

# ROSBACK

PRINTERS AND BOOKBINDER'S MACHINERY

*Quality Bindery Equipment Since 1881*

## FIELD CONVERSION VACUUM KIT

Part No. 220-A-121 (60Hz)

Part No. 220-A-121-1 (50Hz)

For

TRUE-LINE 20" & 26" PERFORATORS

MODELS		
220A	223A	226
220B	223B	226B

Rev. 06-09

Shipping & Mailing Address: 125 Hawthorne Ave., St. Joseph, MI 49085

Phone: (269) 983-2582 \* Fax: (269) 983-2516 \* Internet: [www.rosbackcompany.com](http://www.rosbackcompany.com) \* E-mail: [Sales@RosbackCompany.com](mailto:Sales@RosbackCompany.com)

**Manufactured in the USA since 1881**

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## **Section 1. Introduction**

Congratulations on your purchase of this Rosback Vacuum Kit. We take pride in the equipment we build. Throughout our history, we have continued to innovate and improve our equipment. This Vacuum Kit is a result of our continued effort.

The following information will assist you with the proper installation of the Vacuum Kit for your Rosback True-Line Perforator.

### **SPECIAL TOOLS REQUIRED:**

- a. Drill Motor
- b. Drill Bits, 1/8" (3.2mm) dia, 9/32" (7.1mm) dia, 3/16" (4.8mm) dia. & 25/64" (9.9mm) dia.
- c. 1/2" Wrench
- d. Hacksaw
- e. 7/8" (22.0 mm) diameter Sheet Metal-Hole Cutter
- f. 7/16" Open-end Wrench
- g. Various Allen Wrenches

## Section 2. INSTALLATION STEPS

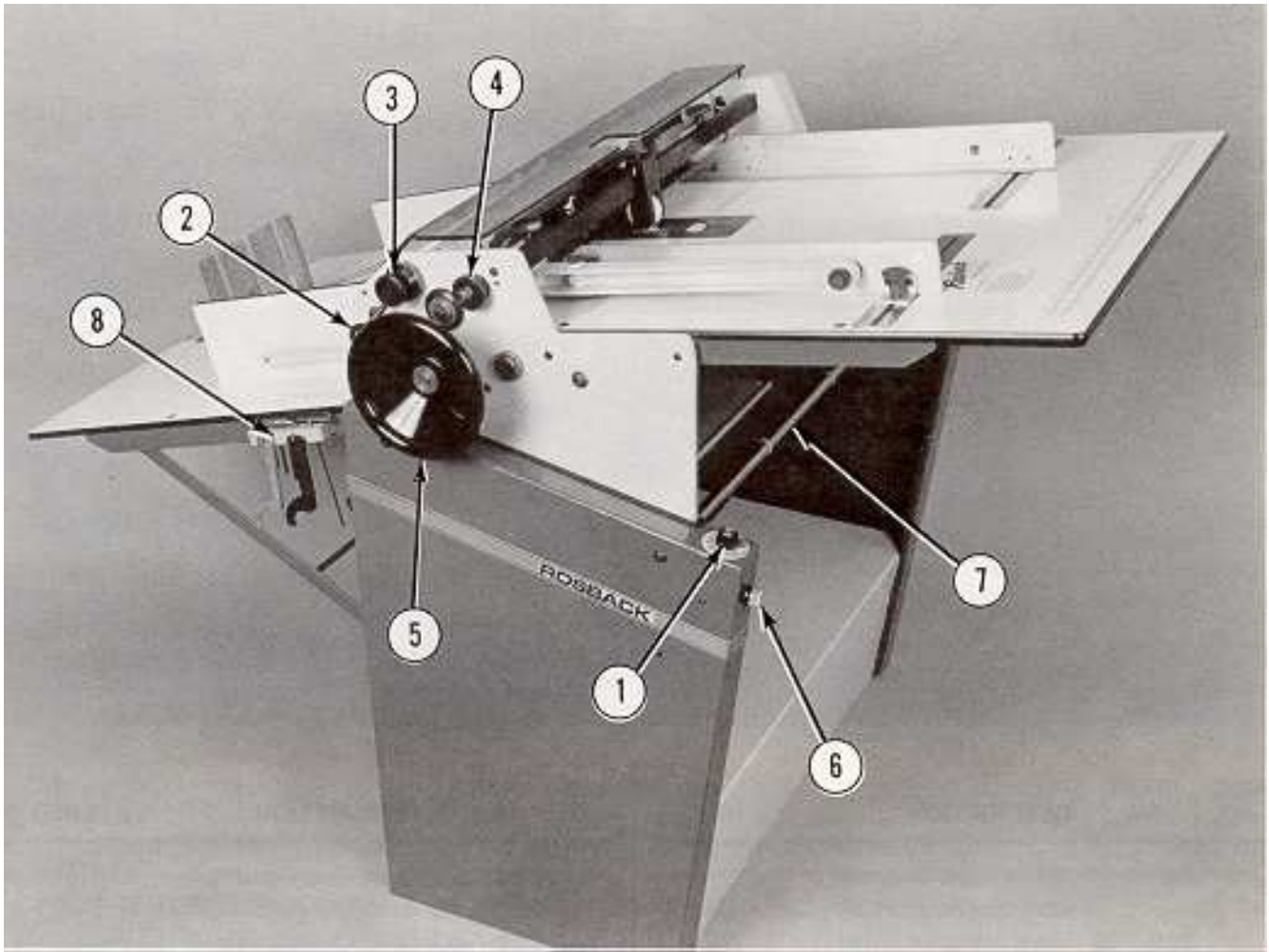
1. Remove hand wheel, 220-156 (page 6, Item 5).
2. The chip chute may need to be modified. Remove the chute. Using the enclosed template (page 13, Fig. E), mark the chip chute and cut with a hacksaw. Re-install the chute.
3. Loosen 2 setscrews holding Knob, 220-183 (page 6, Item 4) and remove side guide adjustment shaft.
4. Remove Side Guide Assembly LH, 220-A-071 (page 8, Item 2) and Side Guide Assembly RH, 220-A-070 (page 8, Item 3). Remove Sheet Deflector, 220-A-065 and 220-A-066 (page 9 Item 9) from side guide assemblies.
5. Model 223 (26") only. Remove Assist Roll Assembly, 223-A-024 (page 9 lower photo).
6. Remove Adjusting Screw, 220-016 (page 9, Item 5) in the caliper; loosen two set screws in the caliper body, push body down and pull out two dowel pins. This will allow caliper and spring to be removed.
7. Remove the Sole Plate, 220-191 (page 9, Item 8).
8. Loosen Idler Sprocket Assembly, 220-A-016 (page 7, Item 4) and remove Secondary Chain, Short, 220-A-079 (page 7, Item 7) or 226-A-008 at master link. Add the Chain Insert Assembly, 220-A-116 to this chain.
9. Loosen setscrew in Drive Sprocket Feed Roll, 220-209 (page 7, Item 2) and setscrew in collar on shaft inside frame. Slide Shaft out removing drive sprocket and collar.
10. Remove two Button Head Cap Screws from side frames and slide Shaft and Feed Roll and Support Casting out of machine.
11. Loosen two setscrews in Feed Roll and Support Casting and slide Shaft out. Insert this shaft into new assembly, 220-A-103 through vacuum sole plate mounting brackets. Put Shaft and new Vacuum Head Assembly, 220-A-103 back into machine (from underneath the table). Tighten two button head cap screws in side frame. Slide Shaft through the Vacuum Head Insert, 220-250, the Vacuum Head, 220-249 and collar. Now, mount new Sprocket, 220-233 in place of old Drive Sprocket, 220-209. Re-attach chain and re-tighten idler. Position sole plate central and flush to table surface; tighten two setscrews in Vacuum Sole Plate Mounting Bracket, 220-226 to shaft.
12. Assemble new Caliper Assembly, 220-A-101 with same dowel pins and Adjusting Screw, 220-016. A little light oil can be added if necessary to dowel pins.
13. Re-assemble the side guide adjustment shaft and Knob, 220-183 with the Side Guide Assemblies, 220-A-070 and 220-A-071 (page 8, Items 2 & 3) with the Air Blast Head Assemblies, 220-A-104 and 220-A-105 (page 12, Fig. C).

