ACROSS MATERIAL STEADILY . . . GIVE IT A CHANCE TO CUT.

BEVEL RIP →

This cut is simply angle ripping . . . you tilt the motor with the machine in RIP position. Elevate the column by rotating the handle. Release spring bevel latch and bevel clamp handle . . . turn motor within yoke to desired angle. If 45° position wanted, the spring latch quickly locates it . . . if any other angle . . . set it and securely clamp motor in place with bevel clamp handle. Adjust guard on in-feed end so that it almost touches material . . . but do not adjust kick-back device. Use a stick as a "pusher" to prevent kick-back of material. ALWAYS GIVE SAW BLADE CHANCE TO CUT . . . SO FEED STEADILY.

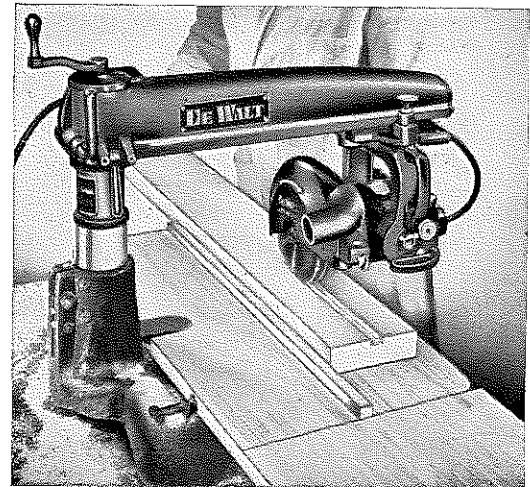


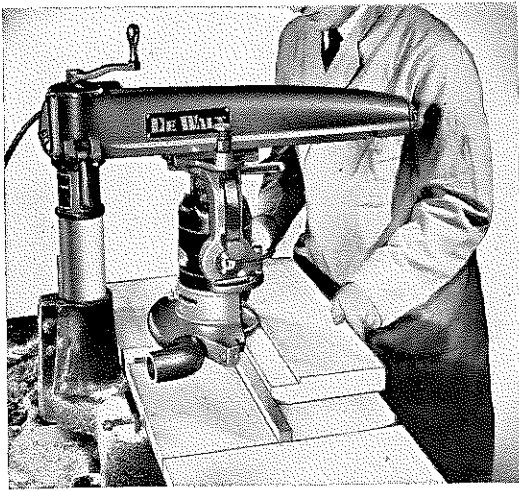
← DADO

For dading . . . you simply remove saw blade from motor arbor and mount dado head (a tool composed of several cutter knives). To determine depth of cut . . . lower column until dado just touches top of material. Remove material . . . continue to lower dado head for depth by rotating crank handle . . . each complete turn lowers column 1/8". For straight dado follow cross cut routine . . . for angle dado follow routine described for miter cuts. (Cuts from 1/16" to any width desired can be made.) Any width of cut can be made by successfully moving dado head . . . back and forth over material . . . it can be operated in either direction.

PLOUGH →

You've already mastered RIPPING . . . all you do now is replace saw blade with dado head for ploughing. After you place in desired position . . . securely clamp rip lock on arm . . . elevate dado so that it clears material. Push away material . . . start lowering dado to depth wanted . . . each turn of elevating crank lowers it 1/8" . . . three turns means 3/8" depth, etc. Adjust safety guard so that in-feed end almost touches material . . . then position kick-back device on opposite end to hold down and safeguard against kick-back of material. FEED MATERIAL STEADILY . . . HOLD AGAINST GUIDE STRIP . . . FOR BEST CUTTING RESULTS.



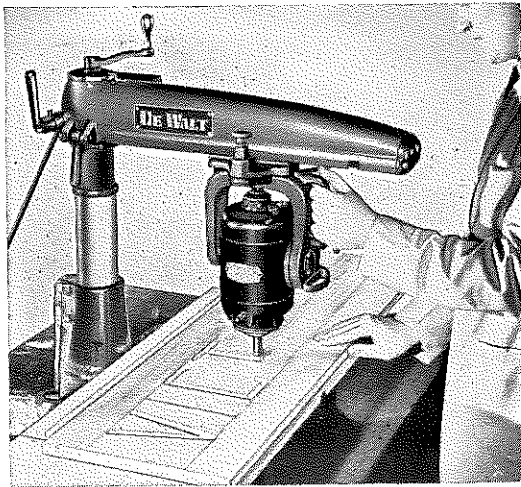
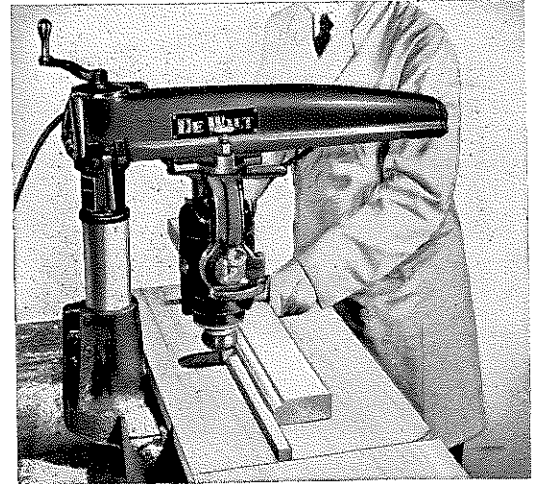


← RABBET

This cut is also made with dado head . . . and should be no problem for you to make. Follow set-up described for PLOUGH. Position motor behind guide strip . . . elevate the column until you can place motor in vertical 90° position. Do this by releasing spring bevel latch and clamp . . . locate at 90° slot and clamp securely. Lower dado head until it touches material . . . push back dado and continue to lower to desired depth . . . each turn of crank lowers dado 1/8". Bring out dado in front of guide strip for width wanted. Adjust dust spout on safety guard. FEED MATERIAL EVENLY AND STEADILY . . . KEEP AGAINST GUIDE STRIP . . . FOR ACCURATE WORK.

SHAPE →

After you have mounted shaper cutter head on saw arbor . . . you're ready to set up for shaping. Use the same setup as RABBET. Because of a vertical and horizontal adjustment of the machine, any part of the shaper cutter can be used or eliminated. Adjust machine so that desired form or shape is profiled on end of material. Lock motor carriage by securing rip lock on arm. Feed material into shaper cutter . . . steadily and against guide strip . . . with the grain for best results.



