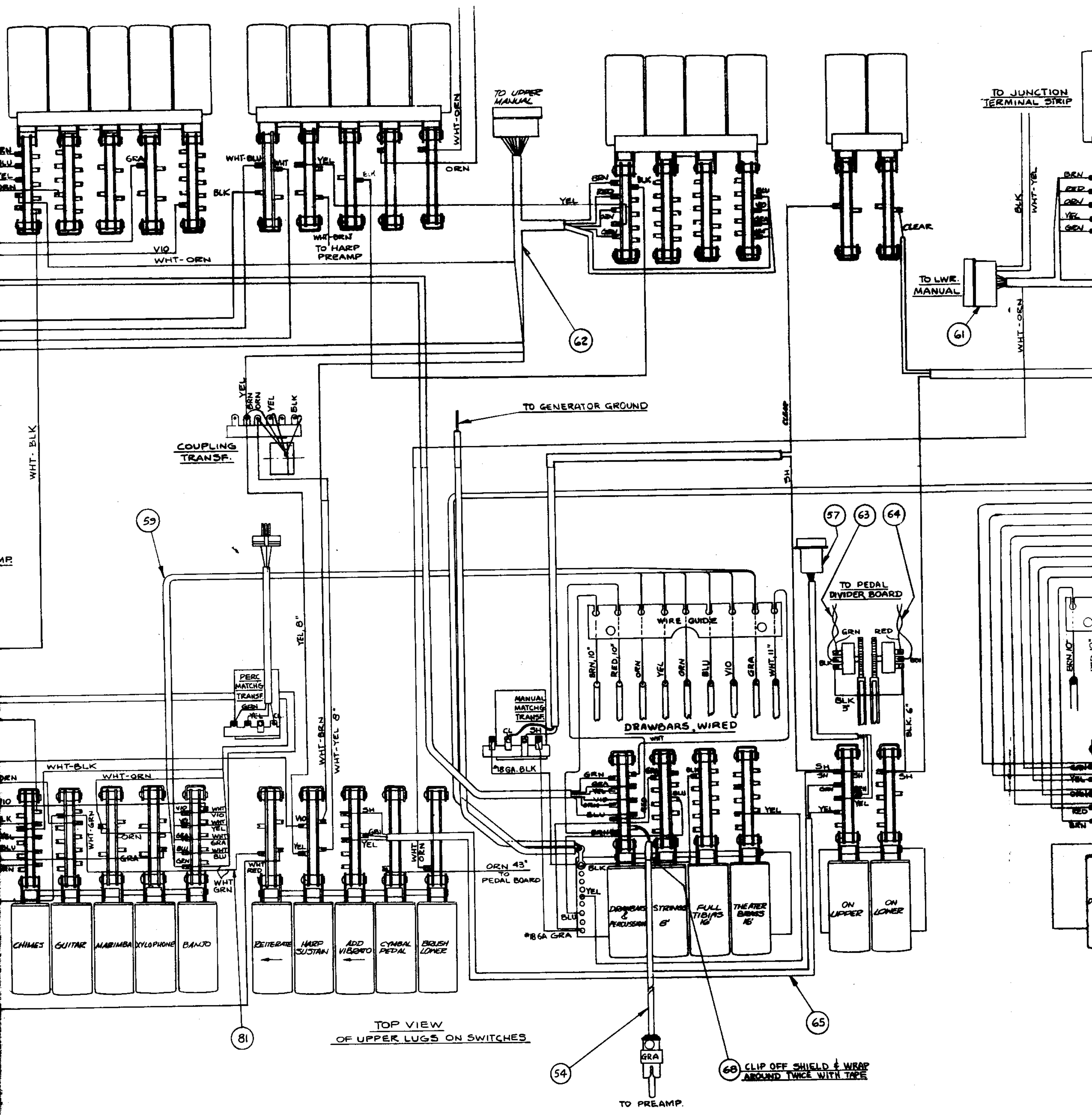


TO BRUSH & CYMBAL BOARDS

BOTTOM VIEW OF LOWER LUGS ON SWITCHES



TOP VIEW OF UPPER LUGS ON SWITCHES

68 CLIP OFF SHIELD & WRAP AROUND TWICE WITH TAPE

TO PREAMP.

TO LWR. MANUAL

TO JUNCTION TERMINAL STRIP

TO UPPER MANUAL

TO GENERATOR GROUND

TO PEDAL DIVIDER BOARD

COUPLING TRANSF.

PERC MATCHG TRANSF.

MANUAL MATCHG TRANSF.

TO PEDAL BOARD

CHIMES  
GUITAR  
MARIMBA  
XYLOPHONE  
BAND

REITERATE  
HARP SUSTAIN  
ADD VIBRATO  
CYMBAL PEDAL  
BRUSH LOWEE

DOWNBARS & PERCUSSION  
STRINGS 8"  
FULL TIBIAS 16"  
THEATER BARRES 16"