## Section 2. INSTALLATION STEPS (Cont.)

14. *For 60Hz:* Drill the four pump mounting holes in the base frame (page 10, Fig. A1).  
*For 50Hz:* Drill the four pump mounting holes in the base frame (page 11, Fig. A2).
15. Carefully remove the pump from the box. Assemble the pump fittings and gauges to the top of the pump. Use sealant tape on the threads.
16. Mount the Pump Assembly onto the base with fasteners supplied.
17. Use the supplied template (page 12, Fig. D1) and drill the switch enclosure mounting holes in the DC control cover.  
*For Model **B perforators 60Hz** only;* remove electrical box cover and push out hole plug. Disassemble the supplied switch enclosure housing and discard. Attach and connect wires cords as shown in Fig. H. Replace the box cover.  
*For Model **B perforators 50Hz** only;* use the supplied template (page 13, Fig. D2) and drill the switch enclosure mounting holes in the DC control cover. Attach switch box to DC control cover with four screws and re-attach the cover.  
*For Model **A perforators 50Hz** only;* use the supplied template (page 12, Fig. D1) and drill the two 3/16" dia. switch enclosure mounting holes in the DC control cover. Attach switch box to DC control cover with only two screws and re-attach the cover.
18. Drill the 7/8" hole (page 12/13, Fig B1/B2) and pass the power cable from the switch box through the hole. Secure the cable with the Strain Relief Bushing, S-0994 supplied.
19. *For 60Hz:* Connect the power cable to a single purpose, 115-volt AC, single-phase circuit through an appropriate plug and receptacle. This supply must have a 15-amp circuit breaker.  
*For 50Hz:* Connect the power cable to a single purpose, 230-volt AC, single-phase circuit. This supply must have a 10-amp fused disconnect.
20. Connect the vacuum tubes between the vacuum drum insert and the pump. Connect the pressure tubes between the Blast Head Assemblies, 220-A-147 & 220-A-148 and the pump. The supplied pipe clamps (S-2126) are for the pressure tubes only. The clamps are for holding the pipes onto the Air Blast Head Assemblies and the pump.
21. On the underside of the feed table, measure 1" from the back edge on the centerline of the machine. Screw in the wood screws supplied with the Backstop Assembly, 220-A-106 securing the end of the bead chain.

**NOTE: PLEASE REFER TO THE OPERATING INSTRUCTIONS FOR FURTHER INFORMATION ON HOW TO SETUP AND USE YOUR VACUUM FEED SYSTEM.**

### Section 3. PARTS LISTS

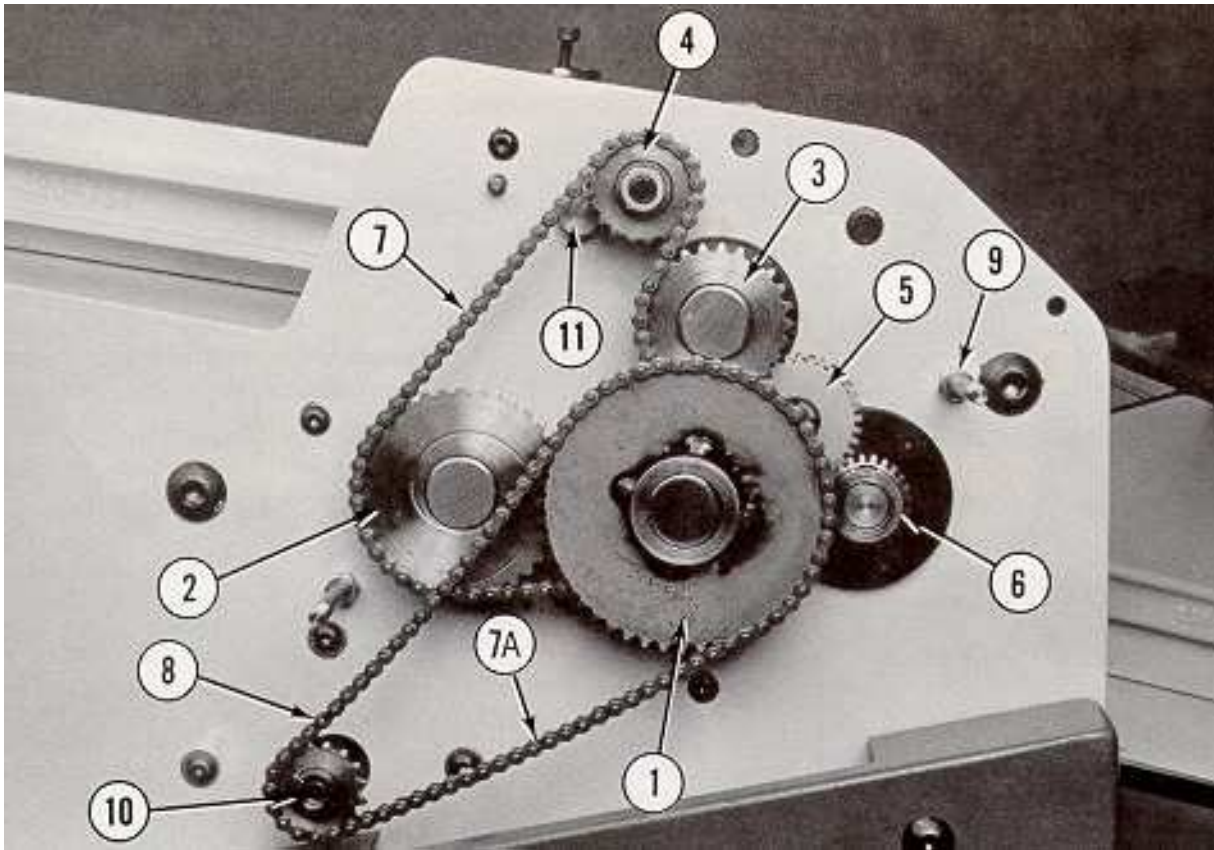


#### Parts List

REF NO	PART NO.	DESCRIPTION	NO. REQ'D	REF NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	220-A-077	Switch & wire ass'y	1	7	220-029	Lower spacer	2
	S-1165	Control	1	8	220-A-056	Tool kit	1
	S-1167	Control knob	1		S-0061	Screwdriver	1
2	S-0806	Knob	1		S-0169	Key 1/8" Allen	1
3	220-065	Eccentric pivot lock	1		S-0170	Key 5/32" Allen	1
4	220-183	Side guide adjust knob	1		S-0171	Key 3/16" Allen	1
	-	Button head screw 3/8-24 x 1/2"	1		S-0172	Key 7/32" Allen	1
5	220-156	Hand wheel	1		S-0173	Key 1/4" Allen	1
	220-157	Hand wheel screw	1		S-0426	White spanner wrench	2
6	220-A-078	Fuse holder & wire ass'y	1		S-0495	Black spanner wrench	2
	S-1171	Fuse holder	1		S-1008	Key 1/8" Allen	1
	S-1002	Fuse	1		S-0831	Leveling feet	4
					S-0859	Chip bag	1
					S-1184	Motor	

*NOTE: Always include machine serial numbers when ordering parts or cutters.*

Section 3. PARTS LISTS (Cont.)



