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OPERATOR'S MANUAL

JET CTAS-10 & 12*
Tilting Arbor Table Saw

CTAS10 -330 3HP 1PH

333 3PH

JET EQUIPMENT AND TOOLS
A **WMH** - WALTER MEIER HOLDING COMPANY

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CTAS 10 and 12

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Mag Contactor 1 phase MST 3 phase MST MS-C18L-24V $94.45

OPERATOR'S MANUAL

JET CTAS-10 & 12*
Tilting Arbor Table Saw

Needed To Convert Phases
330 - Motor
Magnetic Starter
112 - Motor Plate
Thermal overload
Motor Pully
337 - Flat Box Assy

112
330

Introduction

The JET CTAS-10 Tilting Arbor Table Saw you have purchased is a high-quality machine tool that will give you years of superior service. Naturally, you will get maximum performance from your new JET tilting arbor table saw if you follow the instructions in this manual. Before attempting to install or operate your new table saw, we recommend you read this manual and familiarize yourself with the details of operation. Understanding the contents of the manual will help you obtain the best possible results and achieve highest standards of accuracy. It will also resolve many of the problems you could encounter otherwise.

Your JET tilting arbor table saw is backed by a nationwide network of distributors and service centers. If you should have any problems, do not hesitate to call on our nearest representative. Our goal is to ensure maximum satisfaction with your new precision-cutting tool.

A serial number is stamped on the nameplate. Please refer to this serial number in any communications regarding your machine, and refer to the parts list accompanying this manual to order specific part numbered items.

* This manual also applies to the CTAS-12 Tilting Arbor Table Saw

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CTAS 10/12

Specifications

CTAS-10-1	Single phase (stock no. 708520)
CTAS-10-3	Three phase (stock no. 708541)
Saw diameter	10"
Arbor hole diameter	5/8"
Table dimensions	36" W x 27" L
Arbor tilt angle	0 - 45 degrees
Spindle speed (RPM)	4,200
Motor (with magnetic contactor)	2 HP, single phase, 115/230V (pre-wired 115 volts) or 3 HP, three phase, 220/440V (pre-wired 220 volts)
Net weight (approx.)	365 lbs.

Features

The JET CTAS-10 tilting arbor table saw is an easy-to-use, highly accurate tool for cabinet makers and the construction industry. The sturdy, box-type body is made of steel plate. It completely encloses all moving parts to ensure safe operation. The extra rigidity allows for precise, accurate work.

The spindle is supported by the one-piece housing incorporating two enclosed precision ball bearings. The spindle also moves up and down and tilts up to 45 degrees. The motor is equipped with three V-belts to transmit power.

The rip fence moves to either side of the saw blade. It is guided by front and rear rails fastened to the table. The front guide rail is calibrated to show the distance between the fence and the saw blade.

Miter gauge T-slots provide additional work support in front of saw blades.

Standard accessories include:

- Fence
- Miter gauge for 30° to 90° cuts
- Spanner
- Table insert
- See-through guard with splitter and anti-kickback fingers
- Motor

The CTAS-10 tilting arbor table saw is shown in Figure 1.

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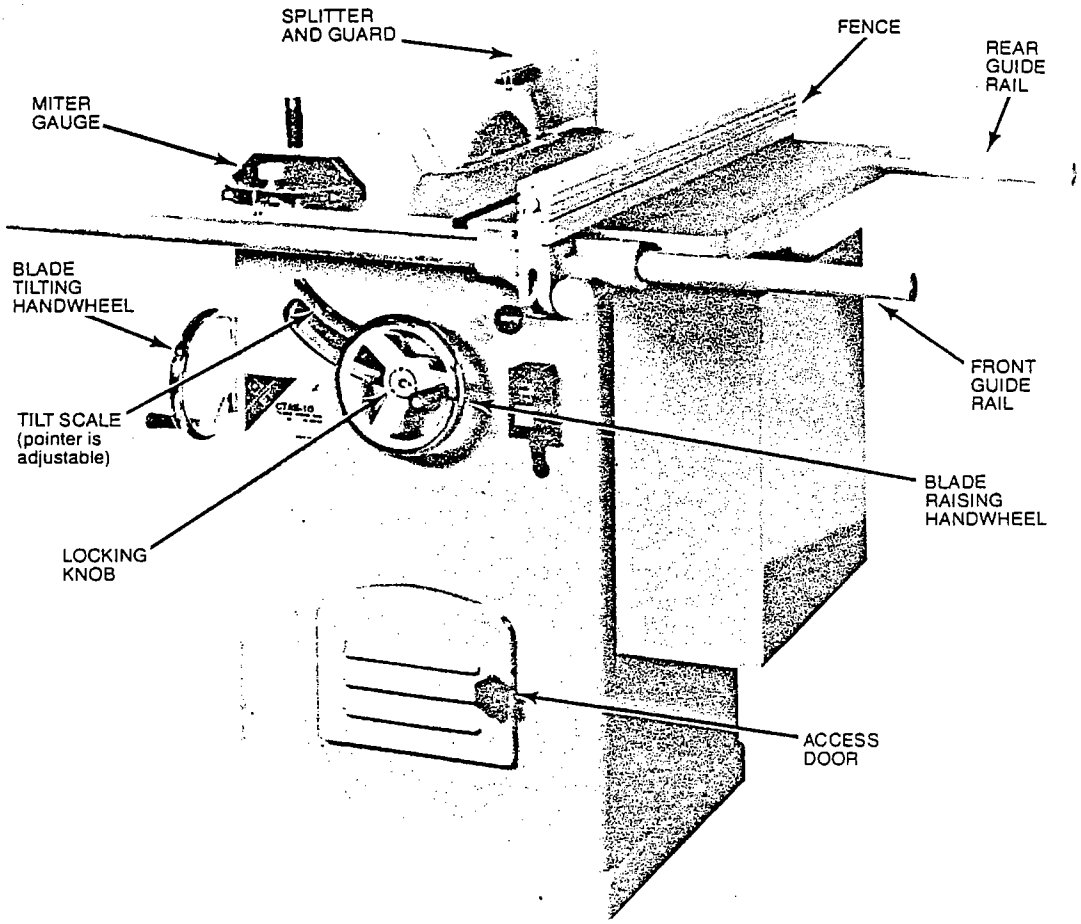

FIGURE 1

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Unpacking and Cleanup

To ensure maximum performance from your JET tilting arbor table saw, clean it properly; and install it accurately before use.

As soon as you receive the table saw, we recommend you follow these procedures:

1. Inspect packing crate for damage in transit. Record damage, and report it immediately to shipper.
2. Open crate and check that machine arrived in good condition. If not, let your industrial distributor know immediately.
3. Before lifting machine, remove all foot bolts locking it to its shipping base.
4. Transport machine to location with a hand truck or dolly.
5. DO NOT USE SOLVENTS on plastic parts; solvents dissolve or damage plastic.

Safety Suggestions for Tilting Arbor Table Saws

1. Read manual before operating machine.
2. If you are not thoroughly familiar with operation of tilting arbor table saw, get advice from supervisor or other qualified person.
3. Remove tie, rings, watch, and other jewelry; and roll up sleeves.
4. Wear appropriate clothing, and keep hands clear of all moving parts of machine while in operation.
5. Always wear eye protection or face shield.
6. Make sure wiring codes and recommended electrical instructions are followed and machine is properly grounded.
7. Disconnect machine from power source when making repairs or adjustments.
8. Check that switch is in OFF position before plugging in power cord.
9. Keep guards in place.
10. When cross-cutting, NEVER use fence as cut-off gauge. Move rip fence out of way.
11. Use push stick when ripping stock that does not give a reasonable distance of safety for your hands.
12. Always use fence or miter gauge to position and guide work. DO NOT use hands to support or guide workpiece.
13. Turn power OFF before freeing stalled saw blade.
14. When cutting wide or long workpiece, provide adequate support to rear and sides of saw table.
15. When cutting mouldings, DO NOT run stock between fence and moulding cutterhead.
16. DO NOT force faster cutting speed.