← ROUT

You may have many jobs that could keep you busy routing. Get the proper size router bit with 3/8" L. H. threaded shank and screw into threaded saw arbor. Place machine in same position as SHAPE operation. Move guide strip toward rear of work table for more working space. Lower router bit into material by revolving the column elevating handle. Lock router bit in one position by securing rip lock on the arm and do **free hand routing** by moving material . . . or, securely nail material to work table . . . release rip lock and move router bit to follow layout marks on material by swinging arm and moving motor carriage when necessary. Templates can also be used.

TENON →

Seemingly difficult, at first . . . but you'll soon find that you can quickly set-up for tenoning and expertly do this work. Insert spacing collar between dado knives for male tenon. Set-up same as RABBET operation. Make a wood holding device . . . nail or clamp one end to keep in position . . . pull tenon cutters forward SLOWLY until tenon cut is completed. Female tenon can be made with proper width tenon cutter in similar manner.



ALIGNING INSTRUCTIONS

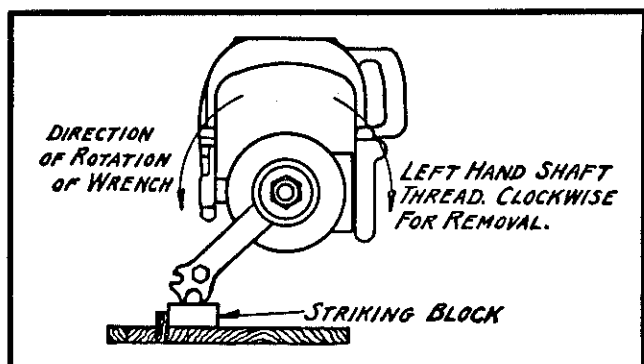
Every DeWalt is thoroughly tested . . . inspected . . . and accurately aligned before leaving the factory. However, moving parts will wear . . . and the abrasive action of dust and dirt adds to this wear. Rough handling during transportation can also throw the machine out of alignment. Eventually adjustment and re-alignment are necessary in any machine to maintain accuracy . . . regardless of the care with which the machine is manufactured.

Provision is made for complete re-alignment . . .

so that the DeWalt can be kept accurate for its entire life. The arm can be kept at right angles to the guide strip . . . the saw blade can be kept parallel to the arm . . . the saw blade can be kept perpendicular to the table top . . . the roller carriage can be kept aligned, each of its roller bearings making contact the full length of the arm . . . and the motor can be kept parallel to the table top. In fact, all flexible parts are adjustable . . . insuring permanent alignment of the machine . . . and maximum efficiency of operation.

Directions for Removing Arbor Nut

1. Fit spanner wrench to hex. arbor nut.
2. Place "striking block" (preferably wood) as shown.
3. Throw wrench in direction shown. Counter-clockwise. Inertia of rotor will loosen arbor nut.
4. Don't wedge anything against the fan.



Relocating Guide Fence for Various Work

When the DeWalt is tested at the factory . . . the guide fence is located in the most frequently used position on the work table. This will take care of normal cutting jobs. Refer to Figures 2 and 5.

If you want maximum cross cut on 1" material or wider bevel miter capacity . . . loosen clamp screws at rear of table top and relocate guide fence behind 2" spacer board. Be sure to tighten the clamp screws after this is done. Refer to Figures 3 and 6.

For maximum width in ripping . . . you loosen the clamp screws and relocate the guide fence by placing it at rear of table top and against column base. Tighten the clamp screws to rigidly hold guide fence in position. Refer to Figures 4 and 7.

Checking the Guide Fence for Accuracy

For accurate work the guide fence must be straight. This wood guide strip is inspected with a Master straight edge at the factory before shipment and should arrive in perfect condition. If the machine has been exposed to the weather it is possible that the wood table top parts may be warped so that the guide fence is no longer straight.

It can be made straight by planing and sanding

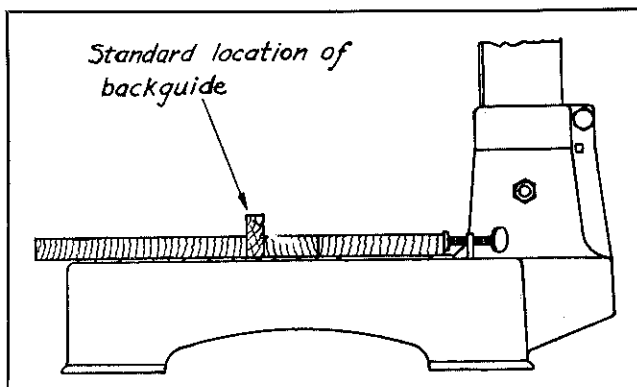


FIGURE 2—MOTO-MITER BOX

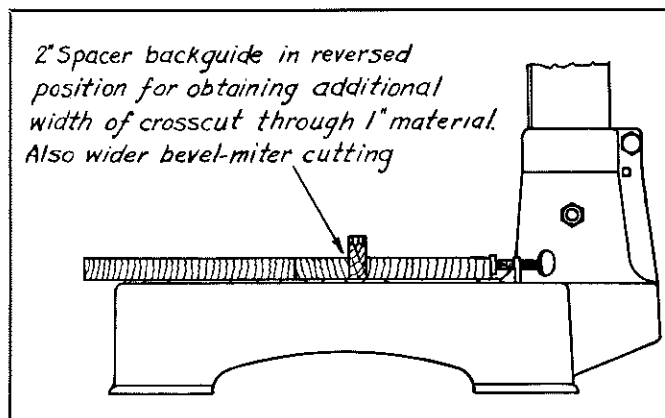


FIGURE 3—MOTO-MITER BOX

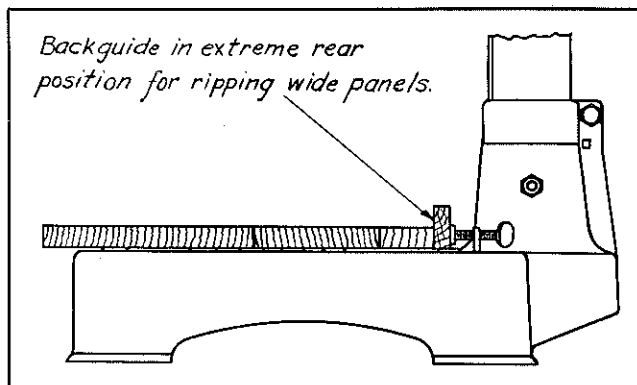


FIGURE 4—MOTO-MITER BOX

... and checked to a straight edge or square before proceeding with other adjustments. Be sure that the clamp screws at the rear of the table are tightened. The main table board must be flat. If a straight edge shows this to be warped ... it should be planed if necessary when you level the work table top.

