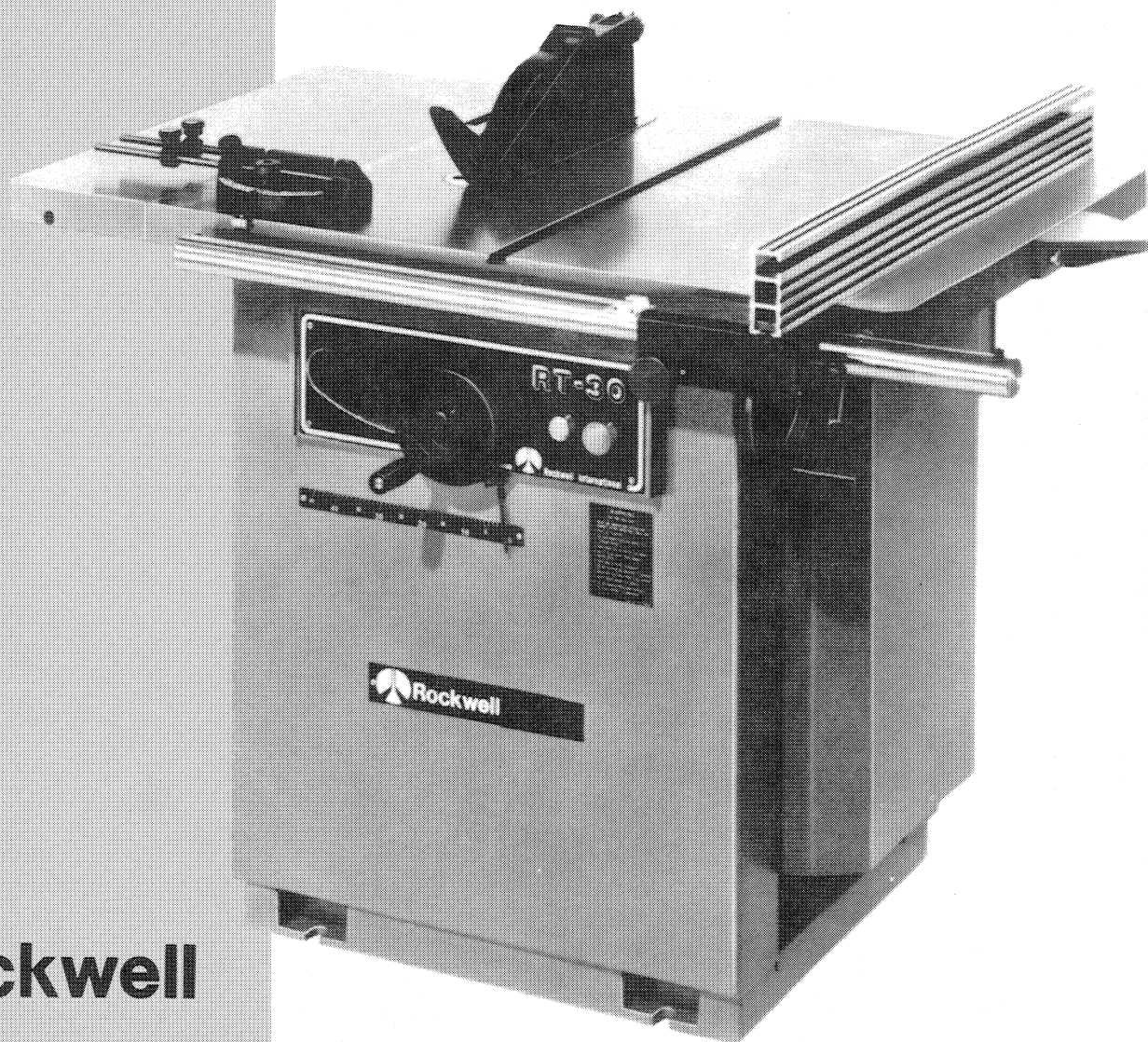


**Instruction
manual**

Rockwell 12" Tilting Arbor Saw



Model RT-30

IMPORTANT

As with all power tools there is a certain amount of hazard involved with the operator and his use of the tool. Using the tool with the respect and caution demanded as far as safety precautions are concerned will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or completely ignored, personal injury to the operator can develop.

There are also certain applications for which this tool was designed. Rockwell strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Rockwell and we have advised you.

ROCKWELL INTERNATIONAL
MANAGER OF PRODUCT SAFETY
POWER TOOL DIVISION
400 NORTH LEXINGTON AVENUE
PITTSBURGH, PENNSYLVANIA 15208

SAFETY RULES

1. READ THE INSTRUCTION MANUAL BEFORE OPERATING YOUR MACHINE.
2. IF YOU ARE NOT THOROUGHLY FAMILIAR WITH THE OPERATION OF CIRCULAR SAWS, OBTAIN ADVICE FROM YOUR SUPERVISOR, INSTRUCTOR OR OTHER QUALIFIED PERSON.
3. REMOVE TIE, RINGS, WATCH, AND OTHER JEWELRY, AND ROLL UP SLEEVES.
4. ALWAYS WEAR SAFETY GLASSES OR A FACE SHIELD.
5. MAKE SURE WIRING CODES AND RECOMMENDED ELECTRICAL CONNECTIONS ARE FOLLOWED AND THAT THE MACHINE IS PROPERLY GROUNDED.
6. MAKE ALL ADJUSTMENTS WITH THE POWER OFF.
7. KEEP SAW BLADE SHARP AND FREE OF ALL RUST AND PITCH.
8. GUARDS SHOULD BE IN PLACE AND USED AT ALL TIMES.
9. ALWAYS HOLD THE WORK FIRMLY AGAINST THE MITER GAGE OR FENCE.
10. ALWAYS USE A PUSH STICK FOR RIPPING NARROW STOCK.
11. STAND TO ONE SIDE, NOT IN LINE WITH THE SAW CUT WHEN RIPPING.
12. DISCONNECT SAW FROM POWER SOURCE WHEN MAKING REPAIRS.
13. SHUT OFF POWER AND CLEAN THE MACHINE BEFORE YOU LEAVE IT.

UNPACKING AND CLEANING

Remove the saw and all loose items from the crate. Remove the protective coating from the machined surfaces of the saw. This protective coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning cover table surface with a good quality paste wax. Fig. 2, illustrates the RT-30 12" Tilting Arbor Saw and Fig. 3, illustrates all the loose items removed from the crate. The loose items packed with the saw are shown as follows in Fig. 3.