Installation and Levelling

The CTAS-10 tilting arbor table saw comes assembled except for guide rails, splitter and guard, fence, blade, table insert and miter gauge.

For best cutting performance, locate table saw on solid, level foundation. With machine in position, test table surface lengthwise and crosswise with machinist level. Place metal shims under low corners. Check that all four corners are supported, then tighten lag screws, retest level of table surface in both directions; and adjust if necessary.

Assembling Guide Rails

To assemble front guide rail to table, proceed as follows:

1. Face graduation markings upward (see Figure 2).

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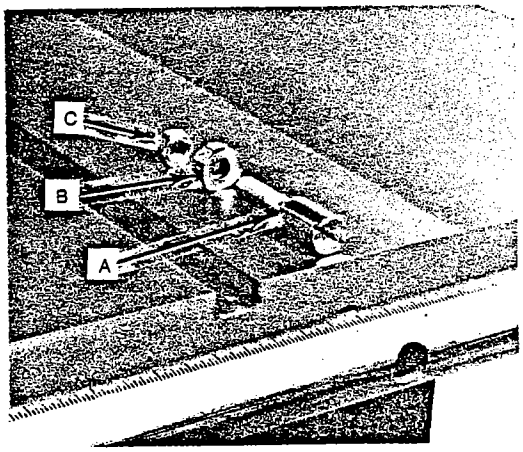

FIGURE 2

2. Insert each screw A through holes in guide rail, spacers B, and table front.
3. Using hexagon nut C, tighten guide rail to table on far side of casting.

Assemble rear guide rail to table in same way, except insert screw A through threaded holes in table casting at rear.

Assembling Blade Guard and Splitter

1. Insert two screws through bracket, attaching it to inside of saw carriage (see Figure 3). DO NOT tighten screws yet.

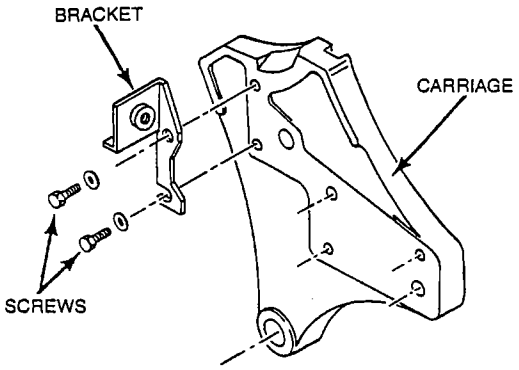

FIGURE 3

2. With a straight edge, align bracket top and bottom to saw flange (Figure 4).

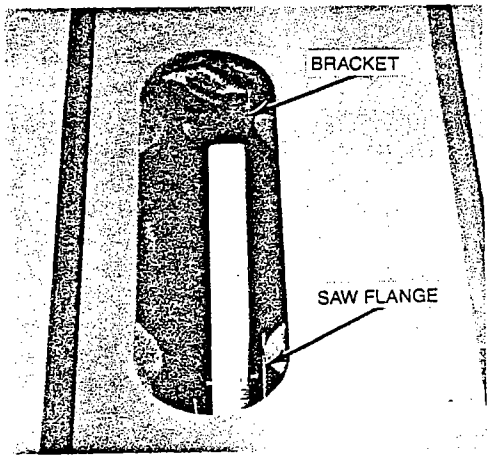

FIGURE 4

3. Secure two screws and bracket (Figure 3) to inside of saw carriage.

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4. With screw provided, assemble splitter fastening plate to bracket (see Figure 5).

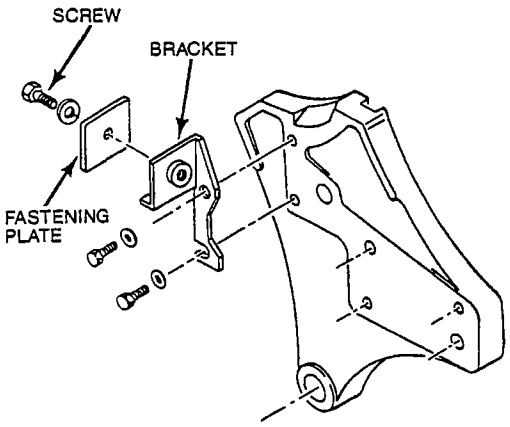

FIGURE 5

5. Insert threaded end of rod (Figure 6) through hole in casting and carriage at rear of machine.

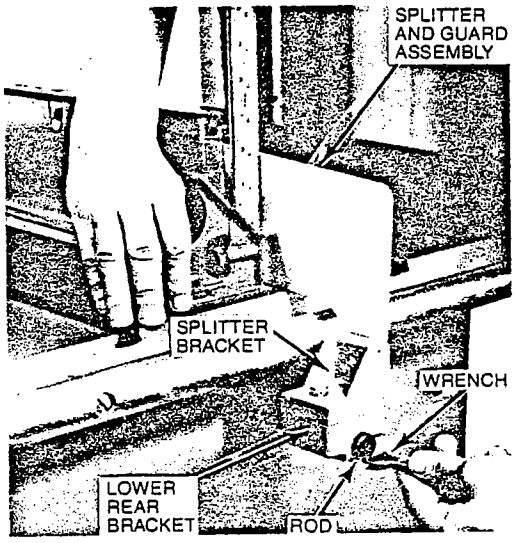

FIGURE 6

6. Fasten rod with star washer and nut, but DO NOT tighten yet.
7. Assemble lower rear bracket (Figure 7) to rod.

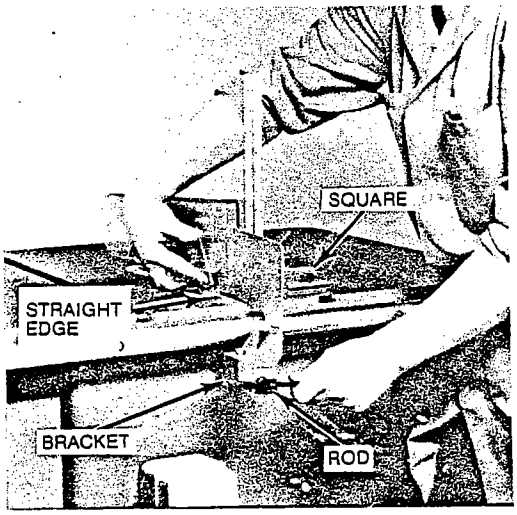

FIGURE 7

8. Using wrench, secure two screws located under bracket.
9. Using screw and lockwasher provided, attach splitter bracket to lower rear bracket.
10. Using screw and washer, fasten splitter and guard assembly to both splitter brackets.
11. Tilt guard up.
12. Using washer and nut provided, assemble saw blades to arbor.

    NOTE: Saw arbor has left-hand threads.

13. Using straight edge and square (Figure 7), align splitter with blade and table. To do so, rotate rod and rotating bracket until splitter aligns with blade and square aligns with table.

    NOTE: To rotate rod, insert nail or small rod in hole at end of rod.