Leveling the Work Table Top to the Arm

The arm tracks must be parallel to the table top at all points. A parallel condition assures uniform depth of cut ... especially in dadoing, etc. If the work table top ever gets out of level on the Model GS or GW ... you can adjust this. Refer to Figure 5 (B) and (C).

1. Insert steel bar (about 1/2" x 1/2" x 12") between saw arbor collars in place of saw blade.

2. Bring motor to forward position on the arm ... swing the bar and adjust table top until the tip of the bar when oscillated barely scrapes the table. Repeat at back section of table board ... to the right and left ... without changing elevation.

3. Adjust for height in various positions until they are all even ... by loosening the jam nuts under table channel frame (top flange) ... then you raise or lower the jack nuts as required.

Be sure to re-tighten the jam nuts under the table flange after making adjustments to hold table board level. Since this adjustment is not available on Portable MB ... you level the table top by planing and sanding the high points after checking all positions with steel bar.

Squaring the Saw Blade with the Table Work Top

If you ever notice that the saw blade is not cutting square ... especially evident in cutting thick material ... you can readily adjust it. Refer to Figure 8.

1. Make sure that the work table top is level at all points.

2. Place steel square (C) against flat of saw blade. The square should be spaced between saw gullets and not against saw teeth.

3. Remove etched dial plate (A) from motor yoke so you can get at the two adjusting socket screws (G).

4. Since the socket screw (G) holds the steel dial plate (H) to motor you can quickly release motor for adjusting saw blade to square by loosening socket screws (G) with socket wrench (B).

5. Firmly grasp motor with both hands and tilt it until saw blade is parallel to the upright steel square (C).

After the saw blade is squared with the table work top be sure to tighten the socket screws (G) with socket wrench (B). Replace dial plate (A).

Squaring Saw Travel with the Guide Fence

Place wide board on table top against guide fence and cut across with saw blade. Check material for accuracy with steel square. If the saw blade does not cut square ... this means that the arm is out of alignment with the guide fence. To adjust this condition refer to Figure 9.

1. Loosen both arm clamp handle (E) and miter latch (C).

2. Opposite adjusting screws (D) are locked in position by set screws (A). Loosen screws (A) with wrench (B).

3. Lay steel square (M) on table against guide fence. Move the saw carriage and blade forward along steel square to determine which way the arm must be adjusted.

4. If saw blade moves toward steel square as you come forward ... loosen adjusting screw (D) in rear (left) with screw driver and tighten adjusting screw (D) in front (right) to bring arm parallel to steel square. Arm will be parallel when saw travels evenly with steel square for its entire length.