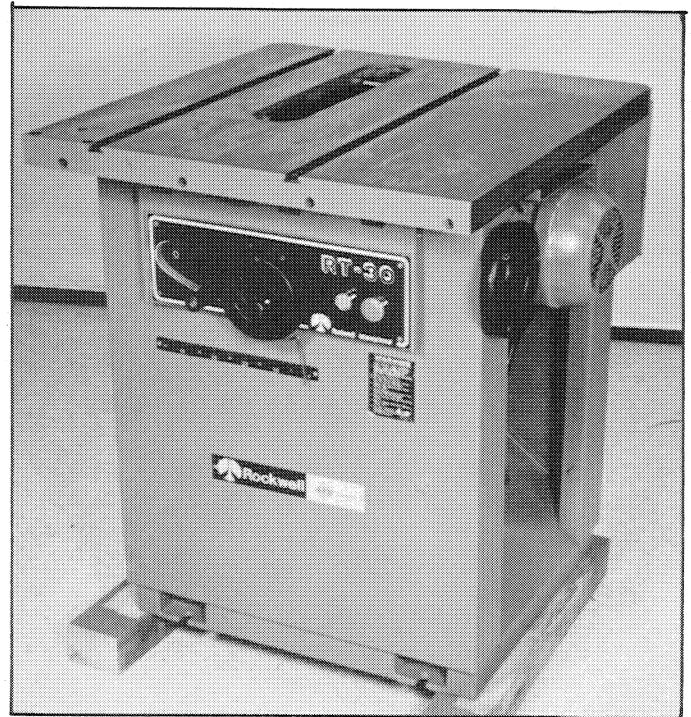


Fig. 2

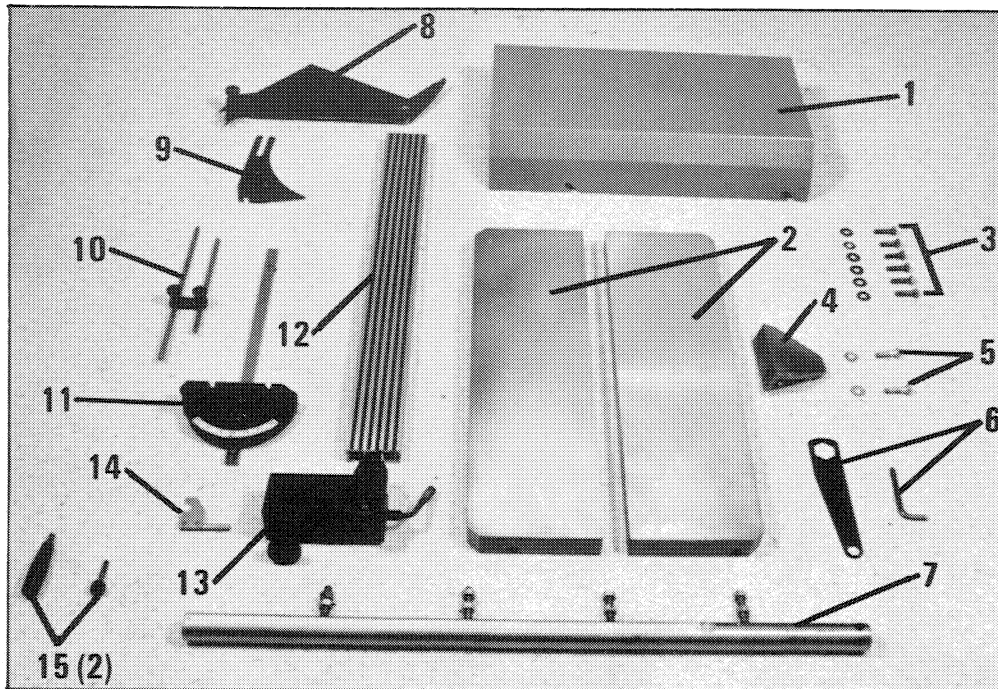


Fig. 3

- | | |
|---|---|
| 1 – Cabinet Side Cover | 9 – Splitter |
| 2 – Extension Wings | 10 – Miter Gage Stop Rods |
| 3 – Hardware for mounting Extension Wings | 11 – Miter Gage |
| 4 – Rip Fence Support Bracket | 12 – Rip Fence |
| 5 – Hardware for mounting Rip Fence Support Bracket | 13 – Rip Fence Body |
| 6 – Blade Mounting Wrenches | 14 – Rip Fence Pointer |
| 7 – Guide Rail | 15 – Hand Lever and Lock Screw for Blade Raising and Tilting Handwheels |
| 8 – Blade Guard | |

ELECTRICAL CONNECTIONS

Before connecting your machine to an electrical power system, make sure the motor rating agrees with the electrical system it is to be connected to.

The motor and controls supplied with the RT-30 12" Saw are wired for 230 Volts, Three Phase Operation. If you desire to operate your machine at 460 Volts, Three Phase Operation refer to the instructions under **CHANGING FROM 230 TO 460 VOLTS, THREE PHASE OPERATION.**

To connect power to your machine, proceed as follows for either 230 or 460 Volts, Three Phase Operation:

1. Remove the four screws (A) and the electrical control box cover (B) Fig. 4.

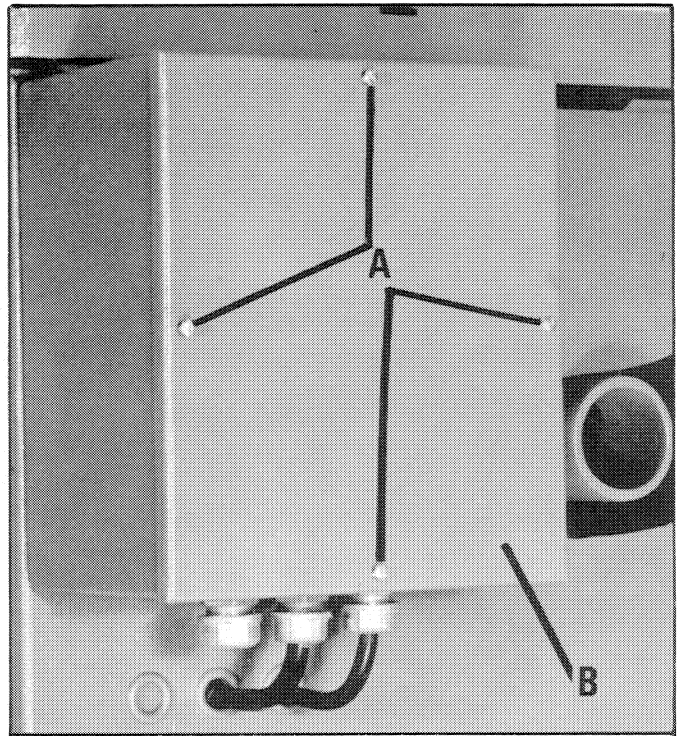


Fig. 4

2. Insert power line through hole (C) Fig. 5, and connect the three power lines to terminals L1, L2 and L3, shown at (D) and the green ground wire to the ground terminal (E). **IMPORTANT:** If after the machine is in operation the blade revolves in the wrong rotation, simply interchange any two of the three power lines that are connected to terminals (D) Fig. 5.

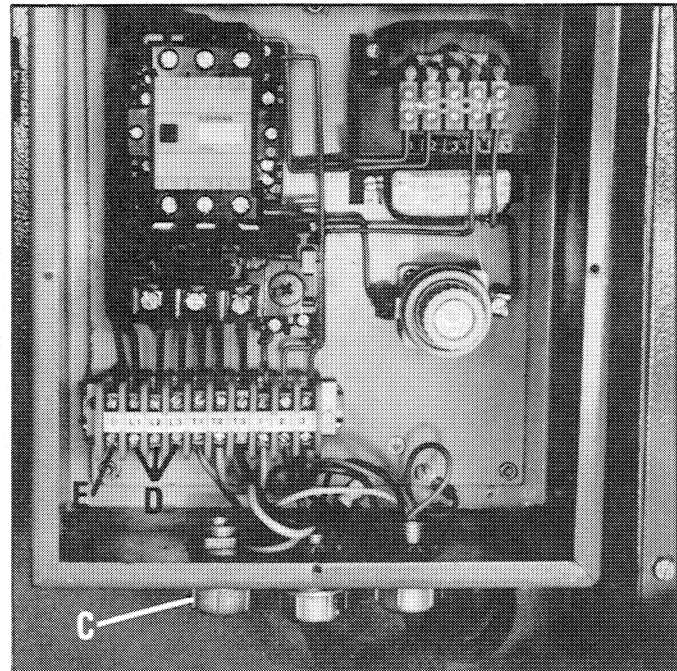


Fig. 5

CHANGING FROM 230 TO 460 VOLTS, THREE PHASE OPERATION

If you desire to change the voltage on your Three Phase Machine from 230 Volts to 460 Volts, proceed as follows:

1. Disconnect the machine from the power source.
2. Remove the four screws and cover from the electrical control box.
3. For 230 Volt operation, the primary wires (A) and (B) Fig. 6, are connected to terminals 1 and 2 of the transformer. For 460 Volt operation, simply remove the primary wire (B) from the terminal 2 and connect it to terminal 3.
4. The amp setting dial (C) Fig. 6, is set at 15 AMPS for 230 Volt operation. For 460 Volt operation, the amp setting dial (C) should be set at 10 AMPS.

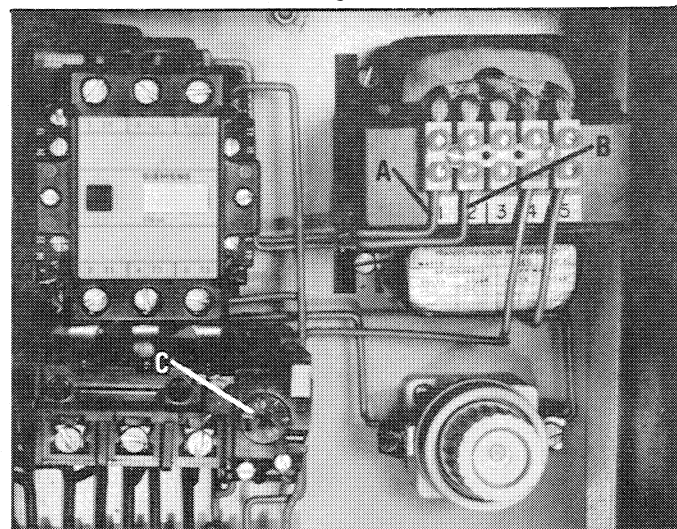


Fig. 6

5. Remove the motor junction box cover to expose motor wires and reconnect motor wires for 460 Volt operation. Fig. 7, illustrates the motor wire connections for 230 Volts and 460 Volts.

