

MODEL
G-101

SERVICE MANUAL

Gibson

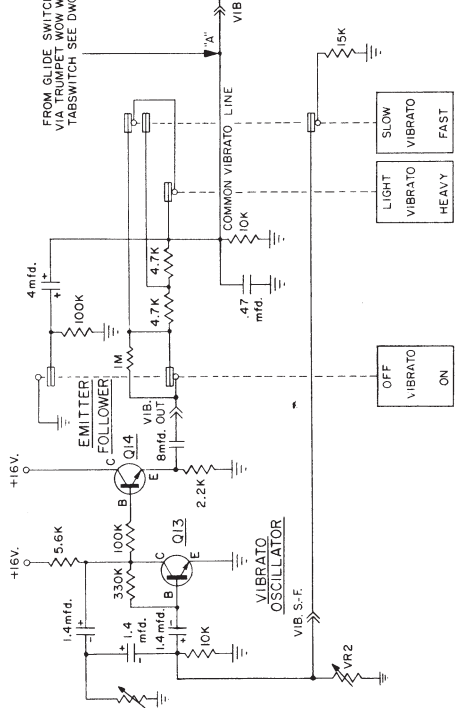
PORTABLE ORGAN



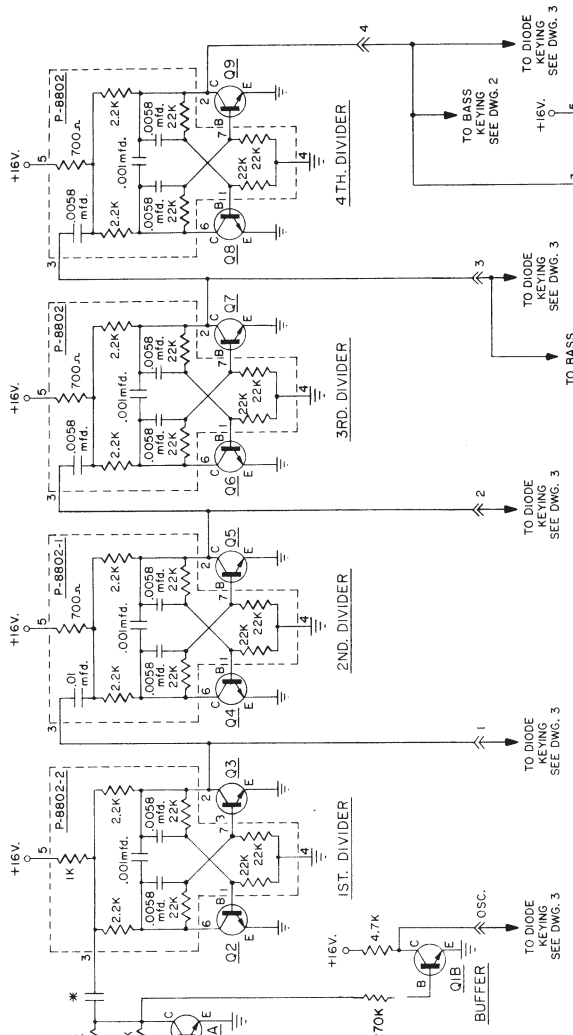
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VIBRATO



TONE GENERATORS



2 1/2" CHART

F	C
F*	C*
G	D
G*	D*
A	E
A*	E*
B	F
B*	F*
C	G
C*	G*
D	A
D*	A*
E	B

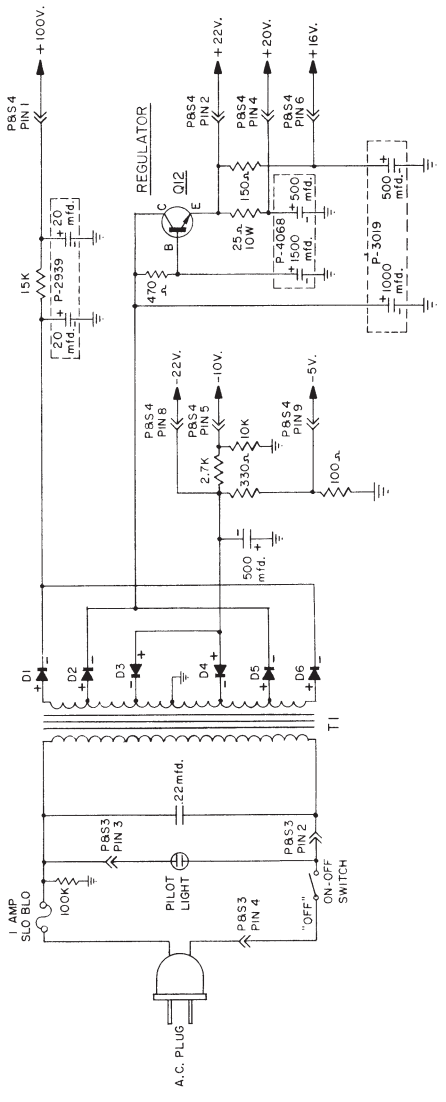
MASTER OSCILLATOR TUNING COMPONENTS

GEN.	C1-C2	C3	L1
G*	.022	.0068	P-9978-3
D*	.022	.0058	P-9978-3
F*	.015	.0047	P-9978-3
G*	.015	.0047	P-9978-3
A*	.012	.0039	P-9978-2
B-C	.01	.0035	P-9978-2

PLUG & SOCKET CONNECTIONS

PLUG BURN IN SOCKET NO.	USE AGE	DESCRIPTION
1	NOT USED	
2	INTVAC	FROM PILOT LIGHT & ON-OFF SWITCH
3	INTVAC	TO PILOT LIGHT
4	INTVAC	TO ON-OFF SWITCH
5	NOT USED	
6	+100V	TO MANUAL PERCUSSION
7	+22V	TO MANUAL B BASS KEYING
8	+20V	TO QUALITY CONTROL
9	-10V	TO QUALITY CONTROL & PERCUSSION
10	+16V	TO TONE GENERATORS-VIBRATO-PEDALS
11	NOT USED	
12	-22V	TO GLIDE SWITCH
13	-5V	TO PEDAL/BASS & SUSTAIN

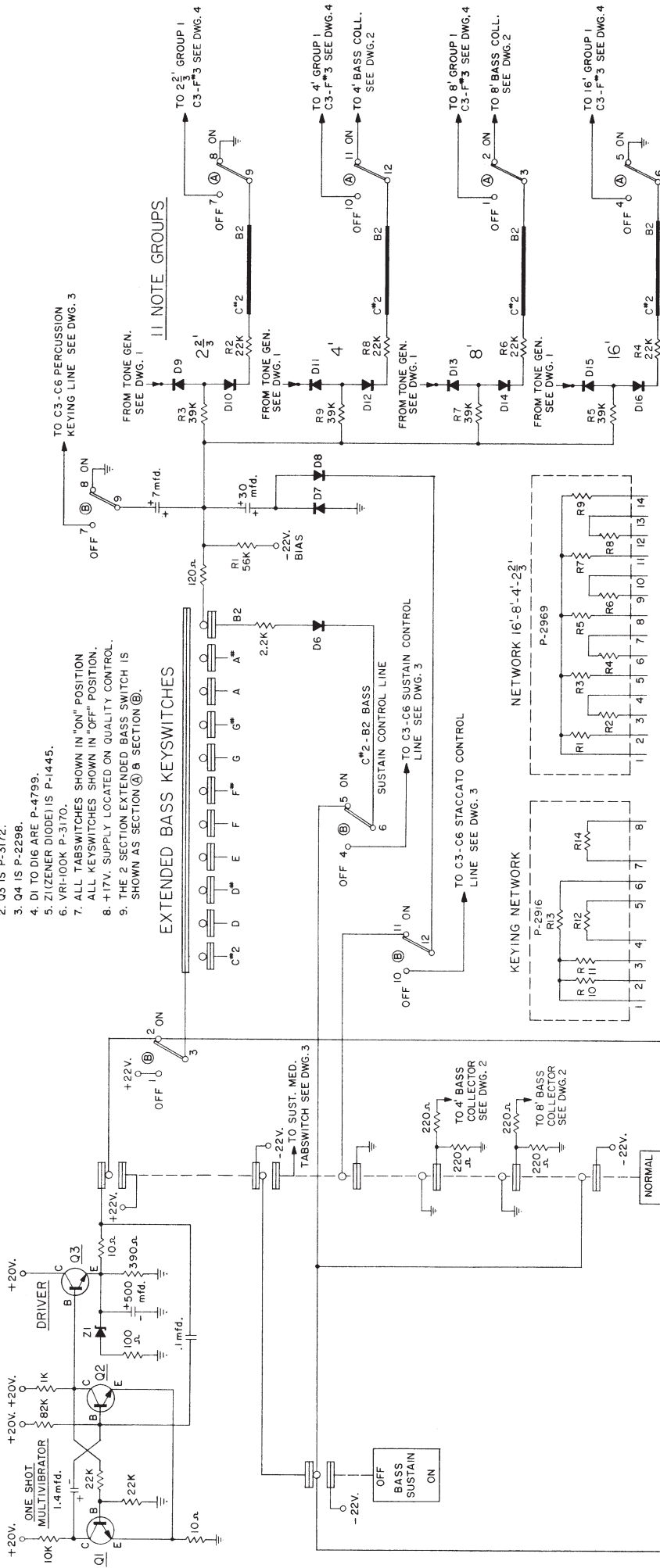
POWER SUPPLY



NOTE:
 1. ONE 100K RESISTOR FROM EACH TONE GENERATOR CONNECTS TO "A".
 2. Q1A, Q1B, Q13 & Q14 ARE P-8393.
 3. Q2 TO Q11 ARE P-8394A.
 4. Q12 IS P-3172.
 5. D1 & D6 ARE P-2240-2, D7 IS P-4799.
 6. D2, D3, D4 & D5 ARE P-2240.
 7. VR10K IS P-8894, VR2-15K IS P-4349.
 8. T1 IS P-4067.
 9. ALL TABSWITCHES SHOWN IN 'ON' POSITION. ALL KEYSWITCHES SHOWN IN 'OFF' POSITION.
 10. * C & B - 01, A* & B - 01; G*, F*, G*, F*, 015; E, D*, D, B, C*, 022.

POWER SUPPLY VIBRATO/
 TONE GENERATORS
 DWG. NO. 1
 MODEL G/01

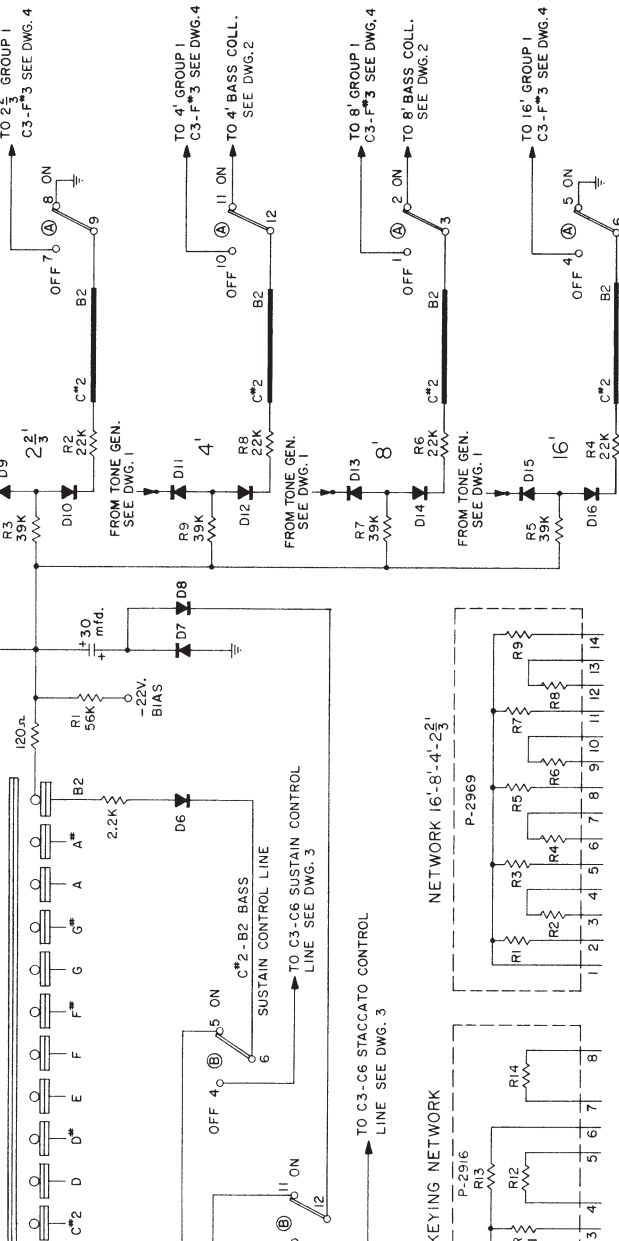
BASS PERCUSSION



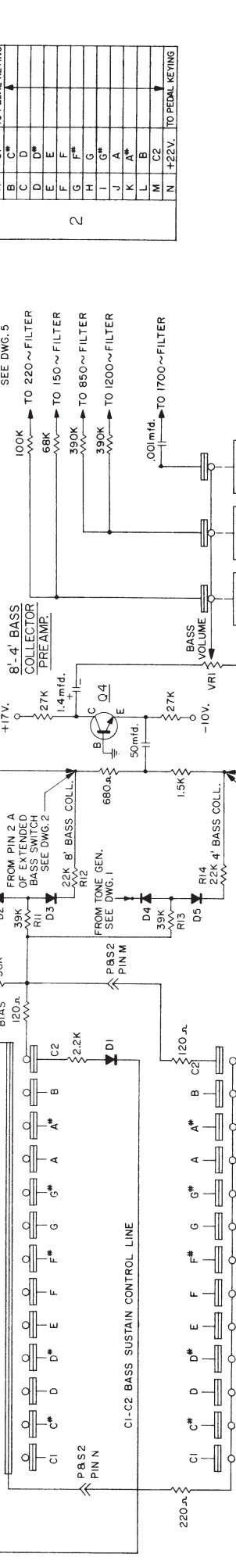
NOTE:

- Q1 & Q2 ARE P-8393.
- Q3 IS P-3172.
- Q4 IS P-2298.
- D1 TO D16 ARE P-4799.
- Z1 IS P-3170.
- VRI-100K P-3170.
- ALL TABSWITCHES SHOWN IN "ON" POSITION.
- ALL TABSWITCHES SHOWN IN "OFF" POSITION.
- +17V. SUPPLY LOCATED ON QUALITY CONTROL.
- THE 2 SECTION EXTENDED BASS SWITCH IS SHOWN AS SECTION (A) & SECTION (B).

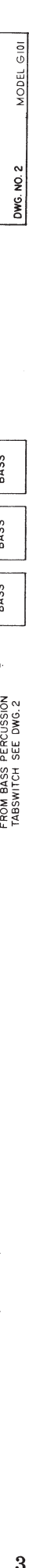
EXTENDED BASS SWITCHES



BASS KEYSWITCHES



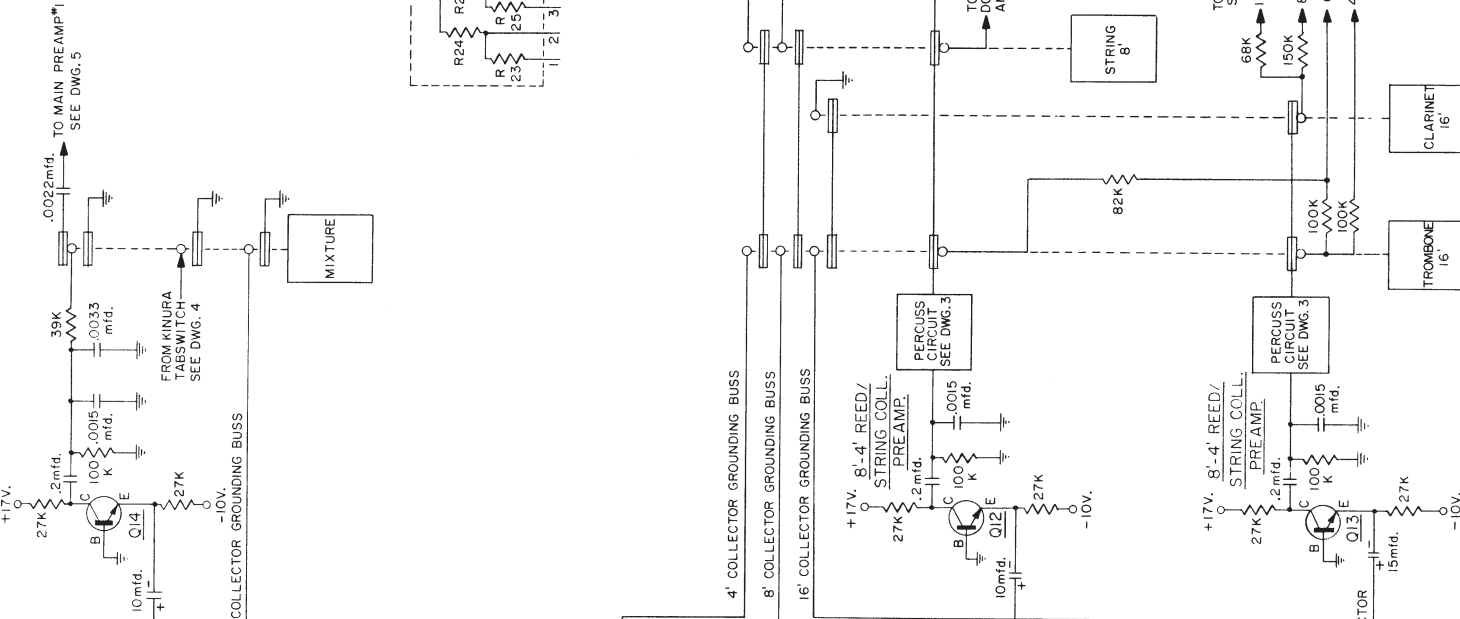
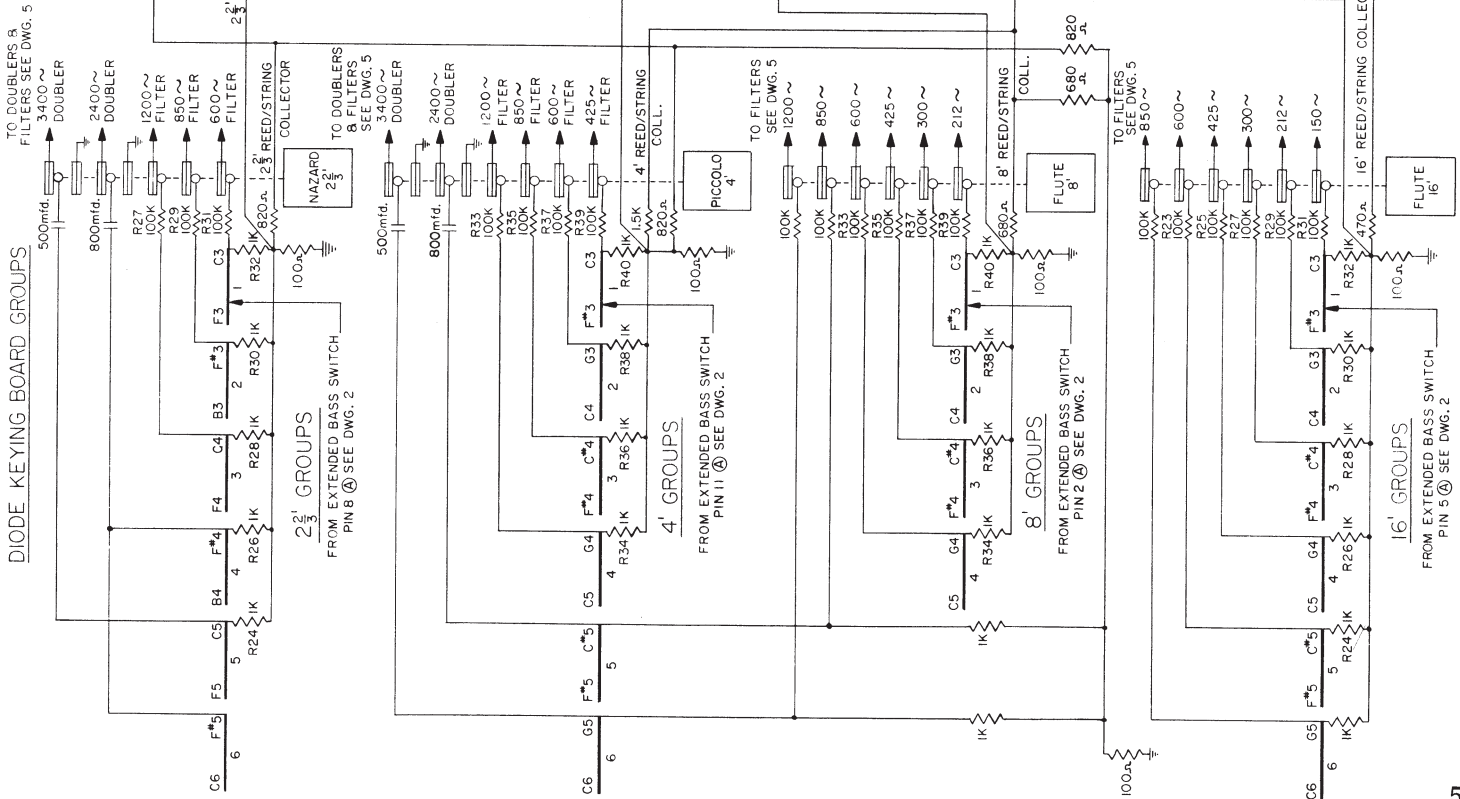
BASS PEDAL SWITCHES (OPTIONAL)



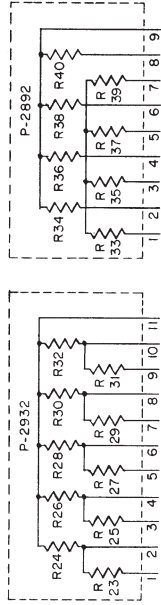
PLUG & SOCKET CONNECTIONS	PLUG & PIN NO. & VOLTAGE	NOTE OR INFORMATION
A	C1	TO PEDAL KEYING
B	C*	
C	D	
D	D*	
E	E	
F	F	
G	F*	
H	G	
I	G*	
J	A	
K	A*	
L	B	
M	B*	
N	+22V.	TO PEDAL KEYING