5. If saw blade moves away from steel square as you come forward ... you make opposite adjust-

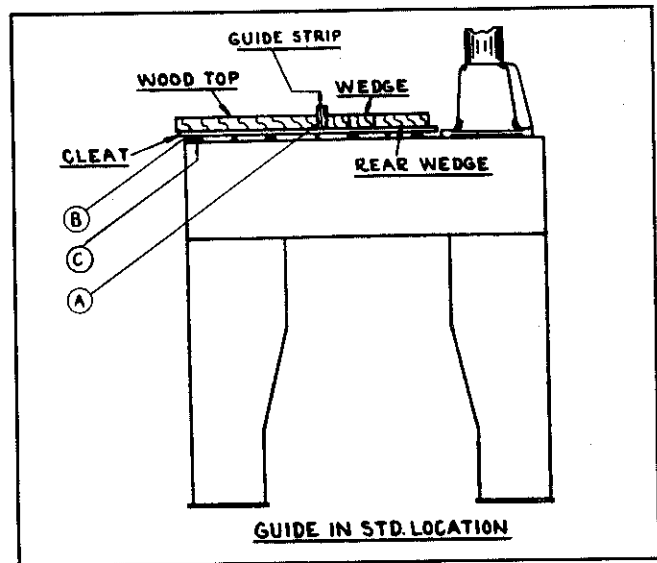


FIGURE 5—Model GS

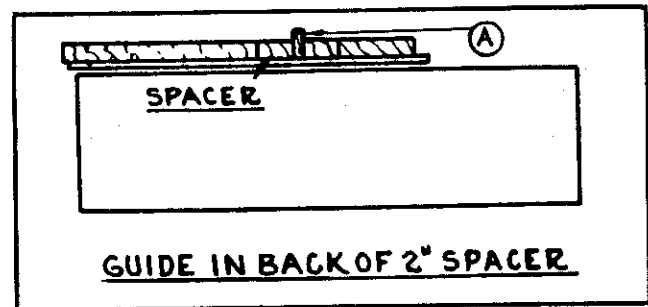


FIGURE 6—Model GS

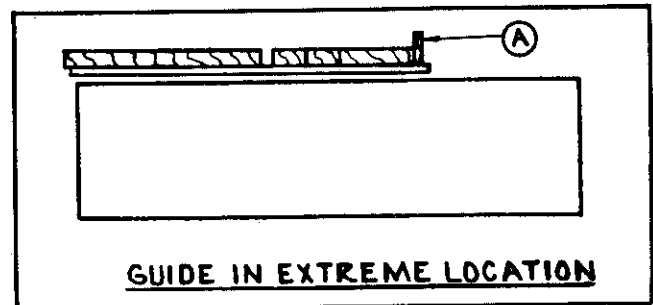


FIGURE 7—Model GS

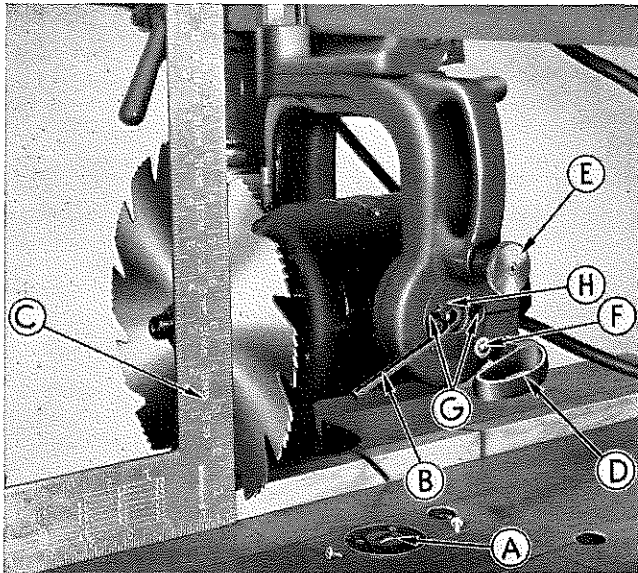


FIGURE 8

A—Etched Dial Plate
B—Socket Wrench
C—Steel Square
D—Bevel Clamp Handle

E—Bevel Latch Assembly
F—Dial Scale Button
G—Socket Screws
H—Steel Dial Plate

ments. Loosen adjusting screw (D) in front (right) with screw driver and tighten adjusting screw (D) in rear (left).

When saw travel is parallel to square . . . lock adjusting screws (D) in front and rear by tightening both Allen set screws (A) with set screw wrench (B). Engage miter latch (C) and arm clamp handle (E).

Adjusting the Base to the Column

If at any time you have some side motion at the end of the arm after the arm clamp handle (E) is tightened . . . this indicates that there is play between the column and base. Refer to Figs. 9 and 10.

1. Loosen base pinch bolt (G) . . . all hex jam nuts (H) . . . and all set screws (I).

2. Rotate elevating crank handle (K) to raise or lower the column. Tighten base pinch bolt (G) so column still raises or lowers freely. There should be no excess play between column and base after you have tightened this base pinch bolt . . . yet the column must be so set that it elevates evenly.

3. In the base slot is an adjusting gib (L). This gib must be secured against column key (2D) to prevent side motion in the arm. If this gib (L) is loose . . . you tighten the top set screws (J) with wrench (I) until there is no play (side motion) in the column. Then lock all hex jam nuts (H) securely with open end wrench.

Adjusting Arm Clamp Handle

The arm clamp handle rigidly holds arm in position for straight or miter cuts. When tightened in position the arm clamp handle should be upright as shown in Figure 11 (C). If this becomes worn so that it goes beyond the vertical position . . . you relocate it. See Figure 11.

1. Remove arm clamp handle stop (A) and lift miter latch (B) upward against side of arm.

2. Unwind arm clamp handle (C) by turning it clockwise (to the right). Make about three or four complete turns of this handle.

3. Push back arm clamp bolt (D) from its hex socket so that the hex head can be turned.

4. Turn the hex clamp screw (D) about one-sixth turn counterclockwise to tighten arm clamp handle.

5. Put hex screw head (D) back in hex socket . . . retighten arm clamp handle (C) in upright position . . . and insert arm clamp handle stop (A).

Adjusting Ball Bearing Saw Carriage to the Arm Tracks

Smooth, even travel of saw carriage inside the cantilever arm assures fast, accurate cutting. The saw carriage is mounted on four ball bearings . . . two of which are on permanent, non-adjustable studs and the other two are on eccentric shafts whose movement is controlled by 5/16" Allen socket screws. If these ball bearings do not roll evenly on tracks . . . you can adjust them. Refer to Figure 12.

1. Remove arm end plate from arm and bring saw carriage forward. Swivel motor into RIP position to get at the adjustments.

2. Loosen set screws (A) in front and rear of saw carriage since they lock eccentric shaft (F).

3. Loosen the hex jam nuts (B) in front and rear of saw carriage so that eccentric shaft (F) can be turned in its socket.

4. Insert socket wrench (C) in eccentric shaft (F) and turn this shaft until the ball bearing it controls just touches arm track. Do not tighten this bearing too much. Repeat on ball bearing (D) in rear of saw carriage.

The ball bearings (D) in front and rear of saw carriage should now roll smoothly inside the arm. Tighten up the hex jam nuts (B) and lock the set screws (A) on both ends of the saw carriage.

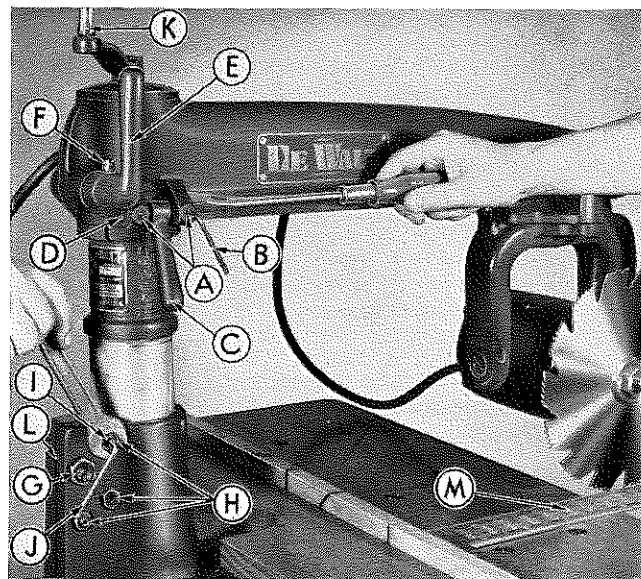


FIGURE 9

A—1/4" Allen Set Screws
B—1/4" Allen Set Screw Wrench
C—Miter Latch
D—Miter Latch Adjusting Screws
E—Arm Clamp Handle
F—Arm Clamp Handle Stop
G—3/8" Base Pinch Bolt

H—5/16" Hex Jam Nuts
I—5/16" Allen Set Screws
J—5/16" Allen Set Screw Wrench
K—Elevating Quick Action Handle
L—Column Key Gib
M—Steel Square