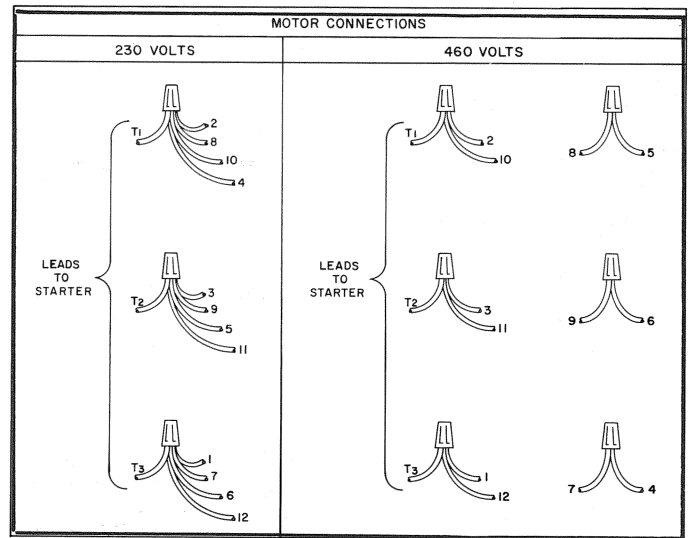


Fig. 7

ASSEMBLING BLADE RAISING AND TILTING HAND LEVERS

1. Assemble the blade raising and tilting hand levers (A) and lock screws (B) Fig. 9, to the two handwheels, as shown.

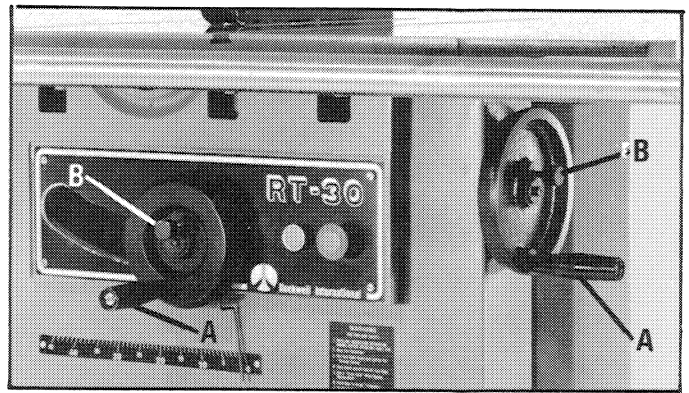


Fig. 9

ASSEMBLING EXTENSION WINGS

Your machine is supplied with two table extension wings that are to be assembled to the sides of the saw table. **NOTE:** The extension wing with the two tapped holes (A) Fig. 10, is to be assembled to the right hand side of the table. Assemble this extension wing (B) to the right hand side of the table using the three screws and washers (C) Fig. 10. Use a straight edge to level the extension wing with the table before tightening the three screws (C).

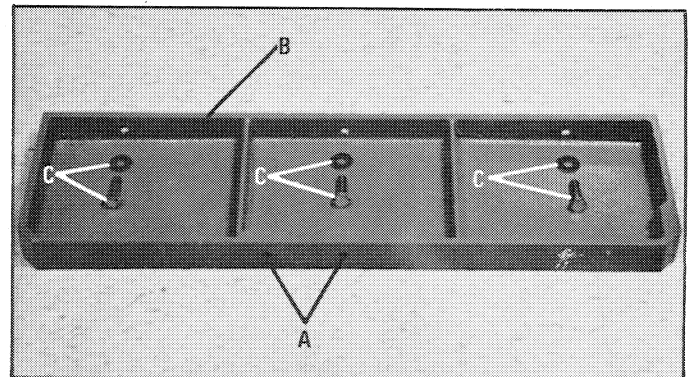


Fig. 10

Fig. 11, illustrates the right hand extension wing (B) assembled to the table.

Assemble the left hand extension wing in the same manner.

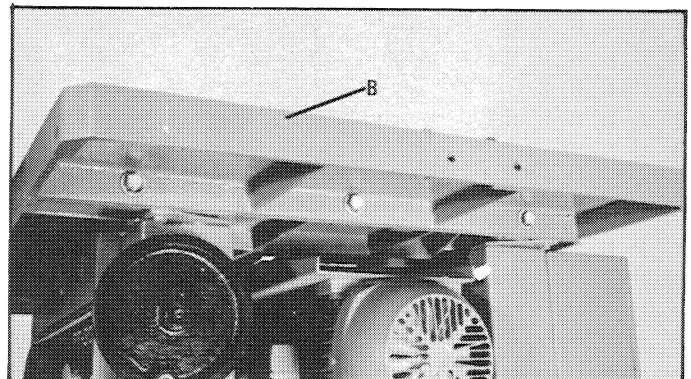


Fig. 11

ASSEMBLING RIP FENCE SUPPORT BRACKET

The rip fence support bracket (A) Fig. 12, is to be mounted to the two holes (B) on the side of the right extension wing using two screws and washers (C). Use a straight edge to level the support bracket (A) to the extension wing before tightening screws (C) Fig. 12.

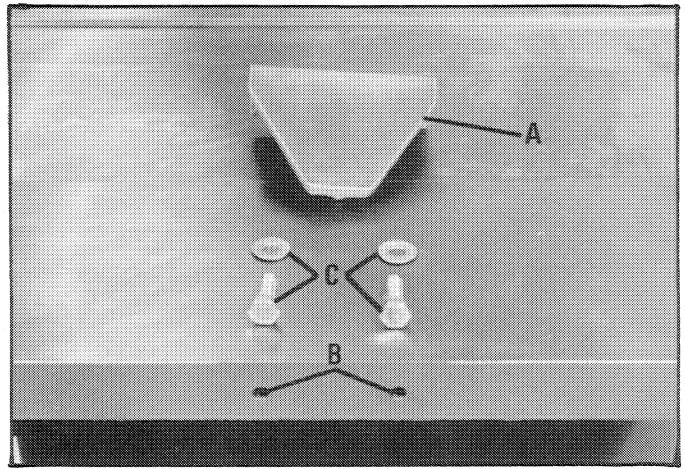


Fig. 12

Fig. 13 illustrates the support bracket (A) mounted to the right hand extension wing.

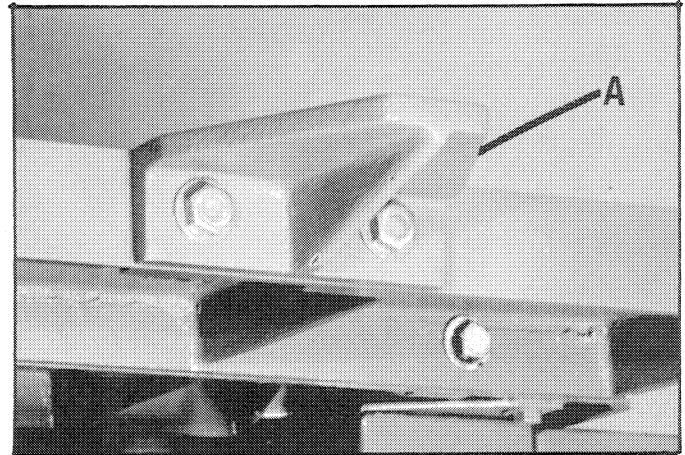


Fig. 13

ASSEMBLING RIP FENCE GUIDE RAIL

The rip fence guide rail (A) Fig. 14, is to be assembled to the three holes in the front of the saw table and the one hole in the front of the right extension wing, as shown. Nuts (B) Fig. 14, are positioned and fastened onto the guide rail screws at the factory to allow for proper alignment of the guide rail to the table. Fasten the guide rail to the table using the four nuts (C) Fig. 14.

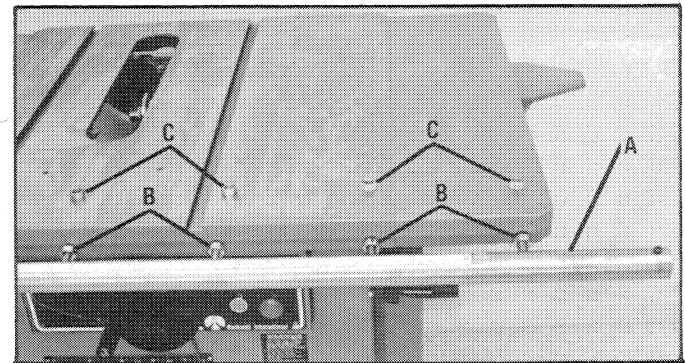


Fig. 14

ASSEMBLING RIP FENCE

The rip fence is to be assembled to the guide rail as follows:

1. Remove screw (A) Fig. 15, from end of guide rail.

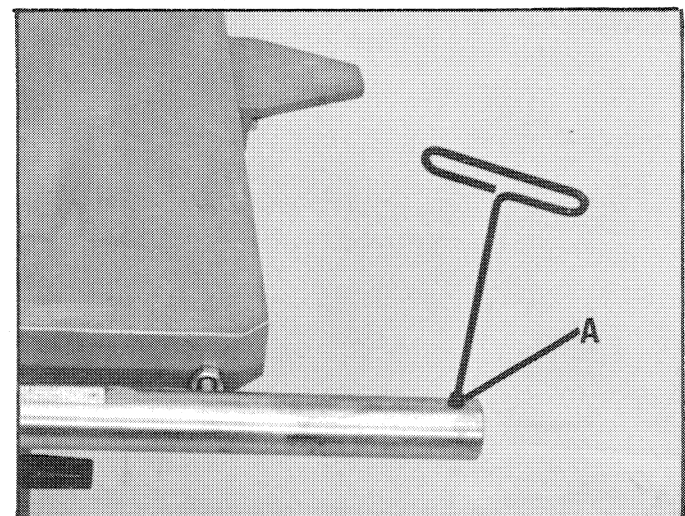


Fig. 15

2. Slide fence body (B) Fig. 16, onto end of guide rail (C) making sure gear (D) is engaged with teeth on bottom of guide rail, as shown.