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14. When splitter aligns with blade and is square with table:
    a. Tighten two screws found under lower rear bracket.
    b. Tighten large nut with star washer, located inside cabinet on other end of rod.

Connecting to Power Supply

To avoid damage to electrical components, machine must be connected to correct power supply.

WARNING

Make sure the receptacle is properly grounded as follows:

If motor is wired for 115V single phase operation, the three-prong plug on the power cord has two parallel current-carrying prongs and one longer ground prong.

If motor is wired for 230V single phase, the three-prong plug on the power cord has two current-carrying prongs in tandem and one longer ground prong.

If motor is prewired for 220V three phase, the four-prong plug on the power cord has three current-carrying prongs and one keyed ground prong.

For converting 220V three phase models into 440V three phase models, see connecting diagram in motor junction box and main control box.

Raising the Blade

To raise and lower saw blade, loosen front handknob, then turn handwheel (Figure 8). Raise blade ⅛" to ¼" above top surface of workpiece.

To lock saw blade, turn handknob using only moderate tension.

Limit stops (for raising and lowering the blade) need no adjustment.

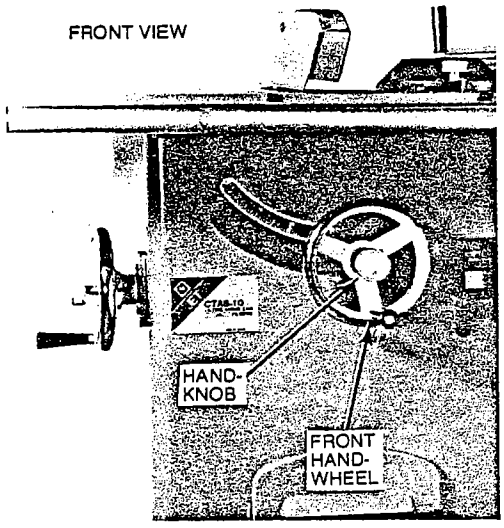

FIGURE 8

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Tilting the Blade

1. To tilt saw blade, turn handwheel counterclockwise as viewed from side of cabinet (see Figure 9).

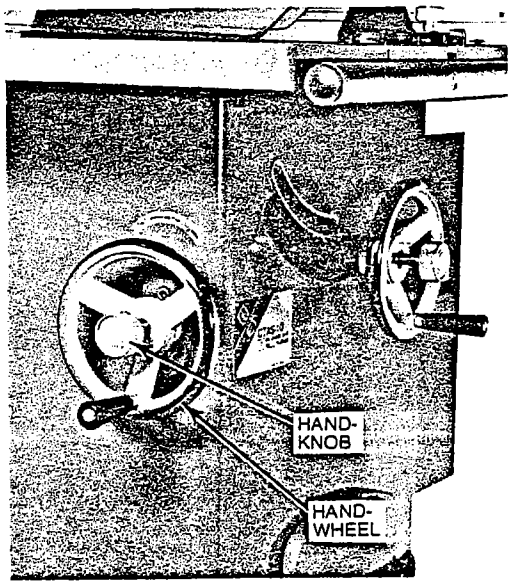

FIGURE 9

2. To lock handwheel turn handknob, using only moderate tension.
3. Adjustable limit stops for 45° and 90° are found under the table. To adjust limit stops, insuring that blade will stop at 45° or 90° angle, proceed as follows:
   a. Raise saw blade to maximum.
   b. To set blade at 90° to table, turn tilting handwheel counterclockwise.
   c. Put steel square on table, and check that blade is 90° to table.

      To adjust:

      - Loosen locknut D (Figure 10).
      - When blade is at 90° to table, turn adjusting screw C against lug on front trunnion.
      - Tighten locknut D.

   d. Check that tilt indicator pointer at cabinet front is at zero.

      Tilt scale pointer is adjustable. When saw is at 90°, pointer should be set at 0°. If not lined up with zero mark, loosen pointer screw, move pointer to zero, and tighten in place.

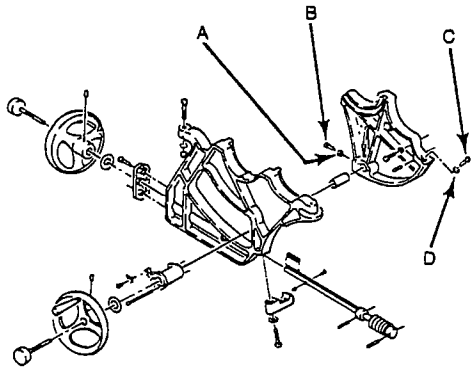

FIGURE 10

4. Tilt saw to 45°. Check with combination square.

   To adjust:

   - Loosen locknut A (Figures 10 and 11).
   - Adjust screw B against table lug.
   - Tighten locknut A.

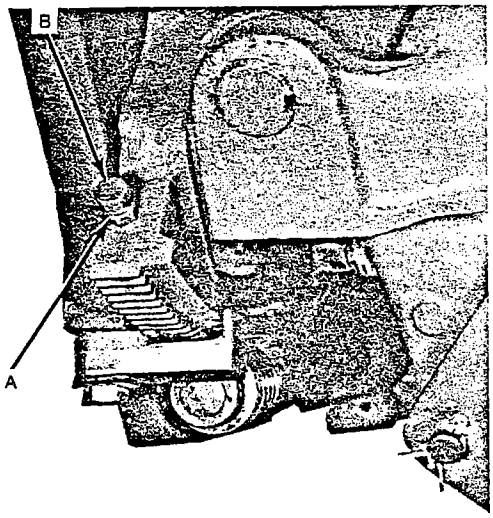

FIGURE 11

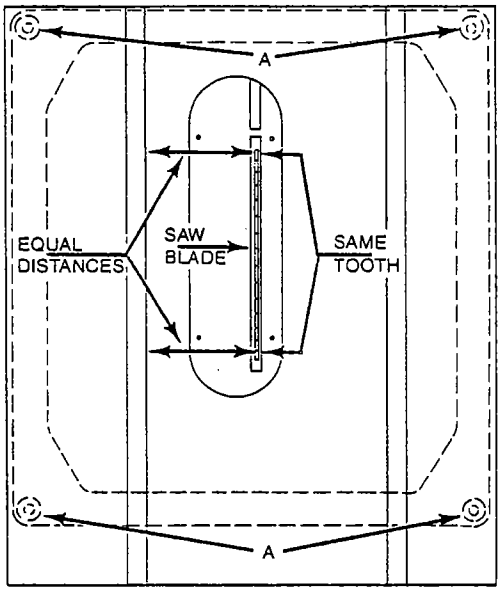

FIGURE 12

Adjusting the Table

Before operating machine, check that saw is lined up. To check alignment, refer to Figure 12. Mark one saw tooth, then test in both front and rear position.

To adjust for alignment:

1. Loosen four hexagon head cap screws A that hold table to top of cabinet gusset.
2. Shift table left or right at front or rear until saw blade is at center of insert slot and parallel to miter gauge slots.
3. Tighten screw securely.

Adjusting Rip Fence

The rip fence moves to either side of saw blade. The right side is the most common position. Front and rear rails guide the fence. Calibrations on the front guide rail show distance between fence and saw blade.

To adjust rip fence, raise clamp lever A (Figure 13) all the way up; and move fence to position desired on table.

For fine movement, raise clamp lever A to maximum height, push fence desired distance from saw blade, and push in micro-set knob B, turning it left or right.