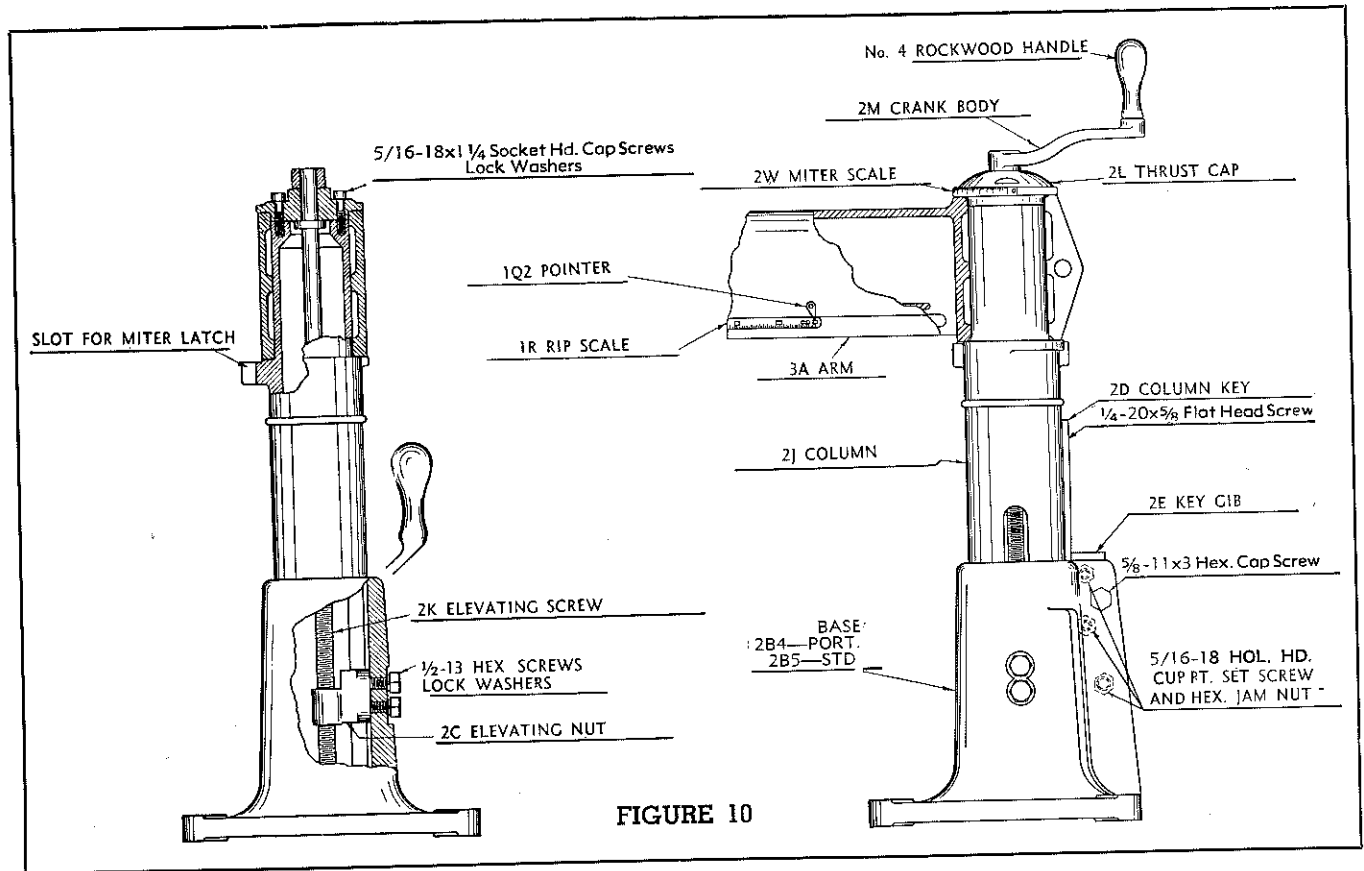


FIGURE 10

Keeping the Saw Travel Parallel to the Arm

In cutting through material it is important to have the plane of the saw blade coincide exactly with the line of its movement. In other words . . . the back or up-moving saw teeth must follow exactly in the kerf formed by the front and down-moving saw teeth which do the actual cutting.

To make sure the saw blade is cutting exactly parallel to the arm . . . place a fairly wide board on the table against the guide fence. Cut all the way across with the front saw teeth . . . but not all the way through the rear saw teeth so that if they are "dragging" they will leave their mark on either side of the cut material. If pronounced marks are left by rear saw teeth . . . adjustment is needed. See Figure 14.

1. If the saw blade is "heeling" on the left side of the cut . . . loosen set screw (C) and tighten set screw (A) using wrench (F).
2. If the saw blade is "heeling" on the right side of the cut . . . loosen set screw (A) and tighten set screw (C) with wrench (F).
3. After adjustments 1 and 2 are made . . . the "heeling" may reappear when you place saw blade in bevel cutting position in which case . . .
 - a. Loosen set screws (A and C) . . . each about one-sixth turn and tighten set screw (B) if the "heeling" is on the material on the bottom side of the saw cut.
 - b. Loosen set screw (B) about one-sixth turn and tighten set screws (A and C) evenly if the "heeling" appears on the upper side of the cut.

Adjusting Bevel Clamp Handle to Motor

The purpose of the bevel clamp handle is to hold the motor rigidly in its yoke at any angle even though the bevel latch may be disengaged from the locating holes in dial plate. Bevel latch only locates 90° cut-off and 45° bevel cut-off positions.

