

model 300 INSTRUCTION and PARTS MANUAL

CHARLES BRUNING COMPANY . INC



BRUNING

model 300 INSTRUCTION and PARTS MANUAL



BRUNING

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model

300 INSTRUCTION SECTION

GUARANTEE

MODEL 300

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GUARANTEE

This manual is presented as an introduction to initial machine use. Consult your Bruning Man to avail yourself af the fullest possibilities, uses, and optional equipment far your Copyflex machine.

The Charles Bruning Company guarantees the parts of this equipment against defective material or workmanship for a period of six months after installation.

The Lamp is covered by a separate guarantee, providing the Lamp Guarantee Card is properly filled out and mailed immediately following installation. Lamp breakage is not covered.

The Charles Bruning Company reserves the right to modify specifications or design without incurring the obligation to change machines already sold.

Bruning papers, developers and supplies are continually being improved by development and research



Printed in U.S.A.

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SPECIFICATIONS

MODEL 300

SPECIFICATIONS

POWER

110 - 130 volt, AC

60 Cycles

Single phase

18 Amperes

B. T. U.

6760 per hour (maximum)

EXHAUST VOLUME

85 C. F. per minute

WEIGHT

Net - 322 pounds

Crated - one crate - 370 pounds

Crated for export - one crate - 490 pounds





CRATE SIZES

DOMESTIC

Depth 49 inches Height 21 1/4 inches Width 26 1/4 inches

EXPORT

Depth 25 inches Height 53 inches Width 31 inches

INSTALLATION

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- 1. Print tray stop
- 2. Print tray
- 3. "Floating" developer roll
- 4. Rubber wedges on each side of cylinder
- 5. Shaft-way shipping screw
- 6. Leveling jack

SET-UP INSTALLATION

Normally your Bruning man will be on hand to install your Copyflex Model 300; however If you must make the installation without hishelp, careful attention to the information in this section will help you avoid mistakes.

CHOOSING THE LOCATION

The Bruning CopyHax process permits a wide choice of installation sites for your CopyHax Model 300. Because the process is odorless, no fume vents are necessary. No plumbing connections are required for the developer system, nor is innecessary to provide a darknoom or subdued room lighting. You can locate the machine in almost any clean area where there is sufficient floor space for efficient operation and where the required electrical subout is available.

Check the physical data listed in the specifications section for dimensions, weight, and electrical requirements. Be sure you have the proper electrical supply available near the chosen site. If you are not certain of the electrical requirements specified on your order, open the right side door of the machine and examine the nameplate mounted on the right sideplate. The complete power supply data is covered on this silver label.

Figure 1 shows the assembled machine. After uncroting the machine, the following procedures should be followed:

- 1. Insert the four leveling jacks.
- 2. Remove the red pointed screw at (A).
- Lift the cabinet section up and remove the three red painted brackets located at (B) on both sideplates.
- Remove the six (three on each side) rubber wedges around the glass cylinder.
- Assemble the tray stop to the print receiving tray, and slip the tray into position as shown in Figure 1.
- Slip the "floating" developer roll into position.

NOTE

The Shaft-way shipping screw (5) need not be removed if the tension roll rides freely on the Shaft-way.



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INSTALLATION

MODEL 300

LEVELING THE MACHINE

Position the machine on a level surface, allowing sufficient space to open the cabinet in order to service the machine.

- Make sure that the shutoff clamp on the drain tube is closed and the tube positioned as shown in Figure 2.
- Raise the developer yoke assembly by Swinging the ball crank, located at the right end of the machine, upward.
- Fill the plastic developer bottle half-full of water, then cap the bottle and set it in the reservoir. The reservoir water level will remain constant.
- Back off the right front leveling jack screw to approximately one (1) inch.
- Adjust the right rear jack screw until the water level at the right end of the trough is 1/4" in depth.
- Adjust both left side jack screws alternately until the water level at the left end of the trough is 1/4" in depth.

Minor adjustments for water level are made with the developer level adjusting stud, as shown in Figure 2. Loosen the adjusting stud and push downward to raise the developer level, or raise upward to lower the level.

NOTE

The level of the machine from front to back is as important as the level from right to left, insufficient water depth in the rough after adjustment of the stud is an indication of a front to rear unlevel condition. To correct this, re-adjust the leveling jack screws.