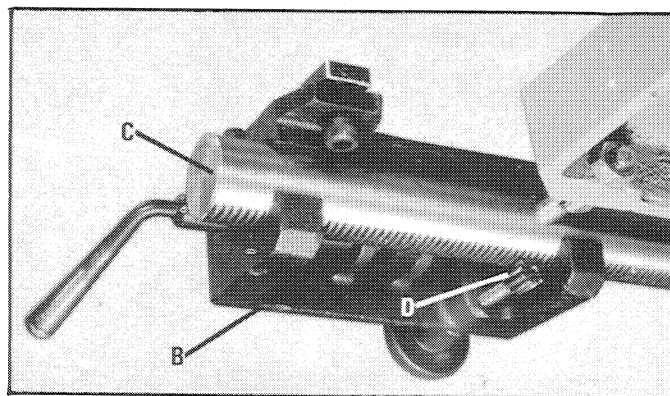


Fig. 16

3. Fig. 17, illustrates fence body (B) assembled to guide rail. Replace stop screw (A) Fig. 17, that was removed in STEP 1.

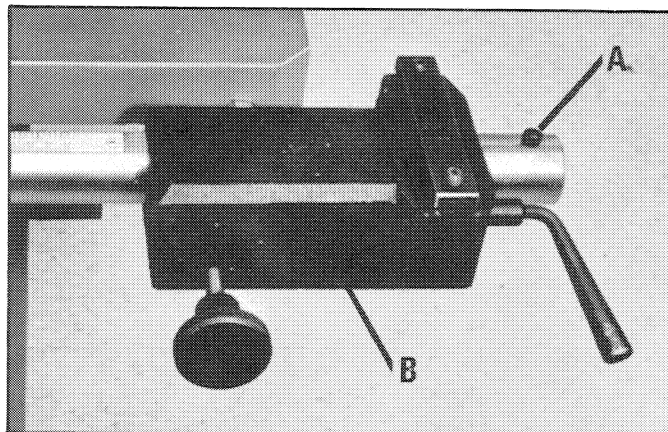


Fig. 17

4. Slide fence (E) Fig. 18, onto clamping plate (F). NOTE: Fence (E) can be assembled to the fence body in either the vertical or horizontal position.

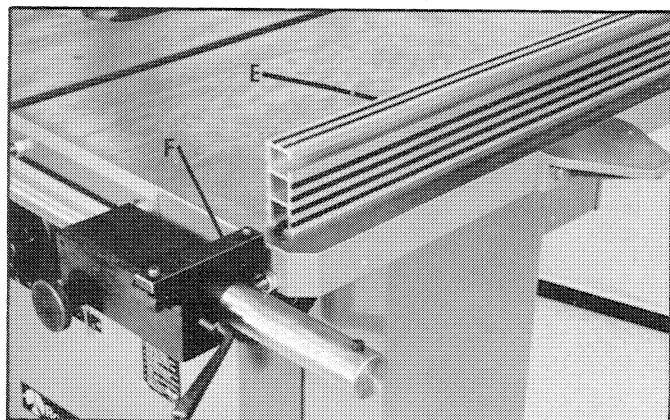


Fig. 18

5. Fig. 19 illustrates the fence (E) assembled to the fence body in the vertical position.

6. Push down on fence locking lever (G) Fig. 19, and move fence body until fence (E) is parallel with the miter gage slot (H).

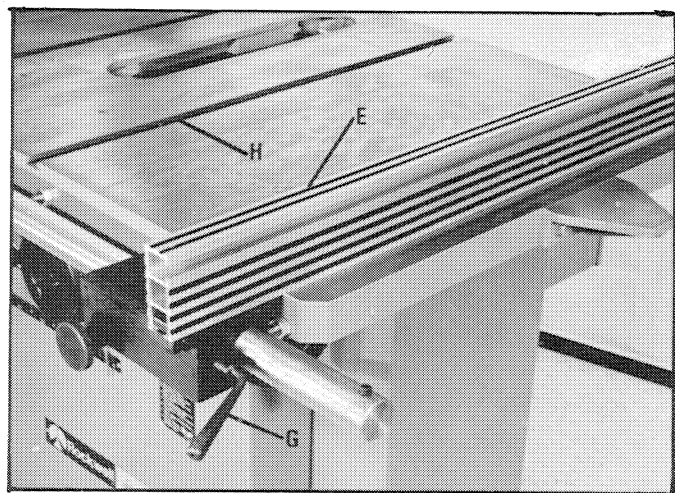


Fig. 19

7. Align the fence with the miter gage slot and tighten two screws (J) Fig. 20.

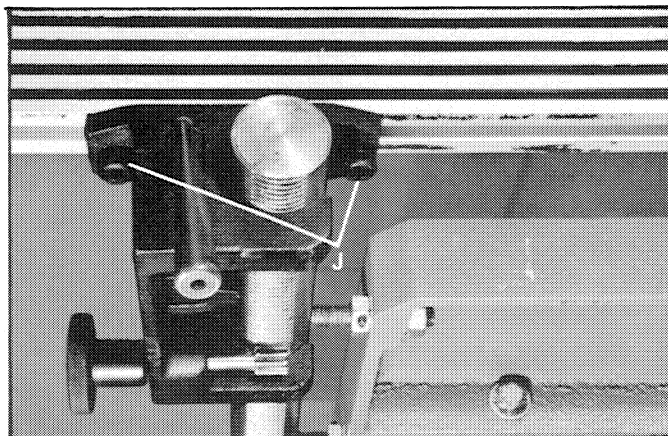


Fig. 20

8. Insert rod of pointer assembly (K) Fig. 21, in hole in fence body (B) and tighten set screw (L).

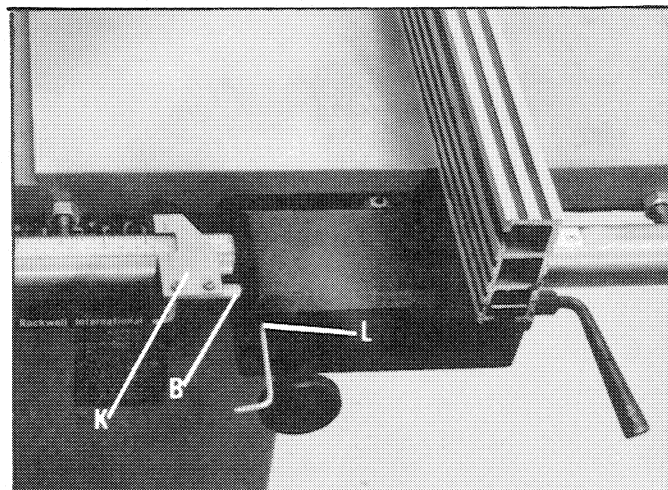


Fig. 21

ASSEMBLING BLADE

1. Remove arbor nut (A) and blade flange (B) from saw arbor, as shown in Fig. 22.

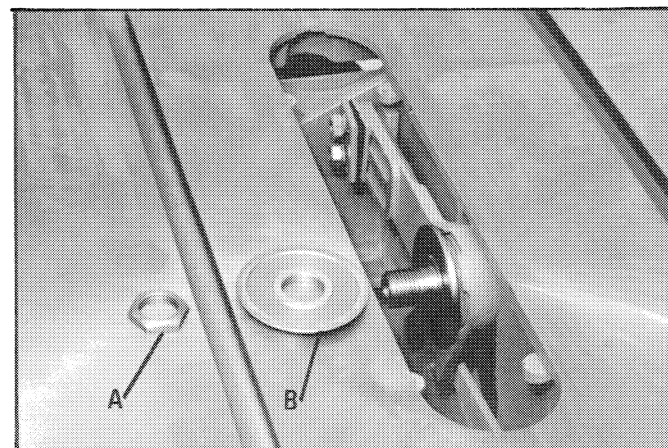


Fig. 22

2. Place blade (C) on saw arbor and replace flange (B) and arbor nut (A), as shown in Fig. 23. Teeth of blade must point down at the front of table.

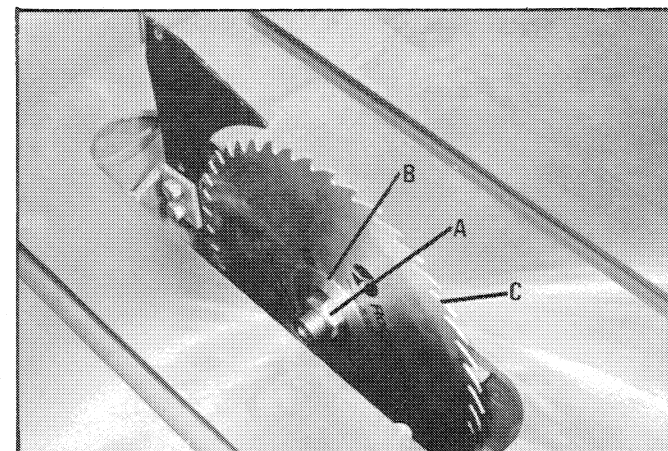


Fig. 23

3. Tighten arbor nut with wrench (D) while holding arbor with allen wrench (E) inserted into hex in end of arbor, as shown in Fig. 24.