If the bevel clamp handle becomes loose and fails

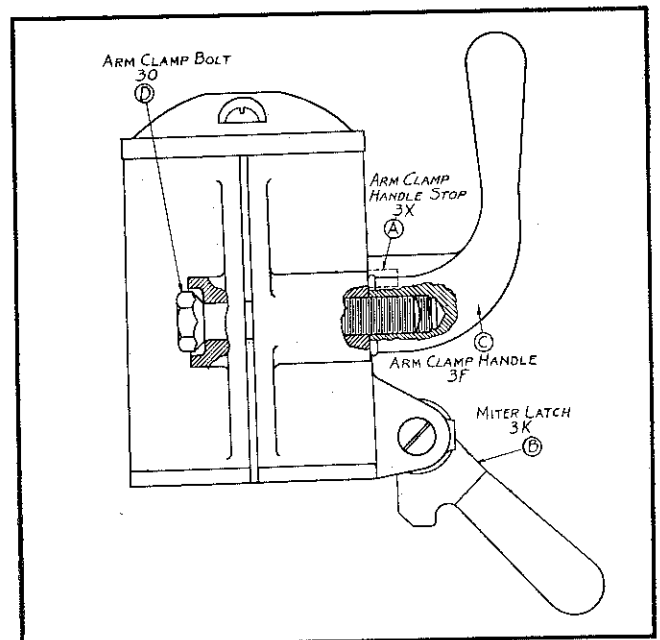


FIGURE 11

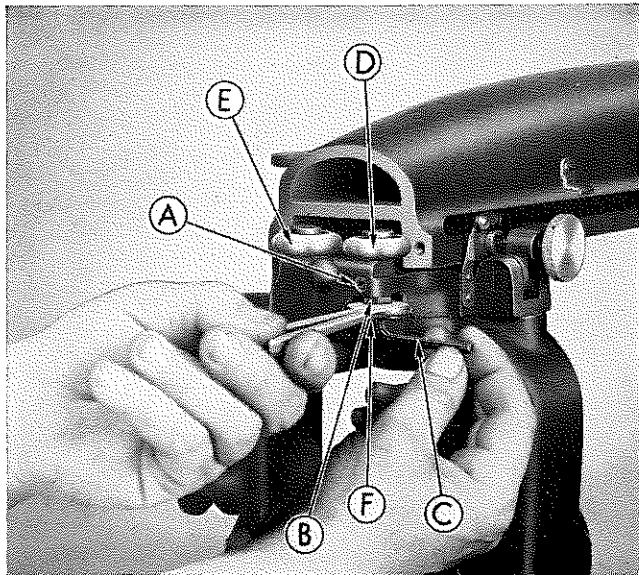


FIGURE 12

- | | |
|---|----------------------|
| A— $\frac{1}{4}$ " Allen Set Screw | E—Ball Bearing |
| B— $\frac{3}{8}$ -24 Hex Jam Nut | (on permanent studs) |
| C— $\frac{5}{16}$ " Allen Socket Wrench | F—Eccentric Shaft |
| D—Ball Bearing | G—Set Screw Wrench |
| (on eccentric shaft) | |

to hold the motor in place desired . . . you can easily adjust it. See Figure 15.

1. Loosen bevel clamp handle (5H) and hex jam nut (G).

2. Turn adjusting bolt (H) clockwise (to the right) until the bevel clamp handle rigidly clamps motor in its yoke.

3. Be sure to tighten hex jam nut (G) after adjustment is made.

Adjusting Yoke Clamp Handle

There should be no play between saw carriage and motor yoke assembly. The yoke clamp handle . . . in conjunction with king bolt . . . securely clamps the saw carriage to the yoke. If the yoke clamp handle becomes loose and does not work properly . . . it can be quickly adjusted. See Fig. 16.

1. Remove saw carriage and motor yoke completely from arm.

2. Dog point set screw (D) is located in milled slot on the side of the king bolt (B) . . . its purpose is to keep the king bolt from turning when yoke clamp handle is loosened or tightened. Remove set screw from slot in king bolt with wrench (A).

3. Turn king bolt (B) about one-sixth of a turn in clockwise direction so that the dog set screw may be located in the next slot in the king bolt. Tighten dog set screw in position to hold king bolt.

4. This dog set screw should be drawn up tight and then backed off slightly so that the king bolt can slide freely up and down as the yoke clamp handle is loosened or tightened.

Basic Facts to Keep in Mind

1. Make sure the current available agrees with the current characteristics specified on the motor name plate. Consult power company if necessary.

2. Do not mount saw blade on the motor until proper connection is made and the motor shaft rotates in the clockwise (to the right) direction.

3. The ball bearings in the motor are grease-packed and life-sealed. No further lubrication is necessary for the life of the bearing.

4. A competent electrician should connect a volt meter in the line at the switch terminals and measure the voltage when the motor is idle and while it is running under load.

5. The voltage should not exceed 5 per cent of the motor name plate reading, otherwise the motor will run hot, damaging the stator or field winding.

6. If the voltage is 10 per cent below the motor name plate reading, steps should be taken to get full voltage in the line.

7. Use care and judgment in ripping operation. If the motor speed decreases more than 175 R.P.M. it indicates that the motor is being overloaded. This may be due to low voltage . . . improperly filed saw blades . . . or the material may be fed too fast into the saw.