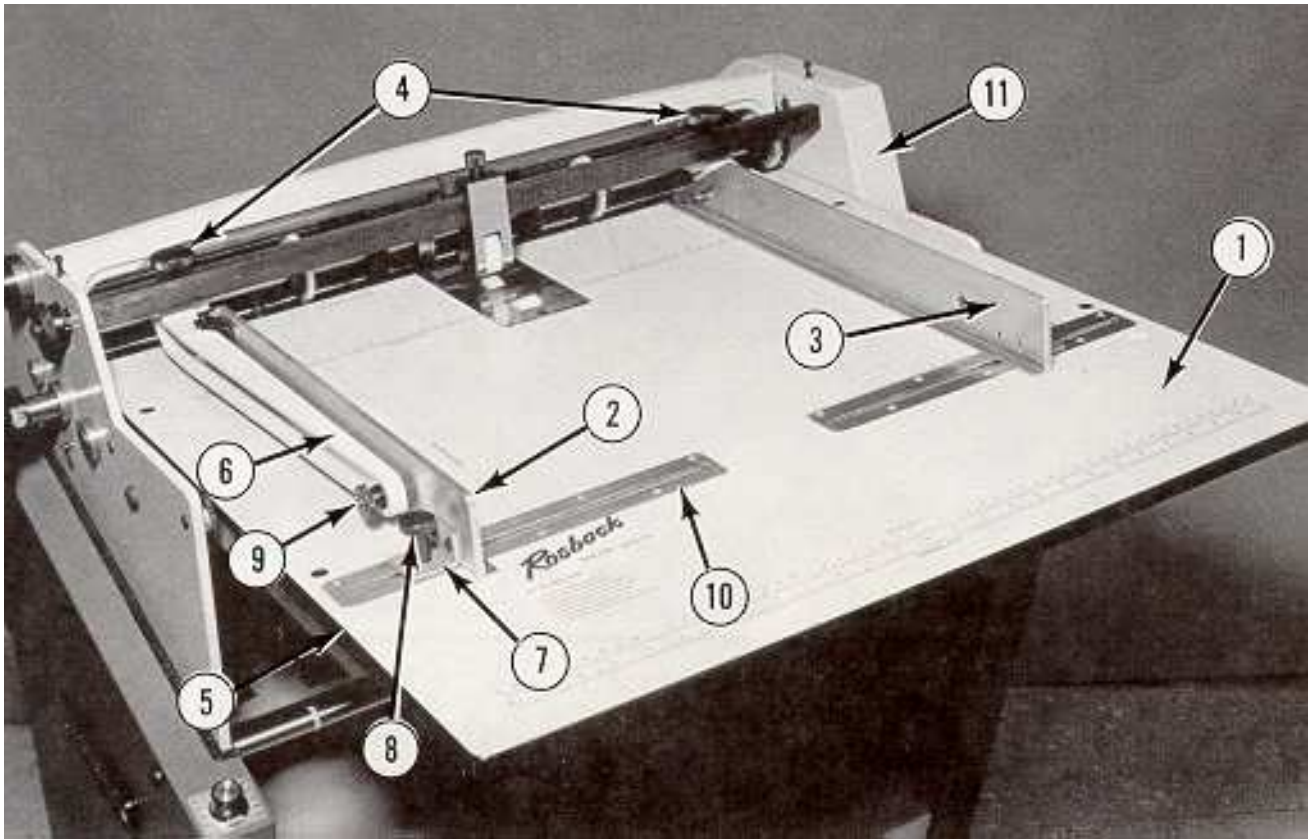
Parts List

REF NO	PART NO.	DESCRIPTION	NO. REQ'D	REF NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	220-A-019	Cutter shaft gear and sprocket assembly	1	6	220-075	Rear feed roll gear	1
2	220-209	Feed roll drive sprocket	1	7*	220-A-079	Short secondary chain	1
3	220-030	Up cutter shaft sprocket	1	7A	220-A-080	Long drive chain	1
4	220-A-016	Idler sprocket assembly	1	8	S-0320	Master link	2
	220-134	Support sleeve	1	9	220-106	Gear guard stud	2
5	300-044	Idler gear	1	10	220-203	Motor sprocket	1
				11	220-182	Side guide adjust shaft	1

\* For machines without an "A" in serial number, use S-0319TL-1 (comes set only)