BASS
DWG. NO. 2
MODEL G01

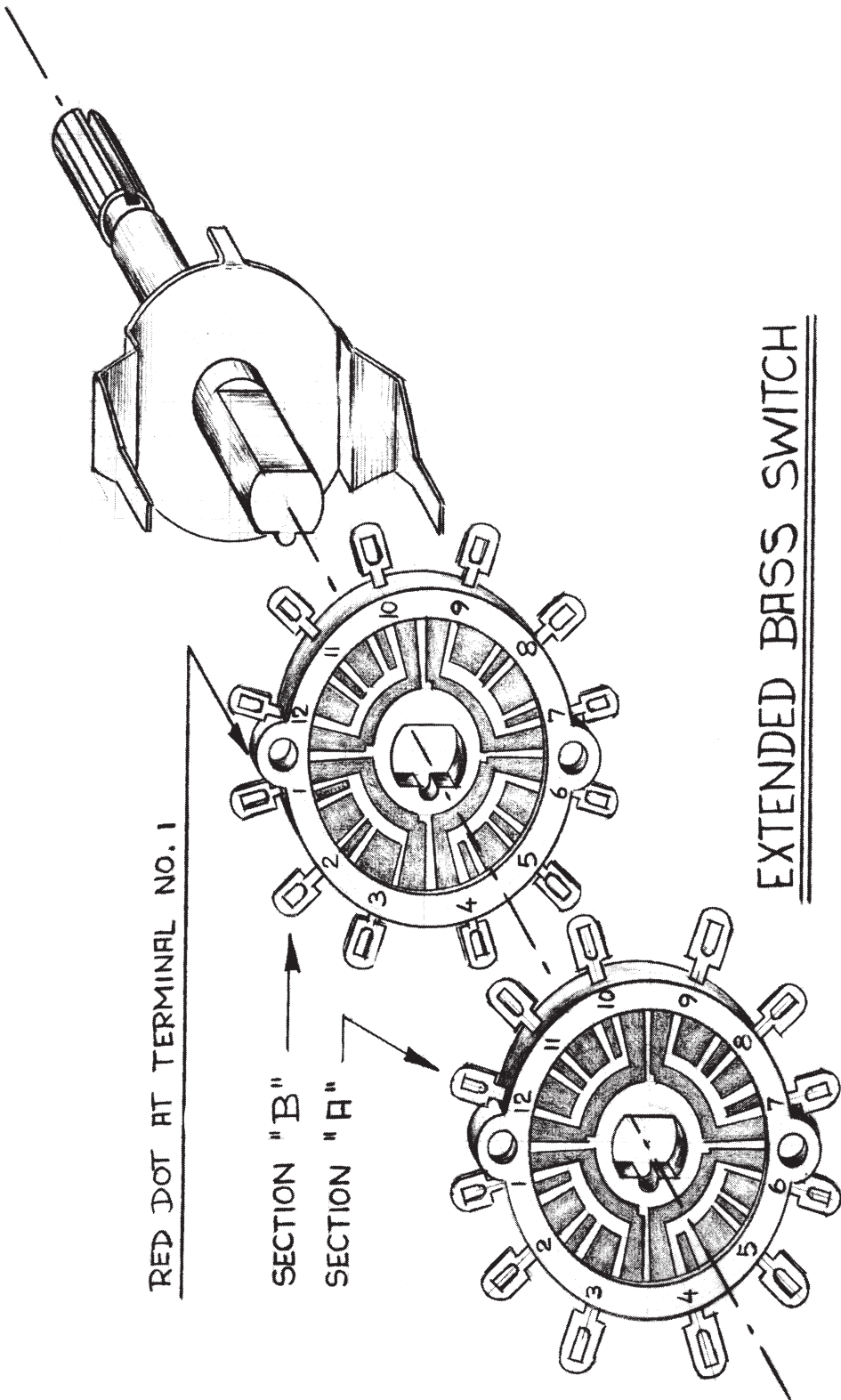
DIODE KEYING BOARD GROUPS



VOICING NETWORKS



- NOTE:**
1. Q12 TO Q14 ARE P-2298.
 2. +17V. SUPPLY LOCATED ON QUALITY CONTROL BOARD.
 3. ALL TABSWITCHES SHOWN IN "ON" POSITION.
 4. ALL RESISTORS WITH "R" NUMBERS ARE CONTAINED IN VOICING NETWORKS. DUPLICATION OF "R" NUMBERS IS DUE TO THE USE OF MORE THAN ONE NETWORK OF THE SAME NUMBER.



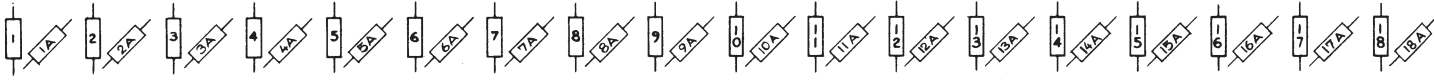
RED DOT AT TERMINAL NO. 1

SECTION "B"

SECTION "A"

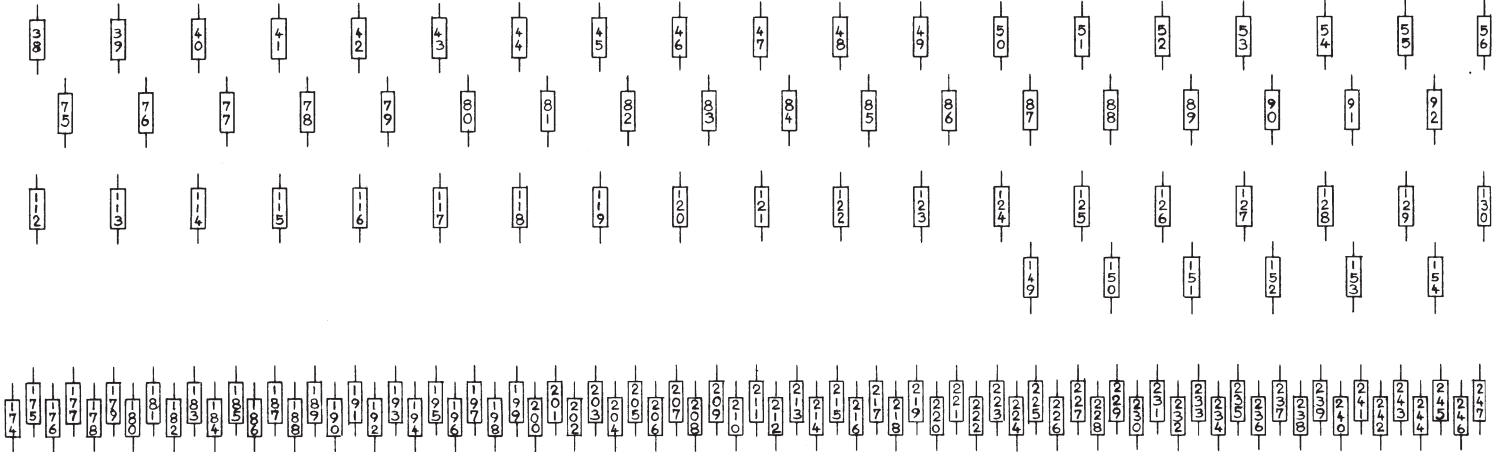
EXTENDED BASS SWITCH

FRONT OF



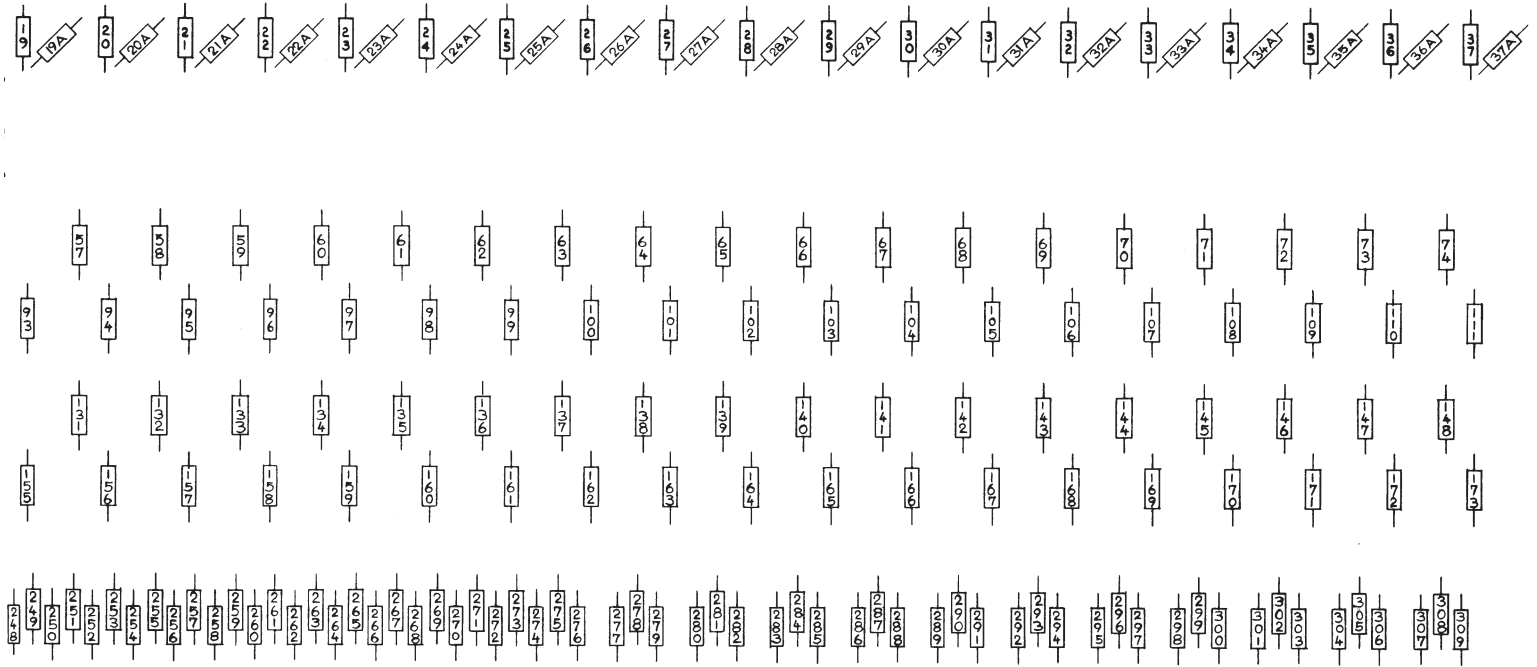
DIODE LAYOUT

DIODE KEYING CIRCUIT BOARD



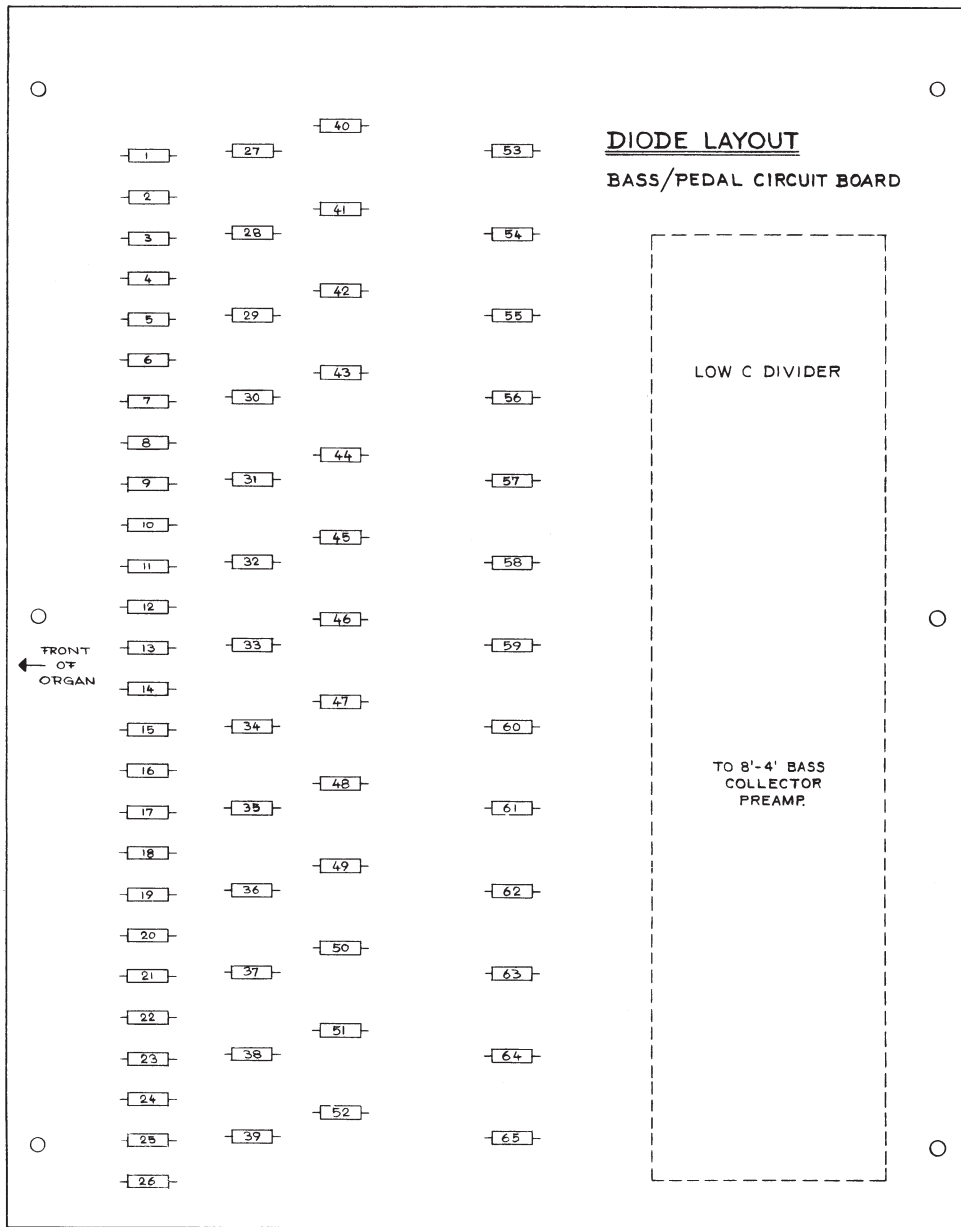
DIODES KEYED					
KEY	16'	8'	4'	2 ² / ₃ '	STACCATO
C ₃	309 & 111	308 & 173	271 & 148	249 & 74	37 & 37A
C* ₃	306 & 110	305 & 172	268 & 147	245 & 73	36 & 36A
D ₃	303 & 109	302 & 171	265 & 146	241 & 72	35 & 35A
D* ₃	300 & 108	299 & 170	262 & 145	237 & 71	34 & 34A
E ₃	297 & 107	296 & 169	259 & 144	233 & 70	33 & 33A
F ₃	294 & 106	293 & 168	256 & 143	229 & 69	32 & 32A
F* ₃	291 & 105	290 & 167	253 & 142	225 & 68	31 & 31A
G ₃	288 & 104	287 & 166	251 & 141	220 & 67	30 & 30A
G* ₃	286 & 103	284 & 165	247 & 140	215 & 66	29 & 29A
A ₃	282 & 102	281 & 164	243 & 139	210 & 65	28 & 28A
A* ₃	279 & 101	278 & 163	239 & 138	205 & 64	27 & 27A
B ₃	276 & 100	275 & 162	235 & 137	200 & 63	26 & 26A
C ₄	307 & 99	272 & 161	231 & 136	195 & 62	25 & 25A
C* ₄	304 & 98	269 & 160	227 & 135	191 & 61	24 & 24A
D ₄	301 & 97	266 & 159	222 & 134	187 & 60	23 & 23A
D* ₄	298 & 96	263 & 158	217 & 133	183 & 59	22 & 22A
E ₄	295 & 95	260 & 157	212 & 132	179 & 58	21 & 21A
F ₄	292 & 94	257 & 156	207 & 131	175 & 57	20 & 20A
F* ₄	289 & 93	254 & 155	202 & 130	228 & 56	19 & 19A