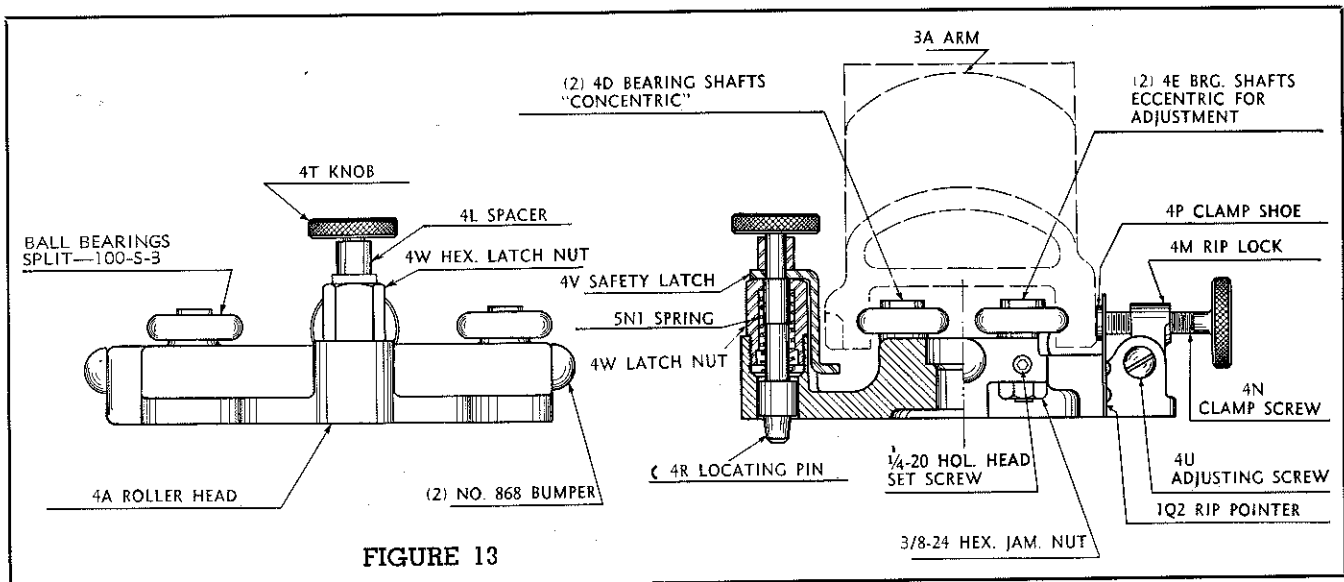


FIGURE 13

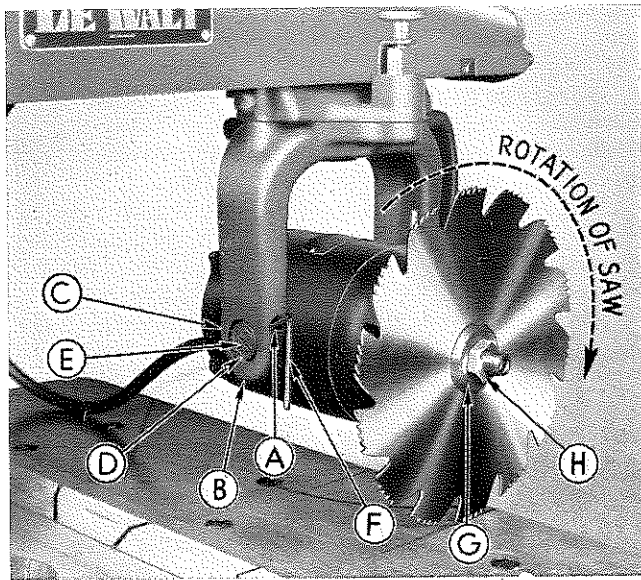


FIGURE 14

- | | |
|--|--------------------------------|
| A—5/16" Allen Set Screw (saw side) | D—Rear Trunnion Stud Bushing |
| B—5/16" Allen Set Screw (bottom yoke trunnion) | E—Rear Trunnion Stud |
| C—5/16" Allen Set Screw (opposite saw side) | F—5/16" Allen Set Screw Wrench |
| | G—Saw Arbor Collar |
| | H—Saw Arbor Nut |

8. On single phase motors do not attempt more than TWENTY STARTS PER HOUR otherwise the motor will heat up.

9. Do not force material into the saw or stall the saw. This causes the centrifugal switch inside the motor to close the circuit of the starting winding and will reconnect the starting winding. This condition will heat up starting winding and eventually burn out. If this should happen the motor will not start properly.

10. Motor must attain full speed in three seconds or less so that starting winding may be disconnected

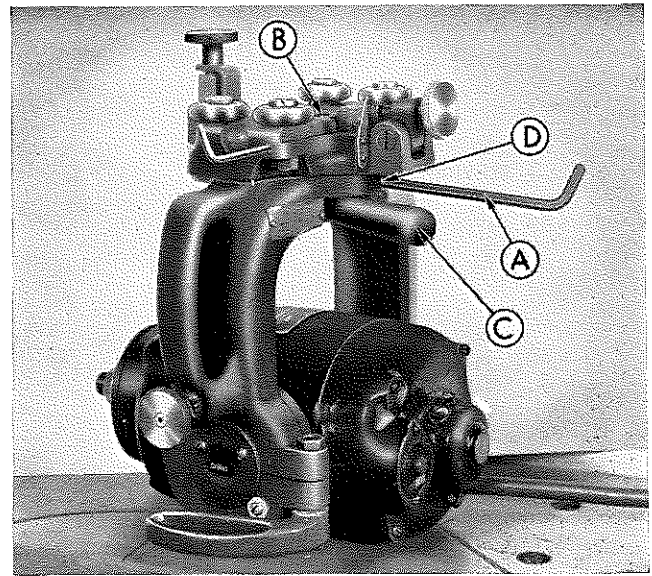


FIGURE 16

- | |
|--|
| A—5/16" Allen Set Screw Wrench |
| B—King Bolt (5Q in Fig. 15) |
| C—Yoke Clamp Handle (5R in Fig. 15) |
| D—5/16" Dog Point Set Screw (I in Fig. 15) |

from the motor circuit by motor relay. The starting winding must never be permitted to remain in the motor circuit longer than three seconds at a time, otherwise it will burn out.

11. The tracks inside the arm should be wiped clean before starting to operate each morning. You can occasionally clean these tracks with lacquer thinner to remove grease and dirt. Never oil or grease these tracks under any circumstances.

12. About once a month you can oil moving parts to minimize normal wear due to friction. Apply good machine oil to elevating screw, miter latch, swivel latch, bevel latch and other parts.