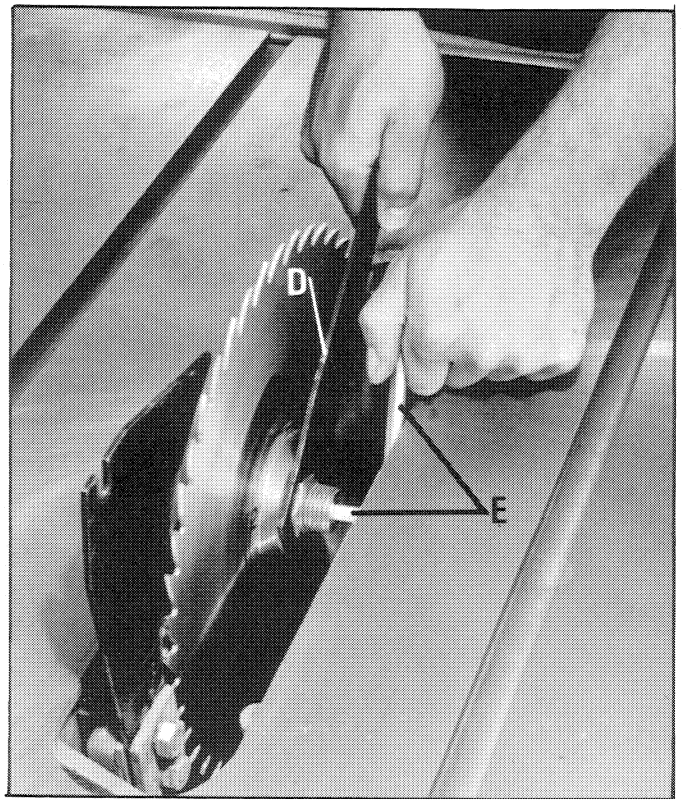


Fig. 24

ASSEMBLING SPLITTER, TABLE INSERT AND BLADE GUARD

1. The splitter (A) is to be assembled to the bracket (B), as shown in Fig. 25.

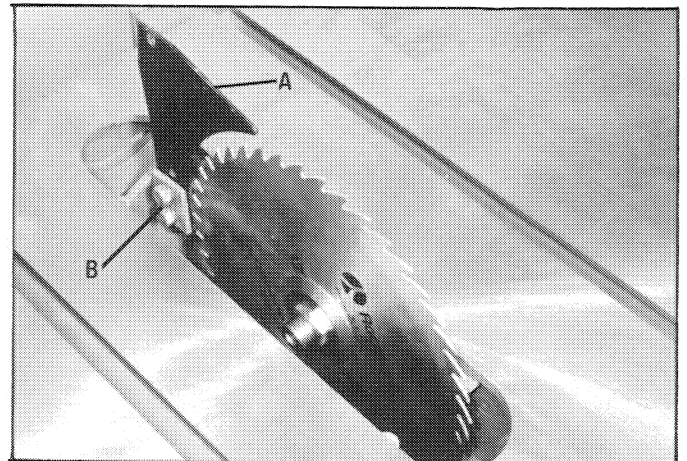


Fig. 25

2. Place table insert (C) on saw table, as shown in Fig. 26.

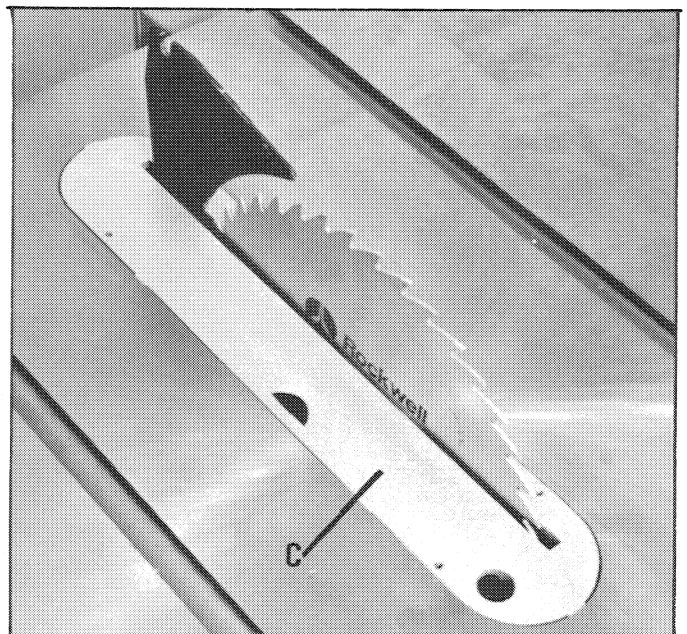


Fig. 26

3. Using blade wrench (D) Fig. 27, check to see if table insert (C) is level with table, as shown. If an adjustment is necessary, tighten or loosen the four screws (E) until the insert is level with the table.

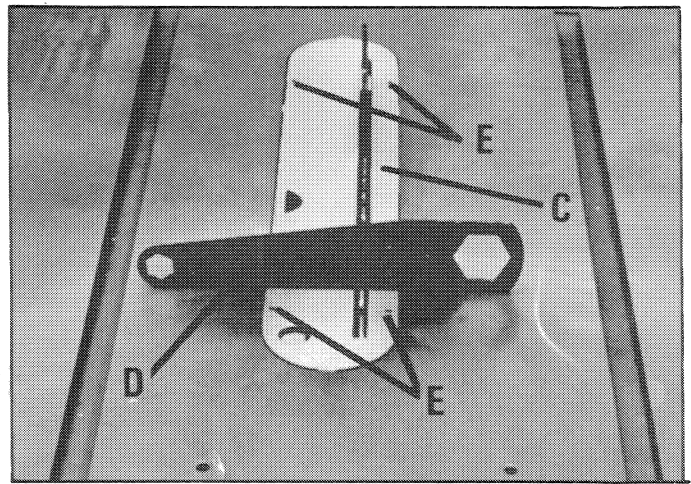


Fig. 27

4. Assemble blade guard (F) to splitter (A) and tighten knurled nut (G) Fig. 28.

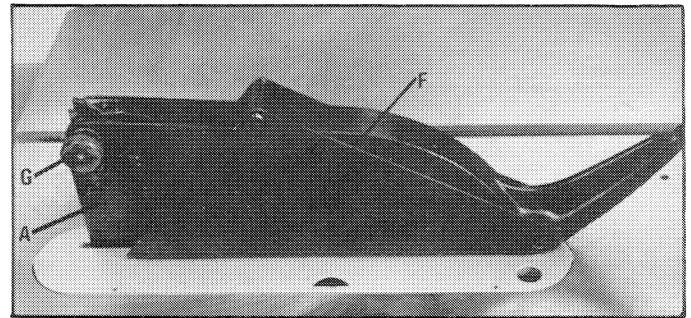


Fig. 28

ASSEMBLING CABINET SIDE COVER

The side cover (A) Fig. 29, is to be assembled to the right hand side of the saw cabinet by sliding the four slots (B) of the side cover onto the four posts (C) located in the cabinet.

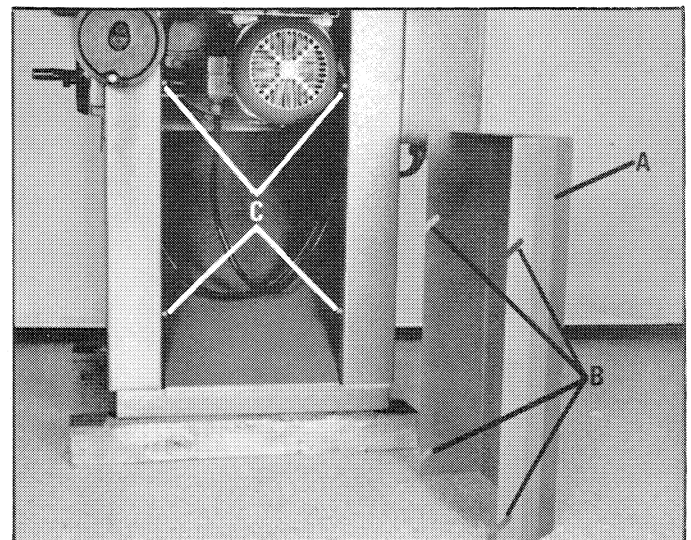


Fig. 29

Fig. 30, illustrates the side cover (A) assembled to the cabinet.

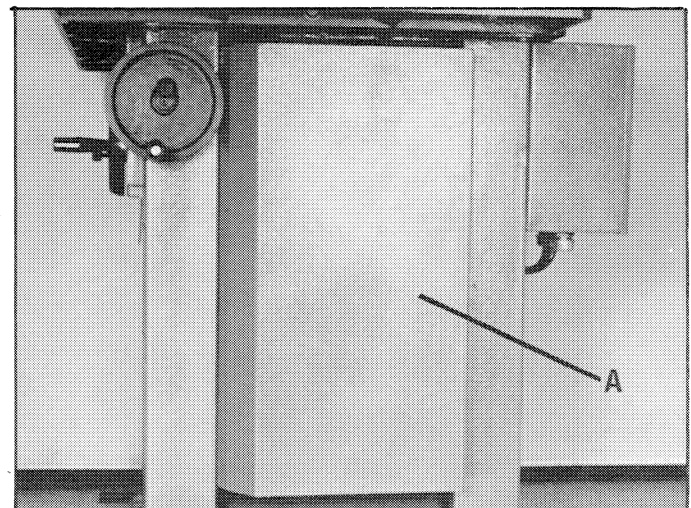


Fig. 30

ASSEMBLING STOP ROD ASSEMBLY TO MITER GAGE

Assemble stop rod assembly (A) to hole in the side of the miter gage body (B), as shown in Fig. 31, and tighten clamp screw (C).