ORGAN

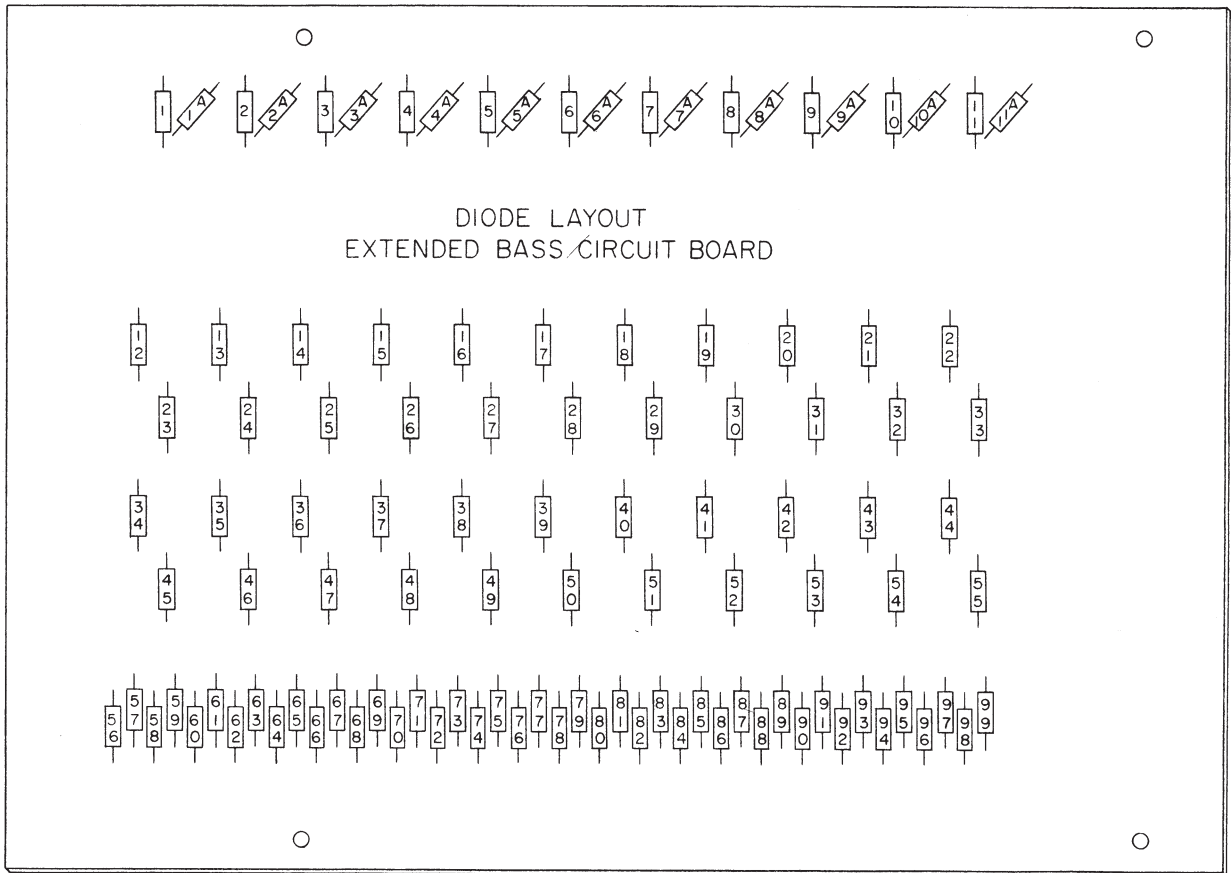


○

DIODES KEYED					
KEY	16'	8'	4'	2 2/3'	STACCATO
G ₄	286 & 92	250 & 154	197 & 129	223 & 55	18 & 18A
G* ₄	283 & 91	246 & 153	192 & 128	218 & 54	17 & 17A
A ₄	280 & 90	242 & 152	188 & 127	213 & 53	16 & 16A
A* ₄	277 & 89	238 & 151	184 & 126	208 & 52	15 & 15A
B ₄	274 & 88	234 & 150	180 & 125	203 & 51	14 & 14A
C ₅	273 & 87	230 & 149	176 & 124	198 & 50	13 & 13A
C* ₅	270 & 86	224 & 123	224 & 123	193 & 49	12 & 12A
D ₅	267 & 85	219 & 122	219 & 122	189 & 48	11 & 11A
D* ₅	264 & 84	214 & 121	214 & 121	185 & 47	10 & 10A
E ₅	261 & 83	209 & 120	209 & 120	181 & 46	9 & 9A
F ₅	258 & 82	204 & 119	204 & 119	177 & 45	8 & 8A
F* ₅	255 & 81	199 & 118	199 & 118	226 & 44	7 & 7A
G ₅	252 & 80	194 & 117	194 & 117	221 & 43	6 & 6A
G* ₅	248 & 79	190 & 116	190 & 116	216 & 42	5 & 5A
A ₅	244 & 78	186 & 115	186 & 115	211 & 41	4 & 4A
A* ₅	240 & 77	182 & 114	182 & 114	206 & 40	3 & 3A
B ₅	236 & 76	178 & 113	178 & 113	201 & 39	2 & 2A
C ₆	232 & 75	174 & 112	174 & 112	196 & 38	1 & 1A

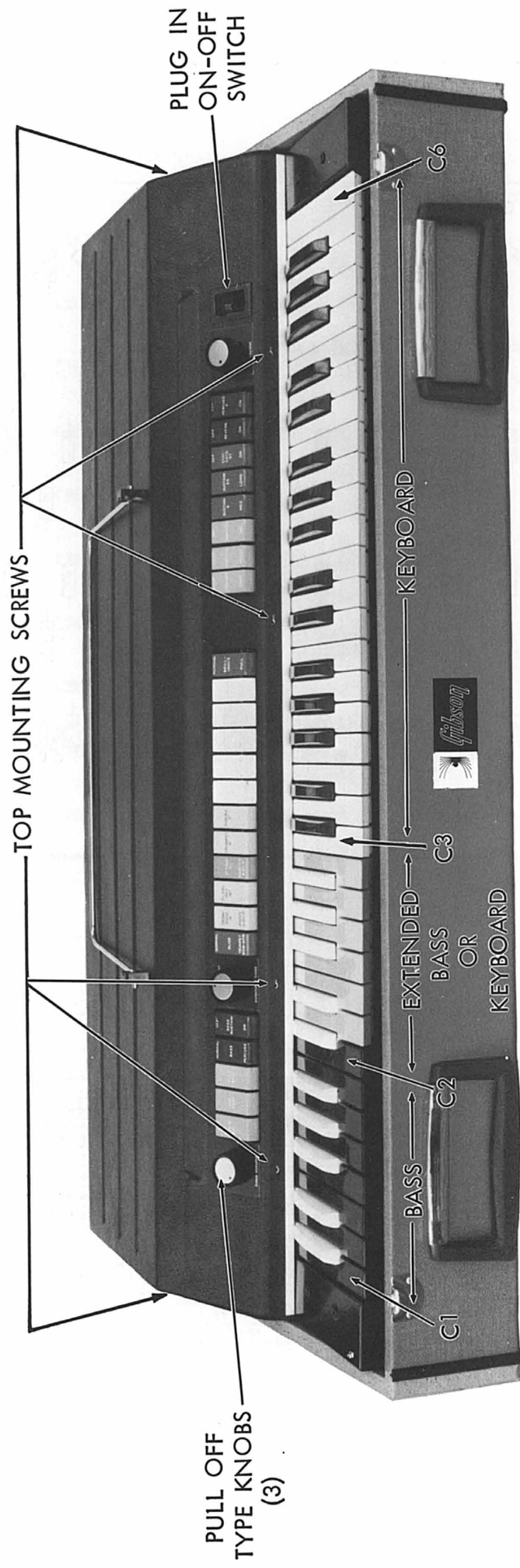


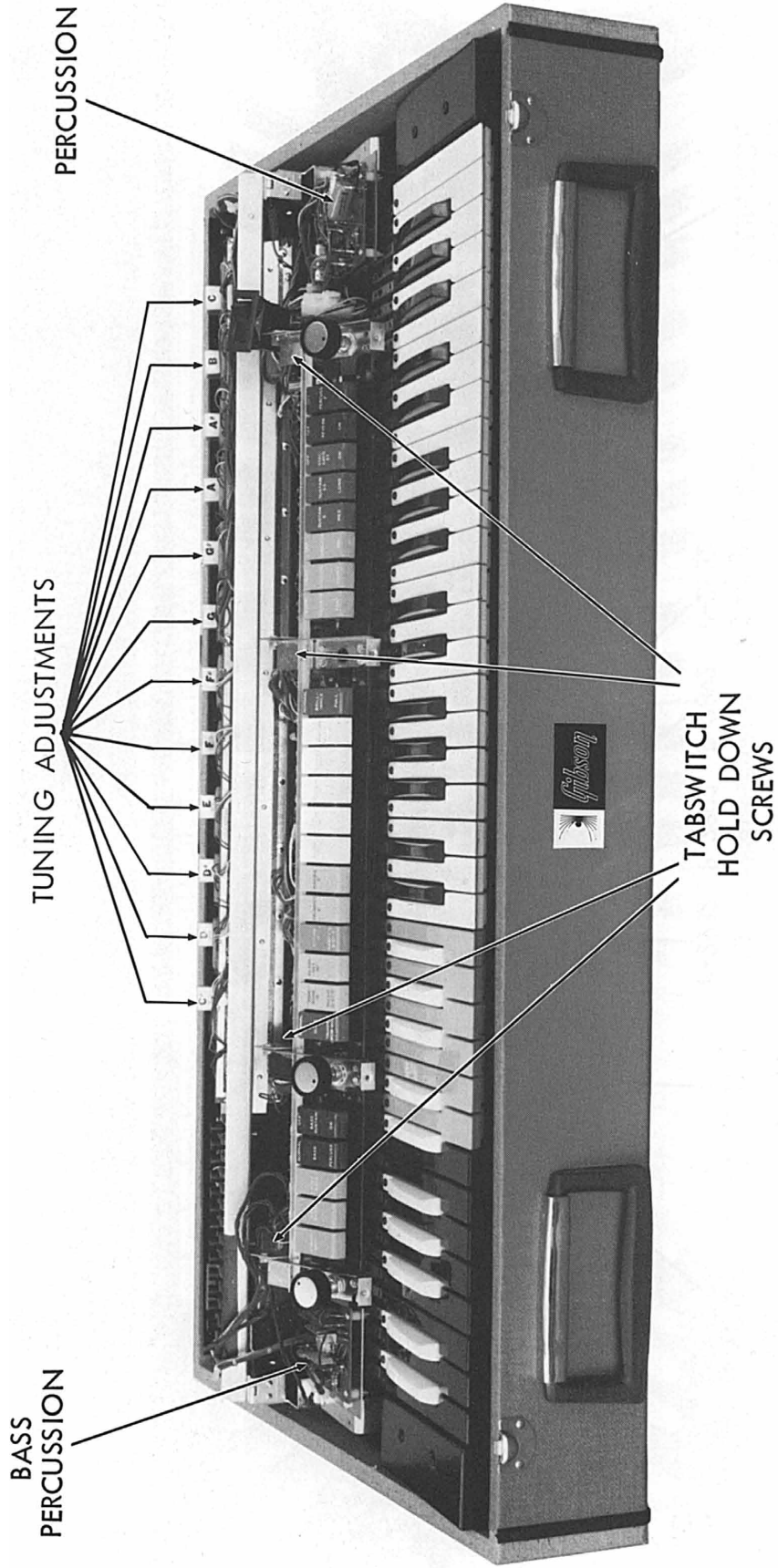
DIODES KEYED			
PEDAL & BASS	8' CONTENT	4' CONTENT	SUSTAIN CONTROL
C ₁	1 & 40	2 & 27	53
C [#]	3 & 41	4 & 28	54
D	5 & 42	6 & 29	55
D [#]	7 & 43	8 & 30	56
E	9 & 44	10 & 31	57
F	11 & 45	12 & 32	58
F [#]	13 & 46	14 & 33	59
G	15 & 47	16 & 34	60
G [#]	17 & 48	18 & 35	61
A	19 & 49	20 & 36	62
A [#]	21 & 50	22 & 37	63
B	23 & 51	24 & 38	64
C ₂	25 & 52	26 & 39	65

