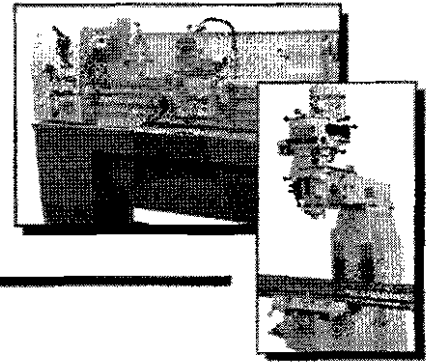


MACHINERY DIVISION

6465 18 MILE ROAD
STERLING HEIGHTS, MI 48314

PHONE:
(586) 731-3600 • 1-800-860-1740

FAX:
(586) 731-7464 • 1-800-862-1740



MODEL BAH-916 BANDSAW

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**KBC MACHINERY
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PH (800) 860-1740
FAX (800) 862-1740
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WWW.KBCTOOLSANDMACHINERY.COM**



PARTS REQUEST FORM

YOUR COMPANY NAME:

STATE/PROVINCE

YOUR NAME

PHONE # + EXT

FAX #

MACHINE INFO:

MAKE/MANUFACTURER

MODEL NUMBER

YEAR MADE

SERIAL#

PARTS REQUESTED:

PART#

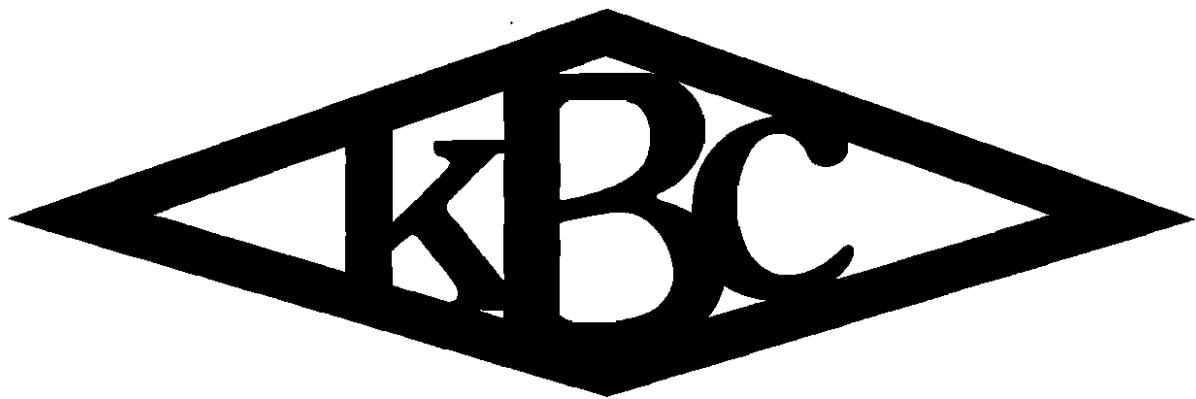
DESCRIPTION

PLEASE INCLUDE COPY(S) OF THE PARTS DRAWING FROM THE
MANUAL AND CIRCLE THE PARTS NEEDED

FAX PARTS REQUEST TO (800) 862-1740

E-MAIL PARTS REQUEST TO: machinery@kbctools.com

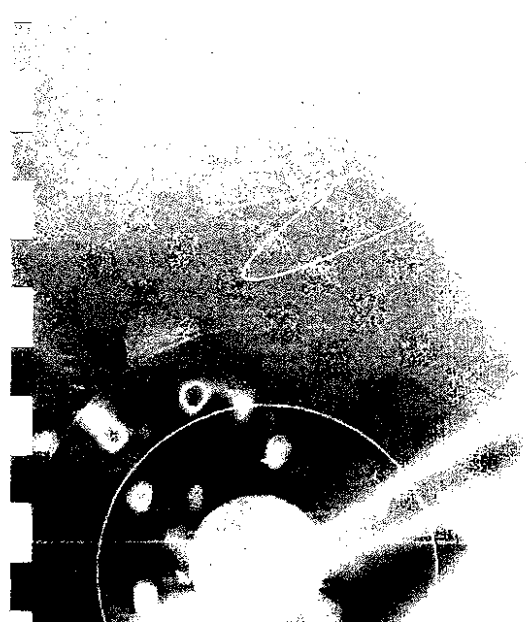
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machinery

**Manual & Auto.
Horizontal Bandsaw**

BAH 916



SAFETY SUGGESTIONS

1. READ THE INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE.
2. IF YOU ARE NOT THOROUGHLY FAMILIAR WITH THE OPERATION OF HORIZONTAL BAND 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 CONNECTION INSTRUCTIONS ARE FOLLOWED AND THAT MACHINE IS PROPERLY GROUNDED.
6. MAKE ALL ADJUSTMENTS WITH THE POWER OFF.
7. ADJUST AND POSITION THE BLADE GUIDE BEFORE STARTING CUT.
8. MAKE SURE THAT BLADE TENSION IS PROPERLY ADJUSTED BEFORE STARTING CUT.
9. STOP THE BAND SAW BEFORE PUTTING A WORK PIECE IN THE VISE.
10. ALWAYS KEEP HANDS AND FINGERS AWAY FROM THE BLADE WHEN THE MACHINE IS RUNNING.
11. STOP THE MACHINE BEFORE REMOVING CHIPS.
12. ALWAYS HAVE STOCK FIRMLY CLAMPED IN VISE, BEFORE STARTING CUT.
13. DISCONNECT MACHINE FROM POWER SOURCE WHEN MAKING REPAIRS.
14. BEFORE LEAVING THE MACHINE, MAKE SURE THE WORK AREA IS CLEAN.

DAILY CHECK LIST

1. CHECK COOLANT: Low coolant level can cause foaming and high blade temperatures. Dirty or weak coolant can clog pump, cause crooked cuts, low cutting rate and permanent blade failure. Dirty coolant can cause the growth of bacteria with ensuing skin irritation.
2. KEEP VISE SLIDES CLEAN AND OILED.
3. CLEAN CHIPS FROM BLADE WHEELS AND AREAS AROUND WHEELS.
4. SAW GUIDE: Keep saw guide tight. Loose guide will affect sawing accuracy.
5. SAW BLADE: Is saw blade sharp?
6. BLADE SPEED: Is blade speed set correctly for workpiece material and shape?
7. CHECK BLADE TENSION: Particularly after initial cuts with a new blade.