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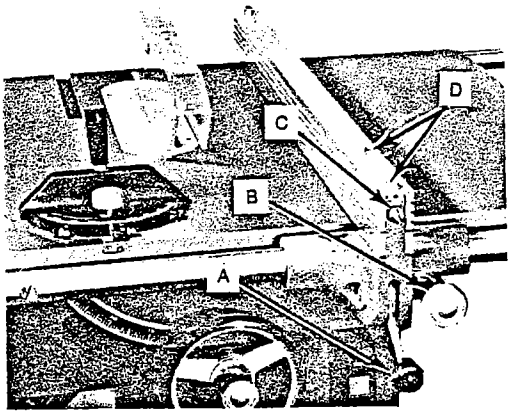

FIGURE 13

To clamp down on front and rear guide rails:

1. Lower clamp lever A to maximum.
2. If clamping action on rear guide rail is not equal to that of front guide, adjust rear clamp hook. To do so, turn screw C clockwise to increase tension or counterclockwise to decrease it.

   NOTE: You will notice clamping action on front guide rail prior to back guide rail.

Your tilting arbor table saw is factory-shipped with miter gauge slots parallel to saw blade. Therefore, adjust the fence so it is parallel to miter gauge slots.

To check rip fence:

1. Set fence at a miter gauge slot.
2. Tighten clamp lever A (Figure 13).

To adjust fence:

1. Loosen two front cap screws D (Figure 13).
2. Raise clamp lever A.
3. Move rear end of fence body to one side or the other until parallel with miter gauge slot.
4. Push clamp lever A down, and tighten two clamp screws D.

Adjusting Table Insert

Always keep table insert flush with table top. To adjust table insert, turn adjusting screws in or out (Figure 14).

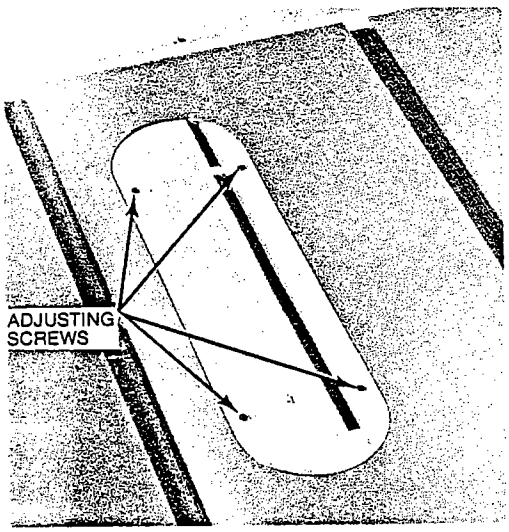

FIGURE 14

Adjusting Miter Gauge

The miter gauge comes with adjustable index stops at 90° and 45° right and left.

To adjust index stop, tighten or loosen one of three adjusting screws A (Figure 15) against stoplink D.

To operate miter gauge:

1. Loosen lock knob B (Figure 15), and move body of miter gauge C to desired angle. It stops at 90° and 45° both right and left.
2. To rotate miter gauge body past these points, flip stoplink D out of way.

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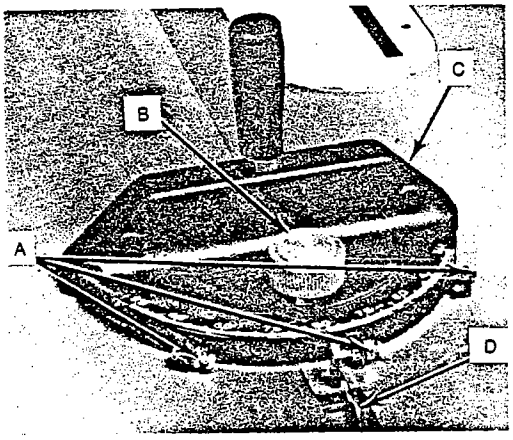

FIGURE 15

Table saw comes with T-slot miter gauge grooves. Assemble groove plate E and flathead screw F to end of miter gauge bar (Figure 16). Position pivot screw G in miter bar.

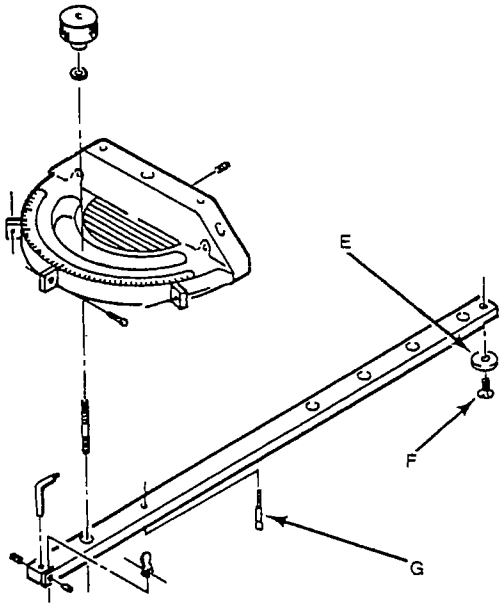

FIGURE 16

Removing Saw Blade

To remove saw blade:

1. DISCONNECT saw from power source.
2. Remove table insert.
3. Place block of wood against front of saw blade.
4. Using arbor nut wrench turn arbor nut toward you.

Adjusting Rip Fence Flush to Saw Table

To prevent thin material (such as veneer) from sliding or catching between rip fence and table surface, adjust fence flush to table:

1. Loosen four screws C (Figure 17).

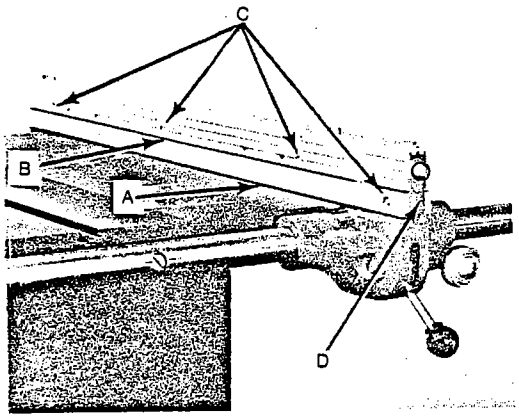

FIGURE 17

2. Push bottom section of fence D down tight against saw table A. If necessary, insert screwdriver in slot B prying upper and lower sections apart.
3. Tighten four screws C.

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Assembling Wood-Facing to Rip Fence

1. Attach wood-facing A to rip fence B, using four wood screws C (Figure 18).
2. Check that wood-facing fits flush to table surface along edge D.

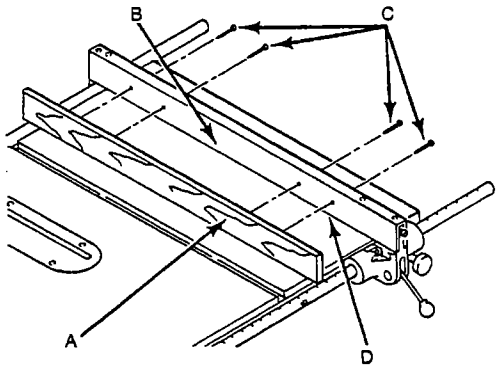

FIGURE 18

Access Door

Remove excess sawdust through access door at front of cabinet.

Preliminary Operating Instructions

The operation of power tools involves a certain amount of hazard for the operator. Before attempting regular work, we recommend you get the feel of operations, using scrap lumber to check settings. Read entire instructions before you start to cut workpiece. Always pay attention to safety precautions to avoid personal injury.

Cross Cutting

When cross cutting, place miter gauge in either table groove. Position workpiece against miter gauge edge, and guide workpiece by pushing gauge toward saw blade (see Figure 19).