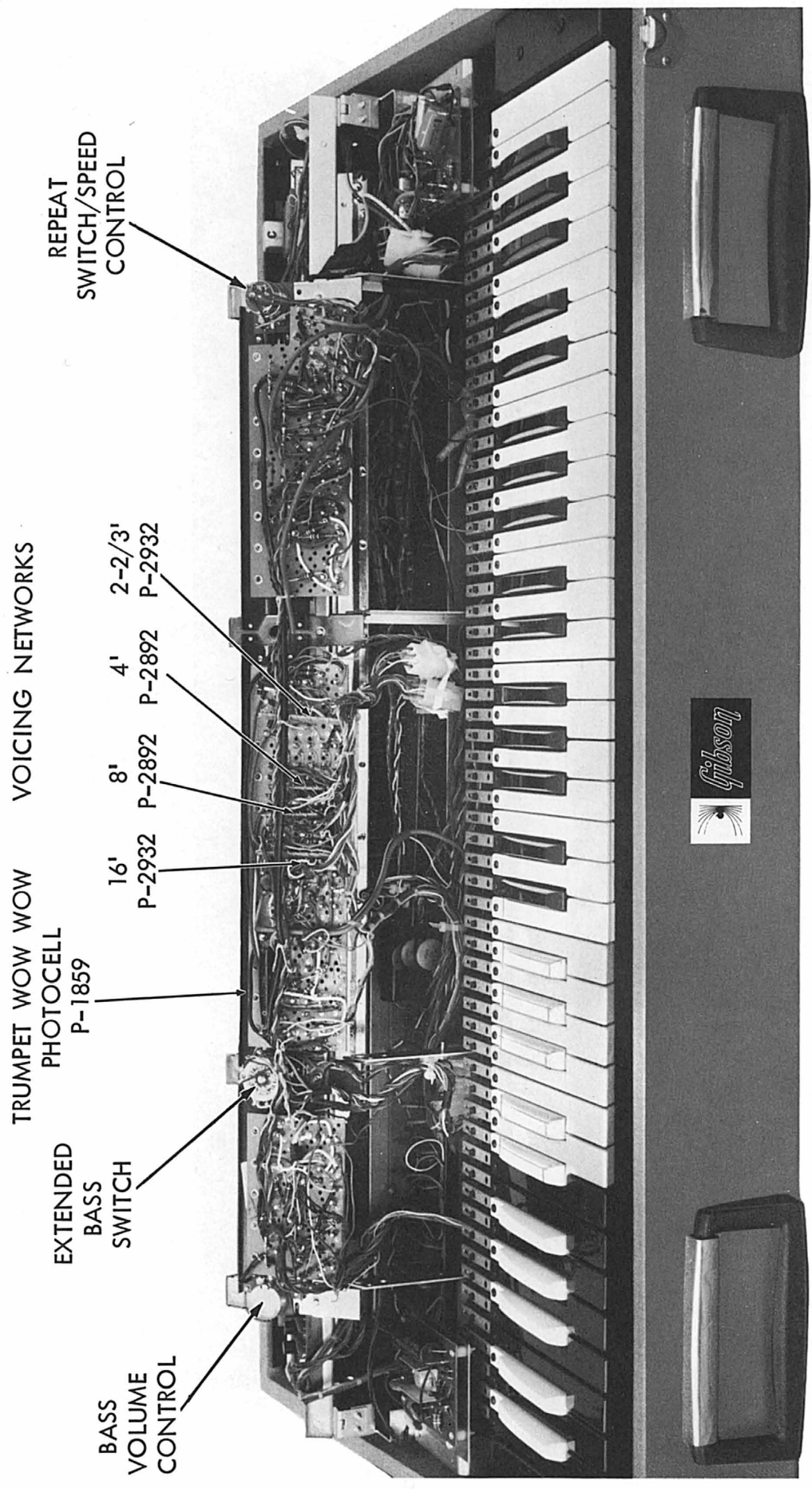


DIODES KEYED

KEY	16'	8' 8' CONTENT (BASS)	4' 4' CONTENT	2 2/3'	STACCATO
C* ₂	96 & 33	97 & 55	98 & 44	99 & 22	11 & 11A
D ₂	92 & 32	93 & 54	94 & 43	95 & 21	10 & 10A
D* ₂	88 & 31	89 & 53	90 & 42	91 & 20	9 & 9A
E ₂	84 & 30	85 & 52	86 & 41	87 & 19	8 & 8A
F ₂	80 & 29	81 & 51	82 & 40	83 & 18	7 & 7A
F* ₂	76 & 28	77 & 50	78 & 39	79 & 17	6 & 6A
G ₂	72 & 27	73 & 49	74 & 38	75 & 16	5 & 5A
G* ₂	68 & 26	69 & 48	70 & 37	71 & 15	4 & 4A
A ₂	64 & 25	65 & 47	66 & 36	67 & 14	3 & 3A
A* ₂	60 & 24	61 & 46	62 & 35	63 & 13	2 & 2A
B ₂	56 & 23	57 & 45	58 & 34	59 & 12	1 & 1A