With the machine unplugged, and the main switch off, open the cabinet by lifting upward and bockward until it is in the fully opened position.



Figure 3

INSTALLING THE LAMP

Careful installation of the lomp will insure maximum lamp life and performance.

- Uppack the lamp. While handling the lamp, use poper wrapped around the glass to eliminate the possibility of fingerprints left on the surface of the glass ofter installation. Fingerprints and other foreign materials may affect the machine's printing speeds if left to bake on the surface of the lamp.
- Remove the lamp housing covers at both ends of the glass cylinder.
- Loosen the wing nut (A) shown in Figure 3, and slide the duct assembly out from the left side of the machine. Use care when withdrawing the assembly so as not to scratch the cylinder.
- Position the lamp and snap the wire clip holders over the lamp ends.

NOTE

The mercury arc lamp used in this machine has a prominent nipple through which measured amounts of Mercury and other gases are injected. The nipple should always face

OPERATION

MODEL 300

upwardonce the assembly is installed in the machine.

- Slide the lamp duct assembly into the machine. The brackets at the right end of the duct must fit into the slots of the plastic housing as shown at (B) in Figure 3.
- Tighten the wing nut (A) in Figure 3 and press the two lamp connections onto the lamp ends.
- 7. Replace the lamp housing covers.





GENERAL INFORMATION

Operation of your Model 300 is simplicity Itself once you have familiarized yourself with the operating controls and machine features. These enable you to vary the operating routine to fit the job. After the contols are set you need only feed the master tracings and sensitized paper into the machine, adjusting the exposure setting if necessary.

FILLING THE DEVELOPER SECTION

Mix your Bruning developer solution using the mixing jar, bottles and stirring rod supplied with the machine. A funnel is provided to fill the plastic reservoir bottle after mixing the developer.

CAUTION

Make certain the drain hose is in the position shown in Figure 2 and that the shut-off clamp

is closed, before placing the developer bottle in its bracket.

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SPEED CONTROL

On the left escutcheon is the dial for the speed control (see Figure 4). To start the machine turn this knobpast the red linean the dial in a clockwise direction. This starts the blower motors and the machine drive. Further clockwise rotation will increase the speed at which your prints travel hough the machine. The setting best suited to your application may be determined by running a tet printor two drifts, slaw down the speed, conversely, if too dark, slaw down the speed, and

CAUTION

Be sure the knob is set in a low range to avoid overloading the electrical components. An idling speedof 2-1/2 ft, per min. is recommended.



Figure 5

LAMP SWITCH

This control is located at the rear of the mochine as shown in Figure 5. It should be turned to the "on" position and left there. This is a convenience control and is used primarily when cleaning the machine.

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HEATER SWITCH

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The heater switch, also located at the rear of the machine (Figure 5), should be snapped to the "AUTO" position when starting the machine. This will automatically actuate the drying heaters. When the switch is in the "auto" position, the front heater operates at all speeds. The rear heater is activated at any speed above 3 ft, per min, as indicated on the speed control dial.

Should a special application warrant a modification of drying heat, the following settings are desirable:

If heat is not desired, snap the heater switch to the "off" position. Alwaysallow a 5 minute warmup period when the drying heat is modified. If full heat is desired, snap the switch to the "high" position, which will cause both heaters to operate at all speeds. The best general setting should be "auto". If left there the speed control will now control the lamp, the heaters and the speed of the machine, thus simplifying the overall operation of your machine.

NOTE

When running the machine at slower speeds, take care not to turn the speed control knob below the red line on the dial. This will turn the machine off and necessitate a 5 min. wait before restarting to allow the lamp time to cool sufficiently to start again.

REVERSING SWITCH

Turning the reversing switch to the "reverse" position will change the direction of drive in order to remove or re-align incorrectly fed materials.

CAUTION

Never use the reverse switch if the print is already passing through the developer section.



THE BRUNING COPYFLEX METHOD

To help you understand how to operate your machine it may prove benificial to review a fext about the Capyflex process. The Model 300 employs the Bruning Capyflex principle to produce diaze prints. Anything drawn in pencil, ink, printedor typed (except in non-reproductible colors: suchas light blueor violet) on oneside of a translucent paper, film or tracing cloth can be copied by the process.