ON UPPER  
ON LOWER

59

62

61

57

63

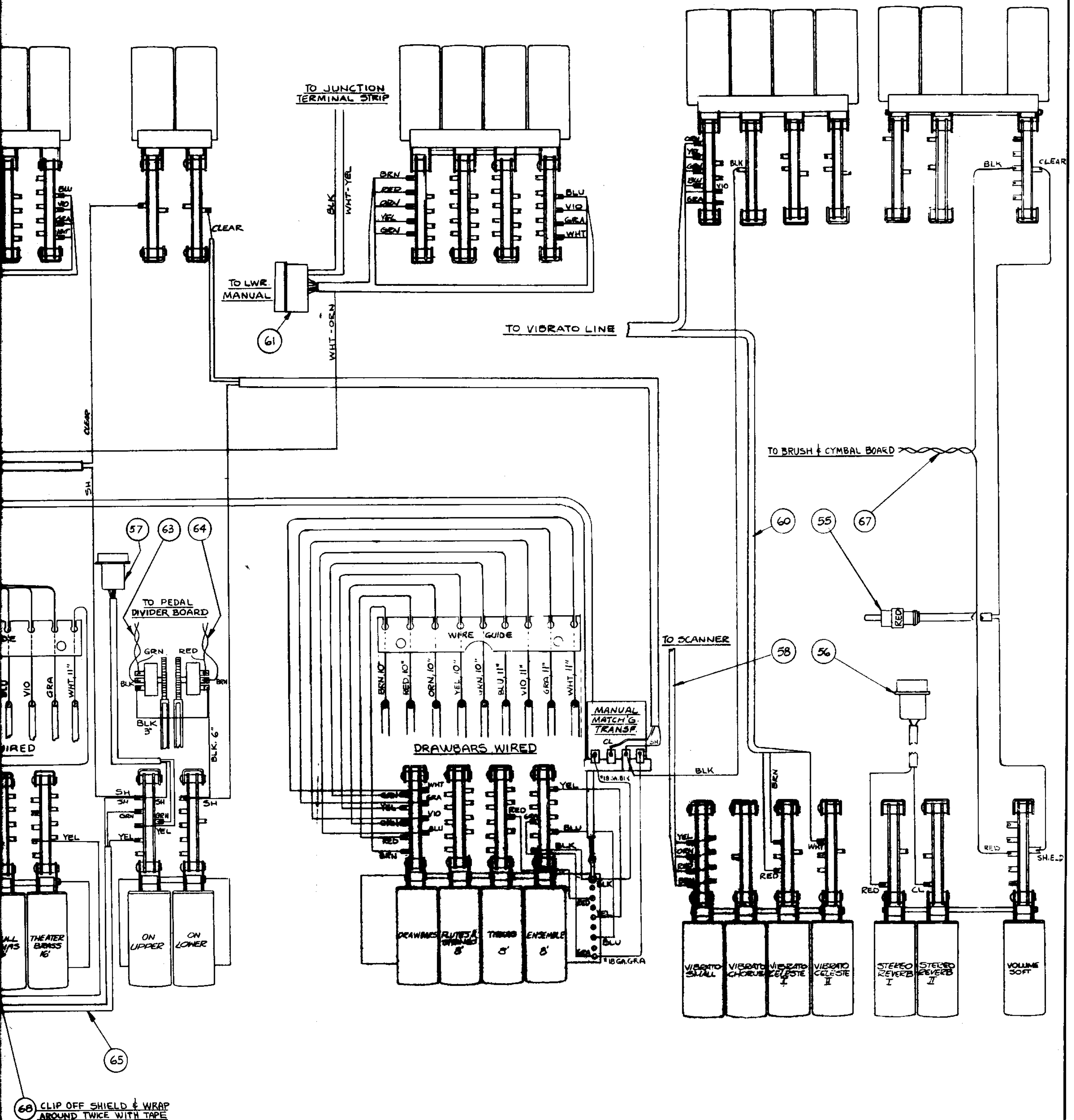
64

81

54

65

BOTTOM VIEW  
LOWER LUGS ON SWITCHES

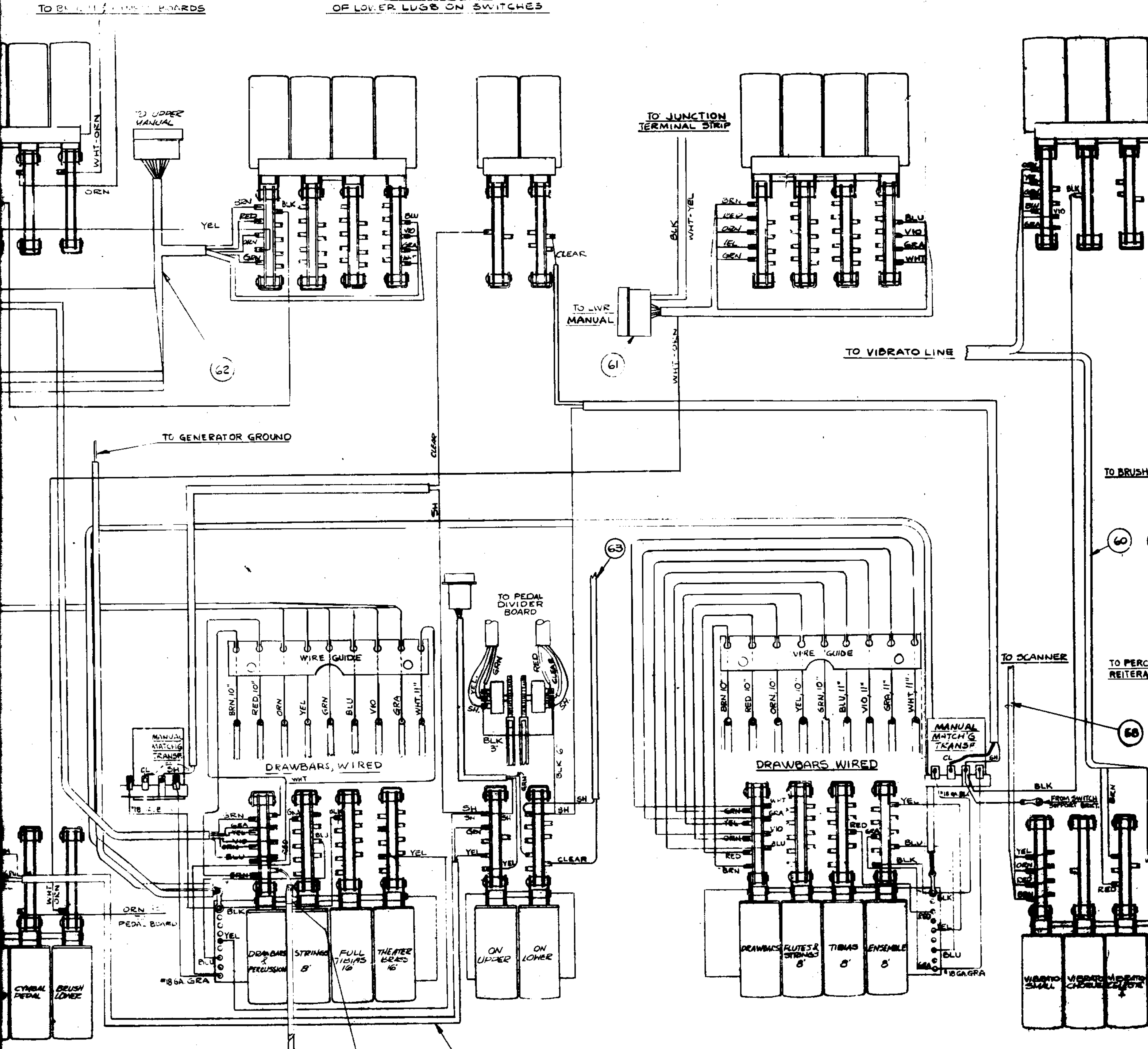


68 CLIP OFF SHIELD & WRAP AROUND TWICE WITH TAPE