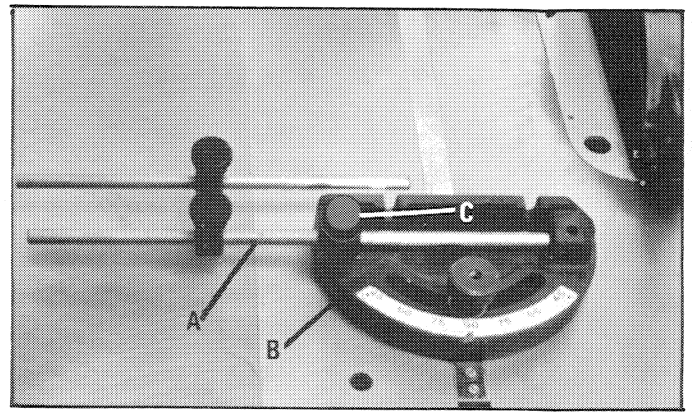


Fig. 31

SAW BLADE RAISING AND TILTING MECHANISM

To raise or lower the saw blade, loosen lock knob (A) Fig. 32, and turn handwheel (B). After the saw blade is at the desired height, tighten lock knob (A).

To tilt the saw blade, loosen lock knob (C) Fig. 32, and turn handwheel (D). The saw blade can be tilted 45 degrees to the right. When the saw blade is at the desired angle, tighten lock knob (C).

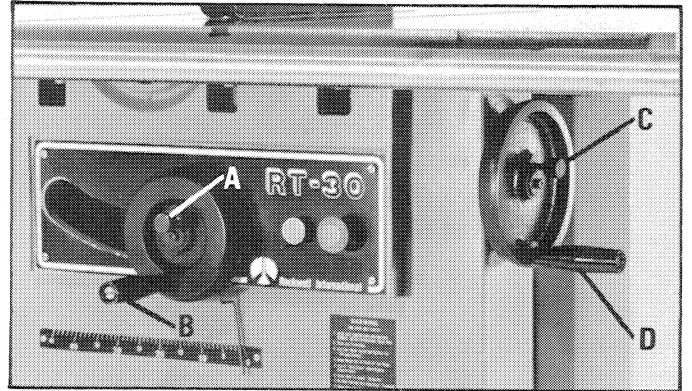


Fig. 32

ADJUSTING 90 DEGREE AND 45 DEGREE POSITIVE STOPS

Positive stops are provided to insure that the blade can rapidly be set at 90 or 45 degrees to the table. To adjust the positive stops, proceed as follows:

1. Remove blade guard.
2. Set the blade at 90 degrees to the table by turning the blade tilting handwheel clockwise as far as it will go. Place a square on the table with one end of the square against the blade, as shown in Fig. 33. Check to see if the blade is at a perfect 90 degree angle to the table.
3. If the blade is not at 90 degrees to the table, back off set screw (A) Fig. 33, and turn blade tilting handwheel until you are certain the blade is at 90 degrees to the table. Then tighten set screw (A) until it bottoms.
4. Turn the blade tilting handwheel counterclockwise as far as it will go and check with a square to see if the blade is at a perfect 45 degree angle to the table, as shown in Fig. 34.
5. If the blade is not at 45 degrees to the table, back off set screw (B) Fig. 34, and turn the blade tilting handwheel until you are certain the blade is at 45 degrees to the table. Then tighten set screw (B) until it bottoms.

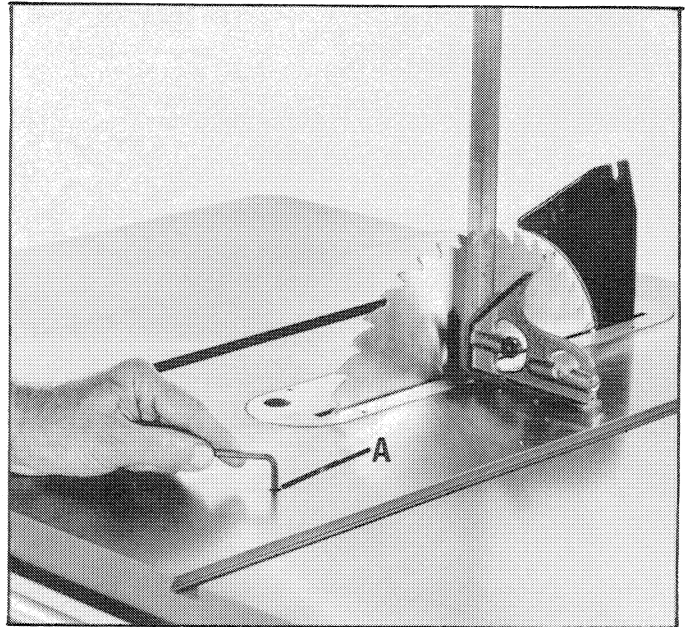


Fig. 33

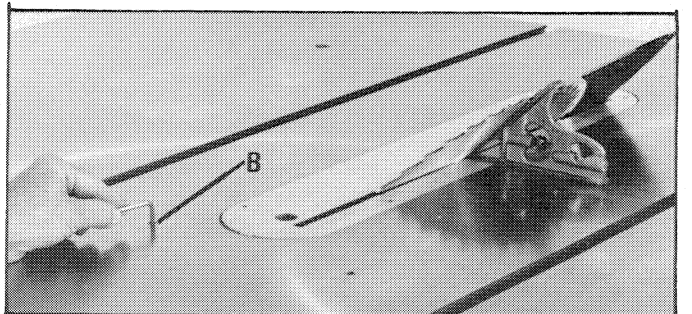


Fig. 34

START/STOP SWITCH

The start stop switch is located on the front of the machine for easy accessibility. To start the machine simply press the smaller green button (A) Fig. 35, and to stop the machine, press the larger red stop button (B).

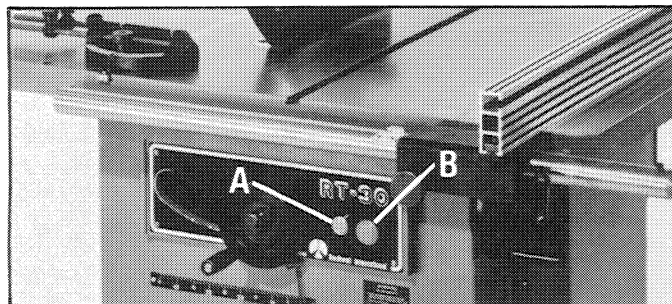


Fig. 35

OVERLOAD PROTECTION

The RT-30 Saw is provided with overload protection which will shut off the motor if the saw is overloaded or if line voltage falls below safe levels. If the motor shuts off due to overloading or low voltage, let the motor cool for approximately five minutes. The overload block supplied with this saw will automatically reset itself and the machine can be started again by pushing the start button.

If the machine continually shuts off due to overloading, the cause of overloading must be corrected. If this happens, it is recommended you obtain advice from a qualified electrician.

CHANGING BLADES

1. Disconnect the machine from the power source and remove the blade guard and table insert.
2. Place wrench (D) Fig. 36, on arbor nut and insert wrench (E) in hex slot in end of arbor. Turn wrench (D) toward front of saw to loosen arbor nut. Remove arbor nut, flange and blade.
3. To install new blade, reverse the above procedure.

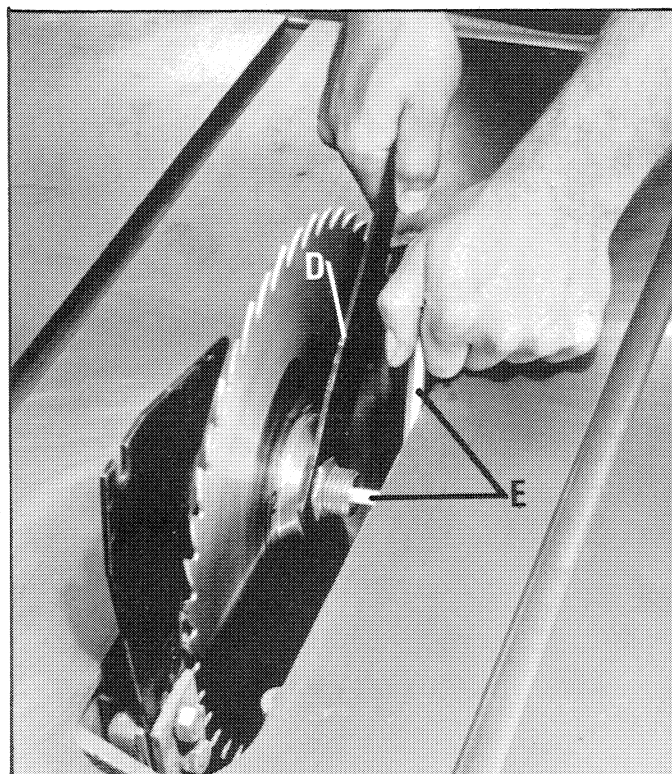


Fig. 36

ADJUSTING BELT TENSION

To adjust belt tension loosen two screws (A) and (B) Fig. 37. The weight of the motor will be sufficient to provide proper tension to the belts. Then tighten two screws (A) and (B).