Figure 6

The matter tracing is placed on top of the coated (sensitized) Copyflex stock and fed into the machine where light from the mercury lamp passes through the translucent matter and strikes the coated Copyflex paper. The light cannot penterate where the lines are on the matter and thus does not strike thesensitized coating of the Copyflex paper. The exposed stock passes on through a chemical fluid developer which dyes the latent image lines, but has no effect on the areas which were exposed by the light from the mercury lamp.

After drying rapidly in the machine a crisp, dry, white print with black or colored lines (depending on the developer and paper used) is delivered to the operator within seconds after it was fed into the machine. The master tracing and print will pass through the printer section and then the exposed print should be fed into the developer slot as shown in Figure 6.

OPERATION

MODEL 300

The master is ready for immediate re-insertion to make another print, or for return to file. The fully developed print will be discharged onto a metal conveyor belt which moves the sheet over the heater area for drying and then deposits it onto the rear print tray.

PRINT EXPOSURE

Exposure time is dependent upon the transparency and condition of the original material. Check the following table if your test prints are not up to expectation:

Print		
Condition	Cause	Correction
Greenish	Excess water	Mix stronger
	in developer.	solution.
Brownish	Not enough	Add 1-1/2 oz.
	water in	of water to
	developer.	developer trough.
Dark	Insufficient	Run at slower
background	exposure.	speed.
	Incorrect material	Use translucent
	used for master.	stock without
		grain for master.
Weak	Too much	Increase machine
image	exposure.	speed.
lines		

Table 1. Hints for Better Prints

For information on reflex copying from opaque matters, colored line printing, colored paper, film and other reproduction methods, as well as short cuts in time and money, ask your Bruning Man-He's a Reproduction Specialist. He can tell you how to produce multi-colored images, copies of Polaroid silder, intermediate masters, and a host of other reproduction variables using Bruning paper and supplies.

A complete list of the papers and developers available for your Copyflex Model 300 is shown in Tables 2 and 3.

0	R	R	11	N	1	N	G
v	~		~				᠃.

Catalog No.	Line	Makes Approximately
27-121	Black	12 - 14 oz.
27-122	Block	24 - 28 oz.
27-123	Black	48 - 56 oz.
27-124	Black	96 - 112 oz.
27-125	Black	five gallons

Table II. Copyflex Developers

C	£1	C-I		D		
CODY	TIEX	00	or	U	eve	IODERS.

27-131	Blue	12 oz.	
27-132	Blue	24 oz.	
27-133	Blue	48 oz.	
27-142	Brown	24 oz.	
27-152	Red	24 oz.	
27-161	Yellow	9 oz.	

Your Bruning Man can also get you such allied products as eradicators, surface cleaners and transparentizers. For expert advice on any or all reproduction problems he's the man to see.

Several informative booklets describing these processes and Bruning papers, supplies and drafting equipment are yours for the asking. Check with your Bruning Man or write to: Marketing & Promotion, Charles Bruning Co., Inc., Mount Prospect, Illinois.



The Charles Bruning Company also manufactures an electrostric processor called the Copytan Model 2000. This machine capits any document – any color – up to 11" wide by any reasonable length. It makes dry, photo-exact black-on-white copies automatically, yet provides the lowest costper-copy of any electrostatic copier with a minimum of operator maintenance. See your Bruning Sales Representative to arrange a demonstration of this latest advancement in the field of business copying machines. (BRUNING)

COPYFLEX MATERIALS

MODEL 300

Table III. Copyflex Papers, Cloths and Films

COPYFLEX OPAQUE PAPERS

Catalog Na.	Application	Description	Speed
25-173	For copying practically all business and	17 lb. light, std. wt., black line	3
25-175	industrial paperwork; particularly with regard to		5
25-177	mailings and filing.		7
25-193	For colar-cading engineering, shipping and receiving and business affice paperwark .	18-1/2 lb. tinted stock - specify blue, green,	3
25-195		pink, yellow ar salmon	5
25-197			7
25-203	Far capying practically all business and	20–1/2 lb. std. wt., black line	3
25-205	Industrial paperwork; especially useful for		5
25-207	engineering drawings and affice system forms.		7
25-2084		20-1/2 lb. std. wt., sepia line	8
25-243	Far reproduction of forms and drawings on	24 lb. heavy wt., black line	3
25-245	heavier weight base stack to resist constant		5
25-247	wear and handling		7