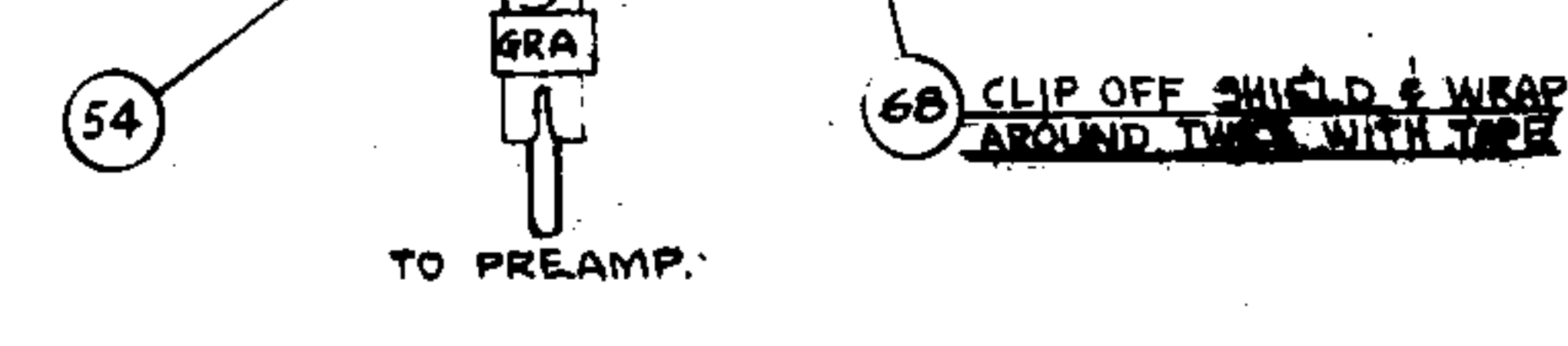
CONTROL PANEL  
WIRING DIAGRAM  
HAMMOND ORGAN  
E-100 SERIES  
FIGURE 24

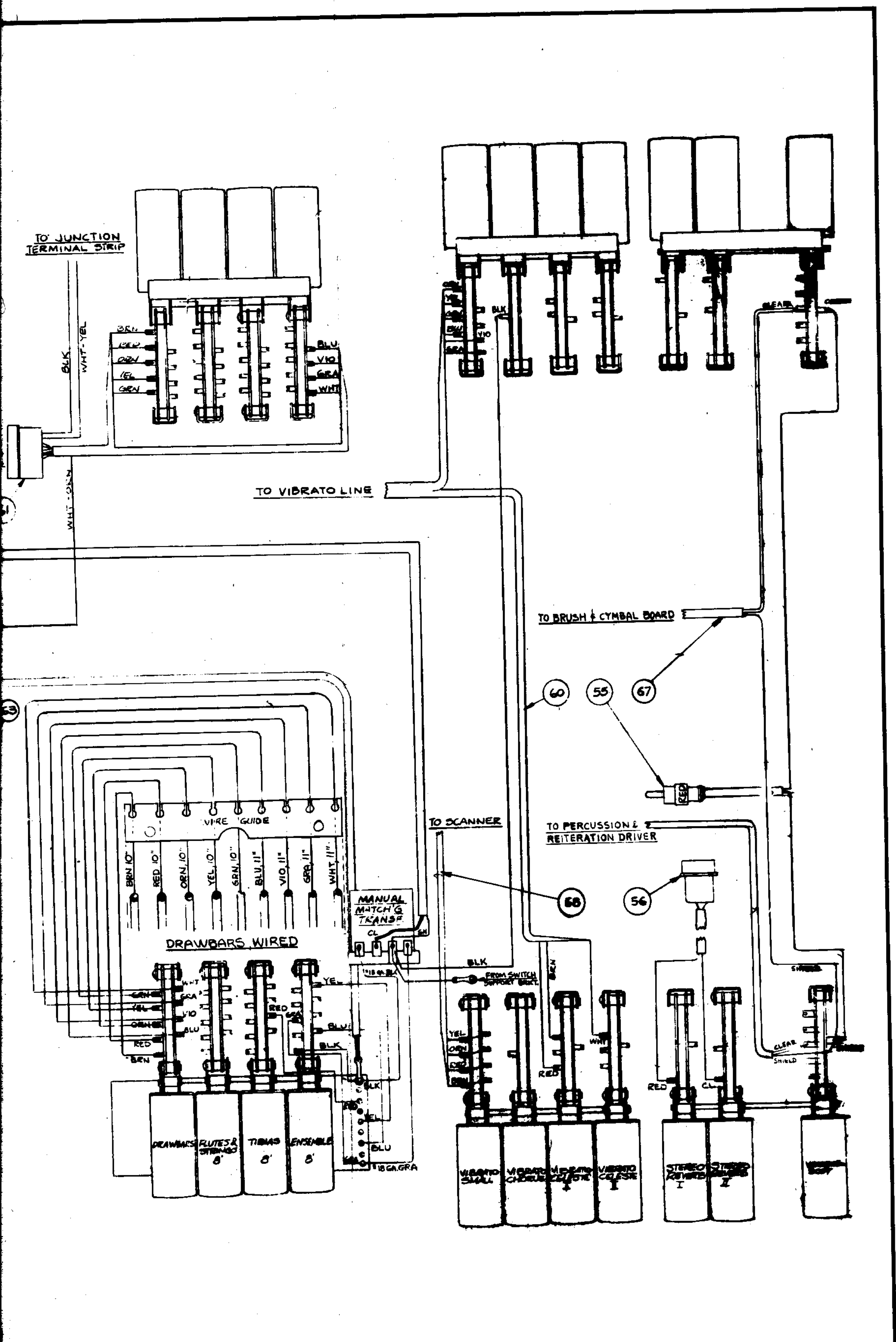


**BOTTOM VIEW  
OF LOWER LUGS ON SWITCHES**

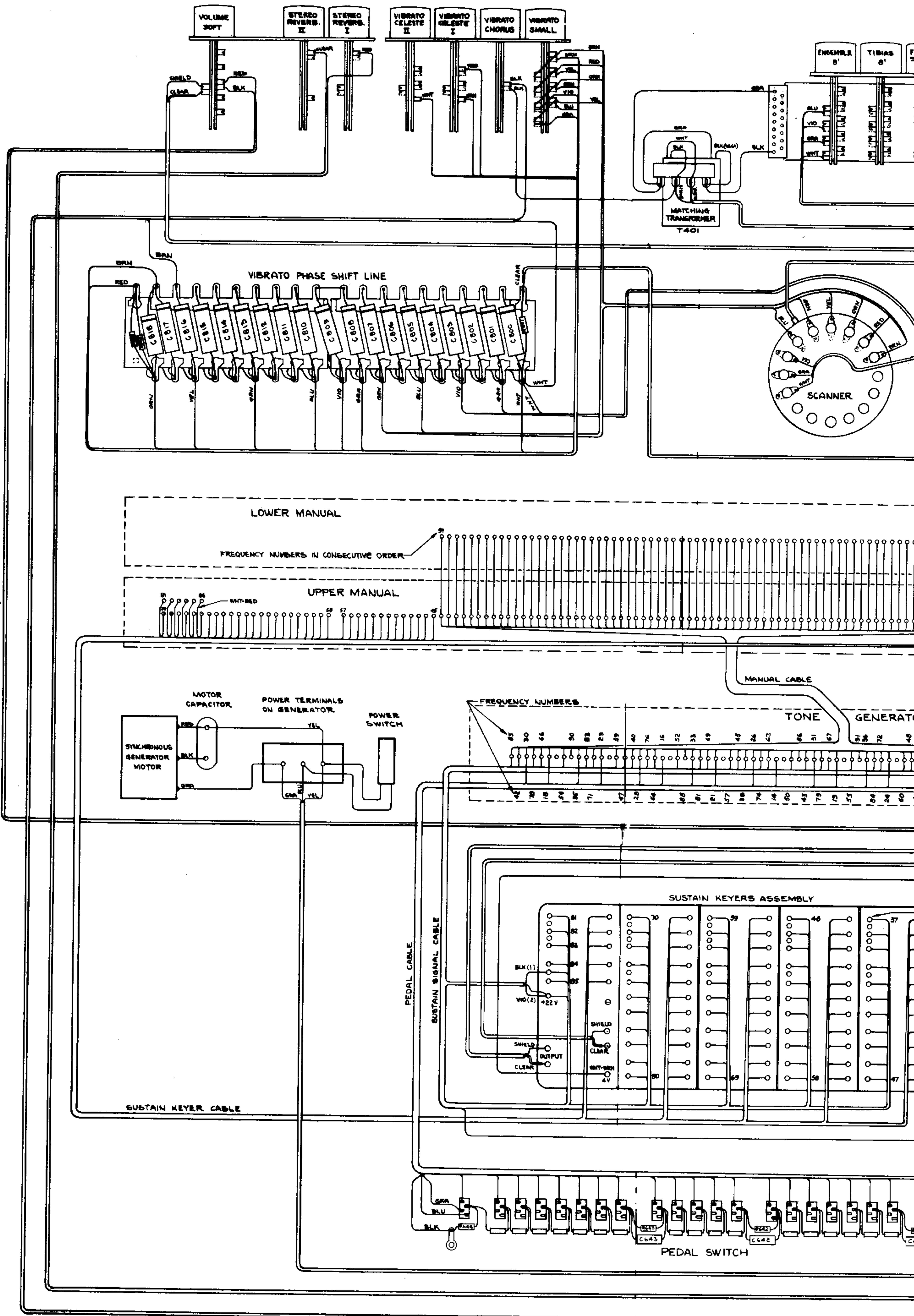