REPEAT
SWITCH/SPEED
CONTROL

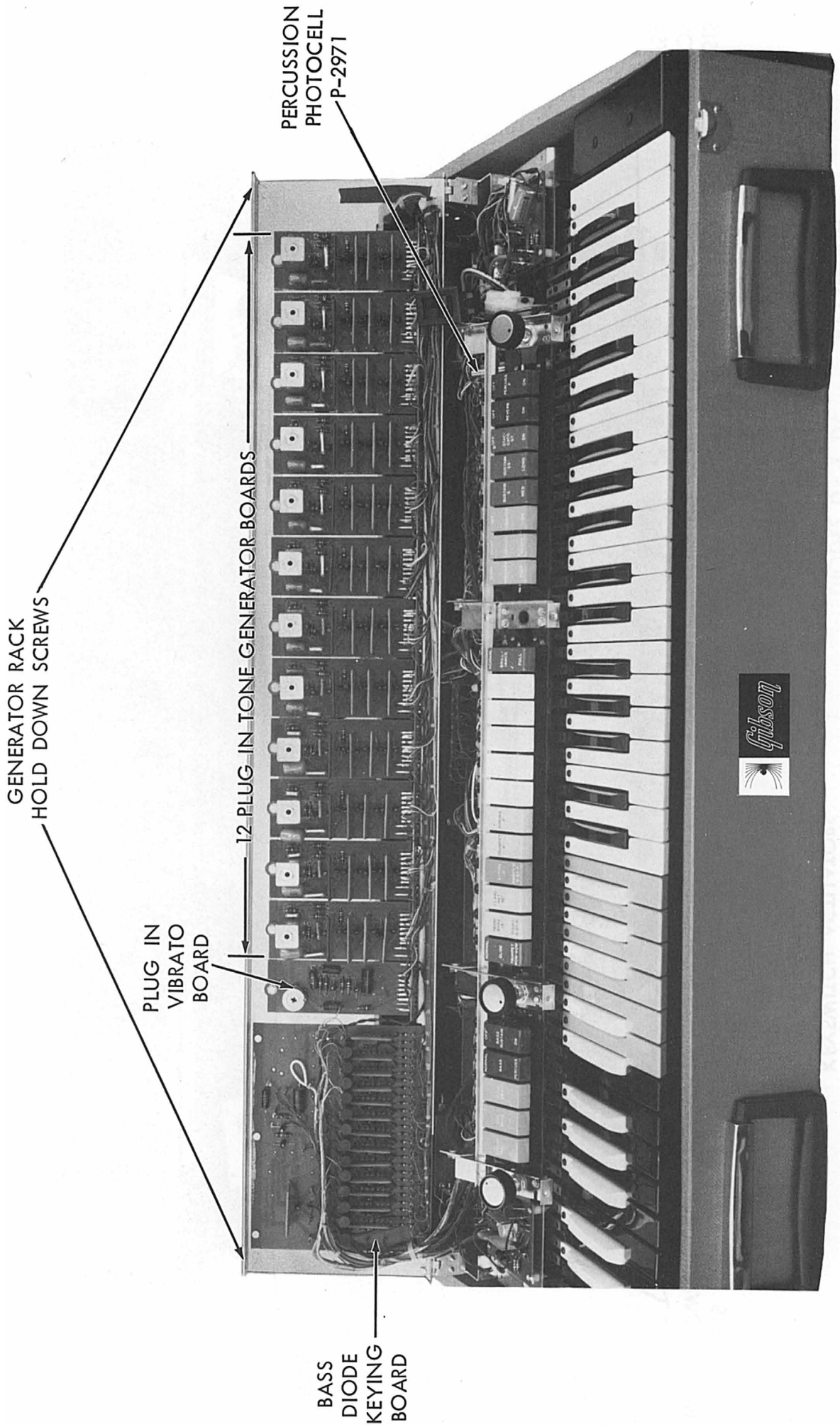
VOICING NETWORKS

TRUMPET WOW WOW
PHOTOCELL
P-1859

EXTENDED
BASS
SWITCH

BASS
VOLUME
CONTROL

16' P-2932
8' P-2892
4' P-2892
2-2/3' P-2932



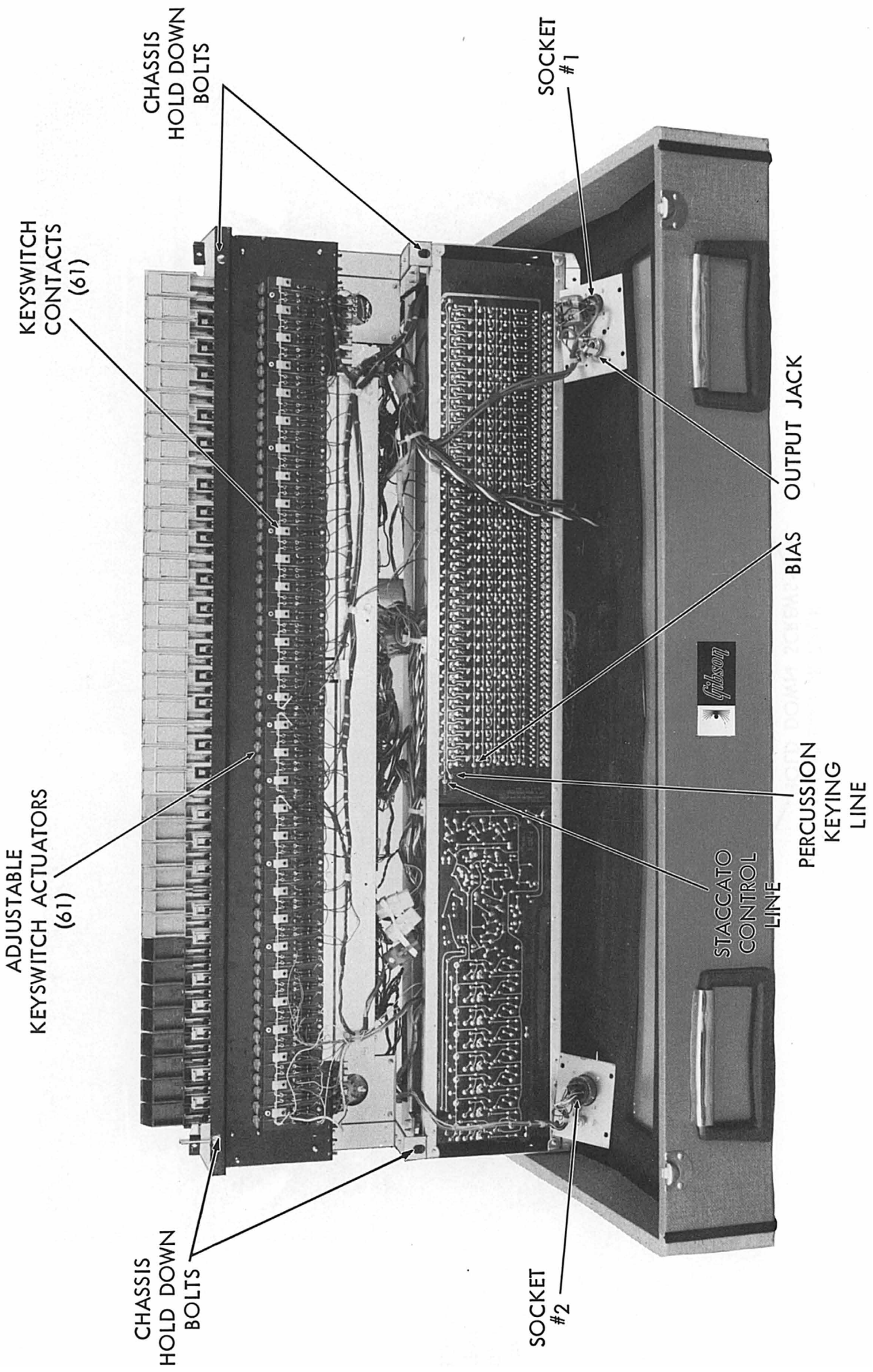
GENERATOR RACK
HOLD DOWN SCREWS

PLUG IN
VIBRATO
BOARD

12 PLUG IN TONE GENERATOR BOARDS

PERCUSSION
PHOTOCELL
P-2971

BASS
DIODE
KEYING
BOARD



KEYSWITCH CONTACTS (61)

CHASSIS HOLD DOWN BOLTS

SOCKET #1

ADJUSTABLE KEYSWITCH ACTUATORS (61)