*NOTE: Always include machine serial numbers when ordering parts or cutters.*

### Section 3. PARTS LISTS (Cont.)

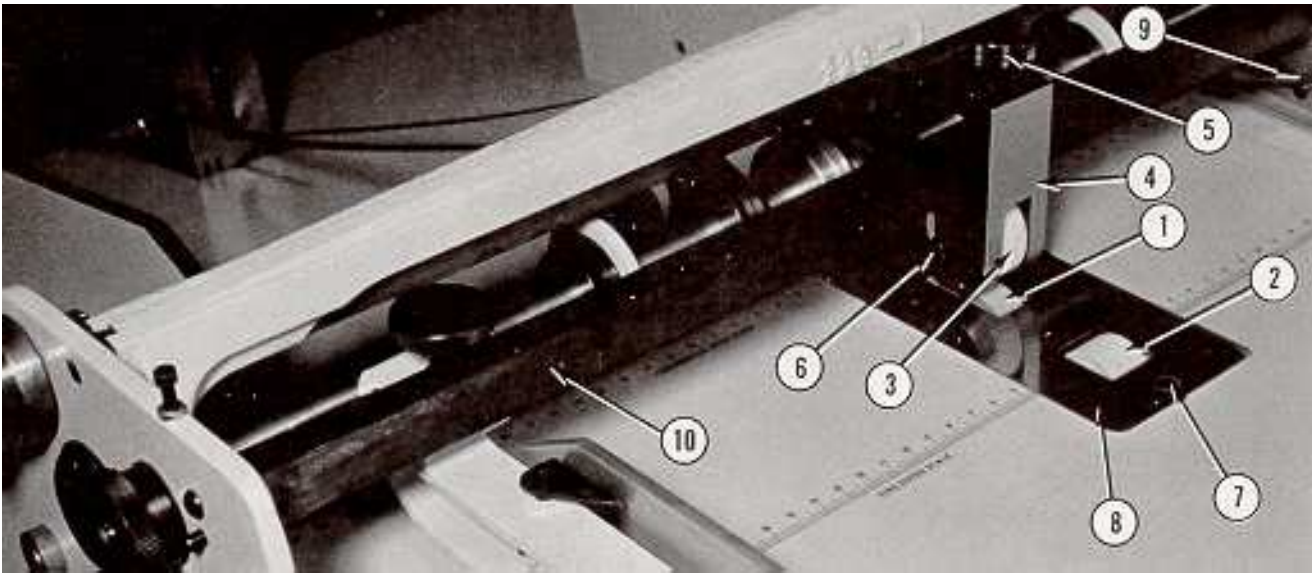


#### Parts List

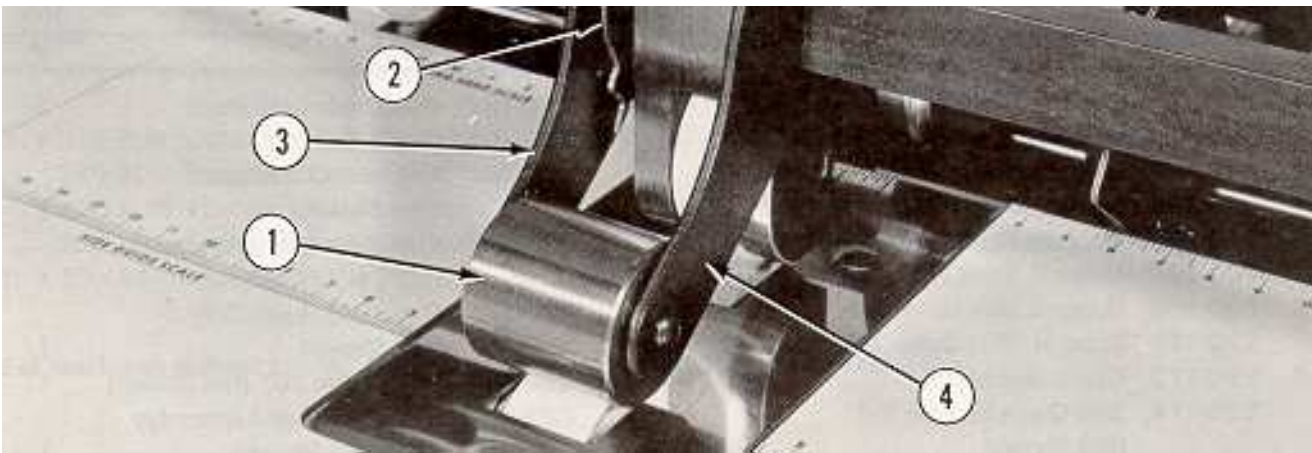
REF NO	PART NO.	DESCRIPTION	NO. REQ'D	REF NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	223-046	Feed table 26"	1	10	220-192	Side guide lock plate	2
2	220-A-071	Side guide ass'y LH	1	11	220-205	Chain guard	1
3	220-A-070	Side guide ass'y RH	1		220-078	Chain guard retainer (not shown)	2
4	220-188	Feed guide lock knob	2		223-A-025	Plexiglass guard ass'y (not shown)	1
5	220-026	Feed table support LH	1		223-052	Plexiglass guard only (not shown)	1
6	220-027	Feed table support RH	1		220-190	Feed table 20" (not shown)	1
6	220-160	Side guide support LH	1		220-A-076	Plexiglass guard ass'y (20" not shown)	1
6	220-161	Side guide support RH	1		220-199	Plexiglass guard only (not shown)	1
7	220-173	Clamp bracket	2				
7	220-174	Side guide lock nut (not shown)	2				
8	220-175	Guide lock screw	2				
9	220-176	Side guide adjust screw	3				

*NOTE: Always include machine serial numbers when ordering parts or cutters.*

### Section 3. PARTS LISTS (Cont.)



Parts List							
REF NO	PART NO.	DESCRIPTION	NO. REQ'D	REF NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	220-A-035	Primary Feed roll	1	7	-	Sole plate screw	
2	220-A-039	Second Feed roll ass'y	1			#10-24 x 1/2 flat head	3
3	220-A-036	Caliper roller ass'y	1	8	220-191	Friction roll sole plate	1
4	220-186	Caliper body	1	9	220-A-065	Sheet deflector RH	1
5	220-016	Caliper adjusting screw			220-A-066	Sheet deflector LH (not shown)	1
6	-	5/16-24 x 1-1/2 SHCS	1	10	220-185	Caliper support bar	1



Parts List							
REF NO	PART NO.	DESCRIPTION	NO. REQ'D	REF NO.	PART NO.	DESCRIPTION	NO. REQ'D
-	*223-A-024	Assist feed roll ass'y	1	4	223-049	Assist roll arm RH	1
1	220-119	Assist roll	1	-	220-118	Assist roll shaft (not shown)	1
2	223-051	Assist roll locking spring	1	-	220-117	Assist roll cam (not shown)	1
3	223-050	Assist roll arm LH	1				

\* Standard on Model 223A; Optional on Model 220A

*NOTE: Always include machine serial numbers when ordering parts or cutters.*

## Pump Supply 60Hz hookup

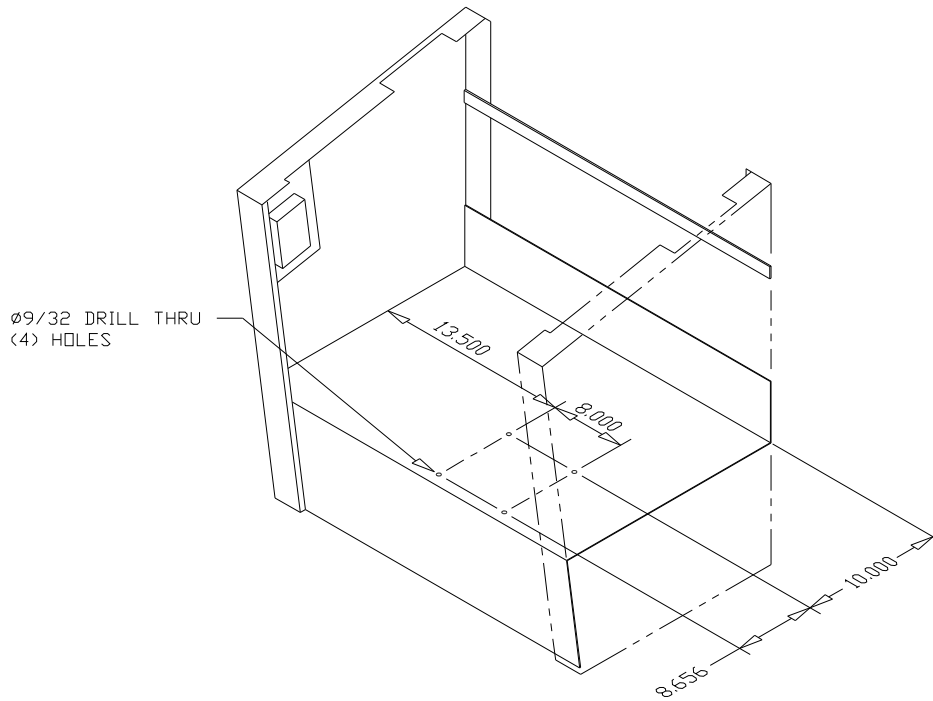
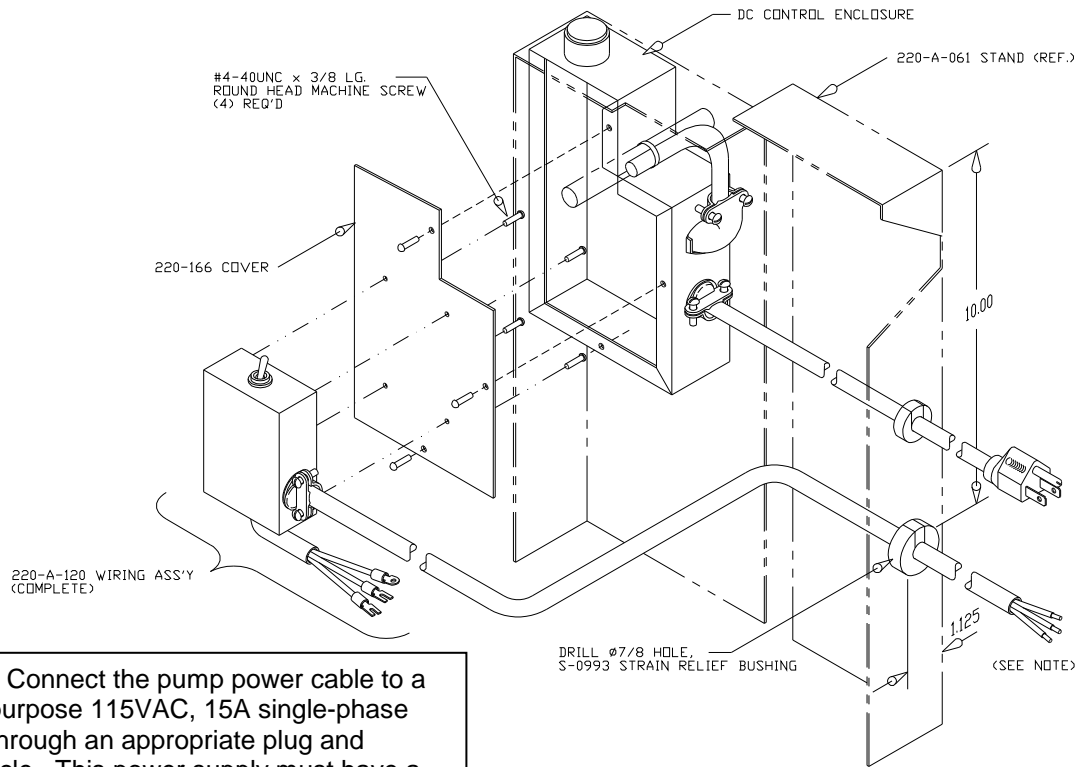