COPYFLEX OPAQUE CARDSTOCKS

25-323	Far prints of documents that must withstand	32 lb. cardstock, black line	3
25-325	considerable handling.		5
25-483	Tinted cardstocks are invaluable for colar-	48 lb. cardstock - specify blue, green, plnk,	3
25-485	cading prints for distribution purposes.	yallaw ar white	5

COPYFLEX ACETEX CONTRAST PAPERS

26-035	Ideal for use with maps, chart presentations	Acetate-caated cardstack, white
26-036	and color display work.	Acetate-coated cordstock, aluminum

COPYFLEX OPAQUE CLOTH

26-110	For permanent prints that must withstand	Medium thickness, apaque cloth

COPYFLEX TRANSLUCENT PAPERS

26-200	Used to make duplicate ariginals, masters ar	17 lb, white base, sepia line
26-205	Intermediates in either engineering or	Same, meets Gov. Spec. MiL-P-9853
	business office.	

COPYFLEX TRANSLUCENT CLOTH

26-242	Used to preserve ariginal drawings and to make duplicate ariginals af greater strength and	Light blue base, water repelant, sepia line
	permanence.	

COPYFLEX MATTE FILMS

26-320 Used where extensive handling of originals is	Sepia coated 1 side, .005" thick
26-330 necessary and where alterations or additions	Near black, coated 2 sides, .005" thick
26-340 must be made	Sepia coated 1 side, .0075" thick
26-350	Sepia coated 1 side, .010" thick

COPYFLEX CLEAR FILMS

26-510	Far highest speed production of final prints and	Sepia coated 1 side, .005" thick
26-520	where changes ar alterations will not be	Near black, apated 2 sides, .005" thick
26-530	necessary; and for projection usage,	Sepia coated 2 sides, .005" thick
26-540		Sepia coated 1 side, .0075" thick

NOTE: Speed 3 materials yield the densest image and are recommended for most reproduction work. Printing speeds are relative; i.e. speed 8 would be faster than speed 5.

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MAINTENANCE

MODEL 300

MAINTENANCE INFORMATION

The instructions included in this section are intended to cover procedures generally called operator maintenance. These include cleaning, lubrication and minor adjustments which can be made by the operator or in-plant maintenance personnel. For any extensive maintenance problems contact your Bruing Machine Service Representative. Fast nationwide service is available when and where you need it.

CLEANING THE DEVELOPER SYSTEM (DAILY)

Remove the plastic developer supply bottle and drain the trough. Half-fill the bottle with warm water and replace it in operating position in the machine. Run the machine for a few minutes, drain, and squeegee the trough dry.

CLEANING THE DEVELOPER SYSTEM (WEEKLY)

A weekly rinsing in a solution of Bruning Roll Cleaner will old extensively inmaintaining clean developer rolls. The frequency of cleaning is entirely dependent on machine usage. Under normal eight houroperation, the developer rolls should be rinsed at least once a week for a period of 15–20 minutes. Around the clock, or exceptionally heavy usage will, In most cases, require cleaning every other dy.

Follow the procedure outlined below when rinsing the rolls in the cleaning solution.

A. Drain the system of developer.

B. Fill the trough with the cleaning solution, making some compensation for the space the rolls will take up when they are lowered into it.

C. Lower the developer rolls and allow them to rinse for about 15-20 minutes at machine idling speed,

D. Drain the cleaner and add clear water to rinse the rolls of any cleaner that may remain. After about ten minutes drain and squeegee dry.

CLEANING THE GLASS CYLINDER (AS REQUIRED)

RRIINING

Any appreciable drop in printing speed could indicate that the cylinder is dirty. Under normal conditions, the exterior of the cylinder should be cleaned twice a week, and the interior once a week. This should be accomplished in the following manner:

Cylinder Exterior

- 1. Remove the cylinder scraper assembly.
- Clean the cylinder with a soft, damp cloth while the machine is operating at a slow speed. Then wipe the cylinder dry with a soft, dry cloth.