SAW BLADE SELECTION

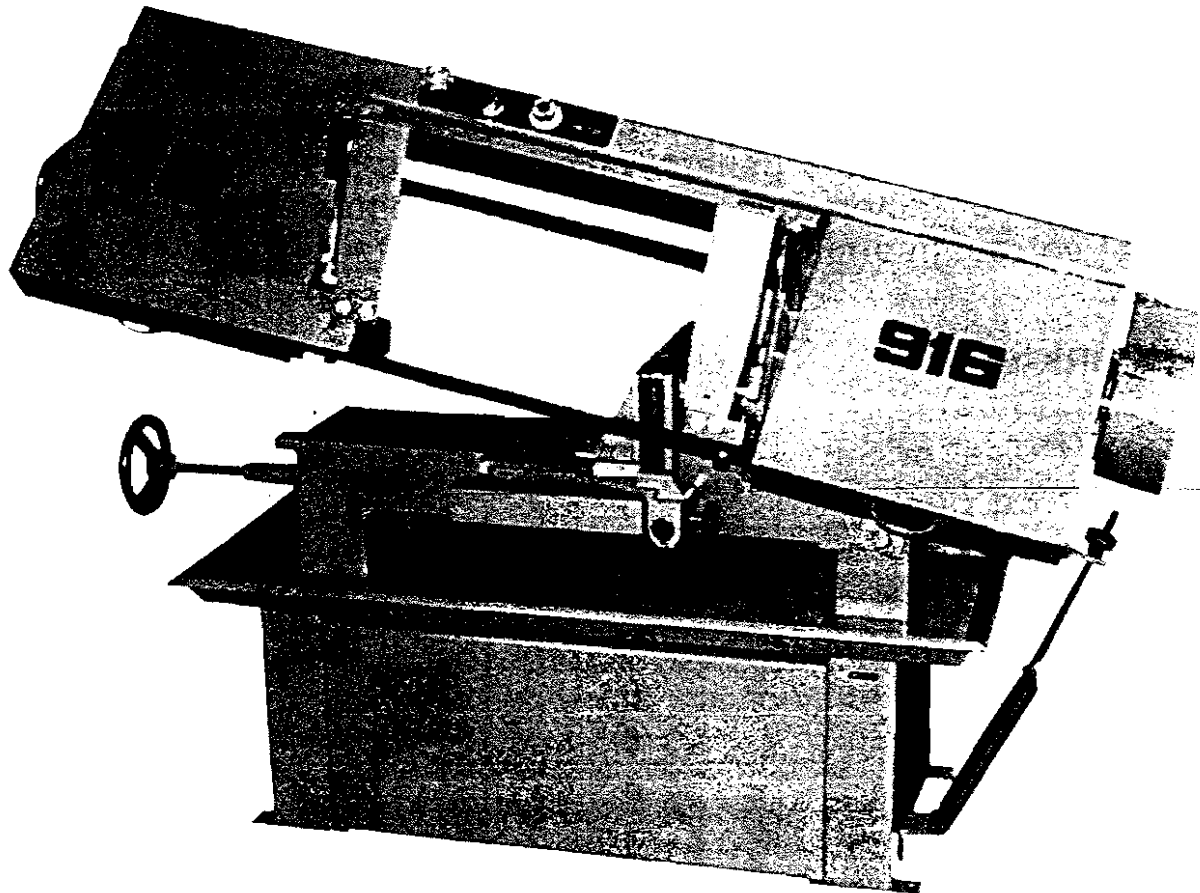
- A. Never use a blade so coarse that less than 3 consecutive teeth are engaged in the work piece at any one time. (Too few teeth will cause teeth to strip out.)
- B. Never use a blade finer than required to obtain a satisfactory surface finish or satisfactory flatness. (Too many teeth engaged in the workpiece will prevent attainment of a satisfactory sawing rate; frequently cause premature blade wear; frequently produce "dished" cuts or cuts which are neither square nor parallel.)
- C. The Chart which follows is not expected to be exactly correct for all cases. It is intended as a general guide to good sawing practice. Your blade supplier or factory application engineer should be your most reliable source of correct information for operational details of saw blades and their use.

WORK SIZE (Solid Bars)	PORBABLE PITCH-TEETH PER INCH		
	BEST	SECOND BEST	THIRD BEST
Less Than 1" Dia. or Sq.	10		
1" Dia. or 1" Sq.	8	10	6
1-1/2" Dia. or 1-1/2" Sq.	8	10	6
2" Dia. or 2" Sq.	8	6	4
2-1/2" Dia. or 2-1/2" Sq.	6	8	4
3" Dia. or 3" Sq.	6	4	3
3-1/2" Dia. or 3-1/2" Sq.	6	4	3
4" Dia. or 4" Sq.	4	3	6
4-1/2" Dia. or 4-1/2" Sq.	4	3	6
5" Dia. or 5" Sq.	4	3	6
6" Dia. or 6" Sq.	3	4	6
7" Dia. or 7" Sq.	3	4	6
8" Dia. or 8" Sq.	3	2	4
9" Dia. or 9" Sq.	3	2	4

NOTE:

1. When standard wall pipe or tubing or thin wall tubing, channel iron, angles I Beams are cut, a 10 pitch saw blade of "wave" set type is frequently used to good advantage. Fewer than 10 teeth per inch of saw will almost never be satisfactory.
2. Tubing or structurals with wall thickness or web thickness of 1/2" or more can usually use an 8 or 6 pitch blade satisfactorily,
3. When rectangular, solid bar is to be sawed, the work should, whenever possible, be loaded with thinnest cross section exposed to the blade teeth. The pitch (or number of teeth per inch of blade) selected must provide engagement of at least 3 consecutive teeth in the work piece. Should application of this rule not be possible because the thinnest cross section is too thin, the piece must be loaded with the wider dimension exposed to the saw teeth and a coarser blade selected from the listing of

9" × 16" HORIZONTAL BAND CUT-OFF MACHINE



INTRODUCTION

Your new 9" × 16" HORIZONTAL Band Saw is well suited for many users - job shops, tool rooms, maintenance departments, metal fabricators, building trade contractors, machine shops, vocational schools and teacher training colleges. Your machine is shipped wired for one of the five following electrical systems:

115 Volt, Single Phase Only

115/230 Volt, Single Phase - Motor wired for 115 Volt

230/460 Volt, Three Phase - Motor wired for 230 Volt

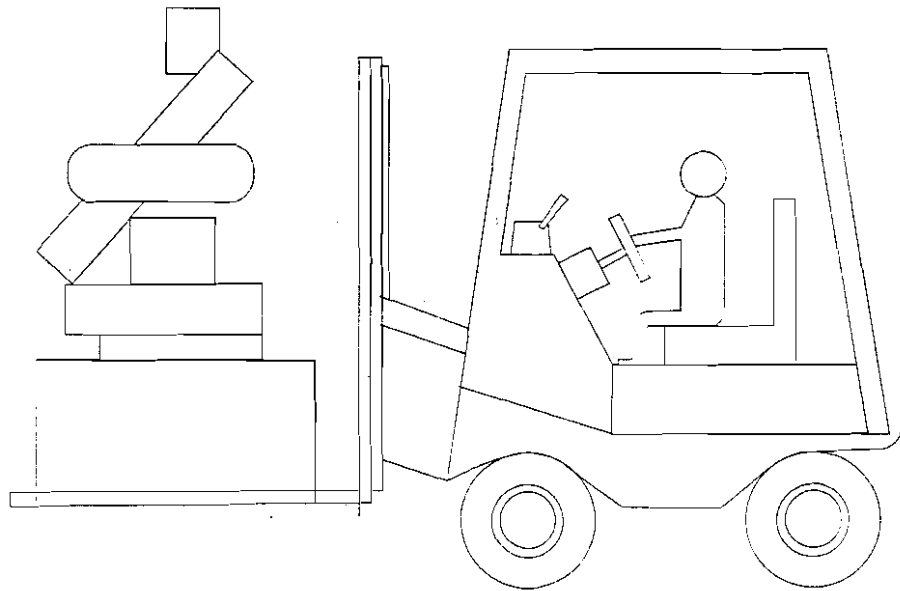
200 Volt, Three Phase

575 Volt, Three Phase

We suggest you read and understand this manual before setting up, making wiring connections and operating your machine and also that you save it for future reference.

TRANSPORATION METHODS

- 1.ALWAYS KEEP BALANCE WHILE THE MACHINE IS IN TRANSPORTATION.
- 2.DRIVE FOLKLIFT SLOWLY AND CAREFULLY.



OPERATING CONTROLS AND ADJUSTMENTS

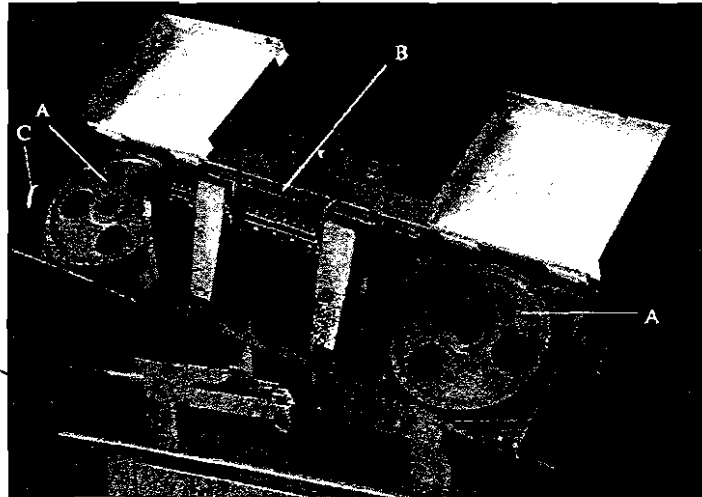


FIG. 1

REMOVING AND INSTALLING THE BLADE

When your machine was shipped, a blade was supplied and assembled to the saw. When selecting a new blade refer to page 3 for information on **SAW BLADE SELECTION**. This machine requires a blade 1" wide x 132 1/2" long.

1. Disconnect the machine from the power source.
2. Raise the saw frame about 6" and close the feed rate lever by turning it clockwise as far as it will go.
3. Open both wheel covers and clean the swarf out of the machine.
4. Release blade tension by turning the blade tension handwheel (C) Fig. 1 counterclockwise.
5. Remove the blade from both wheels and out of each blade guide.
6. Make sure the teeth of the new blade are pointing in the direction of travel. If necessary, turn the blade inside out.
7. Place the blade in place on the wheels (A) and through the upper blade guard (B) Fig. 1. Fig. 1 is shown with the wheel covers removed for clarity.
8. Work the blade (F) all the way up into the blade guide roller bearings (D) with the back of the blade against the back-up bearing (E), as shown in Fig. 2

NOTE: If roller bearings need adjusted refer to the section **ADJUSTING BLADE GUIDE ROLLER BEARINGS**.

9. Put light tension on the blade and work it on both wheels, as shown in Fig. 3 **MAKE SURE THAT THE BACK OF THE BLADE IS AGAINST THE WHEEL FLANGES OF BOTH WHEELS. THIS IS VERY IMPORTANT.**
10. When you are sure the back of the blade is against the wheel flanges of both wheels and properly inserted into the guides, finish putting tension on the blade.
11. Jog the power "on" and "off" to be sure the blade is in place and tracking properly. If blade is not tracking properly refer to the section **TRACKING THE BLADE**.

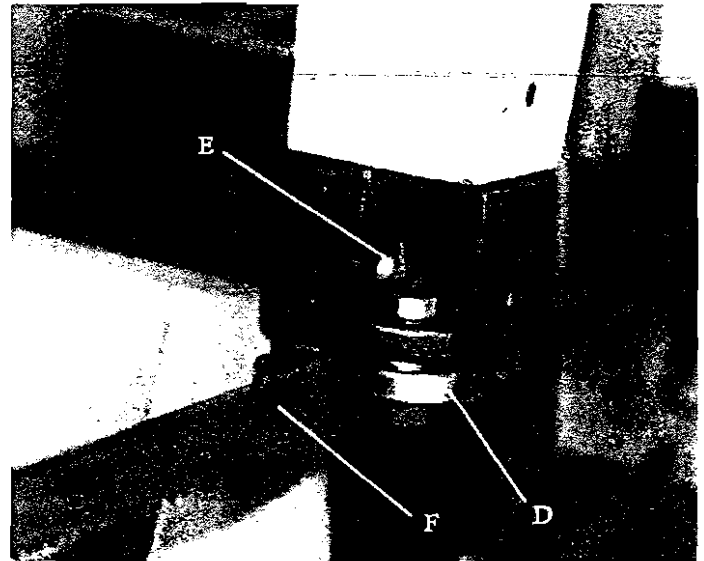


FIG. 2



FIG. 3

ADJUSTING BLADE GUIDE BRACKETS

The blade guides should be set as close to the vise jaws as possible. The right blade guide bracket (A) Fig.4, is not adjustable and is set at the factory to clear the right hand vise jaw. The left blade guide bracket (B) can be moved to the left or right depending on the position of the left hand vise jaw (C). To move the left blade guide bracket (B), loosen hand knob (D), position blade guide bracket (B) and tighten hand knob (D). (Note: when operating 1018T, the right blade guide bracket (A) can be moved as well especially when cutting in 90° to make sure the bracket be moved as close to the vise jaw as possible.