CHASSIS HOLD DOWN BOLTS

SOCKET #2

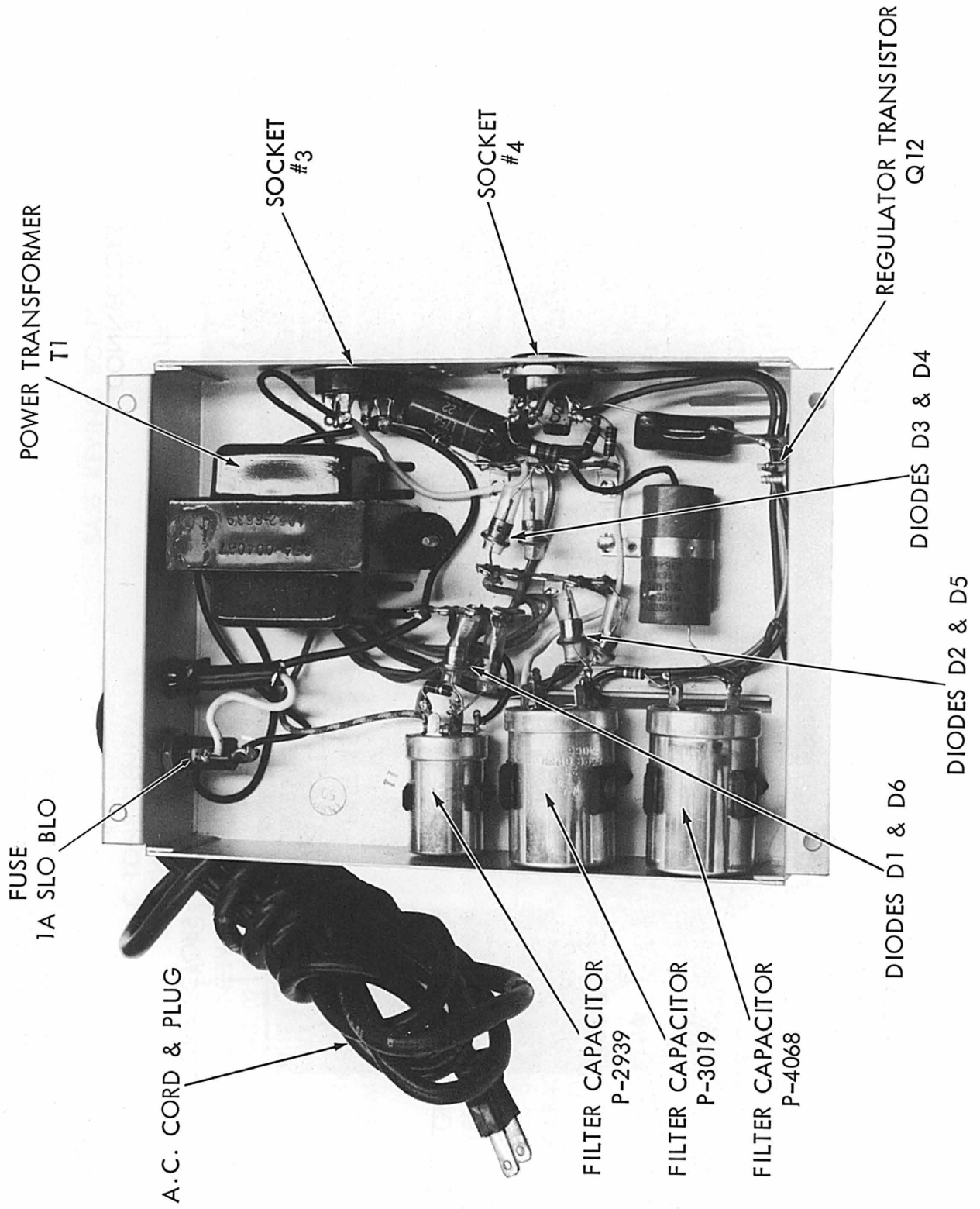
BIAS OUTPUT JACK



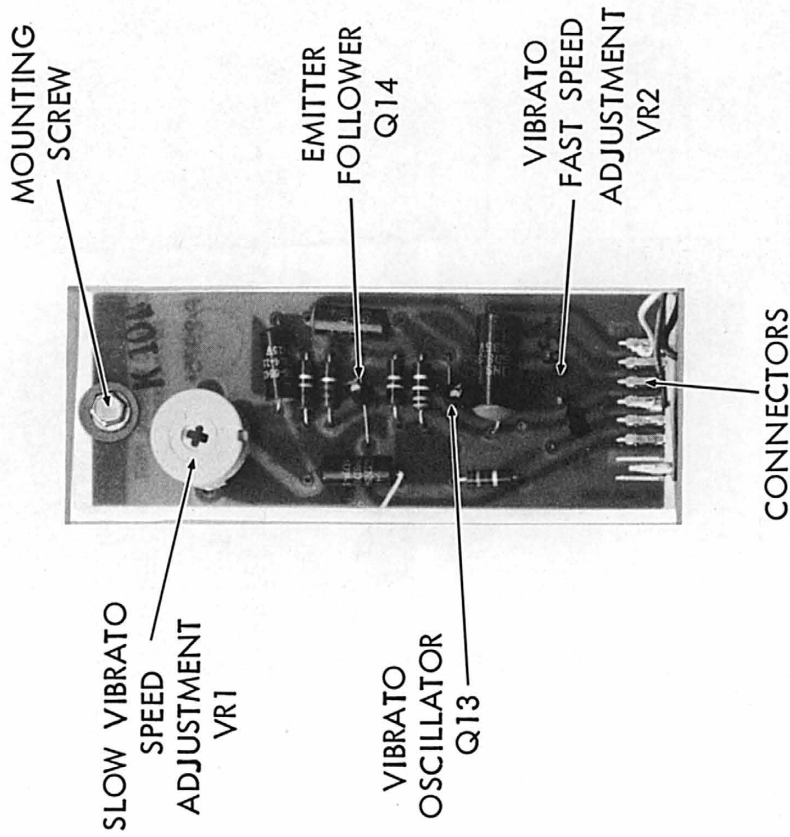
STACCATO CONTROL LINE

PERCUSSION KEYING LINE

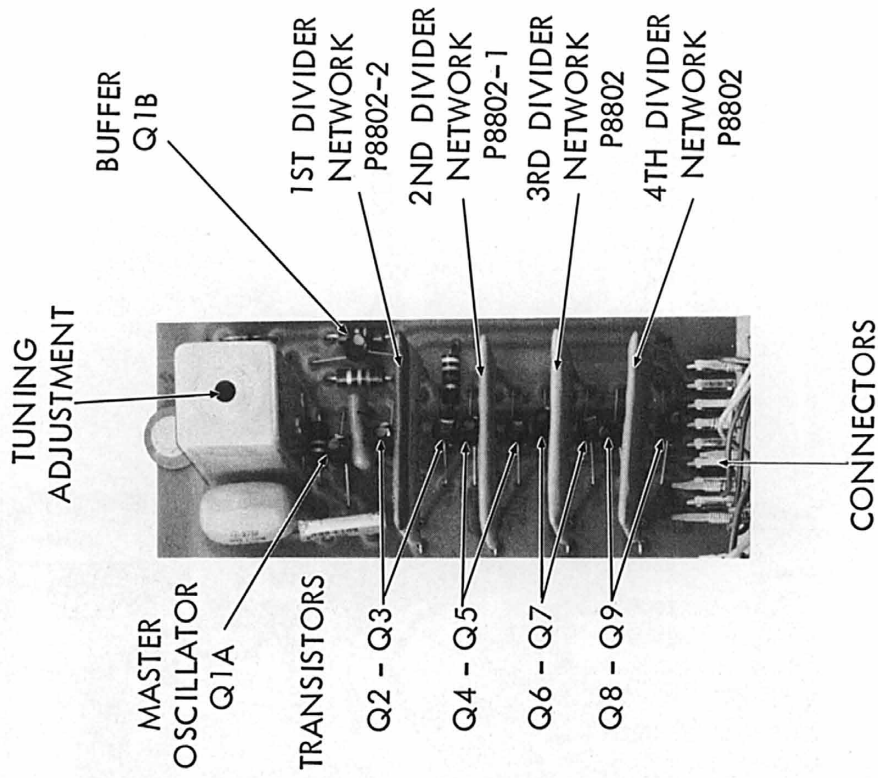
POWER SUPPLY



PLUG IN
VIBRATO
BOARD

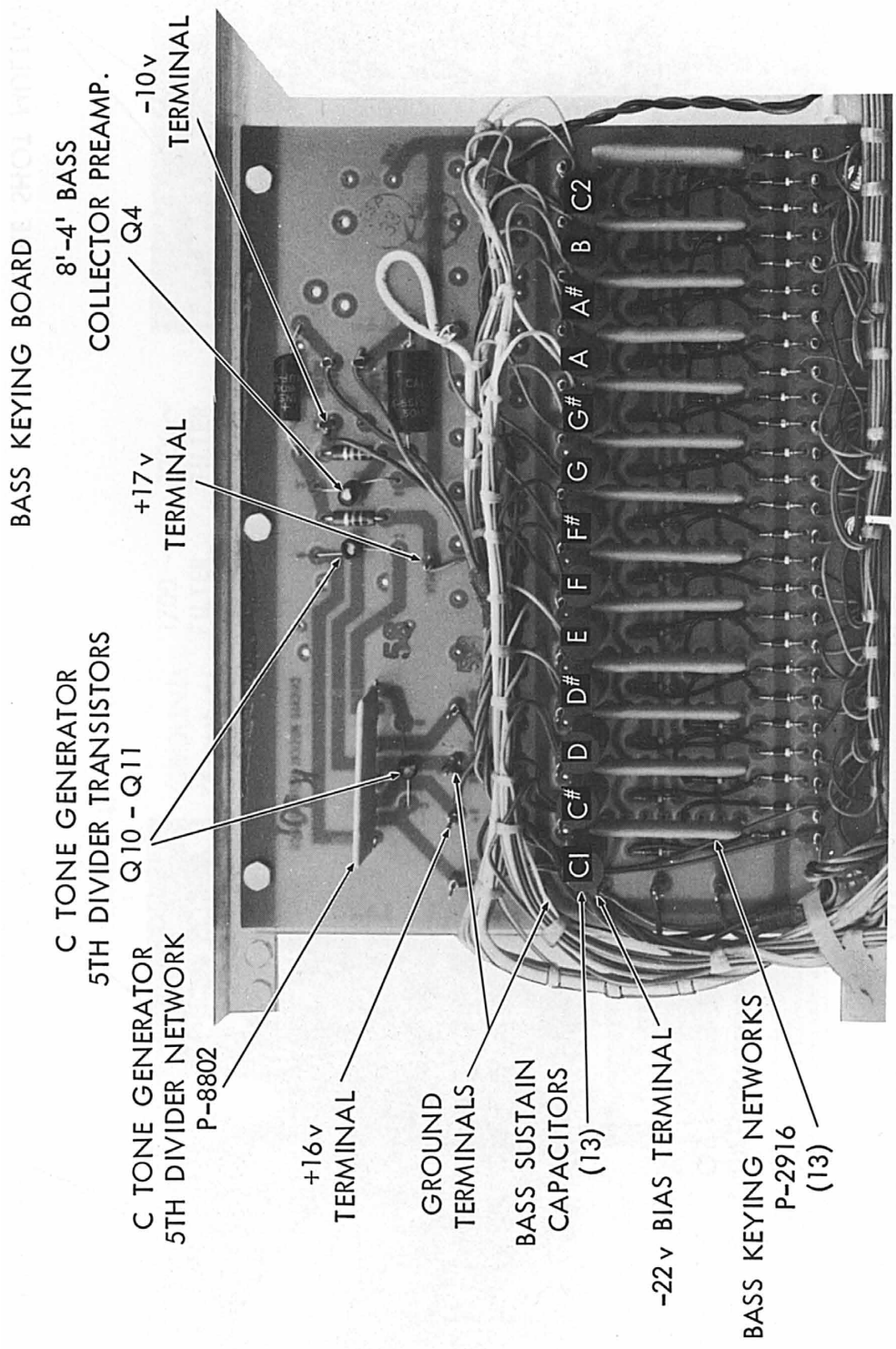


PLUG IN
TONE GENERATOR
BOARD



IMPORTANT:

Adjust Vibrato slow speed before adjusting Vibrato fast speed. Q13 will not oscillate if either adjustment is extreme.

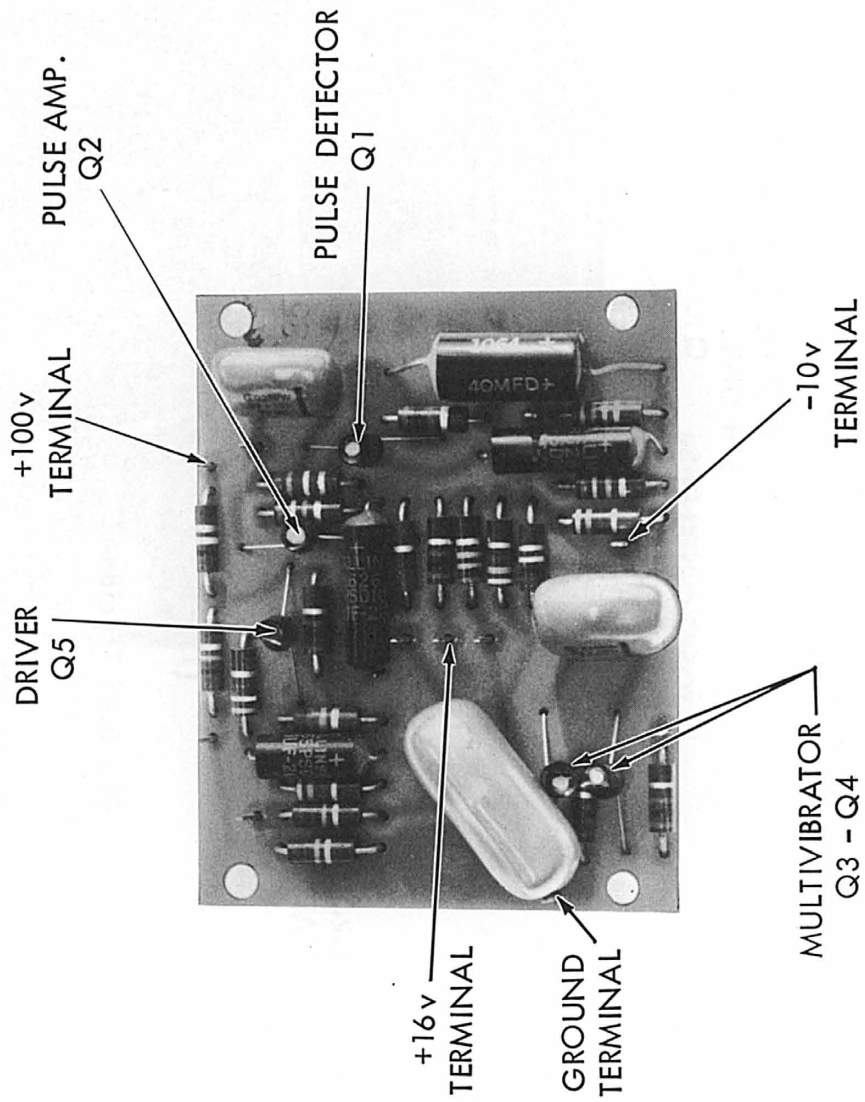


BASS KEYING BOARD

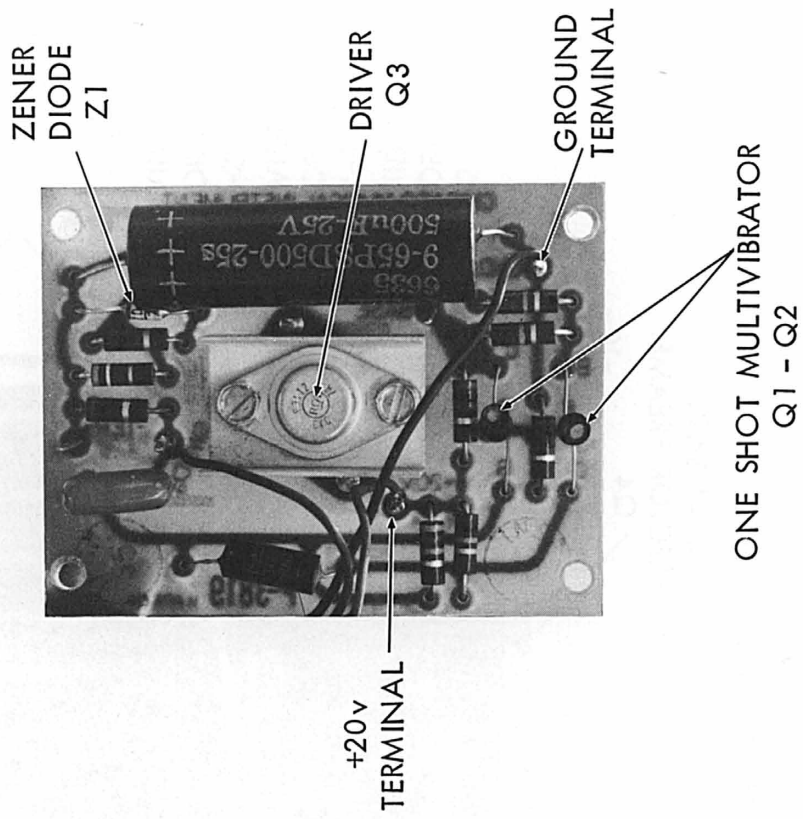
C TONE GENERATOR
 5TH DIVIDER TRANSISTORS
 Q10 - Q11
 C TONE GENERATOR
 5TH DIVIDER NETWORK
 P-8802
 +16v
 TERMINAL
 GROUND
 TERMINALS
 BASS SUSTAIN
 CAPACITORS
 (13)
 -22 v BIAS TERMINAL
 BASS KEYING NETWORKS
 P-2916
 (13)
 +17v
 TERMINAL
 8'-4' BASS
 COLLECTOR PREAMP.
 Q4
 -10v
 TERMINAL