Fig. A1 Perforator Base Modification



**NOTE:** Connect the pump power cable to a single purpose 115VAC, 15A single-phase circuit through an appropriate plug and receptacle. This power supply must have a 15-amp circuit breaker.

Fig. B1 Vacuum Power Switch Wiring, Model A & prior Perforators

## Pump Supply 50Hz hookup

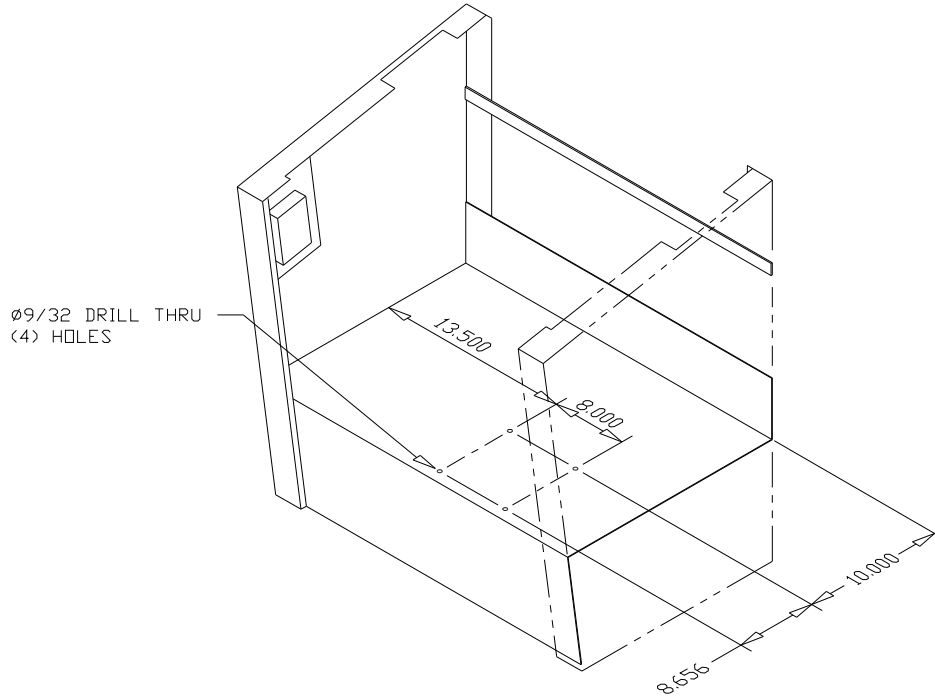
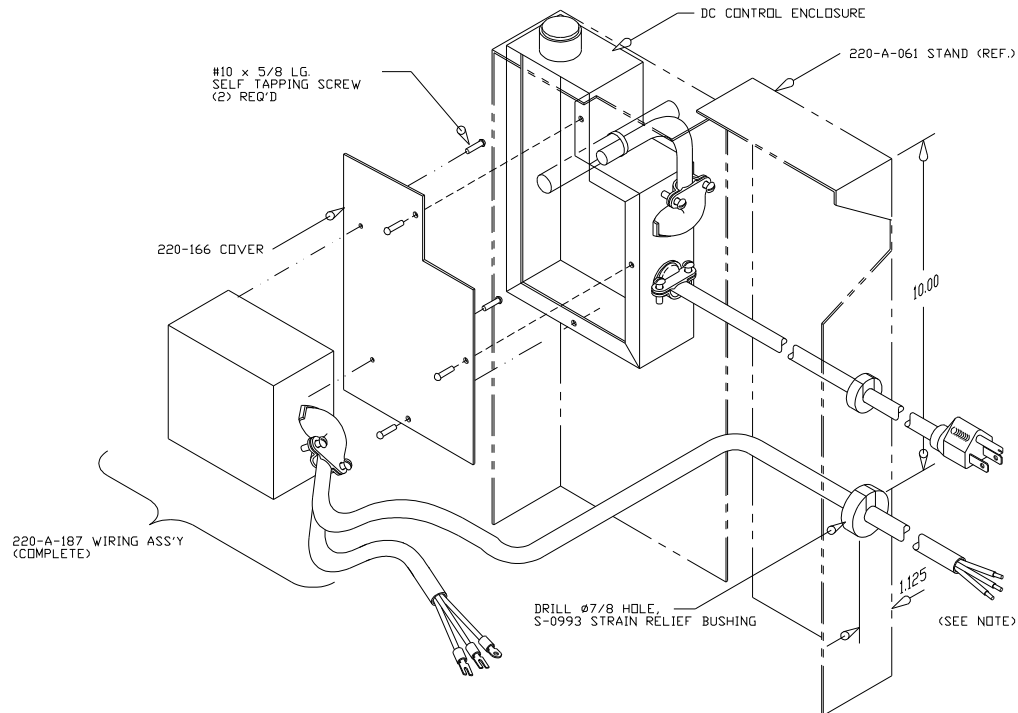


Fig. A2 Perforator Base Modification



**NOTE:** Connect the pump power cable to a single purpose 230VAC, single-phase circuit. This power supply must have a 10-amp fused disconnect.