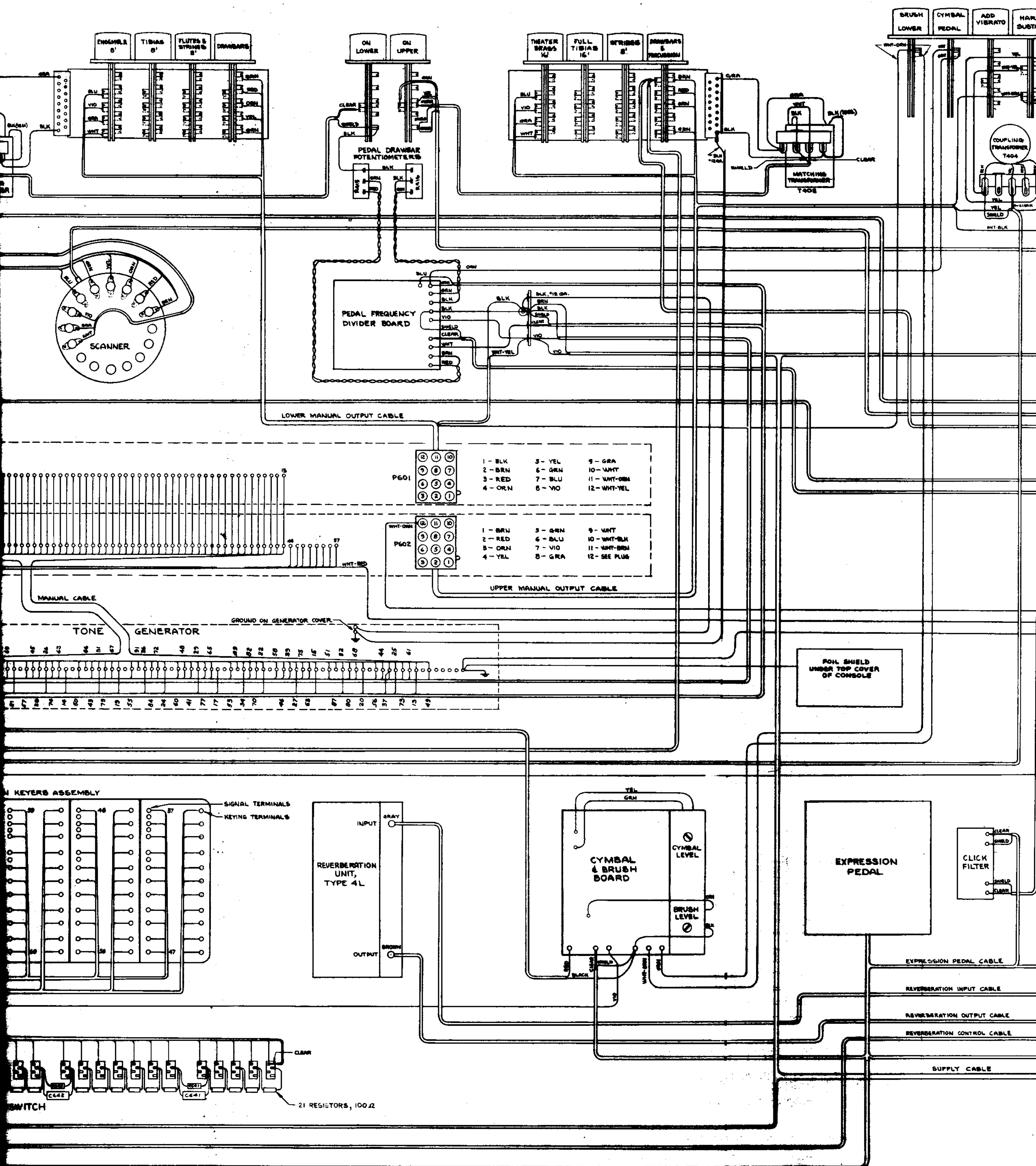
**TOP VIEW  
UPPER LUGS ON SWITCHES**



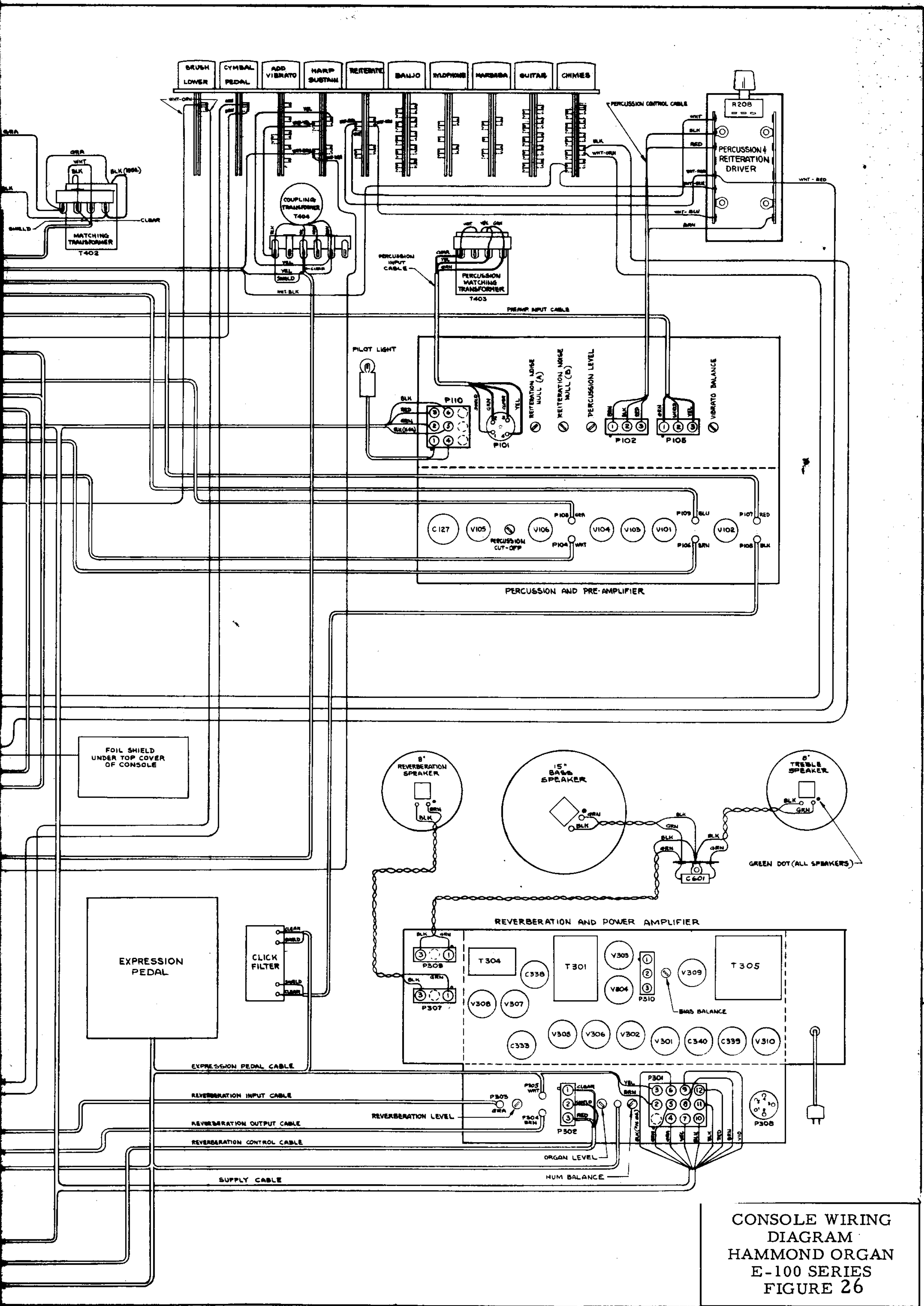


CONTROL PANEL  
WIRING DIAGRAM  
E-100 LATER SERIES  
FIGURE 25