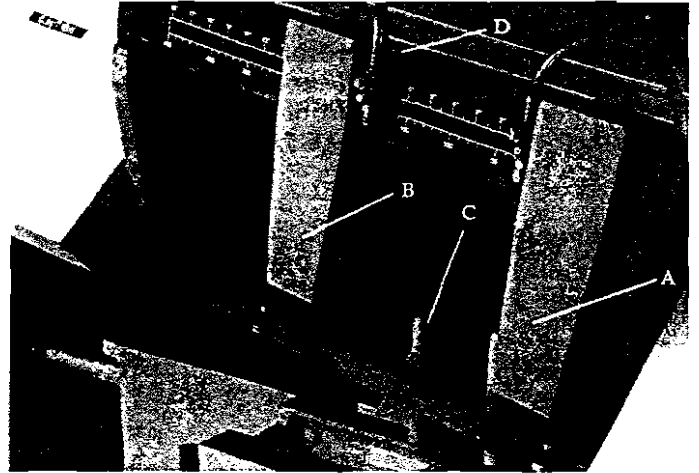


FIG.4

ADJUSTING BLADE GUIDE ROLLER BEARINGS

The back of the blade (A) Fig.5, should ride against the back-up support bearing (B) which is positioned at an angle so as to provide greater bearing support, eliminating bearing wear and extending blade life. The saw blade (A) should also ride between the two roller bearings (C) and (D) Fig. 5. The rear bearing (C) on the left hand blade guide can be easily adjusted to suit blade thickness by loosening nut (E). The bearing (C) is on an eccentric which enables it to be adjusted for the thickness of the blade. The roller bearings on the right blade guide bracket are adjusted for blade thickness in the same manner with the exception that the adjustable roller bearing is in the forward position.

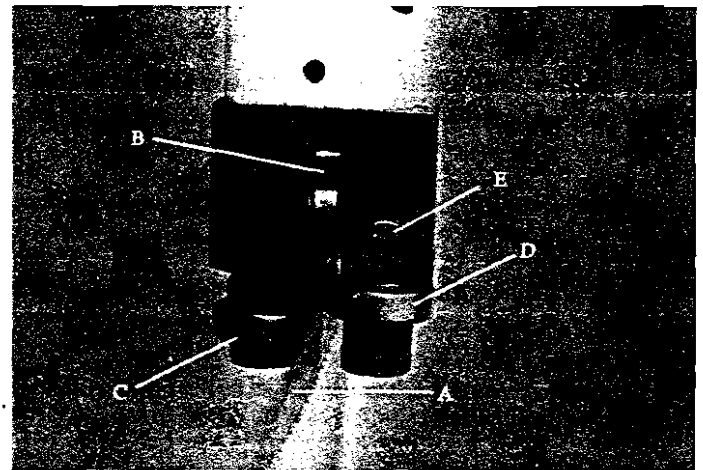


FIG.5

Part (F) shown Fig. 6 is a tungsten carbide block, after complete the adjustments shown in Fig. 5, tighten the Part (F) onto the surface of the saw blade.

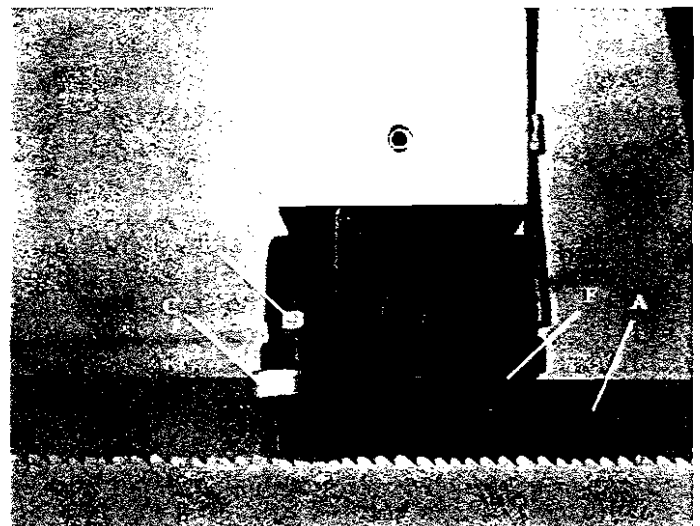


FIG.6

CHANGING SPEEDS

Your machine is provided with a range of four speeds; 50, 125, 200 and 275 feet per minute. To change speeds, proceed as follows:

1. Disconnect the machine from the power source.
2. Loosen wing nut and lift up the swing belt and the pulley guard to the front of the machine.
3. Release tension on the belt by turning the tension lock knob (A) Fig. 7 counterclockwise and lifting the motor swing forward.
4. Shift the belt (B) Fig. 7, to the desired grooves on the pulleys and adjust belt tension by pulling the motor plate (C) back until correct belt tension is obtained and tighten tension lock knob (A).
5. Close the belt and pulley guard.

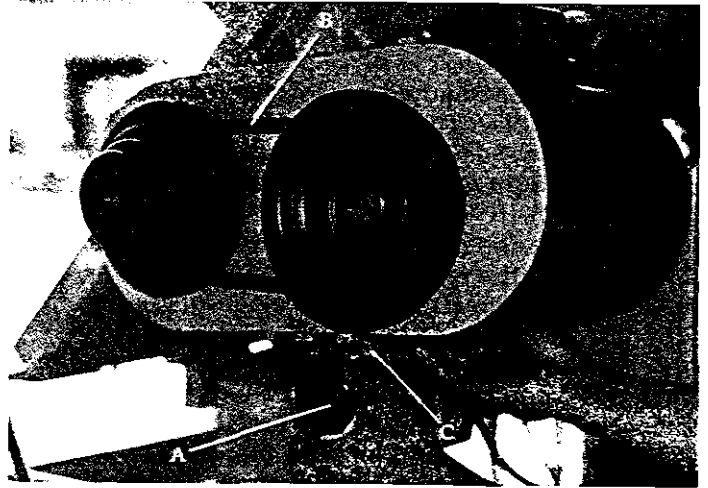


FIG.7

OPERATING VISE (1018M)

The workpiece is placed between the vise jaws with the required amount to be cut off extending out past the blade. To position the moveable vise jaw (B) instantly, simply turn vise handknob (A) Fig 8, counterclockwise 1/2 turn and move the vise jaw (B) to the desired position. Then tighten vise by turning the knob (A) clockwise.

The vise can be adjusted to cut any angle from 0 degrees to 45 degrees by loosening the two bolts (C) Fig. 8, on each vise jaw. Position the vise jaws to the desired angle and tighten the bolts. It is also necessary, when angle cutting, to move the right hand vise jaw (D) to the left until the workpiece and right hand vise jaw clears the right hand guide arm.