C1 C# D D# E F F# G G# A A# B C2

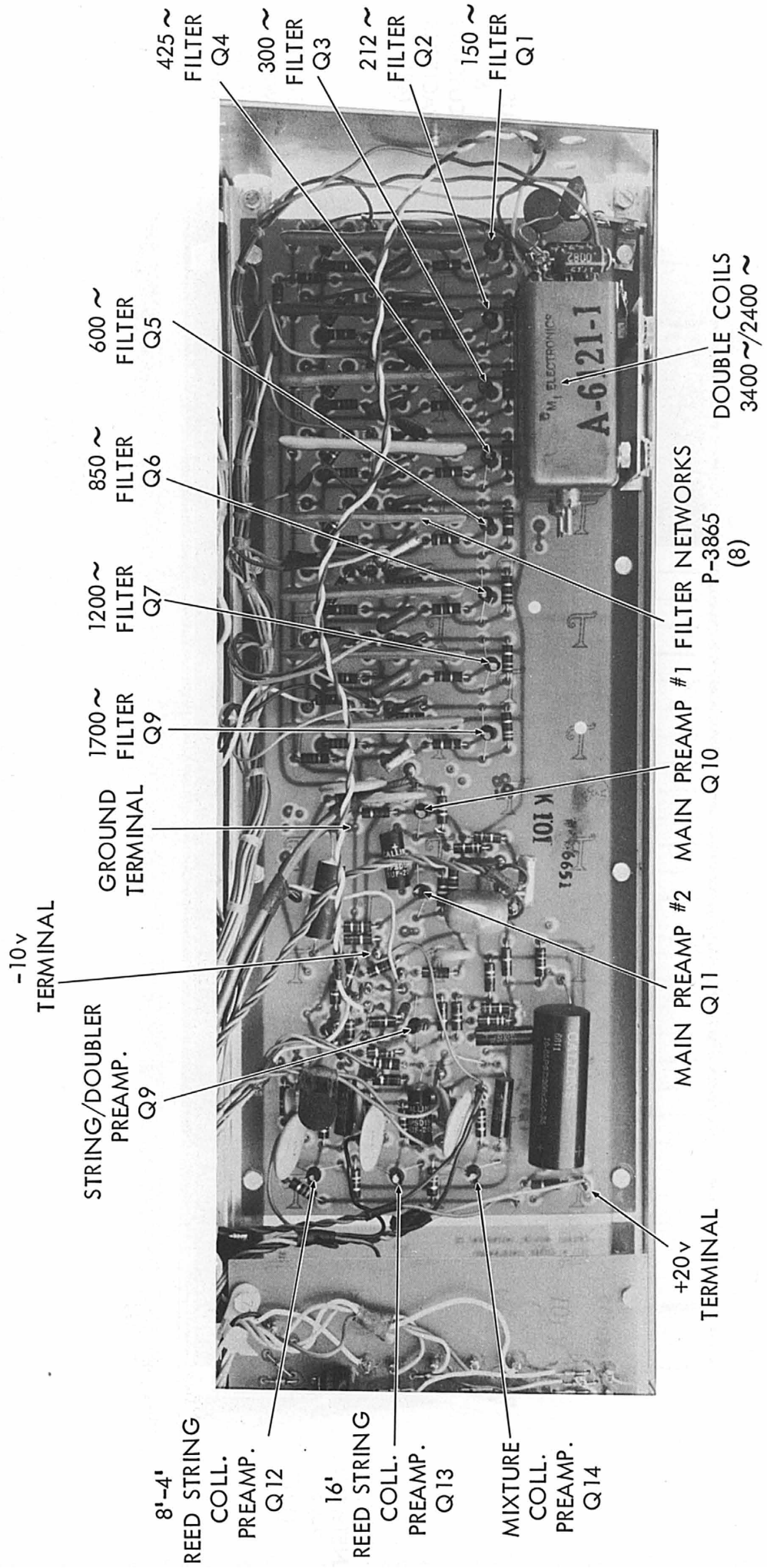
PERCUSSION BOARD

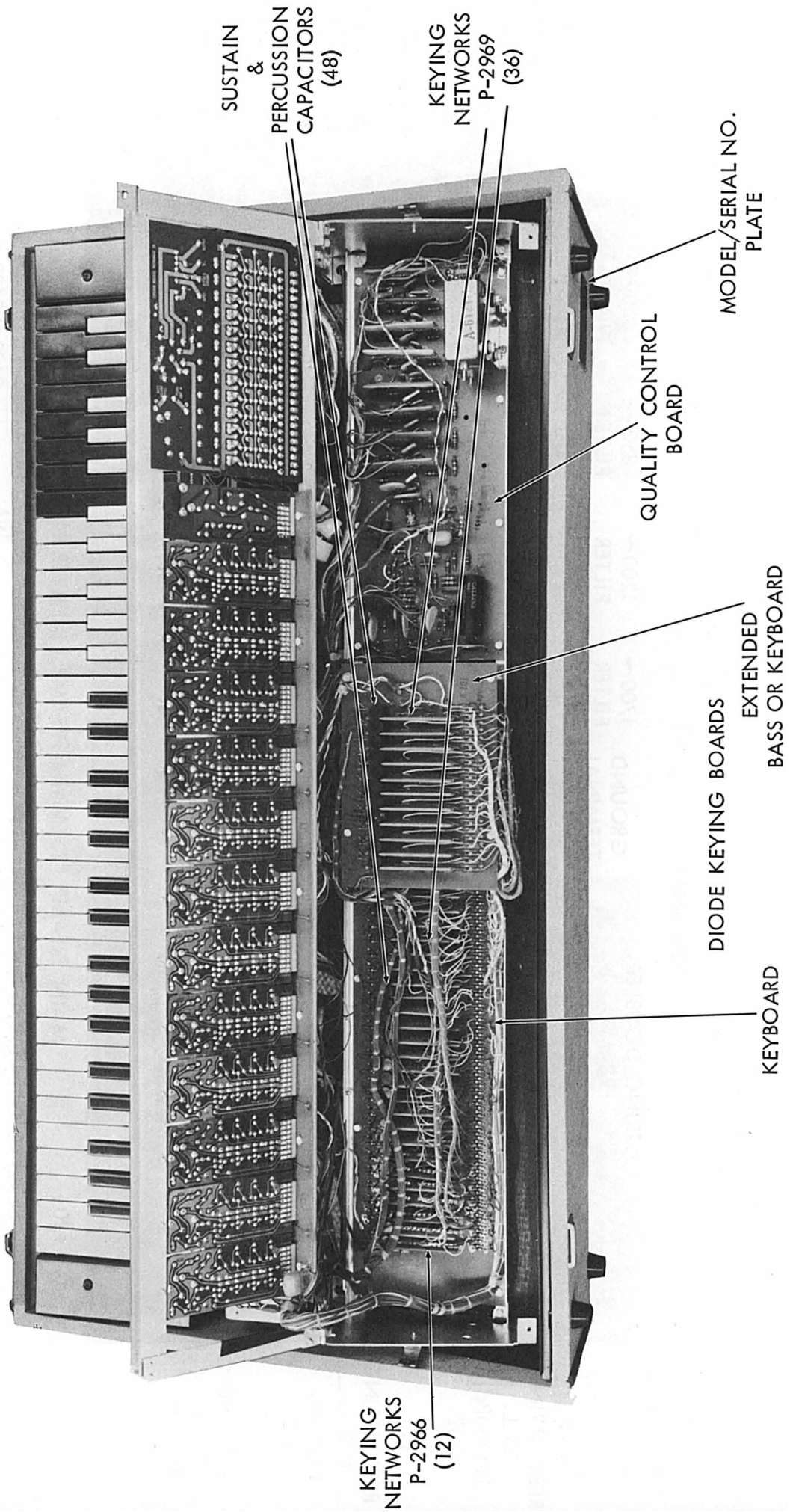


BASS PERCUSSION BOARD



QUALITY CONTROL BOARD





KEYING NETWORKS
P-2966
(12)

SUSTAIN
&
PERCUSSION
CAPACITORS
(48)

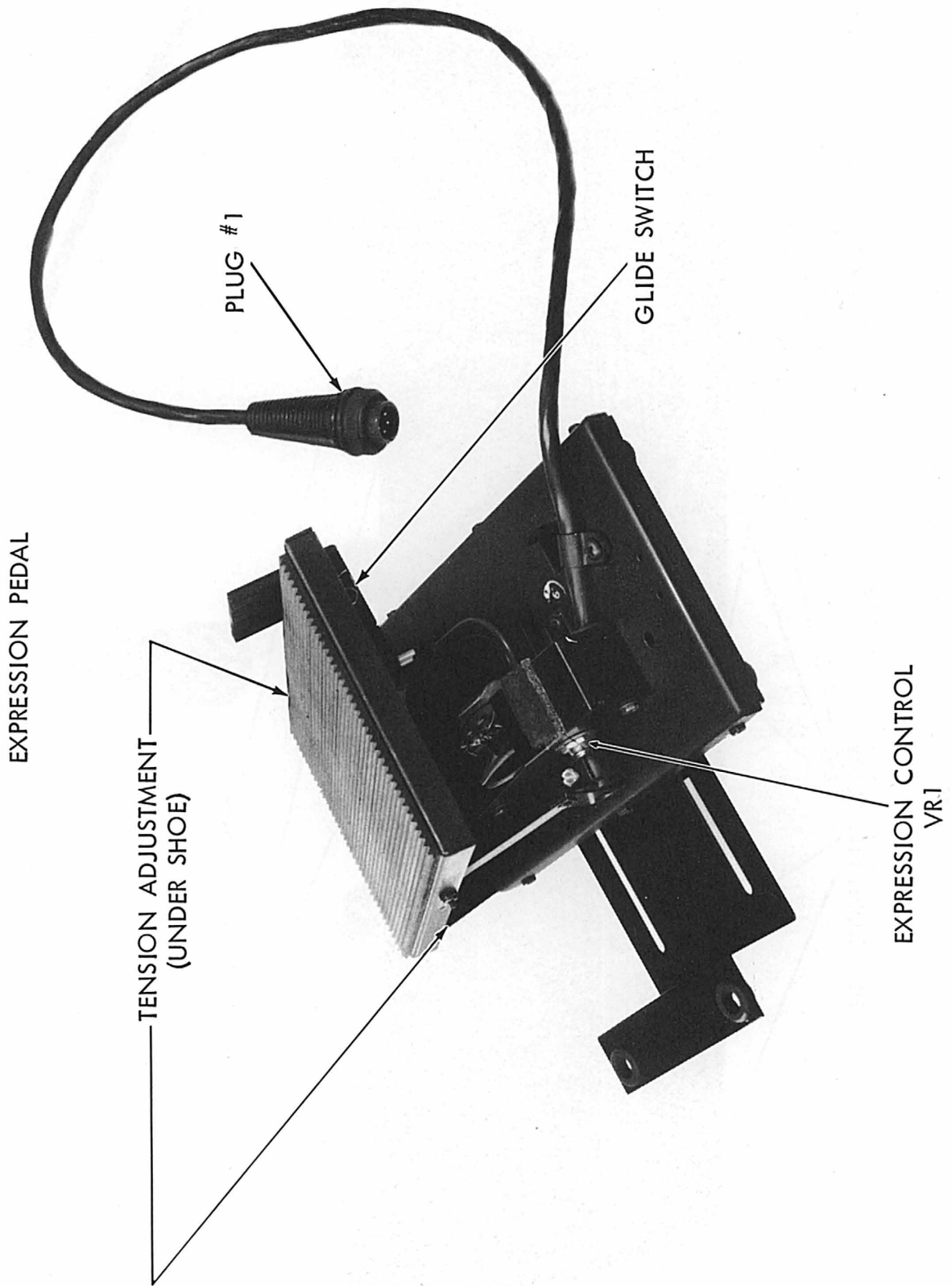
KEYING NETWORKS
P-2969
(36)

DIODE KEYING BOARDS
EXTENDED
BASS OR KEYBOARD

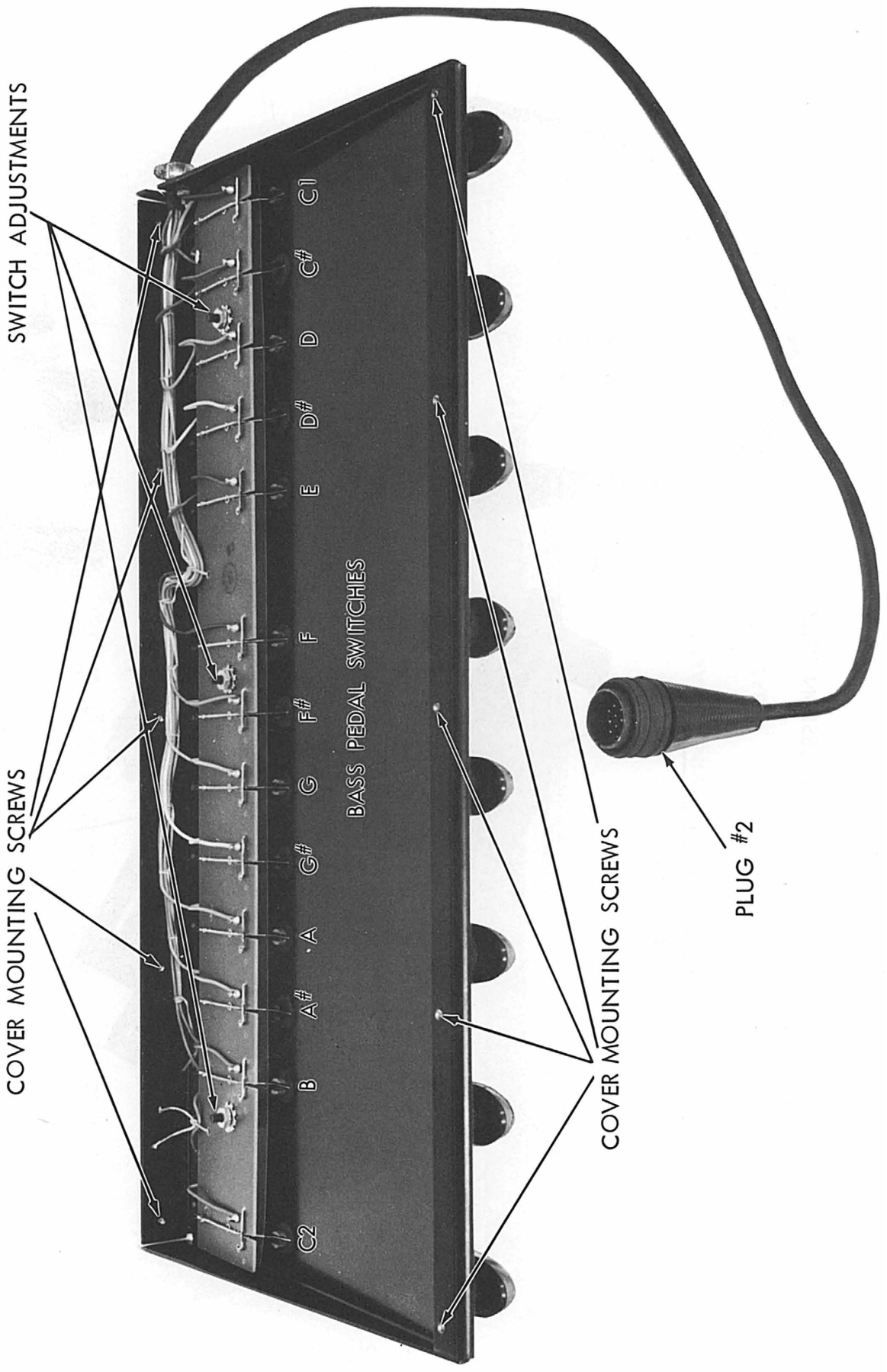
QUALITY CONTROL
BOARD

MODEL/SERIAL NO.
PLATE

KEYBOARD



OPTIONAL BASS PEDAL KEYBOARD



SWITCH ADJUSTMENTS

COVER MOUNTING SCREWS

BASS PEDAL SWITCHES

COVER MOUNTING SCREWS

PLUG #2