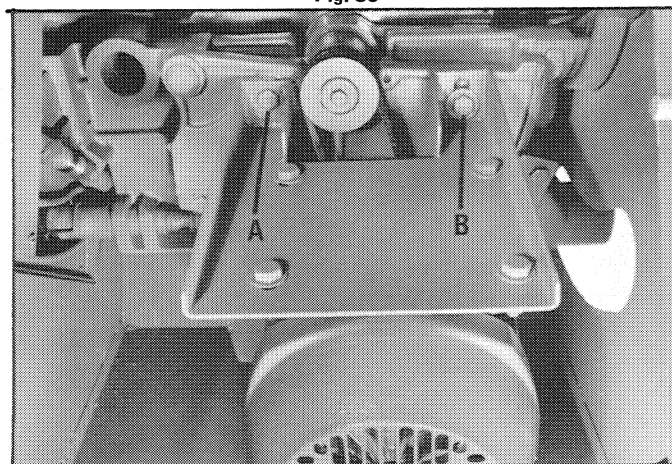


Fig. 37

MITER GAGE AND STOP RODS

The miter gage body (A) Fig. 38, can be adjusted up to 45 degrees right or left by loosening lock knob (B).

The adjustable stop rods (C) Fig. 38, can be adjusted by loosening lock knobs (D).

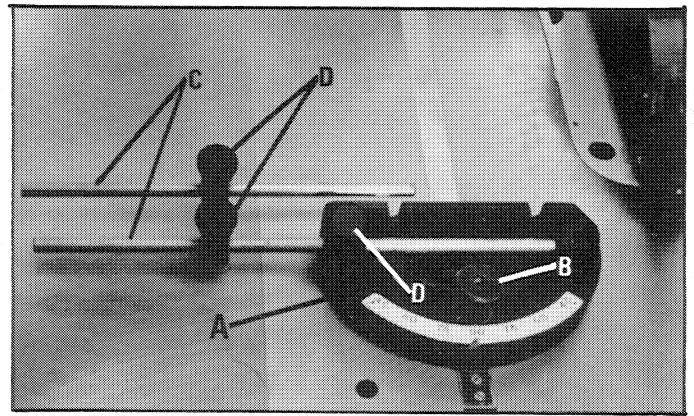


Fig. 38

CHIP EXHAUST CHUTE

The lower half of the saw blade is completely covered with a large chip exhaust chute (A) Fig. 39. The exhaust chute moves with the saw arbor when the blade is tilted. The diameter of the opening of the exhaust chute is 3" O.D. and easily attaches to a central dust collection system.

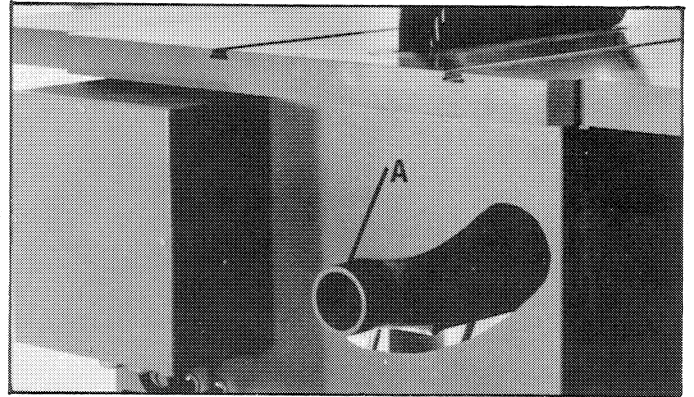


Fig. 39

RIP FENCE OPERATION

The rip fence can be positioned in the vertical position, as shown in Fig. 40, or in the horizontal position as shown in Fig. 41.

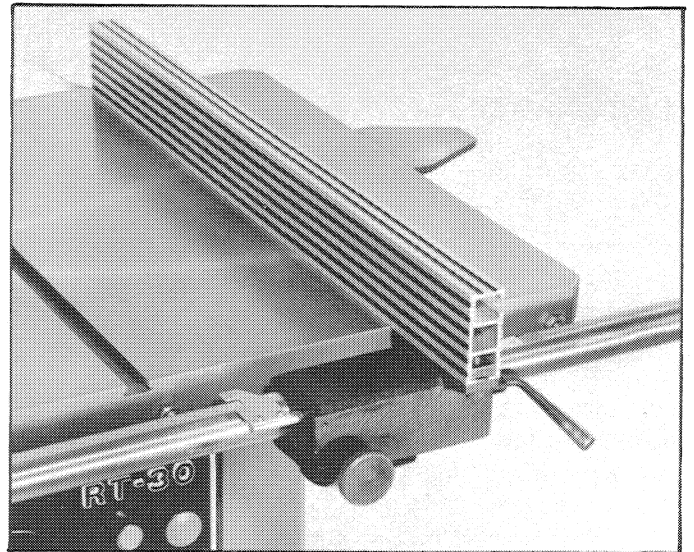


Fig. 40

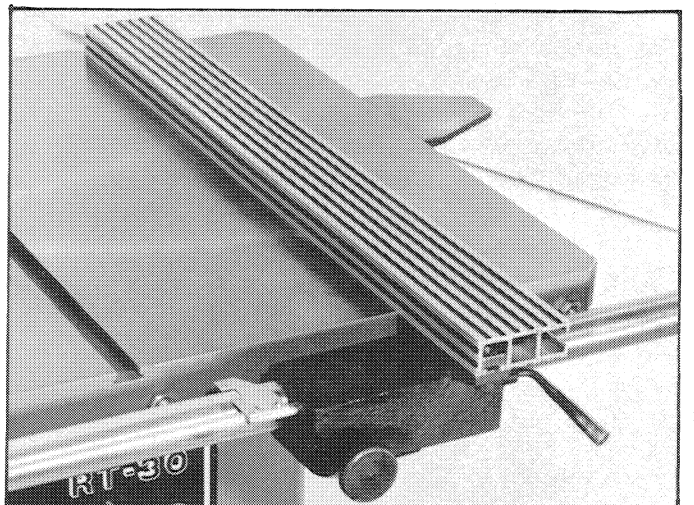


Fig. 41

The rip fence (A) can also be used as a cut-off gage when cross-cutting a number of pieces to the same length, as shown in Fig. 42. **WHEN USING THE FENCE AS A CUT OFF GAGE, AS SHOWN IN FIG. 42, IT IS VERY IMPORTANT THAT THE FENCE (A) FIG. 42, BE POSITIONED IN FRONT OF THE SAW BLADE, AS SHOWN.**

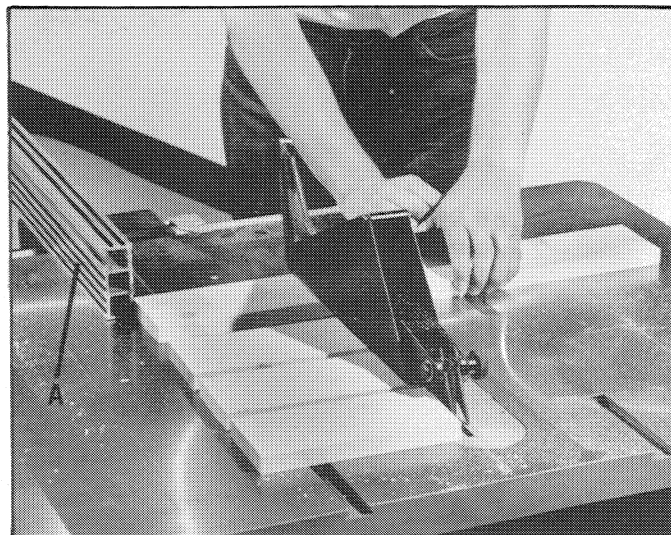


Fig. 42

When moving the fence to the horizontal or vertical position, or moving it lengthwise, front or back, loosen two screws (J) Fig. 43, and reposition the fence to the desired position.

Important: When the two screws (J) Fig. 23, are loosened to reposition the fence, the fence must be readjusted parallel to the miter gage slot as previously explained under the section "Assembling Rip Fence".

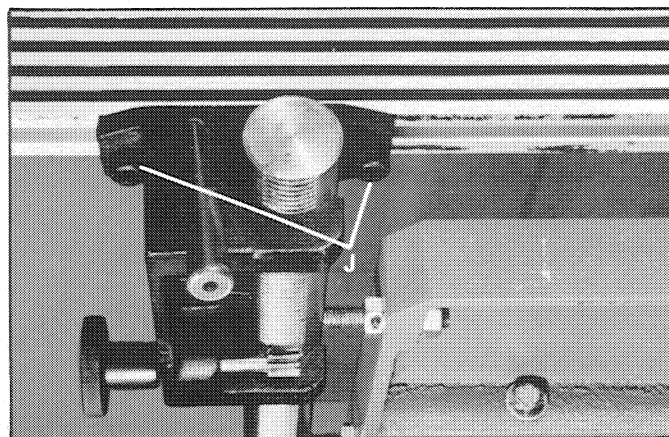


Fig. 43

To move the fence (A) rapidly on the guide rail, push down lever (B) Fig. 44, and pull out knob (C). Move the fence to the desired position on the guide rail and pull up lever (B) to lock fence in place.