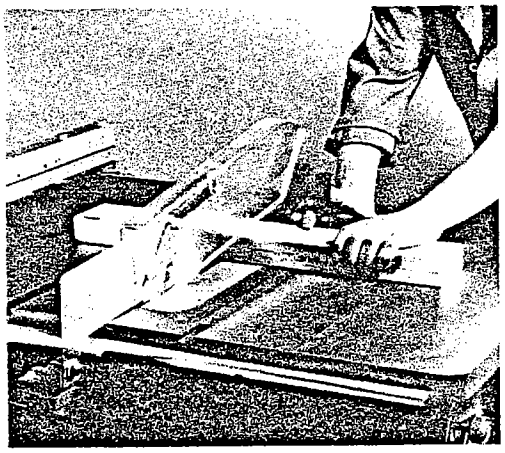

FIGURE 19

Holding workpiece firmly against miter gauge and table, slowly start cut. After workpiece is cut in two, shift work slightly away from blade, then pull work and miter gauge back to starting point. Hold only the supported workpiece.

WARNING

NEVER place hand on cut-off piece when machine is running. NEVER use fence as cut-off gauge.

For added safety, fit miter gauge with auxiliary wood-facing at least one inch higher than the maximum depth of cut and at least 12 inches wider on either side of blade. Two wood screws fasten the wood-facing to the miter gauge front through pre-drilled holes.

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Ripping

When ripping, use the rip fence to position and guide your work. (See Figure 20.) Place the flat side of board solidly on the table, the straight edge flush against the fence, and the saw guard in down position. The guard has anti-kickback fingers and a splitter to prevent saw kerf from closing and binding blade.

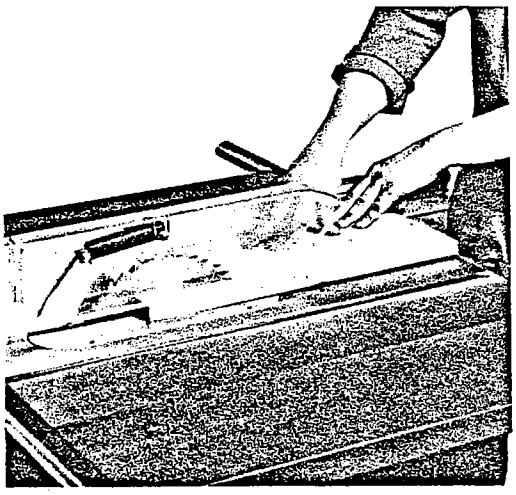

FIGURE 20

Start motor. Holding workpiece solidly on table and flush against fence, advance work toward blade.

WARNING

NEVER STAND IN LINE WITH THE SAW CUT.

The work can be fed through the blade with one or two hands, provided all safety rules are observed. Remove hand(s) from work before workpiece is past saw blade and anti-kickback fingers.

WARNING

DO NOT pick up waste stock from table until saw is stopped, unless workpiece is large and safe to remove.

When ripped work is less than three inches wide, use a push stick to complete the feed (see Figure 21). When ripped work is up to two inches, make an auxiliary guide, fasten it to the rip fence, and use a push stick.

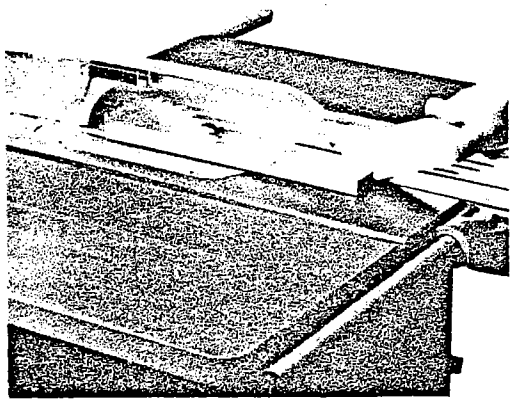

FIGURE 21

Rust Prevention

To prevent rust formation on saw parts, apply paste wax. If rust has already formed, use rust remover to restore machine.

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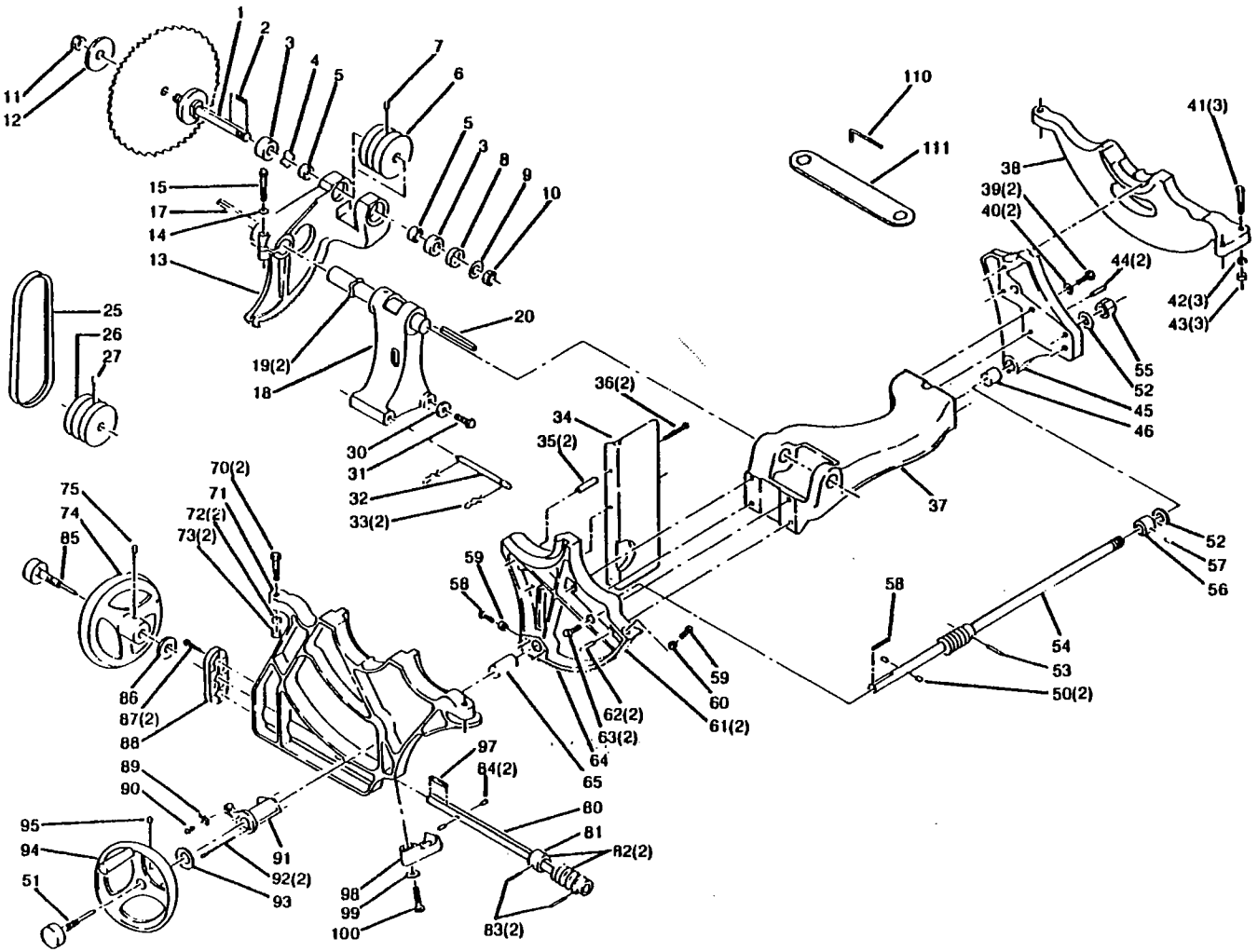
ADJUSTMENT MECHANISMS