Fig. B2 Vacuum Power Switch Wiring (Model A Perforators)

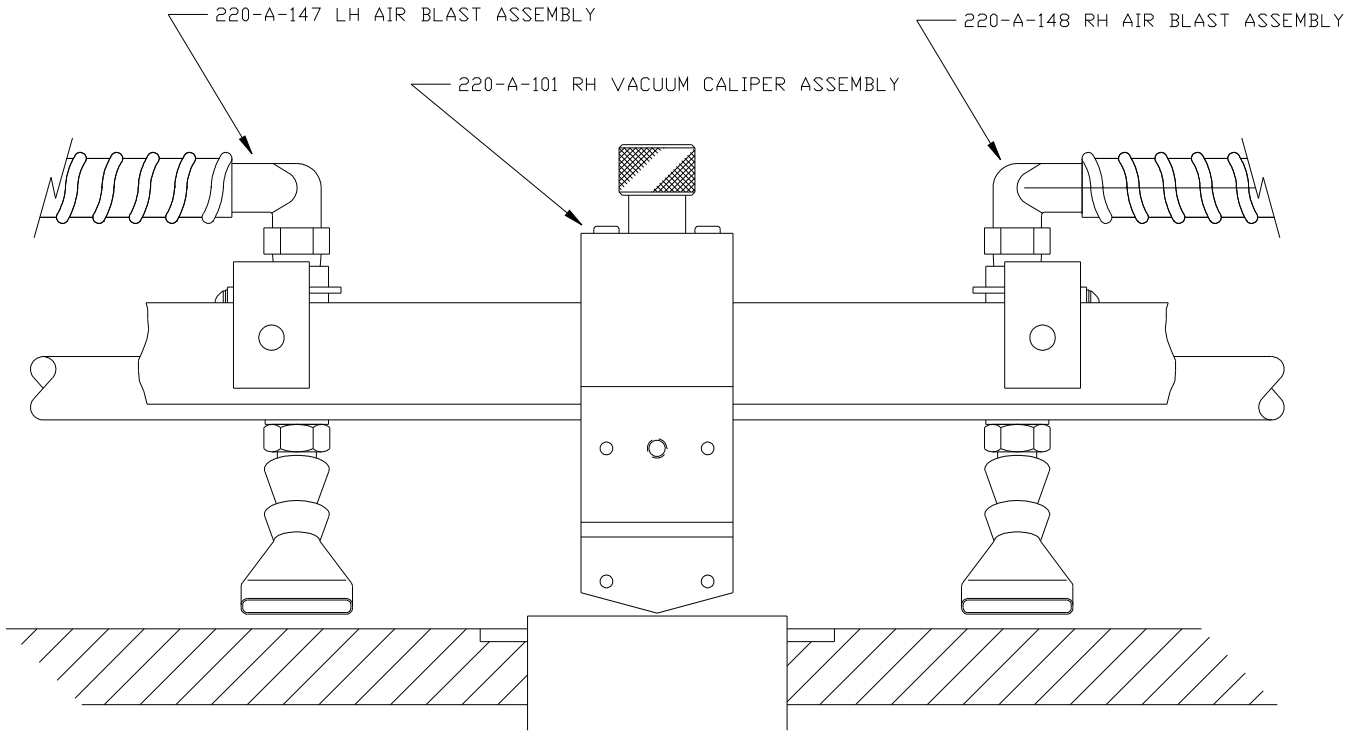


Fig. C Vacuum Caliper and Air Blast

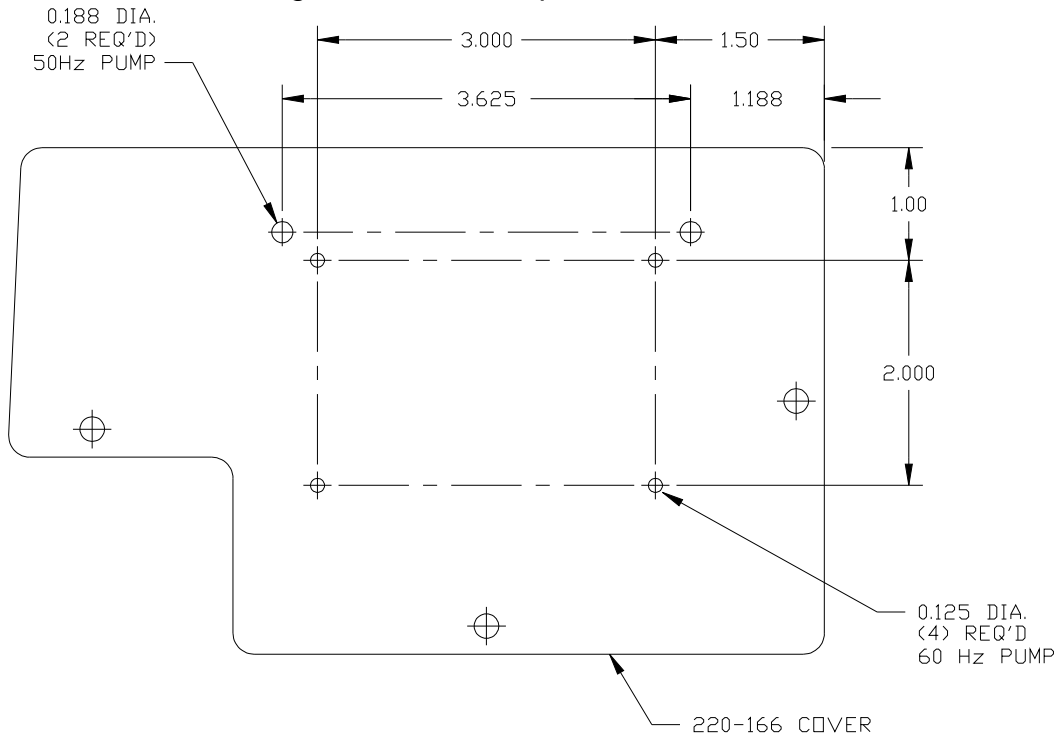


Fig. D1 Electrical Cover Modification 50Hz & 60Hz, (Model A Perforators)

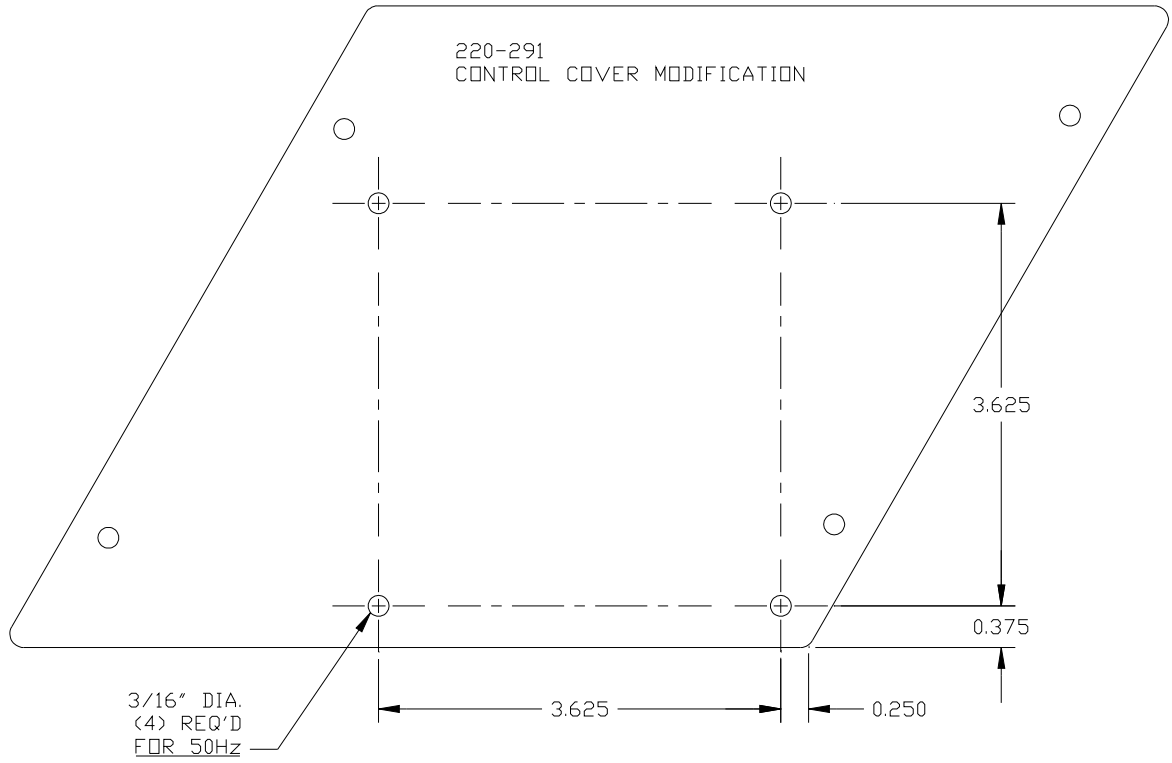


Fig. D2 Electrical Cover Modification 50Hz, (Model B Perforators)