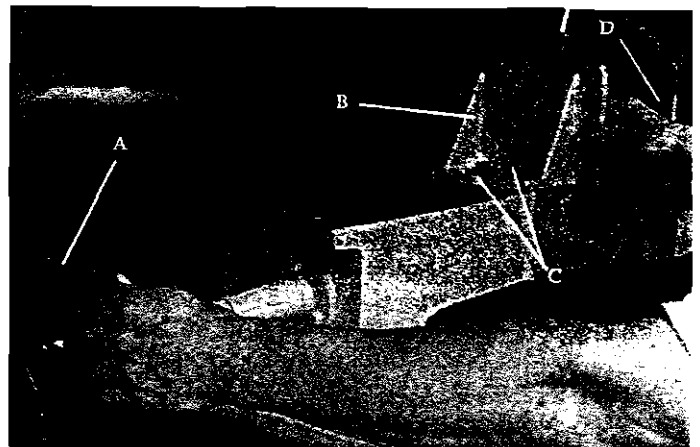
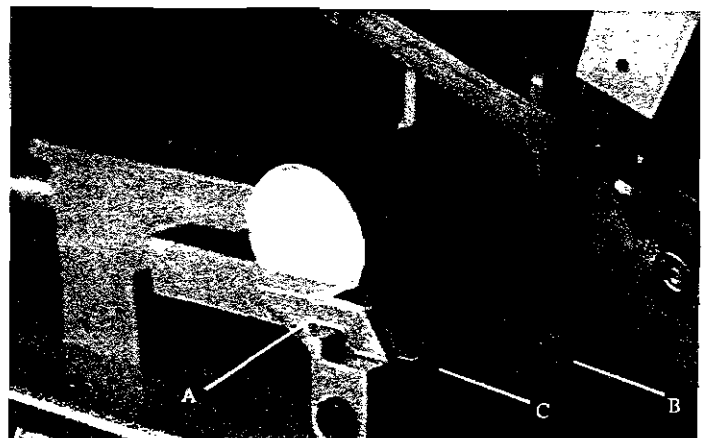


FIG.8

ADJUSTING STOCK ADVANCE STOP

The Stock Advance Stop is used mainly when more than one piece is to be cut to the same length. Simply position the stop block (A) Fig.9, the desired distance away from the blade. The stop may be repositioned by loosening screw (B) and moving the rod (C) accordingly. To move the stop block (A) out of the way simply push it to the down position.



SETTING UP THE MACHINE FOR OPERATION

1. Select the proper speed and blade for the type of material you are cutting.
2. Make sure blade tension is adjusted properly.
3. Lift the saw frame up and close the feed rate lever.
4. Place the stock between the vise jaws, set the stock for the desired width of cut and tighten the vise.
5. Make sure the left blade guide bracket (A) is adjusted as close as possible to the left vise jaw (B) Fig. 10
6. Turn the machine on and if your machine is equipped with a coolant system, adjust coolant flow by turning lever (C) Fig.10.
7. Turn the feed rate lever (D) Fig 10, counterclockwise until the saw blade begins to lower the desired rate of speed.
8. Proceed to cut throughout the workpiece, as shown in Fig. 10. The machine shut off upon completion of cut.

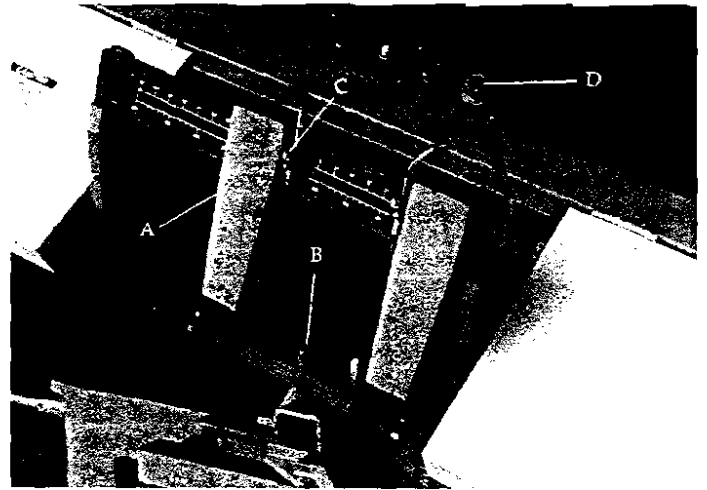


FIG.10

AUTOMATIC SHUT-OFF

On machine equipped with 115/230 Volt, single Phase; 230/460 Volt, Three Phase; 200 Volt Three Phase; or 52-402. 575 Volt Three Phase Electrical, Kits, the machine and any accessories which are wired into the electrical system are controlled by the start-stop buttons. The machine will automatically shut off when the cut is completed. The lever (A) Fig. 11, for the automatic shut-off contacts the top of the hydraulic cylinder (B) and shuts off the machine.

Lubrication of hydraulic system If it is necessary to fill the hydraulic cylinder with oil, proceed as follow:

1. Lift the saw frame a little bit (about 15°), pave a block underneath the saw frame to hold it.
2. Turn cover (B) shown in Fig. 11 counterclockwise, then fill hydraulic oil or equivalent in till it is full.

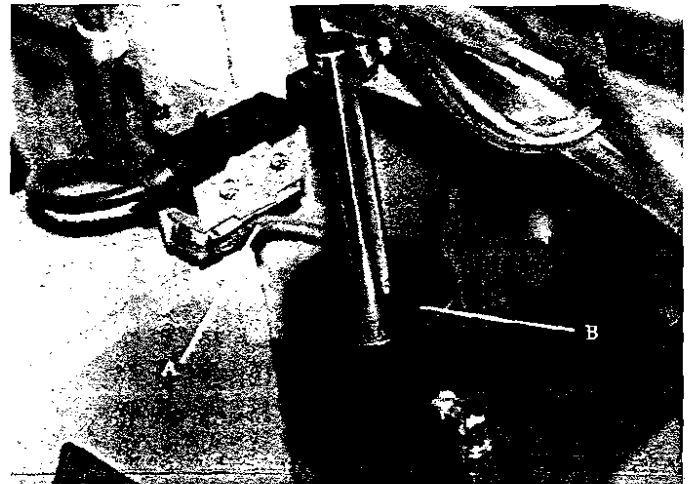


FIG.11

GEAR CASE

After the first 50 hours of use the gear case should be drained and refilled. Remove drain plug (A) Fig. 12 drain all of the oil out of the gearbox. Remove oil filler plug located underneath the right wheel and fill the gear case with 850ml of multi-function gearbox oil or equivalent.