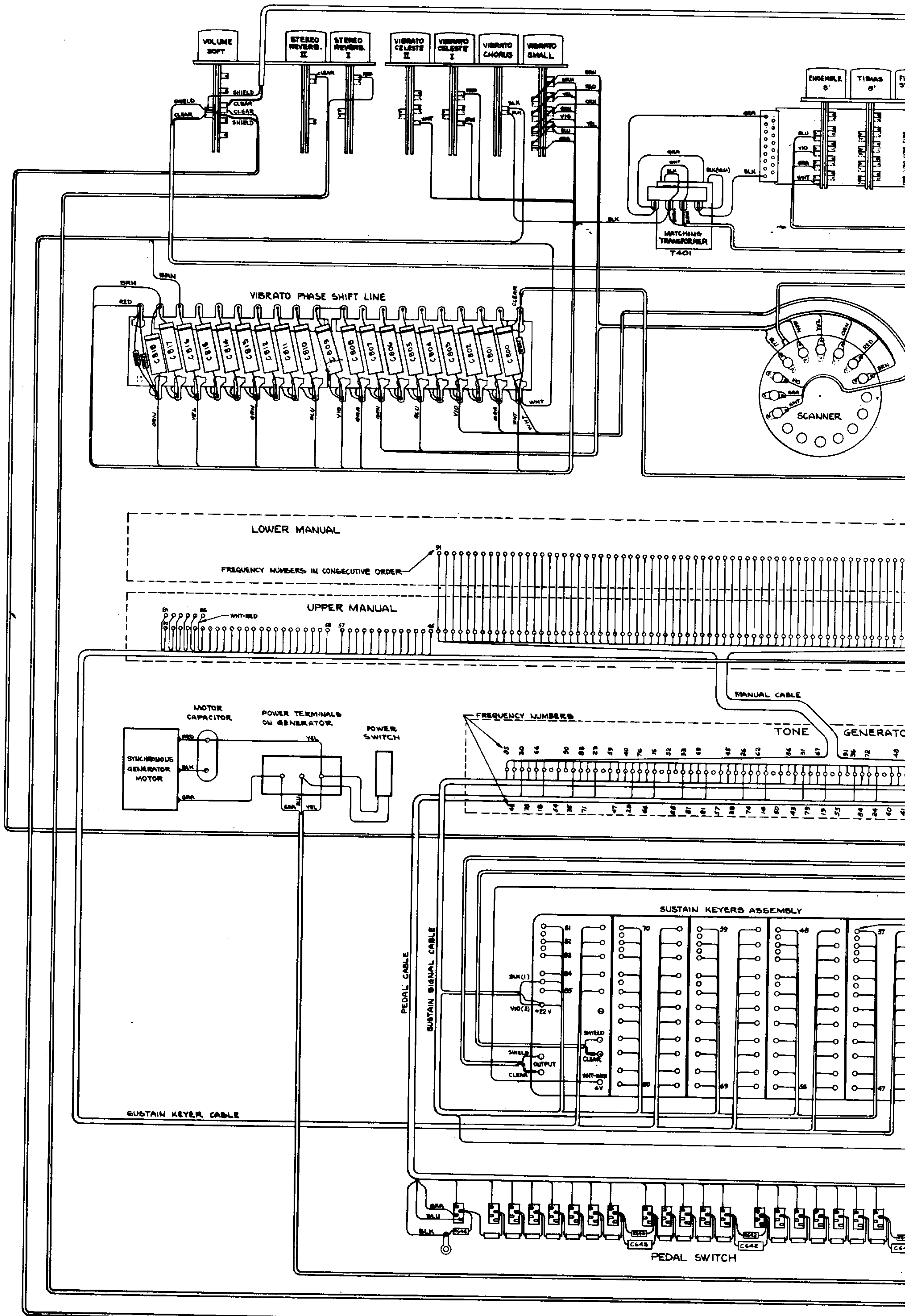


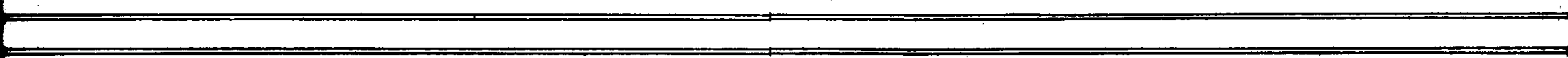
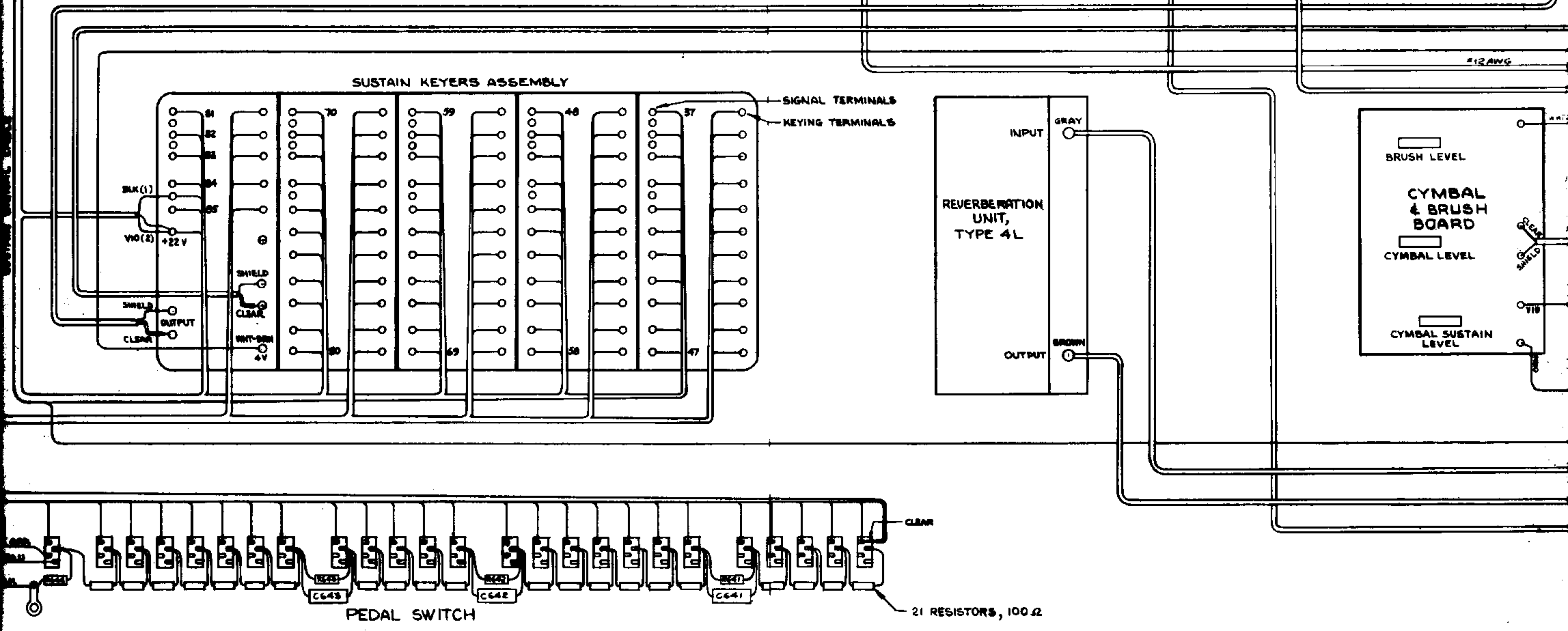
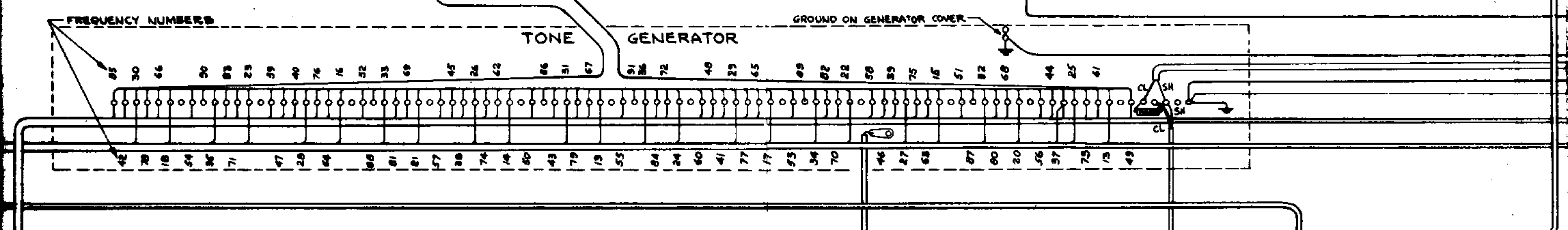
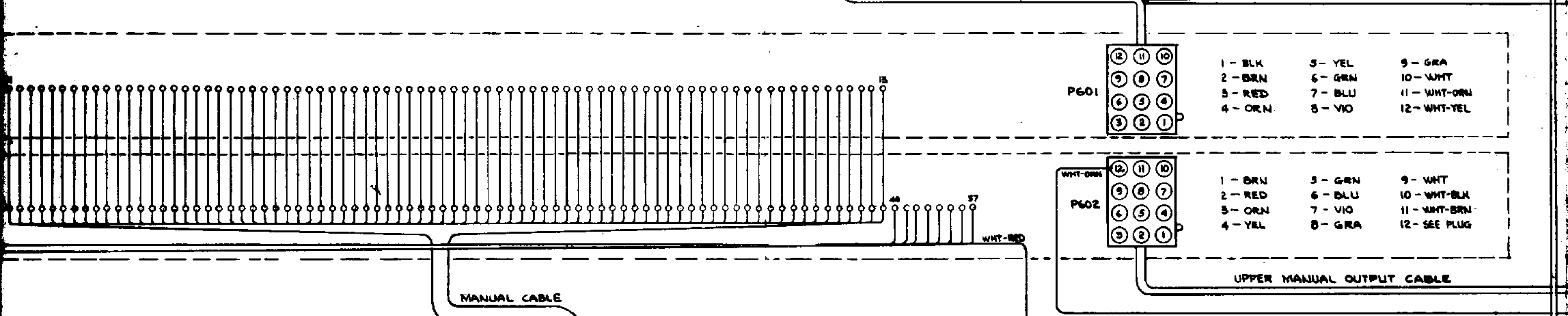
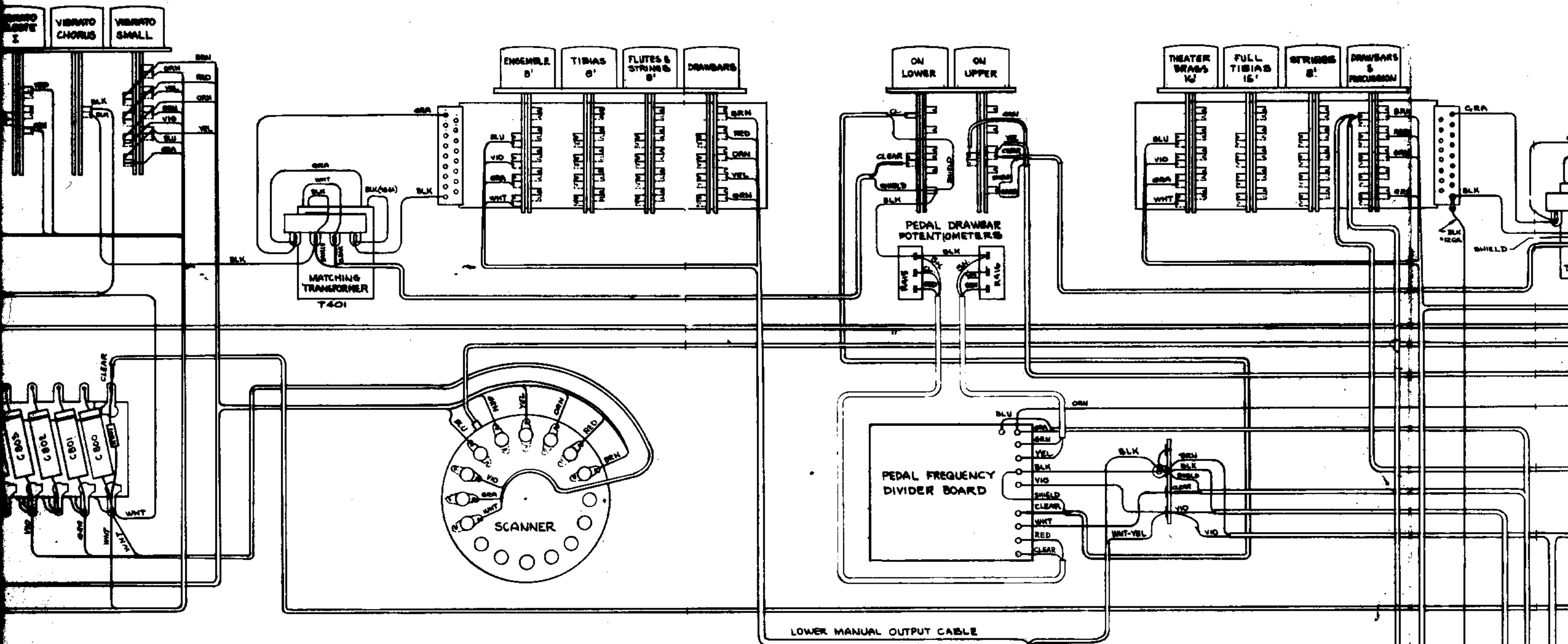