Cylinder Interior

- Disconnect the supply cord from the receptacle box.
- Remove the lamp-duct assembly from the machine.
- Clean the interior of the cylinder with a soft, damp cloth. Then wipe dry with a soft, dry cloth.
- 4. Replace the lamp-duct assembly.

LUBRICATION (MONTHLY)

Lubricate the chain monthly using agood grade of (clean SAE20 or SAE30 pertourn oil without additive. Some additives leave a varnish or gun deposit which prevents the oil from entering the chain (oins. Heavy oils and graeses should not be used. Oil should be applied with a bruth or spour can to the upper edges of the inner andouter link plates to allow a flow of oil between the chain link plates and to fill the pin bushing area.

CLEANING THE MACHINE EXTERIOR

Use mild scap and water to clean the surfaces of your Model 300. Household polish may be used on the large painted surfaces, but do not use ally polishes or waxes on the feedboard or bright metal parts which come in contact with the tracings or sensitized material.

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SERVICE

MODEL 300

SHOULD YOU NEED SERVICE

Fast, dependable, quality service is only a phane call away. Trained personnel who are prepared to help you either over the phane, or by dispatching a machine service representative, will take your call. Just ask for the Service Department when you call. By stating the details of your compliant, the model and serial number, you can be helpful in accelerating the solution to your problem. It is not unusual for trained service personnel to give a step by step account on how to make the repair or adjustment over the phone to in-plant maintenance workers.

The most important service to the machine is periodic preventive maintenance which can best be accomplished by a Bruning Machine Service Agreement . Your Copyflex reproduction equipment represents an investment in the finest of diazotype reproduction. Copyflex is a symbol of quality ... In design, in construction, and in performance - and into every Copyflex machine are built years and years of smooth, dependable service.

A Bruning Machine Service Agreement is a means of protecting your Copyflex Investments of that it will give you the greatest possible return over the years. As with an automobile, typewriter, adding machine, or any other mechanism, a Copyflex machine will loperate at peak efficiency only if given professional Inspection and servicing periodically. Throughout the duration of the agreement, a Bruning Machine Service Agreement does all these things...

- . . . provides for essential cleaning and proper lubrication of all moving parts
- . . . eliminates unnecessary wear on moving parts
- . . . maintains factory-recommended standards of adjustment
- . . . cuts down on the need for major repairs
- . . . reduces parts replacements to an absolute minimum
- . . . protects against machine breakdowns and costly operating interruptions
- . . . keeps each machine in top mechanical condition to meet any work load large or small

Just as Important as the machine Itself is the kind of care and protection it gets. And just as Copyflex machines are designed and built by experts, the professional inspection and servicing provided by Braning Copyflex machineservice representatives are the finest. These factory-trained representatives know and understand Copyflex machines thoroughly ..., are courteous and attentive ... and are ready and willing to answer questions and offer advice on the operation of any machine.

At the lowest possible expense to you, a Bruning CopyFlex Service Maintenance Agreement is your assurance of maximum machine performance ... your guarantee of uninterrupted CopyFlex Production.

Contact your nearby Bruning branch or distributor as shown on back cover for details.





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model 300 PARTS SECTION

ACCESSORIES

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PART NO.	DESCRIPTION
2047	Quart Jar
2049	Funnel
5903	Allen Wrench Set
14813	Stopper Assembly
14817	Utility Bottle
15523	Squeegee
16101	Duster Heod
17104	Stirring Rod
19311	Measuring Cup
20348	Duster

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ISSUED 2/64

The part numbers listed in this Manual are standard for all Model 300 machines manufactured. Revision or replacement part numbers are accompanied by an effectivity serial number. However, to insure positive part identification, include the machine serial number in all correspondence regarding the parts of the machine. (BRUNING)