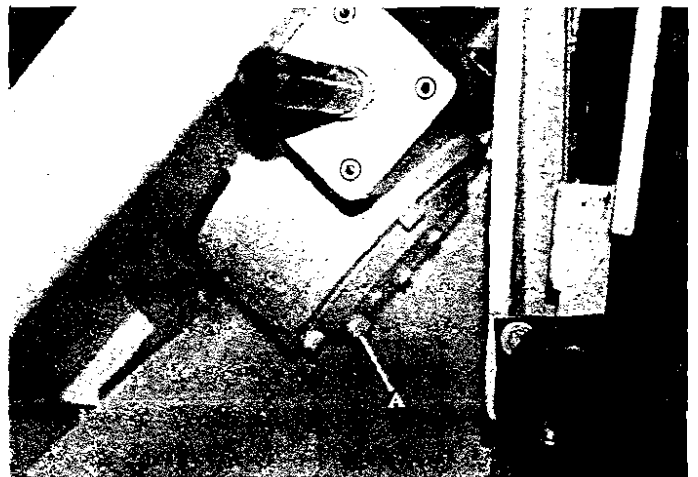
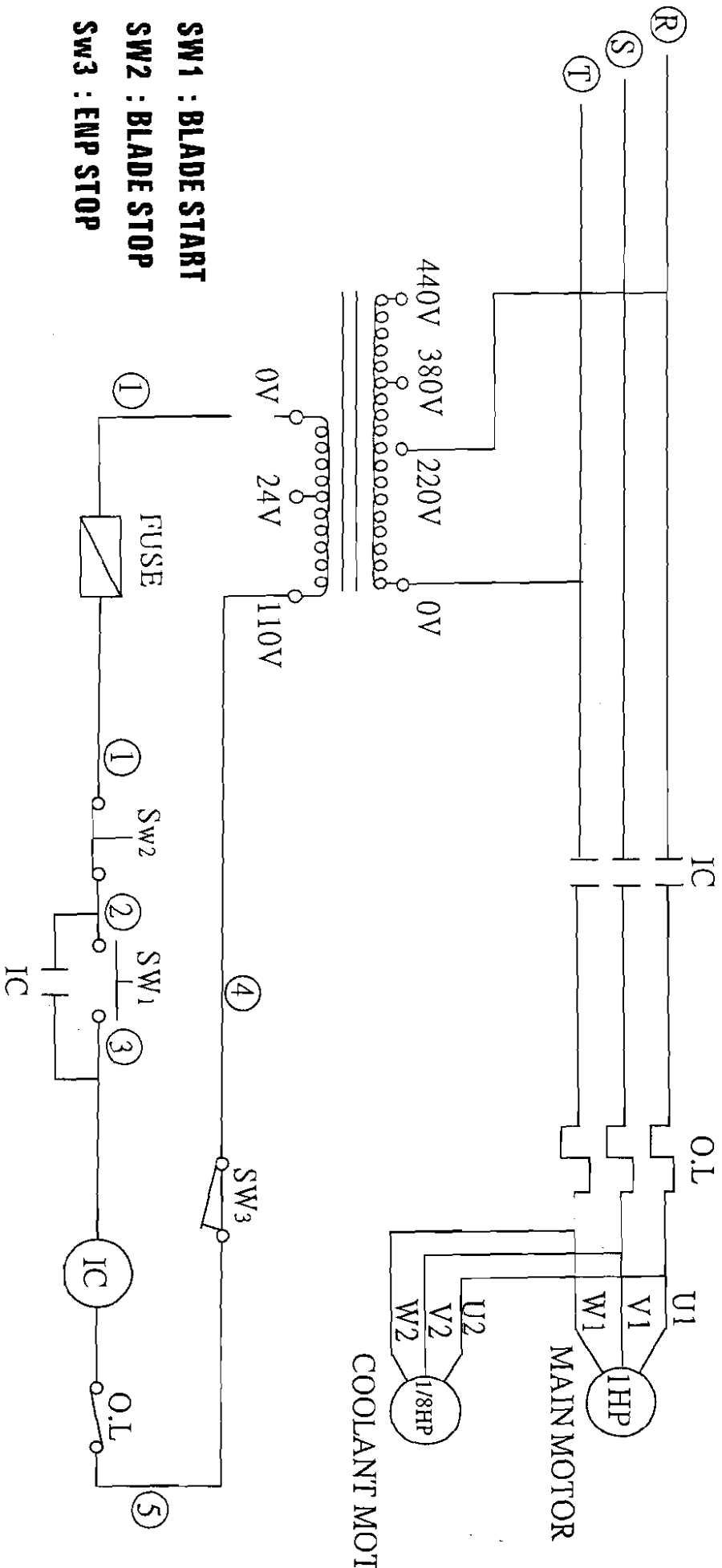