Fine adjustment of the fence along the guide rail can be made by pushing down on lever (B) and push in knob (C) until teeth on end of knob (C) engage with teeth on bottom of guide rail. Then turn knob (C) for fine adjustment of the fence. When fence is in the desired position, pull up lever (B) Fig. 44, to lock fence in place.

The measure of cut can be read by using the indicator (D) Fig. 44. The indicator must be adjusted when using different types of blades or when the fence is changed from the horizontal to vertical position. Simply loosen set screw (E), move the indicator in or out and tighten set screw (E).

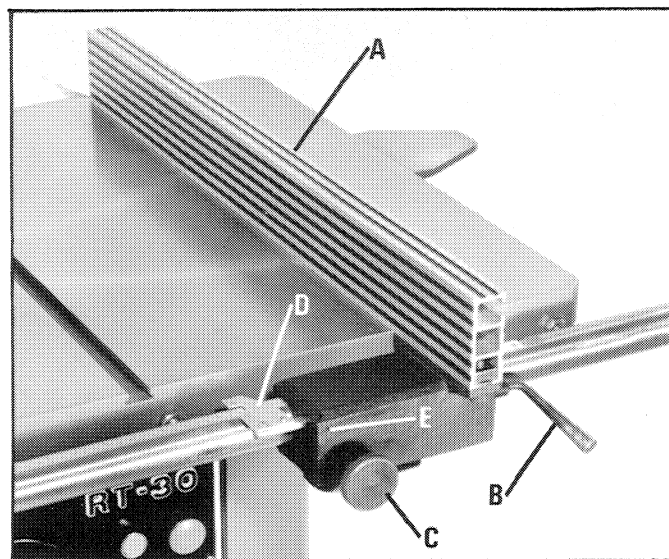
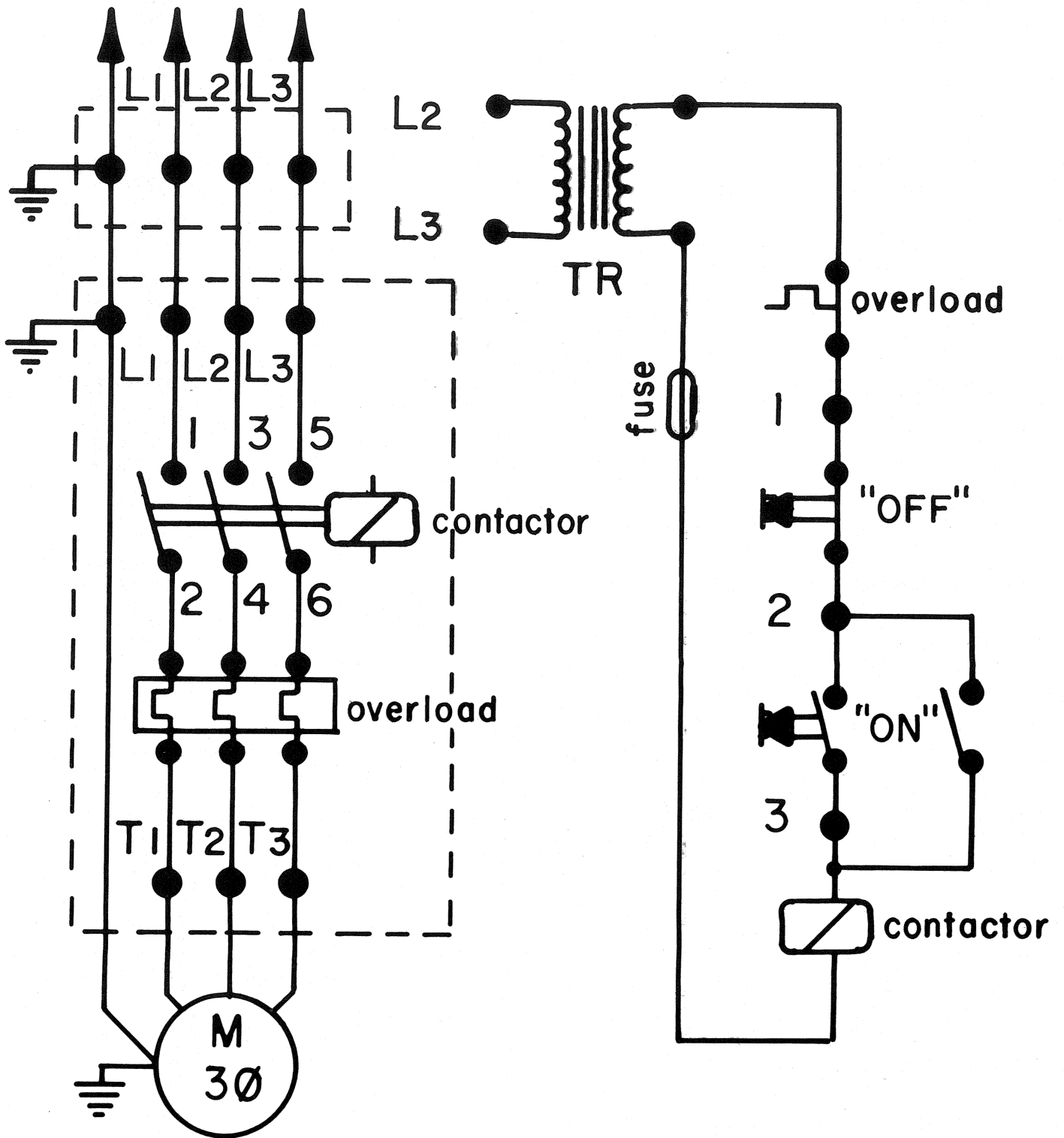


Fig. 44

WIRING DIAGRAM



230/460 V., 3 PHASE



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GEORGIA

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HAWAII

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Melrose Park (Chicago) 60160
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Phone: (312) 345-8900

MASSACHUSETTS

Boston 02134
414 Cambridge St. (Allston)
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Phone: (313) 569-4333

MISSOURI

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Phone: (816) 221-2070

NEW YORK

New York 10013
Rudolf Bass, Inc.
175 Lafayette St.
Phone: (212) 226-4000

Cheektowaga (Buffalo) 14225
Karle Saw Company, Inc.
385 Nagel Drive
Phone: (716) 681-7010

OHIO

Dayton 45439
3050 S. Kettering Blvd.
Phone: (513) 298-5281

PENNSYLVANIA

Philadelphia 19120
4433-37 Whitaker Avenue
Phone: (215) 455-7907

Monroeville (Pittsburgh) 15146
Monroeville Mall Annex
Mall Circle Drive
Phone: (412) 247-3600

TEXAS

Dallas 75247
2934 Iron Ridge Street
Phone: (214) 631-1890

CANADA

ALBERTA

Calgary, Alberta T2G 4B9
4411 Manitoba Road, S.E.
Phone: (403) 287-0462

Edmonton TP5 3X6

10632 169th Street
Phone: (403) 489-5587

BRITISH COLUMBIA

Vancouver, B. C. V5Y 1L4
45 West 7th Avenue
Phone: (604) 879-8622

MANITOBA

Winnipeg, Manitoba R3H 0H2
1699 Dublin Avenue
Phone: (204) 633-9259

ONTARIO

Guelph, Ontario N1H 6M7
644 Imperial Road
Phone: (519) 836-4390

London, Ontario N5Z 3L3
317 Adelaide Street, S.
Phone: (519) 681-0890

Mississauga, Ontario L4V 1J2
6463 Northham Drive
Phone: (416) 677-5330

Ottawa, Ontario K2P 0N9
207 Gilmour Street
Phone: (613) 236-7459

QUEBEC

St. Laurent (Montreal), P.O.
H4N 1W2
523 Rue Deslauriers
Phone: (514) 336-8772

Ste-Foy, Quebec G1N 4L5
Suite 202
2022 Rue Lavoisier
Phone: (418) 681-7305

Rockwell International

**Rockwell Machinery
One Year Limited Warranty**

Rockwell will repair or replace, at its expense and at its option, any Rockwell machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer notifies his supplying distributor of the alleged defect within one year from the date of delivery to him of the product and provides Rockwell with reasonable opportunity to verify the defect by inspection. Rockwell may require that electric motors be returned prepaid to the supplying distributor or authorized service center for inspection and repair or replacement. Rockwell will not be responsible for any asserted defect which has resulted from misuse, abuse or repair or alternation made or specifically authorized by anyone other than an authorized Rockwell service facility or representative. Under no circumstances will Rockwell be liable for incidental or consequential damages resulting from defective products. This warranty is Rockwell's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Rockwell.

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