CABINET PARTS

MODEL 300



Figure 1

REF.	PART		AMT.	REF.	PART		AMT.
NO,	NO.	DESCRIPTION	USED	NO,	NO.	DESCRIPTION	USED
1	20977	Dial (Part of 27107)	1	10	+19437	Grill	2
2	+27107	Escutcheon Assembly - L.H.	1	1	±19953	Push-On Fasteners	8
	26683	Reverse Decal	1	111	20297	Trim	1
	26684	Farward Decal	1	12	19942	Leveling Jack	4
	20331	Switch Clip	11	13	20360	Print Guide Assembly	1
	21845	Twin Nut	1	14	20217	Tracing Tray S.A.	1
I .	50455	#4-36 x 1/2" Flat Hd. Sc.	2		19593	Tracing Tray	
3	+17076	Bruning Nameplate	1 1		20218	Scraper	1
4	+19594	Cabinet Assembly	1}		20233	Felt	2
	*17359	Cautian Decal	1	15	+27106	Speed Cantral Unit S.A.	1
	*23330	Direction of Feed Plate	1			(Mounted inside cabinet)	
5	+20513	Escutcheon Assembly - R.H.	1			(S/N 3004049 and up)	
6	19907	Emblem (Part of 20513)	1		20319	Speed Cantral Assembly	1
7	20310	Print Tray Assembly	1			(S/N 3001-3004048)	
8	20390	Print Tray Stap Assembly	1	16	18304	Cantral Knab	1
9	20276	Back Panel Assembly	1	17	27442	Reversing Switch S.A.	1
	18582	Off Decal	1			(Part af 27106)	
	20274	Heater Switch Decal	1		16785	Locking Lug	1
	20277	Back Panel	1		20441	Salderless Terminal	4
	20278	Angle	1		27103	Reversing Switch	1
	20671	Back Panel Screen	1		27172	Caver	1
1	27906	Lamp Switch Decal	1		27173	End Plate	1 i l
	27097	On Decal	1		51217	#10-32x3/16" Oven Hd.Sc.	i
	18491	High-Valtage Decal	1		27443	Strain Relief Bushing	il
					0.004	D	

*Order Separately +Part of Cabinet S.A. - 21147

LEFT SIDE VIEW

MODEL 300



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Figure 2

(BRUNING)

LEFT SIDE VIEW

MODEL 300

REF.	PART		AMT]	REF.	PART		AMT
NO.	NO.	DESCRIPTION	USED	NO.	NO.	DESCRIPTION	USED
1	+21171	Contral Unit Bracket S.A.	1	22	20214	Idler Gear (28T.)	1
2	+19093	Selenium Bridge	2			(S/N 3001753 and up)	
3	+20485	Switch Terminal Cover	2		*21276	Flance Bearing	1
	+21073	Switch (20 amp)	2			(S/N 3001754 and up)	· ·
4	+16391	Twin Nut	1		*12917	1/4-20 Elastic Stop Nut	1
5	+20332	Cam Shaft Bushing	1		20213	Idler Gear (28T.)	1
6	+11572	Grammet	1			(S/N 3001 - 3001753)	
7	+20333	Switch Cam	1		*20216	Spacer (S/N 3001 - 3001753)	1
8	+20354	Switch Cam	1	23	20208	Gear & Spracket Assembly	1
9	19970	Heater Terminal Cover	2	24	27105	Drive Chain	1
10	+20328	Cam Shaft S.A.	1			(S/N 3004049 and up)	
	+50603	#10-32 x 1/4" Set Screw	2		19943	Drive Chain	1
11	19981	Spacer	2			(S/N 3001 - 3004048)	
	*16275	Elastic Stop Nut	2	25	27468	Mounting Bracket	1
12	20335	Control Rod S.A.	1	26	18447	Maintenance Decal	1
	20334	Cantrol Rod	1			(Part of 20260)	
	18942	1/8" Dowel Pin	1	27	20260	Exhaust Duct S.A.	1
13	20211	Sprocket (19T.)	1		18491	High Valtage Decal	1
14	18323	Gear (31T.)	1	28	15468	Wing Nut	2
	*18766	Bearing	1	29	18369	Sprocket (15T.)	1
15	18344	Bearing Retainer	2			(S/N 3004049 and up)	
16	18324	Gear (38T.)	1		20212	Spracket (10T.)	1
	*18766	Bearing	1			(S/N 3001 - 3004048)	
17	19975	Developer Yoke Frame Asy.	1	30	21028	Base Light Shield S.A.	1
	*18421	Stainless Steel Screw	2			(S/N 3001204 and up)	
	*18422	Stainless Steel Washer	2		20285	Base Light Shield S.A.	1
						(S/N 3001 - 3001203)	
				31	22264	Drive Motor S.A.	1
18	21236	Retainer Collar	1			(S/N 3004524 and up)	
		(S/N 3001204 and up)			18301	Drive Motor	1
	20336	Retainer Collar	11		20347	4 Contact Plug	1
		(S/N 3001 - 3001203)			*28684	Replacement Brush & Spring	1
19	20331	Switch Clip (Part of 27107				(Far Carter Motar)	
		Escutcheon Assembly)			*27099	Adaptor	1
		(S/N 3001204 and up)		32	20265	Insulator Cover Assembly	1
20	10740	Adjustment Cam	1	33	+19661	Fuse (2.5 Amp)	2
21	27102	Chain Guord (S/N 3004049			÷18468	Fuser Holder	2
		and up)	1	34	+20340	Grommet	1
	20355	Chain Guard	1	35	+16112	4 Contact Sacket	1
_		(S/N 3001 - 3004048)		36	21147	Cabinet S.A. (see Figure 1)	1
				37	18302	Variable Transformer	1
				_ 38	+27443	Strain Relief Bushing	1