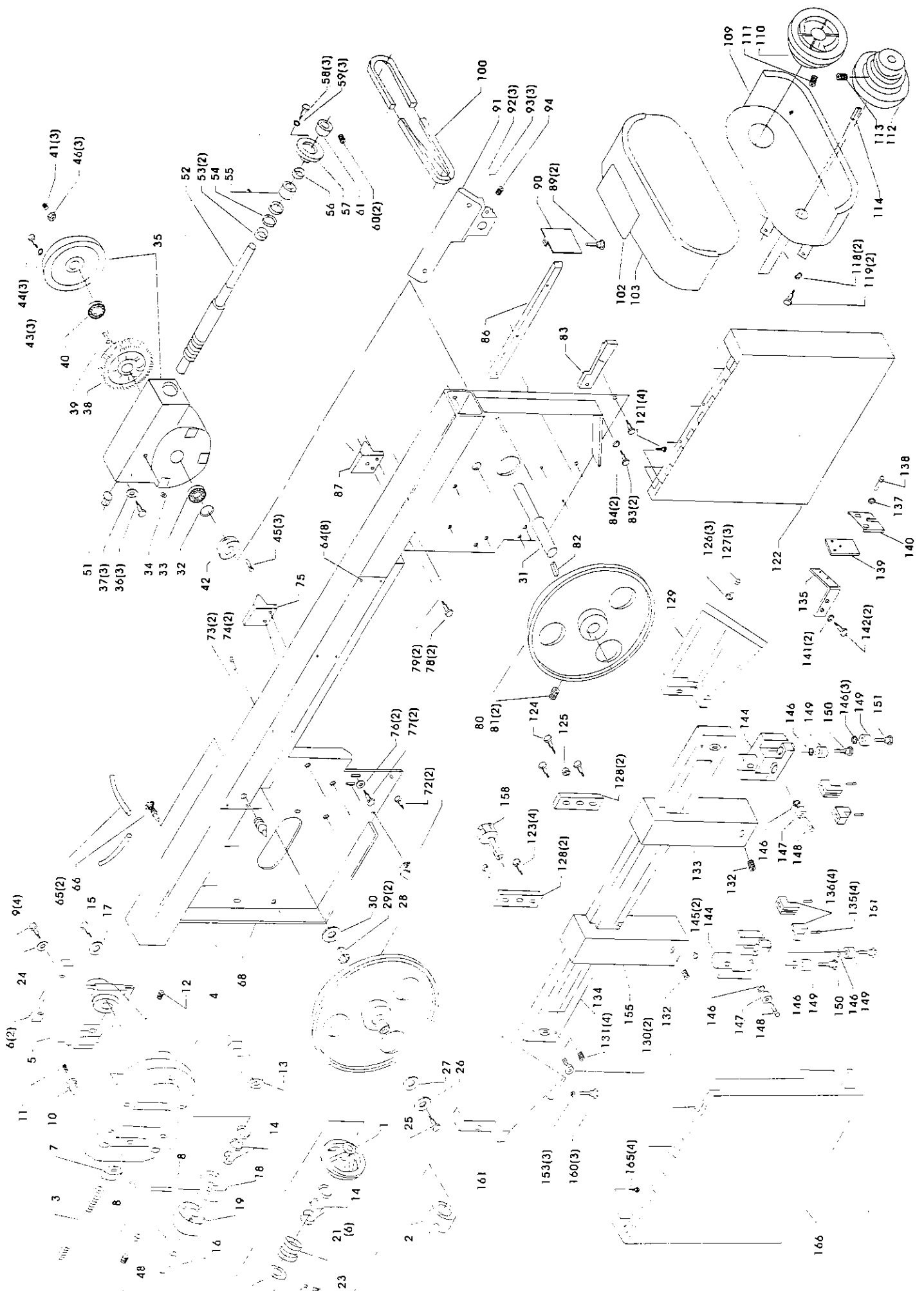
FIG.12



SW1 : BLADE START

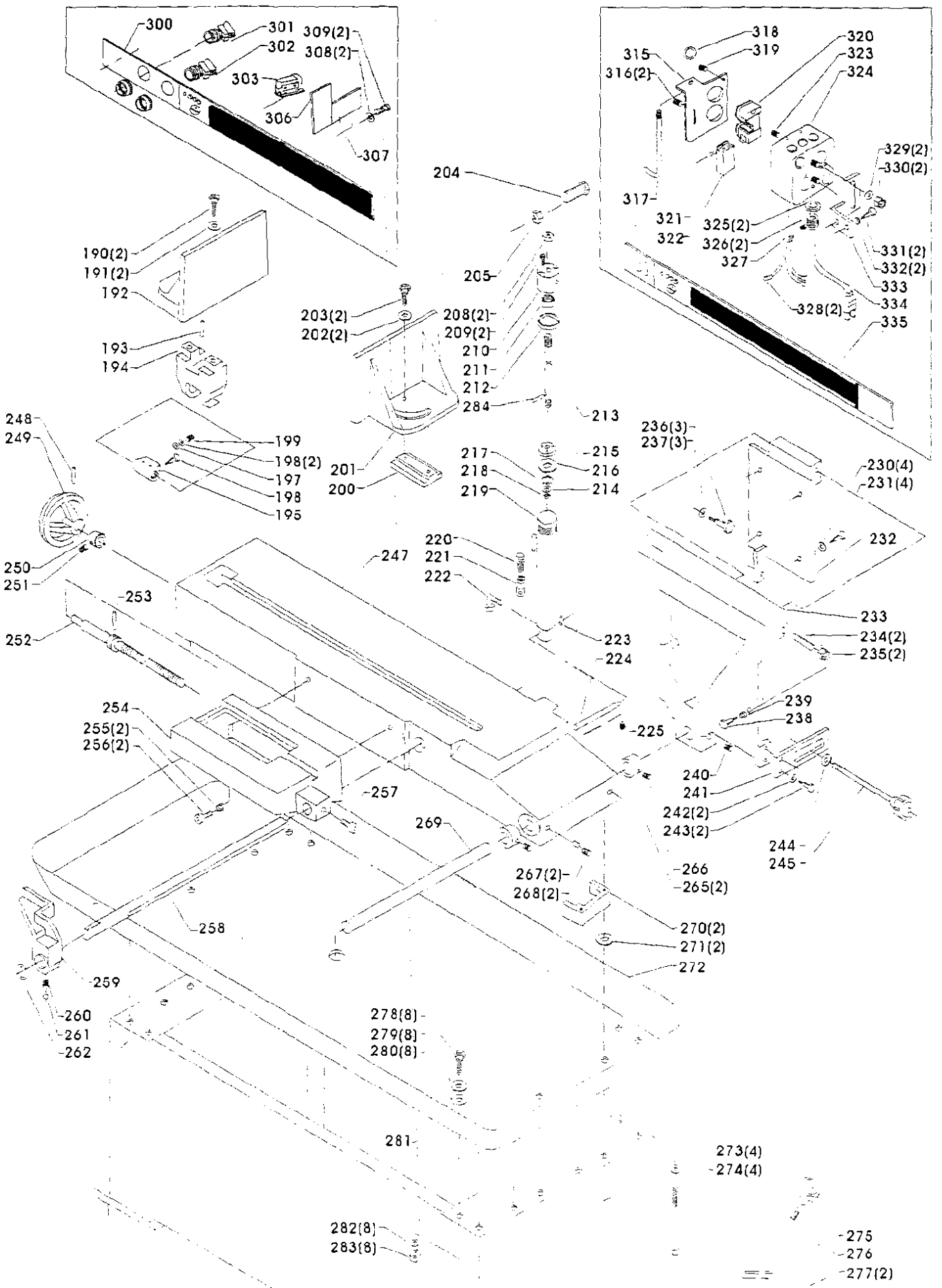
SW2 : BLADE STOP

SW3 : ENP STOP



Replacement Parts

Ref. #	Description	Ref. #	Description
1	Handwheel	76	21/64 x7/8 x1/16" Washer
2	Collar	77	5/16-18 x3/4" Hex. Hd. Scr.
3	Shaft	78	5/16-18 x3/4" Hex. Hd. Scr.
4	Bracket	79	5/16" Split Lockwasher
5	Slide	80	Wheel-R.H.
6	Glb	81	3/8-24 x3/8" Soc. Set Scr.
7	Collar	82	7 x7 x40 Key
8	Roll pin	83	1/4-20 x3/4" Hex. Hd. Scr.
9	5/16" x3/4" screw	84	1/4" Split Lockwasher
10	Adjusting screw	85	Bracket
11	3/8" x1-1/2" screw	86	Bar
12	3/8" x3/8" set screw	87	Bracket
13	Spindle	89	3/16"-24 x1/2" Rd. Hd. Scr.
14	Thrust bearing 51103#	90	Coulumn Cap
15	3/8" x1-1/4" screw	91	Front Pivot Bracket
16	Roll pin, 6 x401	92	3/8" Split Lockwasher
17	Washer	93	3/8-16 x7/8" Hex. Hd. Scr.
18	Driven Dog	94	3/8-16 x3/8" Soc. Set. Scr.
19	Thrust Bearing Housing	100	Belt
20	Lock nut	101	#4 x3/16" Drive Screw
21	Disc Spring	102	Speed Dial
22	Copper	103	Upper Guard
23	1-1/4" x1/4" x24" Hex. Hd. Scr.	108	1/4"-20 Wing Nut
24	5/16" Split Lockwasher	109	Lower Guard
25	3/8-16 x3/4" L.H.Hex. Hd. Scr.	110	Motor Pulley, Including:
26	Spacial Washer	111	5/16-18 x5/16" Soc. Set Scr.
27	Fiber Washer	112	Gear Box Pulley, Including:
28	Wheel Assembly, L.H., Including:	113	5/16-18 x5/16" Soc. Set Scr.
29	Bearing	114	5 x5 x40 Key
30	Nylon Washer	118	1/4-20 x3/4" Hex. Hd. Scr.
31	Output Shaft	119	1/4" Split Lockwasher
32	32, 42, 7, oilseal	121	#10-32 x7/16" Rd. Hd. Scr.
33	Bearing 30207#	122	Cover Assembly R.H., Including:
34	1/8" Soc. Hd. Pipe Plug	126	3/8-16 x7/8" Hex. Hd. Scr.
35	Gear Box and Cover Assembly	127	3/8" Split Lockwasher
36	3/8-16 x3/4" Hex. Hd. Scr.	128	Statjonyary plate
37	Spacial Washer	129	Bracket
38	Worm Gear	130	3/8"-16 x1-3/4" Screw
39	7mm x35mm Key	131	1/4"-20 x3/4" Set.
40	Bearing 30206#	132	5/16"-18 x5/8" Set.
41	1/4" x3/4" set screw	133	Bracket-R.H.
42	Cap	134	Slide Way
43	3/8" Split Lockwasher	135	Bracket
44	3/8"-16 x1-1/2" Hex. Hd. Scr.	137	3/16" Washer
45	1/4"-20 x5/8" Hex. Hd. Scr.	138	3/16" x24 x3/4" Rd. Hd. Scr
46	Washar	139	Wiper
47	5/16" x18 x5/8" Soc. Set Scr.	140	Retainer
48	Brass Plug	141	1/4" Washer
51	Needle Bearing	142	1/4" x20 x5/8" Hex. Hd. Scr
52	Input Shaft	144	Guide
53	Thrust Race	145	5/16"-18 x5/8" Set
54	Rhrust Bearing	145	5/16"-18 Hex. Jam Nut
55	Needle Bearing	146	Washer
56	1" CII Seal	147	Bearing
57	Cap	148	Special Screw
58	1/4"-20 x3/4" Hex. Hd. Scr.	149	Bearing
59	1/4" Split Lockwasher	150	Special Screw
60	5/16-18 x3/4" Soc. Set Scr.	151	Special Screw
61	Collar	155	Bracket-L.H.
64	#6-32 x1/4" Rd. Hd. Scr.	158	3/8"-16 x2-1/2" Screw
65	3/8 O.D. x65"lg. Tubing	159	3/8 x16 x7/8" Hex. Hd. Scr.
66	Valve	160	3/8" Split Lockwasher
68	Upper Frame	161	Bracket
71	Catch	165	3/16"-24 x1/2" Screw