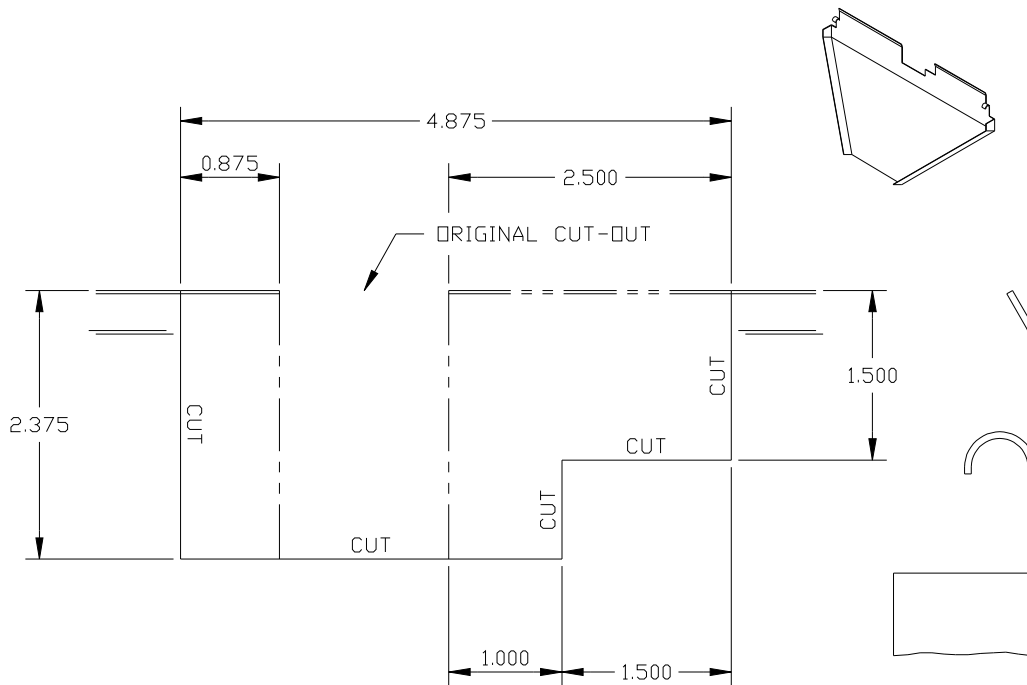


Fig. E Chip Chute Modification

Item	Part No.	Description	No. Required
1	S-2516	Pressure/Vacuum Pump (60 Hz)	1
	S-2516-1	Pressure/Vacuum Pump (50Hz)	1
2	S-1484	Vacuum Gauge	1
3	S-2095	Pressure Gauge	1
4	S-2591	Pump Switch (50Hz)	1
5	S-2105	Pump Switch (60Hz)	1
	S-2700	Vane kit for 60 Hz Pump (7 Vanes)	1 Kit
	S-2700-1	Vane kit for 50 Hz Pump (7 Vanes)	1 Kit
	S-2701	Filter - Intake	1
	S-2702	Filter - Exhaust	1
	S-2703	Filter - 2 <sup>nd</sup> Suction	1

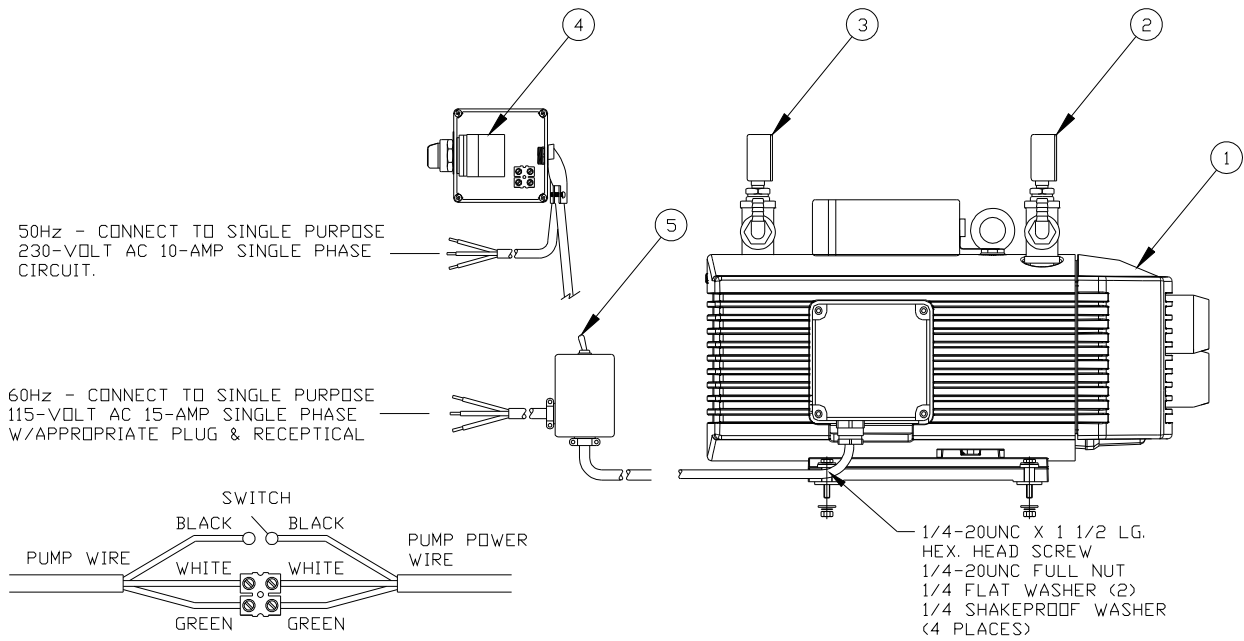
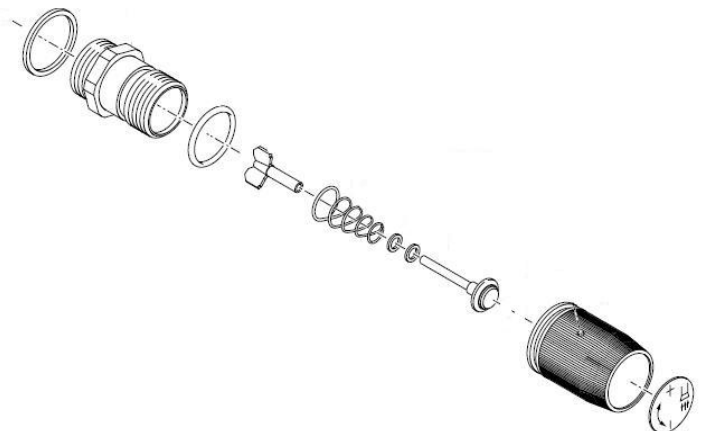
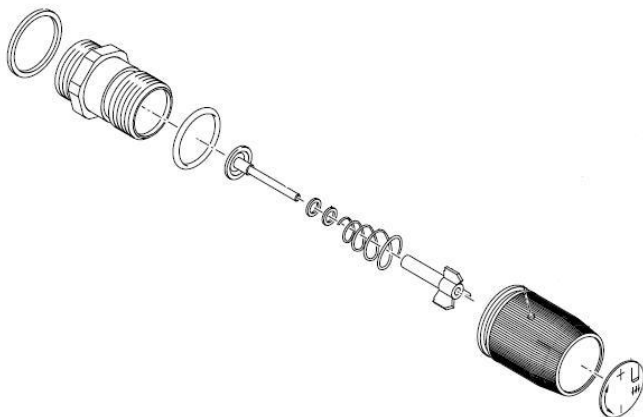