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PARTS LIST — Adjustment Mechanisms

Part No.	Part Name
1	Arbor and Flange
2	3/16 x 3/16 x 1-1/2" Key
3	Bearing
4	Bearing Load Spring
5	Bearing Spacer
6	Arbor Pulley
7	5/16-18 x 3/8" Hex Socket Set Screw
8	Spanner Nut
9	Lockwasher
10	Bearing Nut
11	5/8-12 Arbor Nut
12	Arbor Flange
13	Arbor Bracket
14	3/8" Lockwasher
15	3/8-16 x 1-3/4" Hex Head Cap Screw
17	1/4 x 1/4 x 1-15/16" Key
18	Motor Bracket
19	Bearing Load Spring
20	1/4 x 1/4 x 2-15/16" Key
25	Matched Set of Three V-Belts VB-A26
26	Motor Pulley
27	5/16-18 x 3/8" Hex Socket Set Screw w/Nylon Insert
30	Special Steel Washer
31	7/16-20 x 1" Hex Head Cap Screw
32	Pin
33	Spring Clip
34	Dust Deflector
35	Spacer
36	5/16-18 x 1-3/4" Round Head Machine Screw
37	Yoke
38	Rear Trunnion Bracket
39	3/8-16 x 1" Hex Head Cap Screw
40	3/8" Lockwasher
41	3/8-24 x 1-1/2" Hex Head Cap Screw
42	3/8" Lockwasher
43	3/8-24 Hex Nut
44	5/16 x 1" Roll Pin
45	Rear Trunnion
46	Bearing
50	Lock Pin
51	Lock Knob
52	Fiber Washer
53	3/16 x 1-1/8" Roll Pin
54	Raising Shaft
55	3/4"-16 Hex Nut
56	Collar
57	5/16-18 x 5/16" Hex Socket Set Screw
58	3/16 x 3/16 x 1-3/8" Key
59	5/16-24 x 3/4" Hex Head Cap Screw
60	5/16-24 Hex Nut
61	3/8" Lockwasher
62	5/16 x 1" Roll Pin
63	3/8-16 x 1" Hex Head Cap Screw
64	Front Trunnion
65	Bearing
70	3/8-24 x 1-1/2" Hex Head Cap Screw
71	Front Trunnion Bracket
72	3/8" Lockwasher
73	3/8-24 Hex Nut
74	Handwheel
75	5/16-18 x 5/16" Hex Socket Set Screw
80	Tilting Shaft w/Worm
81	Collar
82	Fiber Washer
83	3/16 x 1-1/8" Roll Pin
84	Lock Pin
85	Lock Knob
86	Fiber Washer
87	5/16-18 x 1" Phillips Head Cap Screw
88	Shield Plate
89	Pointer
90	5/16-18 x 3/8" Round Head Machine Screw
91	Pointer Bracket
92	#8-32 Phillips Head Machine Screw
93	Fiber Washer
94	Handwheel
95	5/16-18 x 5/16" Hex Socket Set Screw
97	5/16 x 3/16 x 1-3/8" Key
98	Guide Block
99	Special Steel Washer
100	7/16-20 x 1-1/2" Hex Head Cap Screw
110	5/32" Hex Wrench
111	Wrench

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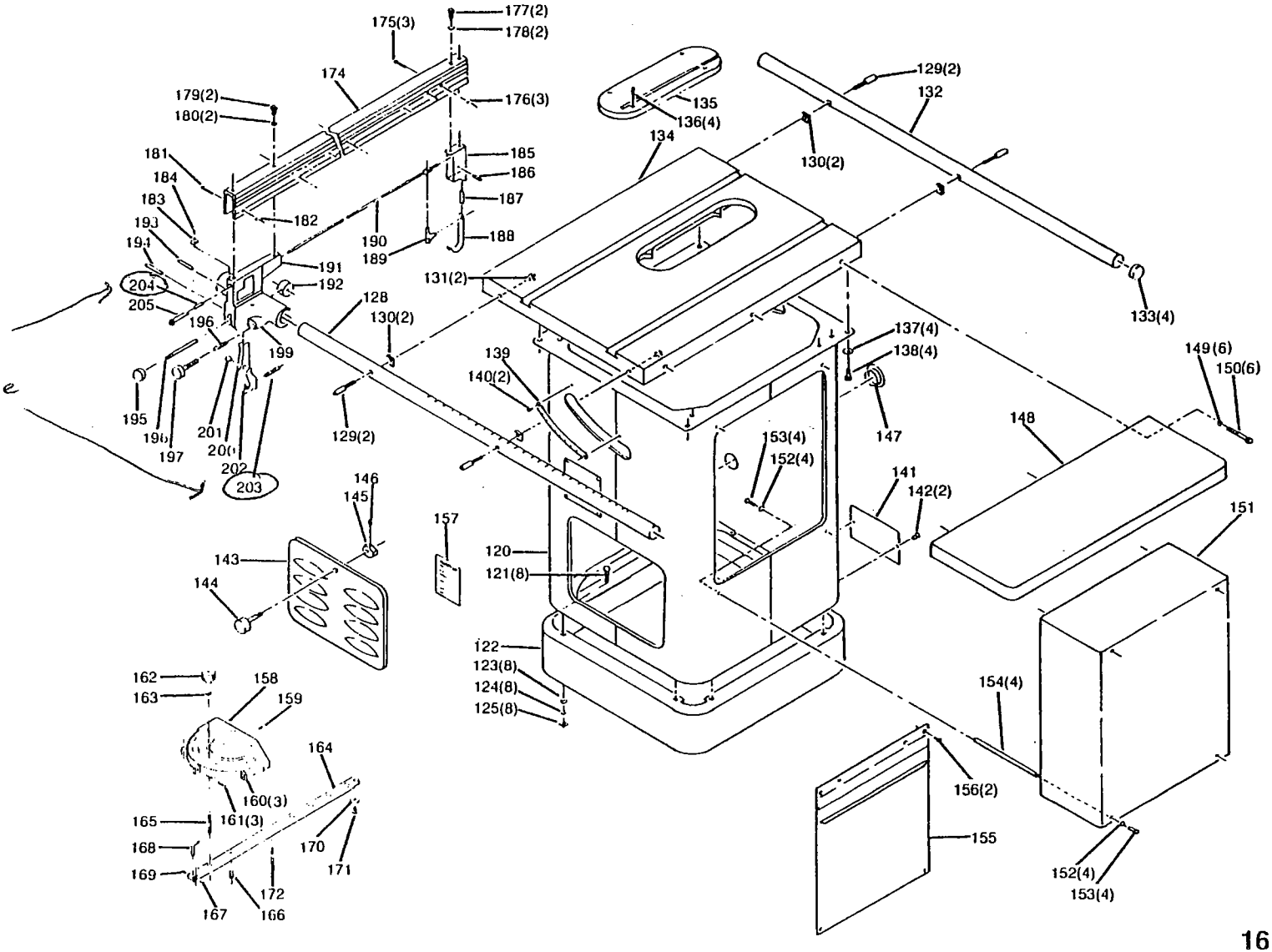
FRAME ASSEMBLY