REPLACEMENT PARTS

Ref. #	Description	Ref. #	Description
161	Bracket	257	5/16-18 x1" Sq. Hd. Set Scr.
162	3/8-16 x3/8" Soc. Set Scr.	*	Adj. Stock Stop. Consisting of:
165	#10-32 x7/16" Rd. Hd. Scr.	258	Shaft
166	Cover Assembly L.H. including:	259	Stop Bracket
*	Not shown Assembled	260	Spring
190	3/8-16 x1-1/4" Hex Hd. Scr.	261	7/16" dia. Steel Ball
191	Special Washer	262	Retaining Ring
192	Vise Jaw Bracket	265	Collar, including:
193	3/16 x1-1/8" Roll Pin	266	5/16-18 x3/8" Soc. Set Scr.
194	Bracket	267	Brass Plug
195	Acme Nut Assembly, including:	268	3/8-16 x3/8" Soc. Set Scr.
196	Button	269	Pivot Shaft
197	Retainer	270	Spacer
198	13/64 x3/8 x1/32" Washer	271	Cork Gasket
199	#10-32 x1/4" Rd. Hd. Scr.	272	Coolant Pan w/Coupling
200	Block	273	3/8" Split Lockwasher
201	Vise Jaw Bracket	274	3/8"-16 x5" Hex Hd. Scr.
202	Special Washer	275	Knob
203	3/8-16 x1-1/2" Hex Hd. Scr.	276	Plate Weld Assembly
204	1/2-13 x1-1/2" Hex Hd. Scr.	277	Spring
*	Dash Pot Assembly, consisting of:	278	3/8-16 x1" Hex. Hd. Scr.
210	Cap	279	Special Washer
211	Oil Seal	280	Cork Gasket
212	Gasket	281	Base Assembly
213	Rod	282	3/8" Split Lockwasher
214	Special Washer	283	3/8"-16 Hex Nut
215	Pistom	284	3/16 x1-1/2" Roll Pin
216	Seal		For all 24v. Low voltage conrtal mach.
217	"O" ring	300	Nameplate
218	5/16-18 Hex Jam Nut	301	Start Switch
219	Tube Assembly	302	Stop Switch
220	Tube fitting	303	Limit Swith
221	Tube fitting	**	Cover for Limit Switch
222	Tube fitting	**	#10-32 x1" Rd. Hd. Scr. for cover
223	Retaining ring	306	Insulator
224	Pivot shaft for Dash Pot	307	Limit Switch Bracket
225	3/8" Split Lockwasher	308	1/4" Split Lockwasher
230	5/16" Split Lockwasher	309	1/4-20 x3/4" Hex Hd. Scr.
231	5/16-18 x3/4" Hex. Hd. Scr.		For 115 Volt Manual Toggle Switch mach.
232	Motor Plate	315	Box Cover
233	Rear Pivot Bracket	316	#4-36 x3/8" Rd. Hd. Scr.
234	Special Soc. Set Screw	317	Rod
235	1/2"-13 Hex Nut	318	Knob
236	3/8"-16 x1-3/4" Hex Hd. Scr.	319	#6-32 x1/4" Rd. Hd. Scr.
237	3/8" Split Lockwasher	320	Duplex Outlet
238	1/4-20 x3/4" Hex Hd. Scr.	321	3/32 x1" Cotter Pin
239	1/4" Split Lockwasher	322	Switch w/Wire Clamp
240	3/8-16 x3/8" Soc. Set Scr.	323	#10-32 x3/8" Rd. Hd. Scr.
241	Strap	324	Box
242	1/4" Split Lockwasher	325	Luck Nut
243	1/4-20 x3/4" Hex Hd. Scr.	326	Clamp
244	Special Washer	327	Cable
245	Knob Assembly, including:	328	Terminal
246	1/8 x3/4" Roll Pin	329	1/4" External Tooth Lockwasher
247	Table	330	1/4"-20 Hex Nut
248	1/4 x1-1/2" Roll Pin	331	1/4-20 x3/4" Dex Hd. Scr.
249	Handle	332	1/4" Split Lockwasher
250	Collar, including:	333	Bracket
251	5/16-18 x5/16" Soc. Set Scr.	334	Power Cord
252	Acme Screw Assembly including	335	Nameplate
253	3/16 x1-1/4" Roll Pin	*	Not Shown assembled
254	Work Support	**	Not shown
255	3/8" Split Lockwasher		
256	3/8-16 x1" Hex Hd. Scr.		