* Order Separately + Part of 27106 Speed Control Unit Assembly

RIGHT SIDE VIEW

MODEL 300



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Figure 3

(BRUNING)

RIGHT SIDE VIEW

MODEL 300

REF.	PART		AMT
NO.	NO.	DESCRIPTION	USED
1	17476	Ball Bearing	7
2	21147	Cabinet S.A. (see Figure 1)	1
3	18344	Bearing Retainer	2
4	19678	Bottle (1 quart)	1
	*19890	Bottle Cap Assembly	1
		(See Figure 6)	
5	15517	Hase Clamp	2
6	20229	Developer Feed Hose	1
7	20831	Bushing (S/N 3001104 and up	01
	20832	Washer (S/N 3001104 and up)	1
	19827	Bushing (S/N 3001-3001103)	1
8	21847	Nameplate	1
	26735	Nameplate (C.S.A.)	1
9	26481	Stud	1
10	20365	Drain Hose Bracket	1
11	20220	Reservoir Assembly	1
12	20255	Spring	1
13	18533	Shut-off Clomp	1
14	20454	Hase Clamp	1
15	20231	Developer Droin Hose	1
16	5154	Collar	2
17	21132	Blower S.A.	1
		(S/N 3004049 and up)	
	14952	Solderless Terminal	1
	18322	Blower Wheel	1

REF.	PART		AMT.
NO.	NO.	DESCRIPTION	USED
	18984	Female Amp Connector	1
	20668	Housing	1
	20669	Mounting Bracket	1
	21878	Motor Bracket	1
	21879	Spacer	4
	22109	Blower Motor	1
	20670	Blower S.A.	1
		(S/N 3001 - 3004048)	
18	18476	Grill	1
19	21046	Patent Nameplate	1
20	19351	Blower Housing	1
21	20298	Guard Plate	1
22	20290	Blower Housing Spacer	2
23	20282	Light Shield S.A.	1
	18491	High Voltage Decal	1
24	20406	Thumbscrew	2
25	+19954	Knab	1
	<i>‡</i> 19983	Spacer	1
	[‡] 19984	Screw	1
26	+19985	Crank Arm	1
27	+19986	Bushing	1
28	+19987	Catch	1
29	+19988	Link	1

* Order Separately + Part of 19889 Crank S.A.