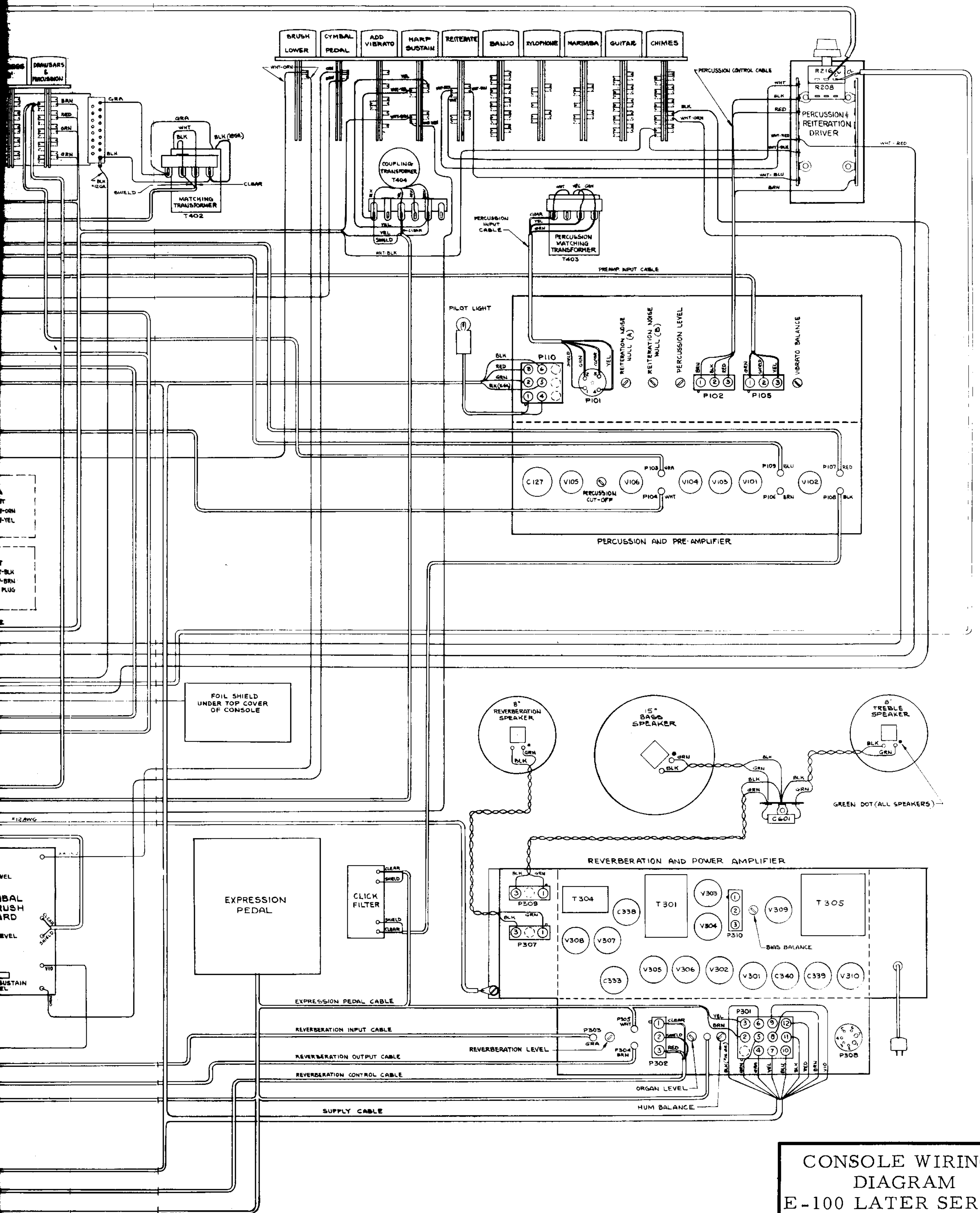




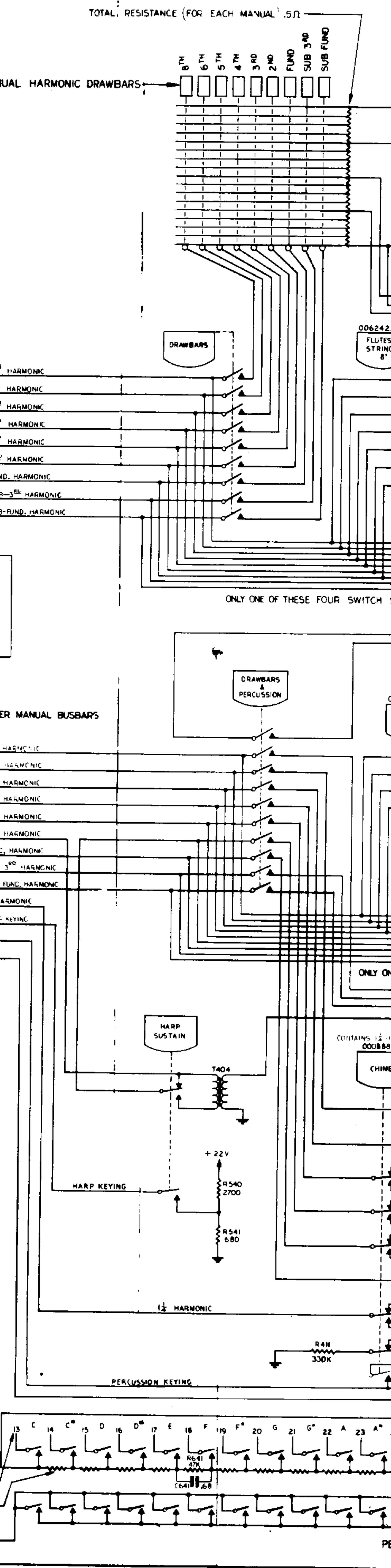
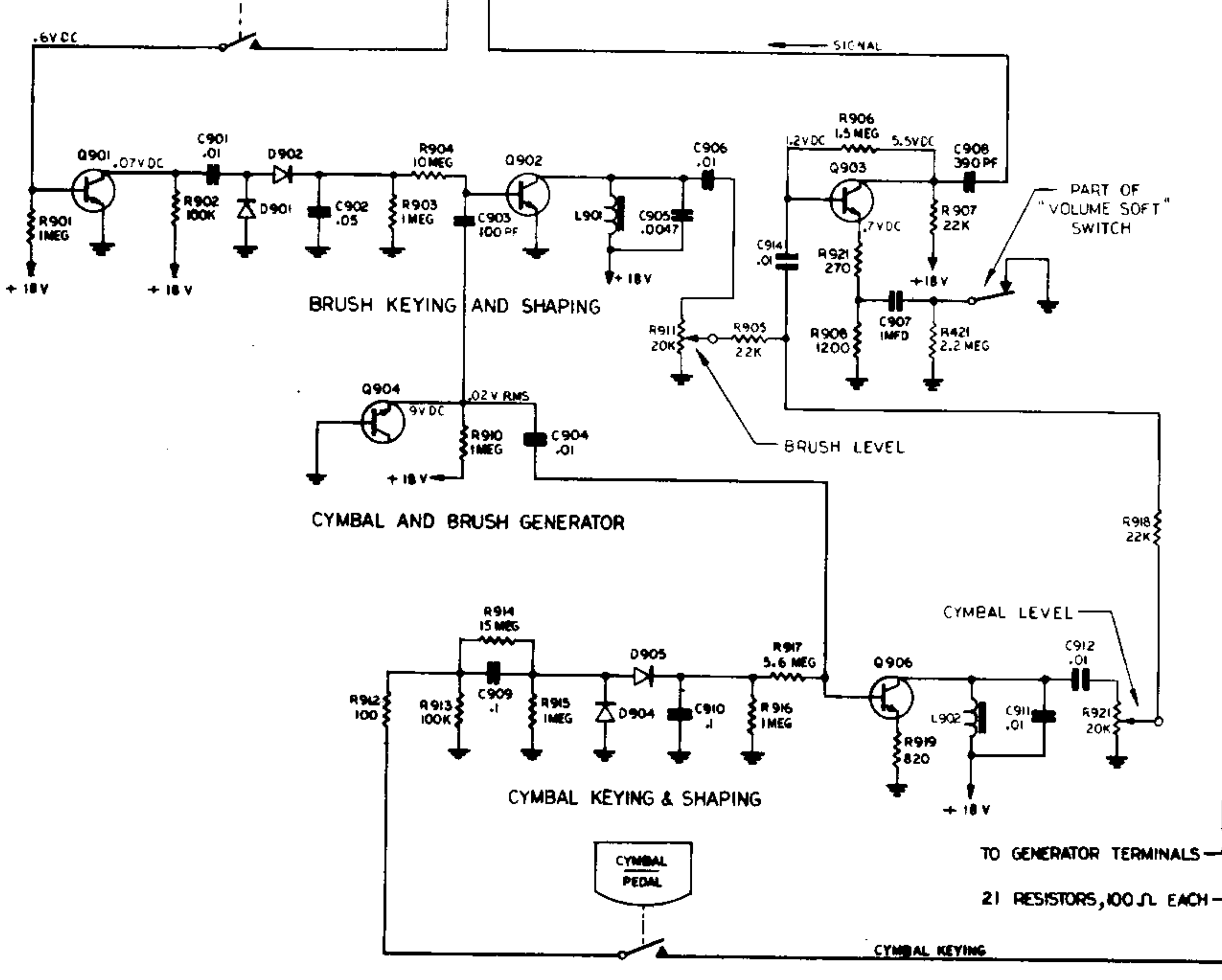
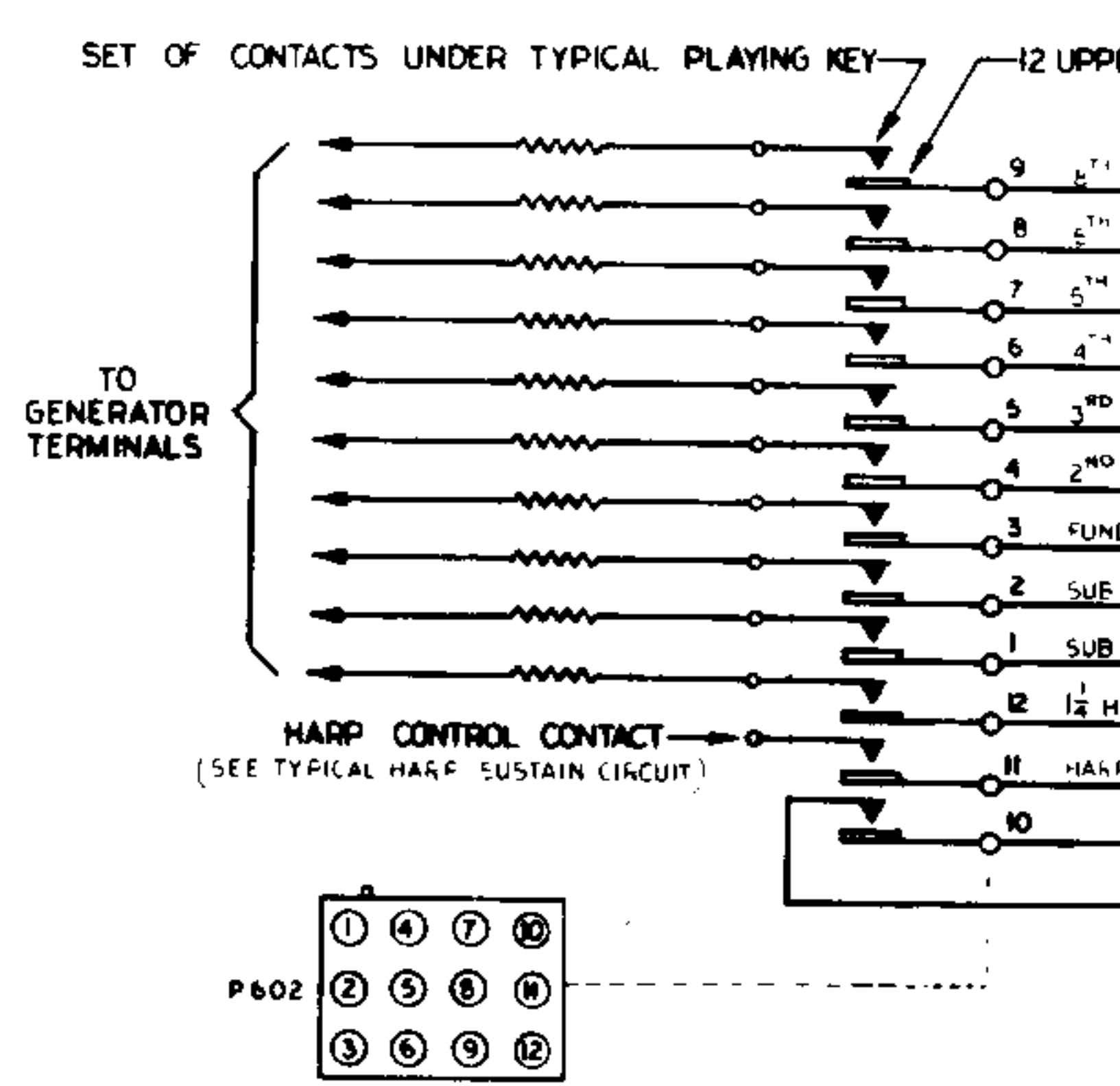