Do Not Come on Jet Fence

FILE

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PARTS LIST — Frame Assembly

Part No.	Part Name
120	Cabinet
121	5/16-18 x 1-1/4" Carriage Bolt
122	Cabinet Base
123	11/32 x 11/16 x 1/16" Washer
124	5/16" Lockwasher
125	5/16-18 Square Nut
127	#4 x 3/16" Drive Screw
128	Front Guide Rail
129	3/8-24 Special Screw
130	Spacer
131	3/8-24 Hex Nut
132	Rear Guide Rail
133	Plug
134	Table
135	Table Insert
136	1/4-28 x 3/8" Levelling Screw
137	Special Steel Washer
138	7/16-20 x 3/4" Hex Head Cap Screw
139	Indicator Scale
140	#6-32 x 1/4" Self Tapping Screw
141	Plate
142	#10A x 1/2" Hex Head Metal Screw
143	Door
144	Door Knob and Stud
145	Door Lock Cam
146	5/16-18 x 5/16" Hex Socket Set Screw
147	Insulator
148	Side Extension Wings
149	7/16" Split Lockwasher
150	7/16-20 x 1" Hex Head Screw
151	Motor Cover
152	5/16" Internal Tooth Lockwasher
153	5/16-18 x 7/8" Phillips Head Screw
154	Spacer
155	Envelope
156	Retainer
157	Warning Label
158	Miter Gauge Body
159	Special Set Screw
160	Special Nut
161	#8-32 x 1/2" Phillips Head Screw
162	Lock Knob
163	Fiber Washer
164	Bar
165	Stud
166	Stop Link
167	Special Pin
168	Pointer
169	Special Set Screw
170	Plate
171	1/4-28 x 5/16" Flat Head Machine Screw
172	Special Pivot Screw
174	Fence Body
175	10-32 x 1-1/4" Pan Head Screw
176	10-32 Clinch Nut
177	5/16-18 x 5/8" Hex Head Screw
178	5/16 x 3/4 x 1/16" Washer
179	3/8-24 x 5/8" Hex Head Screw
180	25/64 x 11/16 x 1/16" Washer
181	10-32 x 1-1/4" Pan Head Screw
182	10-32 Clinch Nut
183	Pointer
184	#10-32 1/4" Round Head Screw
185	Rear Slide Block
186	Pin
187	Spring
188	Clamp Hook
189	Lever
190	Rod
191	Front Clamp Body
192	Eccentric
193	Pin
194	Pin
195	Ball Handle
196	Clamp Lever
197	Knob and Pinion
198	Spring
199	1/4-20 x 1/4" Socket Set Screw
200	Front Clamp Shoe
201	Rubber Bushing
202	Pin
203	Spring
204	Spring
205	Sleeve

FILE

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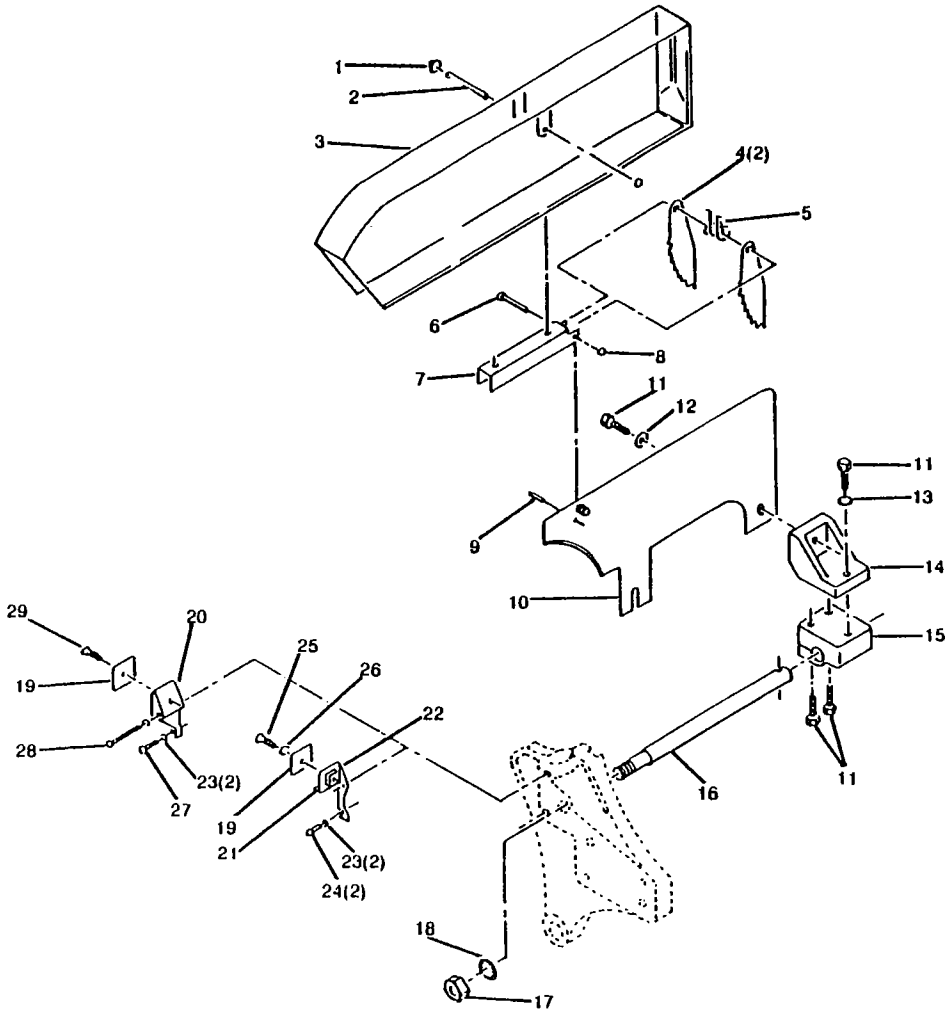
BLADE GUARD



FILE

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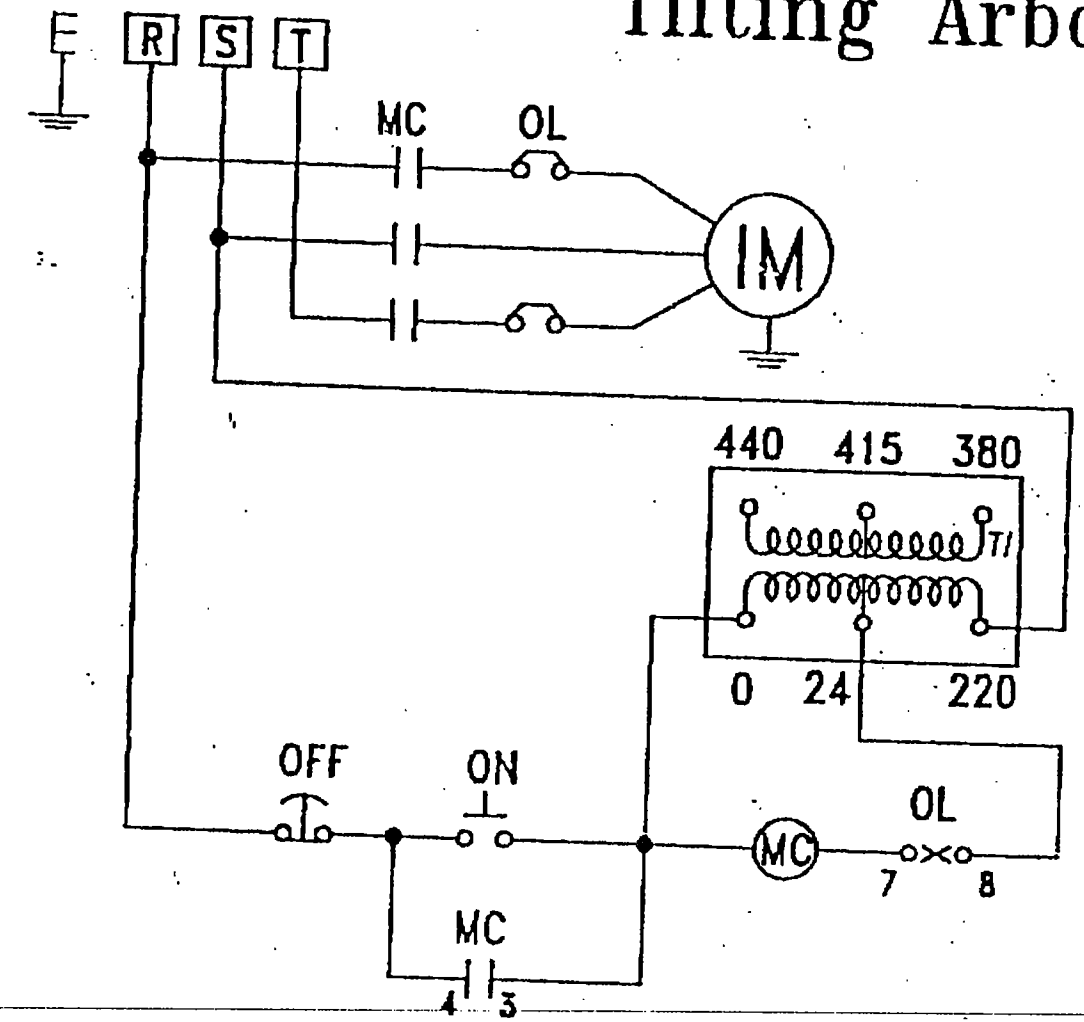
PARTS LIST — Blade Guard