Figure 4

(BRUNING)-

CROSS-SECTION VIEW

MODEL 300

REF.	PART		AMT.	REF.	PART		AMT.
NO.	NO.	DESCRIPTION	USED	NO.	NO.	DESCRIPTION	USED
1	19966	Conveyor Roller Assembly	1		*18487	Bearing	4
2	19906	Conveyor Belt	1	24	19963	Idler Roller	2
3	20383	Spring	2		*20291	Light Seal	2
4	20384	Nut	2	25	19991	Duct Assembly	1
5	20256	Conveyor Guide Assembly	2		18347	Lamp Spring	2
6	20528	Top Plate Assembly	1		18365	Twin Nut	2
7	21131	Heater and Conveyor Sup.	1		19992	Duct Mounting Plate S.A.	1
		Asy. (S/N 3004049 and up)	1 1		19993	Reflector	1
		See Figure 5.	1 1		19994	Duct Cover	1
	20203	Heater and Conveyor Sup.	1	1	21905	Twin Washer	2
		Asy. (S/N 3001-3004048)	1 1		*19292	Spacer (S/N 3001-300101)	2
8	14170	Wire Clomp	3	26	19700	1200 Watt Lamp	1
9	19961	Canveyor Drive Raller	1	27	19300	Cylinder	1
10	19962	Printer Drive Roller	TT	28	22225	Contact Band	15
	*17504	Ball Bearing	1			(S/N 3004349 and up)	
11	28826	Finger Guide Assembly	1	NE	19905	Contact Band	15
	16275	Elastic Stop Nut	1	1	22222	(S/N 3001 - 3004348)	
	18376	Spacer	32	29	14075	Grommet	2
	18377	Guide Finger	31	30	20204	Spacer Roll S.A.	1
	18678	Shoulder Screw	11		17476	Ball Bearing	2
	18708	Lever	1		18416	Spacer	15
	28825	Shaft	1 1		20205	Tube Assembly	1
	28804	Trailing Edge Nut	11		20253	Shaft	1
	*28830	Spring	1 1		20254	Disc	15
12	20219	Reservoir Stop	1		3298	Drive Pin	1
	*50700	#10-24 x 1/2" Corriage Balt	2		21520	Stabilizer	1
13	19921	Grooved Rall	2	31	19952	Spring	2
14	19924	Floating Roll	2	32	19950	Retainer	4
15	20294	Drip Tray	1	33	20457	Lamp Control Unit Clamp	2
16	19915	Plain Developer Roll	1 1	34	20286	Blower Motor S.A.	1
17	20234	Developer Trough Assembly	1 1	1	18984	Female Amp Connector	2
18	20292	Trough Bracket - R.H.	1		21878	Bracket	11
	*20293	Trough Bracket – L.H.	1		21879	Spacer	4
19	20360	Print Guide Assembly	11	L	22109	Blower Motor	
20	20357	Guide Clip	7	35	18322	Blower Wheel	
21	18488	Cylinder Guide Roller	2	37	20324	Supply Cord (On Right	1
22	19828	Rod	2			Side of Rear Panel)	
23	18486	Cylinder Roller	2	38	20364	Heat Control Switch S.A.	1
	*0-1	Same and a la		39	19480	Lamp Control Unit	1 1
	Order	separately		40	20280	Bracket - R.H.	1
					1920201	Denalist I H	1 1

HEATER & CONVEYOR SUPPORT ASY. - 21131

MODEL 300



Figure 5

REF.	PART		AMT.	REF		PART		AMT
NO.	NO.	DESCRIPTION	USED	NC		NO.	DESCRIPTION	USE
	19900	Brass Washer	4			50115	#10-32 Hex Nut	1
2	21134	Jumper Leads S.A.	1	10		19967	Heater Reflector	1
3	19968	Tubular Heater	2	11		50240	#10-32×1/2" Fil. Hd. Sc.	1
4	20201	Canveyor Suppart Bar	1 1		*	50015	#10 Flat S.A.E. Washer	1
5	50242	#10-32 x 3/4" Fil. Hd. Sc.	1		193	50016	#10 Lockwasher	1
	*50015	#10 Flat S.A.E. Washer	1	12	2 2	20202	Heater Cap	4
6	21135	Heater Jumper Leads S.A.	1	1:	3 1	19969	Heater Mounting Bracket	2
7	50107	#6-32 Brass Hex Nut	4	* 0	rde	er Sepo	irately	
8	21128	Wiring Harness	1					

BOTTLE CAP ASSEMBLY-19890



Figure 6

REF. NO.	PART NO.	DESCRIPTION	AMT . USED
1	20430	Nut	1
2	19893	Washer	2
3	19719	Rubber Stopper	1
4	19813	Bottle Cap	1
5	19718	Plunger	1
6	19891	Washer	1
7	19720	Valve Spring	1
8	19892	Plunger Gulde	1

(BRUNING)



WIRING DIAGRAM

MODEL 300



BRUNING

P-12







CHARLES BRUNING COMPANY . INC. General Offices Mount Prospect . Illinois

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