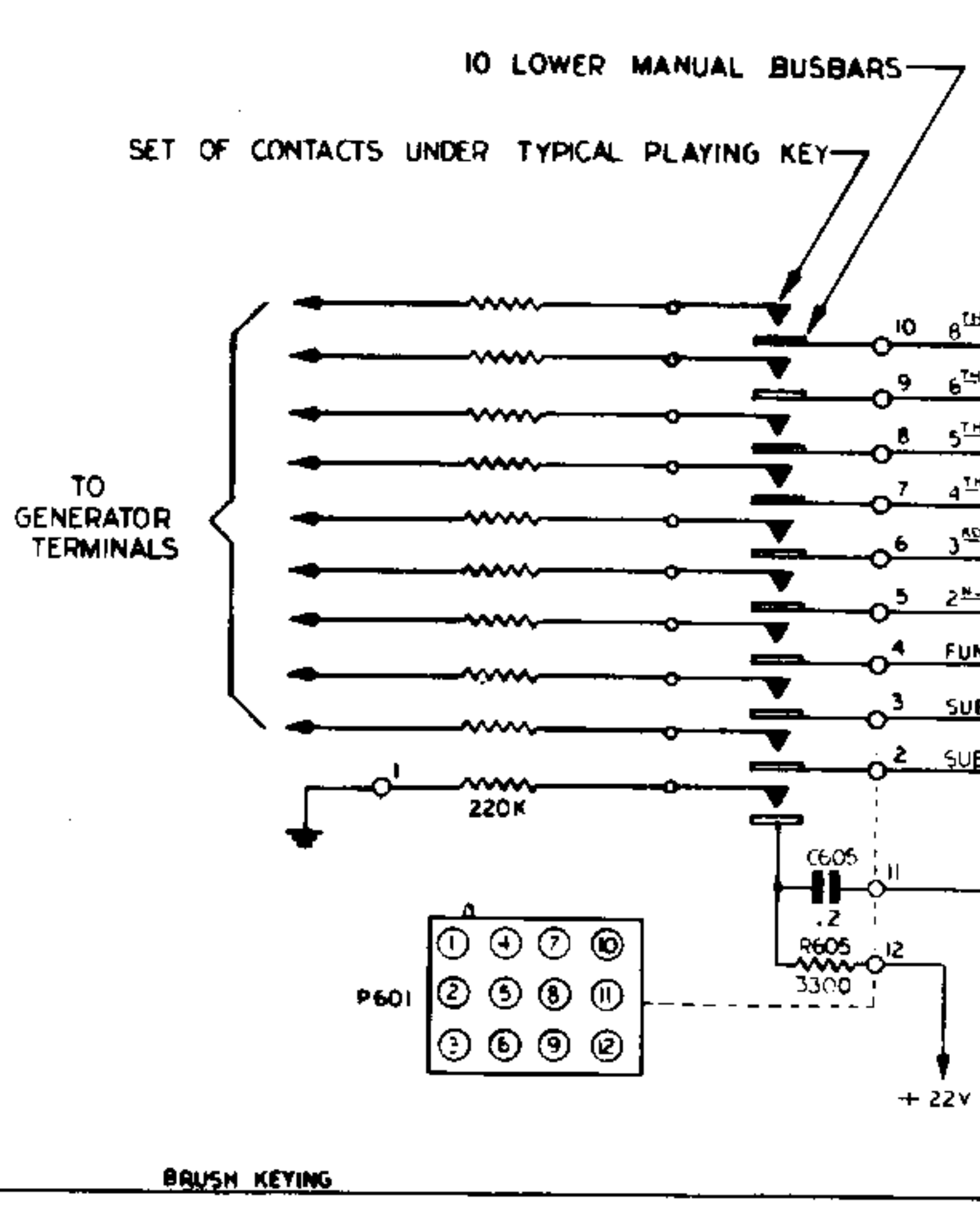
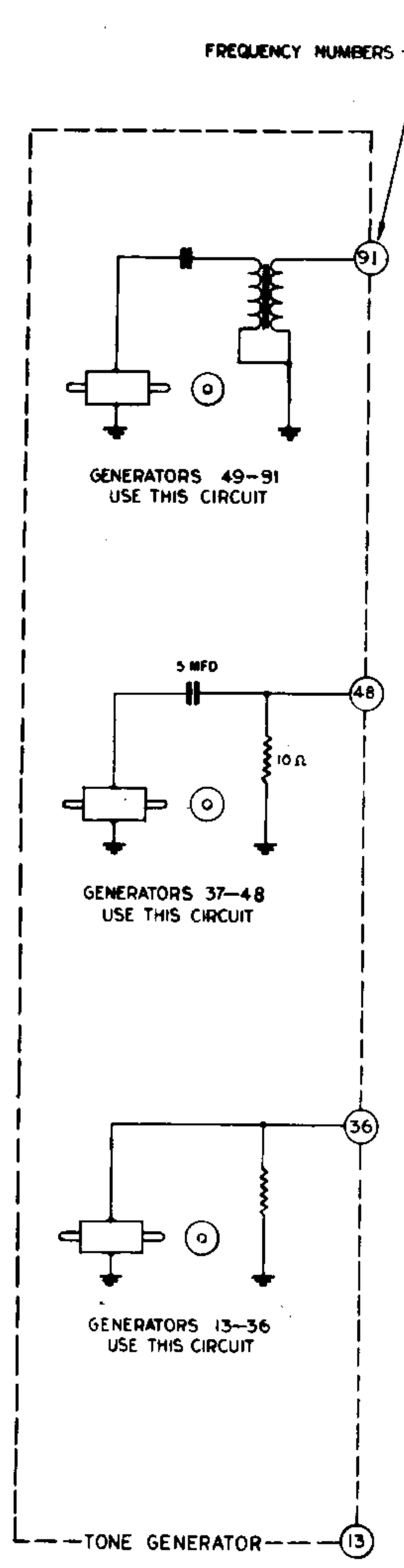
CONSOLE WIRING  
 DIAGRAM  
 HAMMOND ORGAN  
 E-100 SERIES  
 FIGURE 26