Fig. F Pump Assembly

Pressure Valve Assembly

Vacuum Valve Assembly



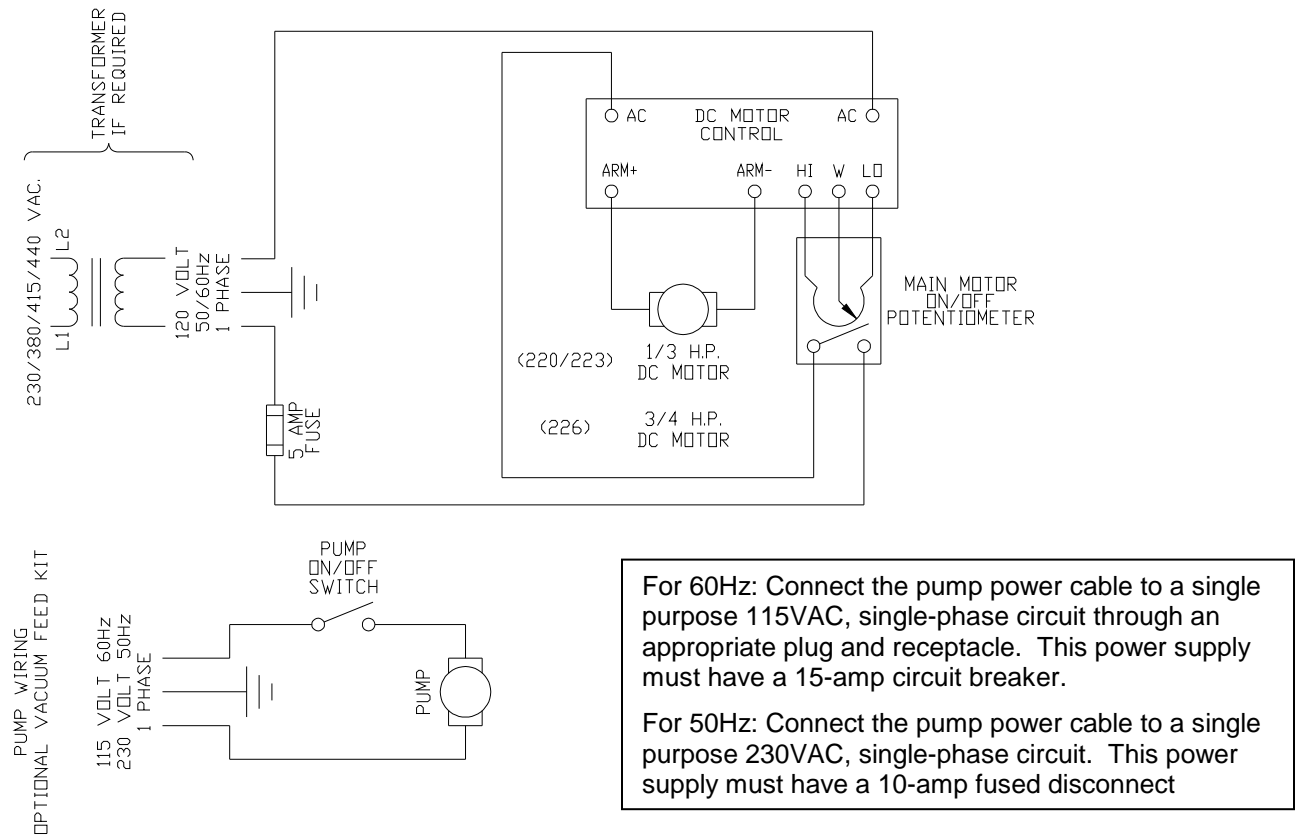


Fig. G Vacuum Perforator Electrical Schematic

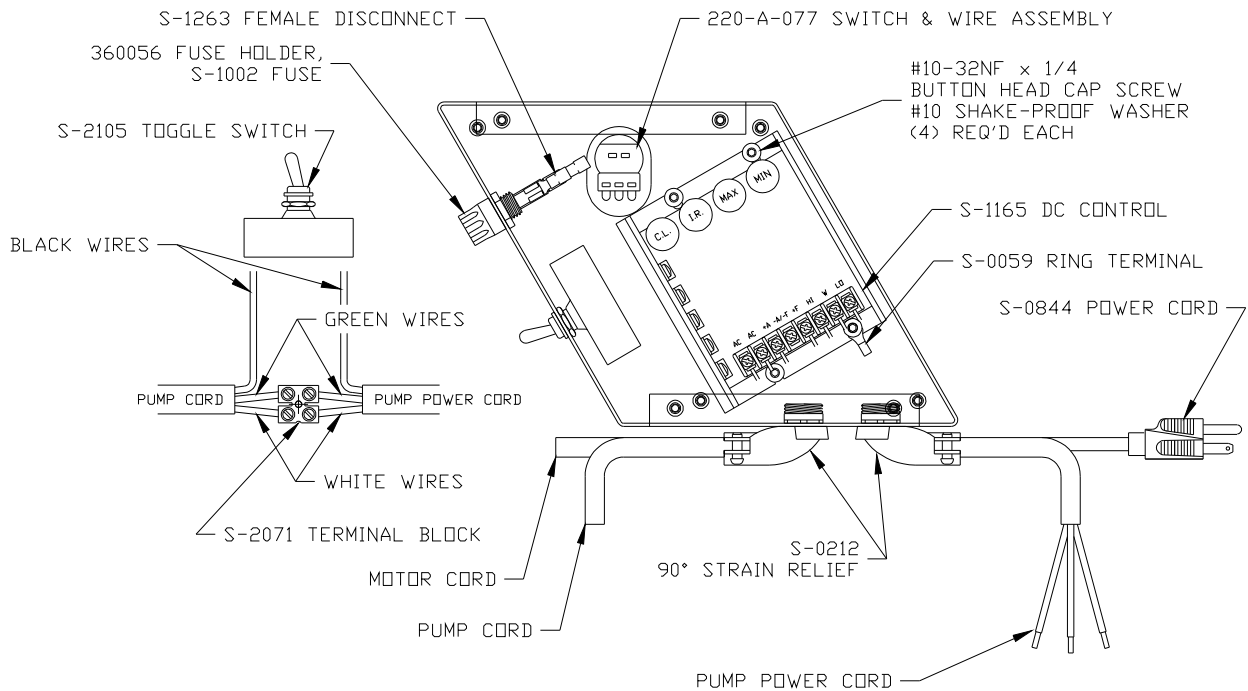


Fig. H Vacuum Power Switch Wiring (60Hz) Model B Perforators