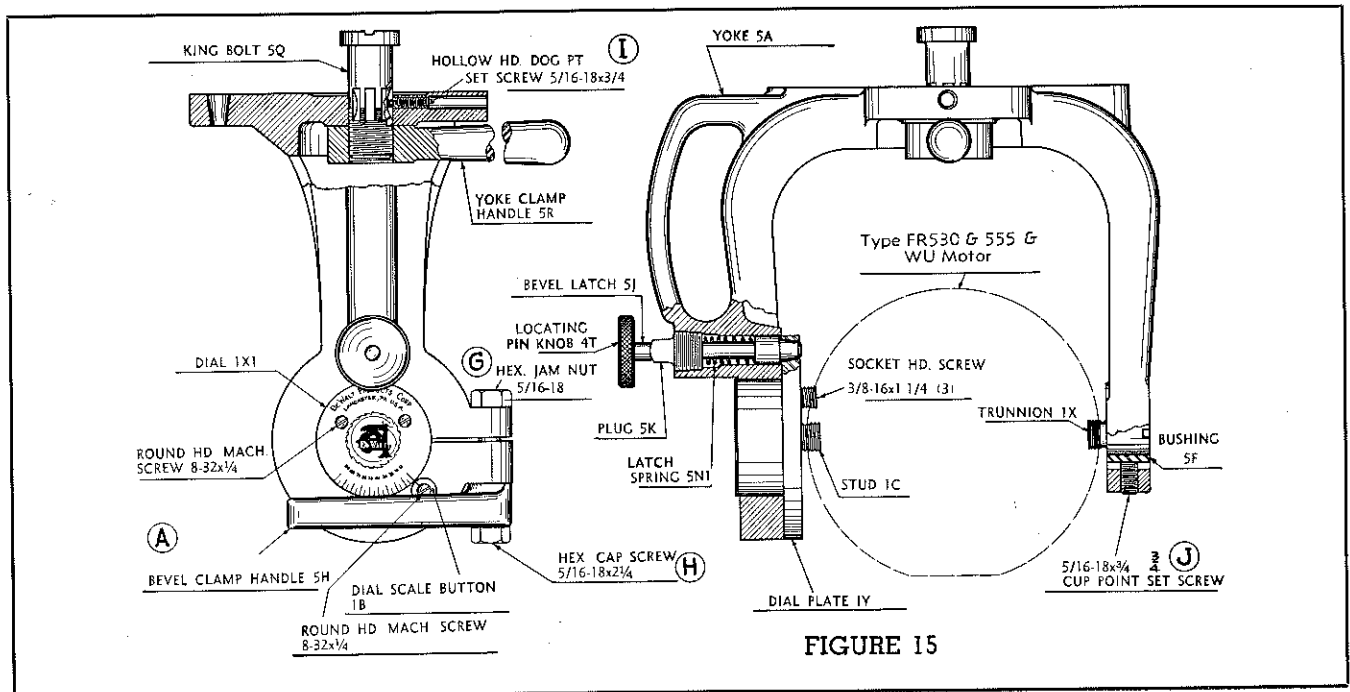


FIGURE 15

These Tools Make Your

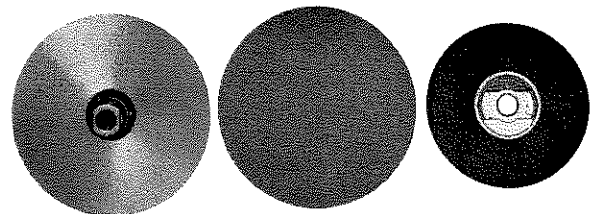
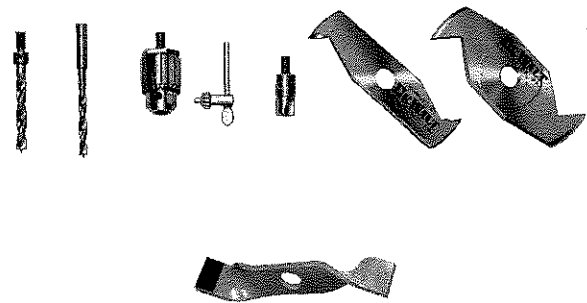
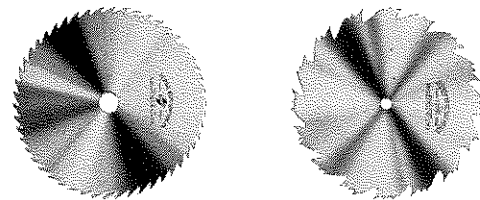
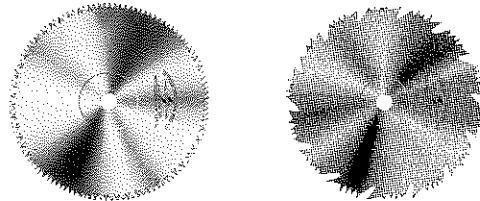
DE WALT

A Many Purpose Machine

The four most commonly used saw blades are the combination, rip, hollow-ground miter, and the metal cutting blade. Each type is designed and built for definite cutting requirements. You can use each of these saws on your DeWalt. Exact manufacturing methods of heat control insure correct hardening and tempering of these saw blades. They are easy to refit; they are hard and tough. The teeth are re-set with ease and are easily sharpened, because they are uniform in temper throughout. DeWalt machines are furnished with only the finest quality saw blades.

With DeWalt Dado Heads you are sure of accuracy and perfect grooves. They operate at any width, with or across the grain. DeWalt Dado Heads come to you ready for use, jointed and filed. You simply add or remove inside cutters and spacers to obtain any width of cut.

Shaper cutters, cove and bead cutters, sash and cabinet cutters, disc sanders, boring bits, etc.—in fact, any reasonable number of tools can be used on your machine. The full-floating DeWalt arbor, carrying all saws and cutters above the table top, eliminates the need of innumerable sizes of throat plates. Arbors can be adjusted to either end of the motor shaft of most models. This enables you to use larger cutters or Dado Heads whenever you need them.



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METAL

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DeWalt machines are warranted to be free from defects in material and workmanship, this warranty and the liabilities hereunder being limited to replacing or repairing, without charge, such parts as may prove thus defective and be returned to us within the period of one year from the date of Delivery to Customer, except as to electrical parts. Long experience has demonstrated that electrical defects, if they exist, are disclosed in a short period of operation, and that most electrical failures are caused by abuse or neglect; for these reasons electrical parts are warranted for a period of ninety days only. No guarantee is made on electrical parts unless operated on the proper and prescribed voltage, frequency and phase, and with the starting device prescribed or its equivalent.

Defective parts will be replaced within the warranty period without charge, if returned to the factory of the undersigned with transportation charges prepaid. Liability under this warranty shall cease if the damage or defect is found to have been caused by misuse, negligence or accident, or if the parts are repaired or altered outside our factory.

DEWALT Inc.
Paul Gardner
President

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Your Dealer is required to send a Warranty Registration Card to the factory which makes the above Warranty valid. Be sure your Dealer files your registration. Consult your Dealer for further information covering tools and attachments available for your DeWalt. For service or repair, consult your Dealer or write direct to the factory.