Part No.	Part Name
BG-A	Splitter and Guard Assembly
BG-1	Push Nut (Cap)
BG-2	Pin
BG-3	See-Through Guard
BG-4	Kickback Fingers
BG-5	Spring
BG-6	Pin
BG-7	Pivot Bracket
BG-8	Push Nut
BG-9	5/32 x 11/16" Roll Pin
BG-10	Splitter w/Bushing
BG-11	5/16-18 x 7/8" Hex Head Screw
BG-12	5/16 x 3/4 x 1/16" Washer
BG-13	5/16" Split Lockwasher
BG-14	Bracket, rear
BG-15	Bracket, bottom
BG-16	Shaft
BG-17	Hex Nut 5/8-18
BG-18	Lockwasher 5/8"
BG-19	Plate
BG-20	Bracket, front
BG-21	Bracket
BG-22	Tinnerman Nut
BG-23	1/4 x 9/16 x 3/64" Washer
BG-24	1/4-20 x 5/8" Hex Head Cap Screw
BG-25	5/16-18 x 1" Hex Head Cap Screw
BG-26	5/16 x 3/4 x 1/16" Washer
BG-27	1/4-20 x 7/8" Hex Head Cap Screw
BG-28	1/4-20 x 2 Hex Head Cap Screw
BG-29	5/16-18 x 5/8" Hex Head Cap Screw

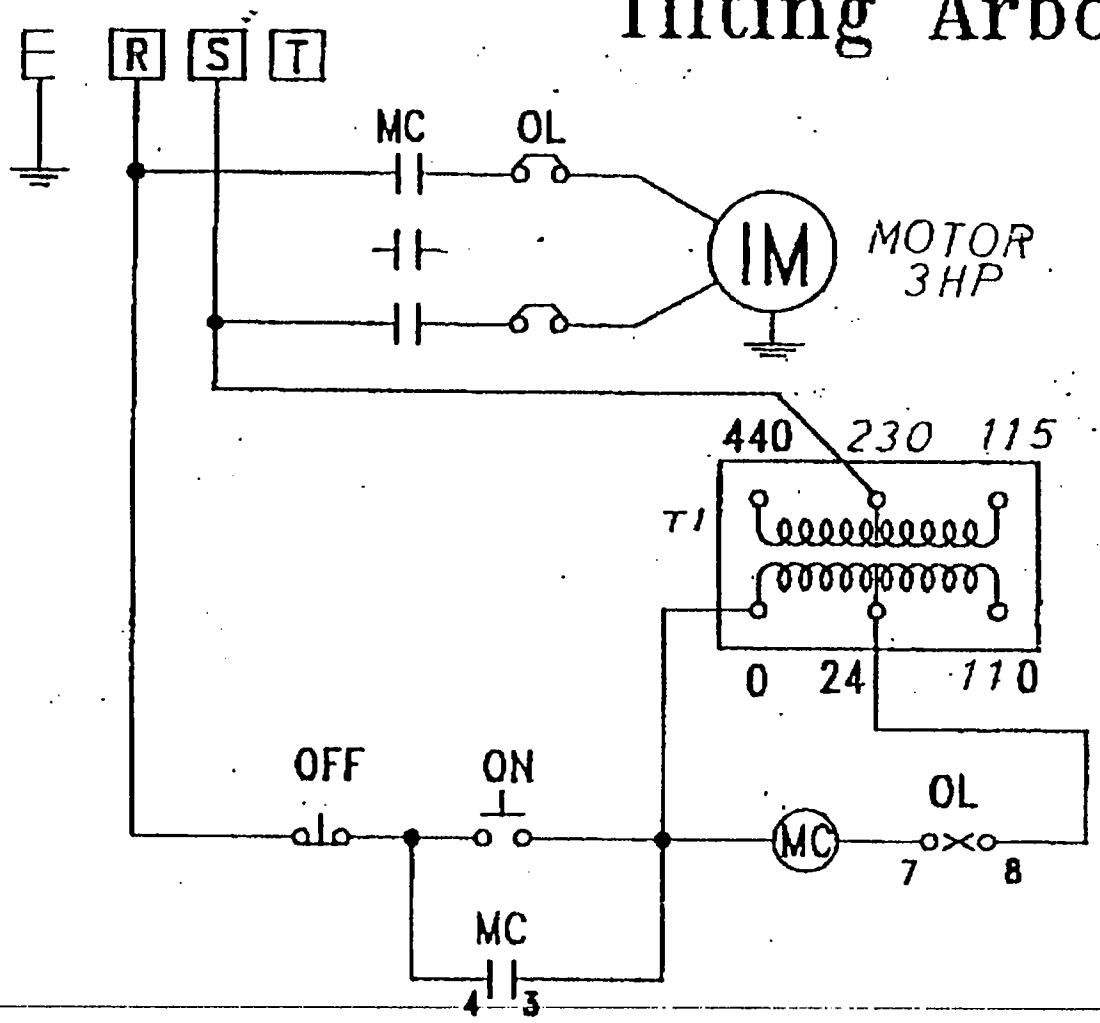
FILE

CTAS-10-3
Tilting Arbor Table Saw



3 HP 3 PH		
MARK	TYPE	SPEC
ON	PP-2	AC600V3A
OFF	PP-2	AC600V3A
MC	C-11G	20A 24V
OL	RH-10E/10C	8/12A 24V
T1	PT-25	0.5A

CTAS-10-1
Tilting Arbor Table Saw



FILE

3 HP 1 PH		
MARK	TYPE	SPEC
ON	PP-2	AC600V3A
OFF	PP-2	AC600V3A
MC	C-18G	35A 24V
OL	RH-$^{13}/_{15}$	$^{12}/_{8}$A 24V
T1	PT-25	0.5A

CTAS 10-1 **FILE**