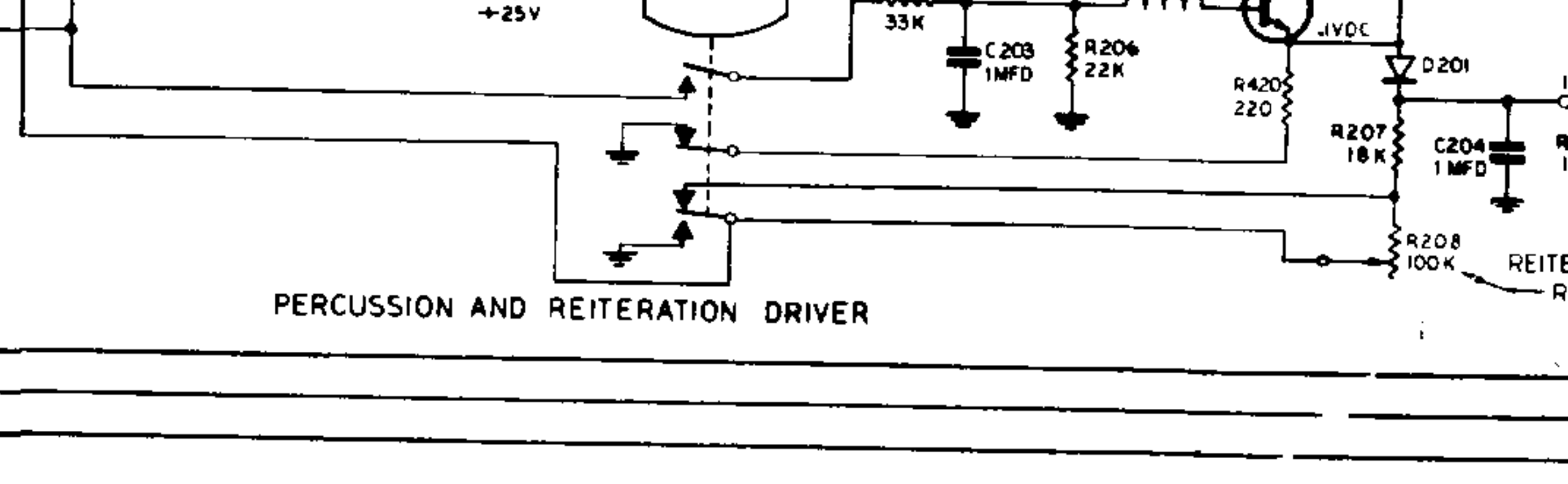
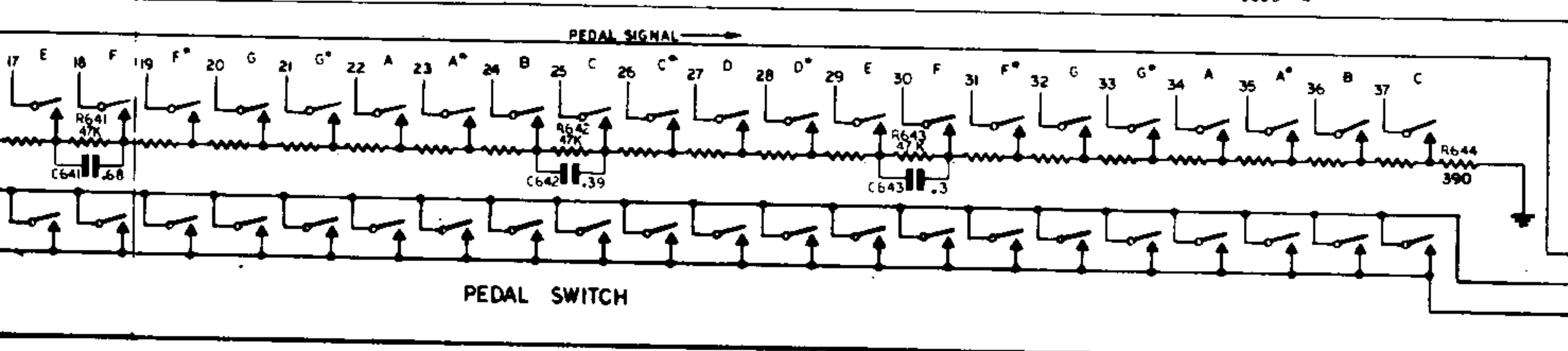
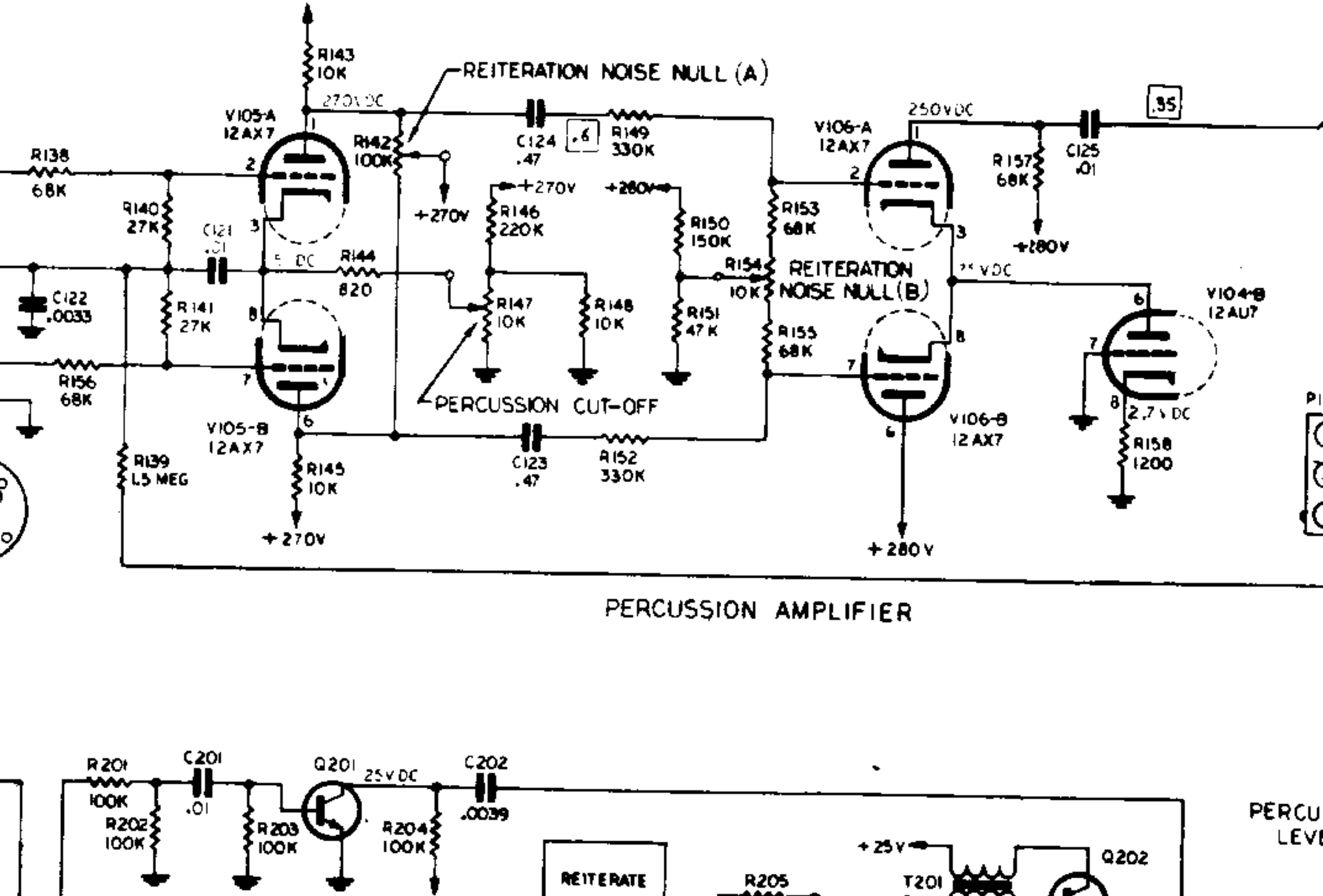
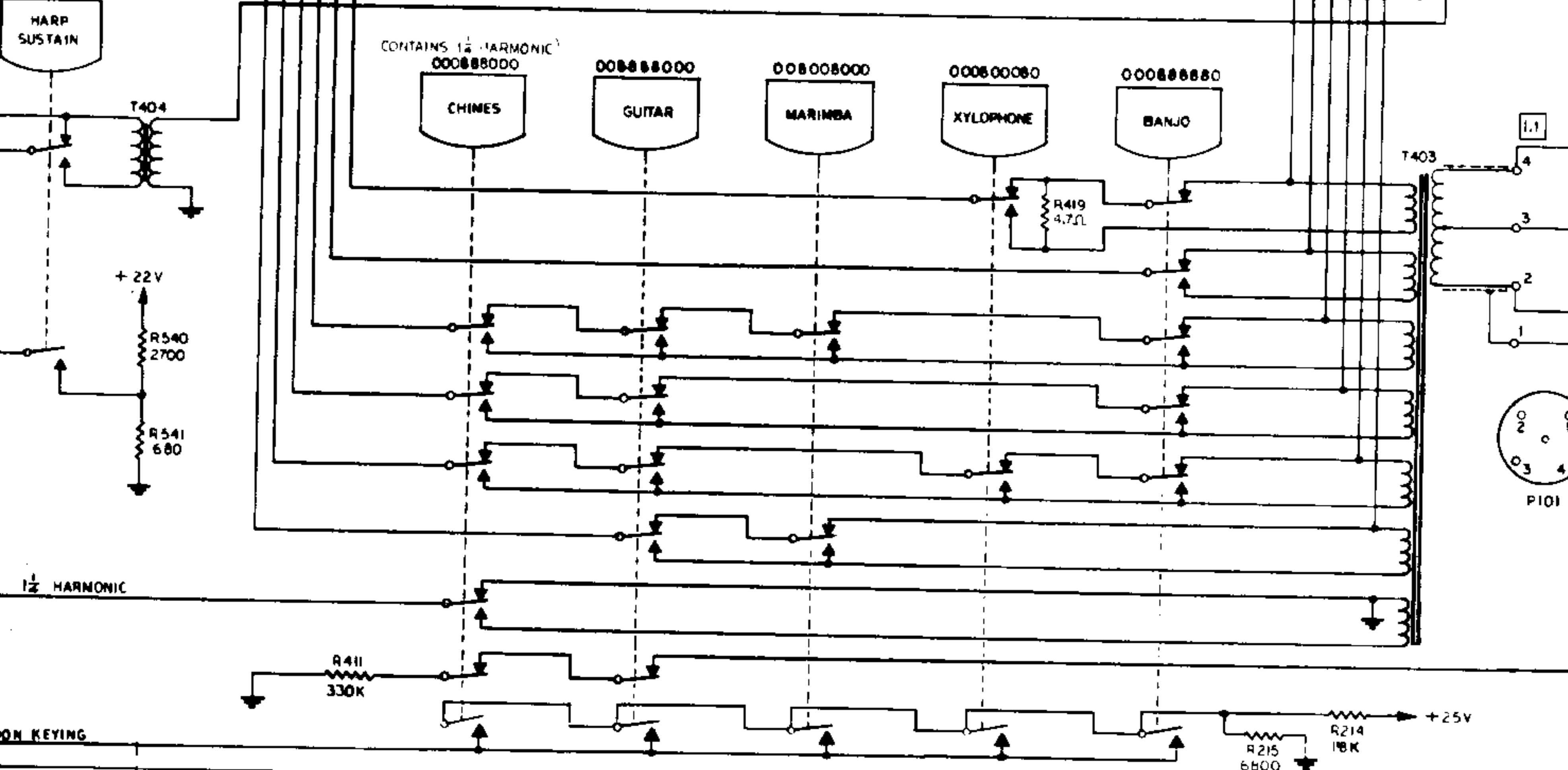
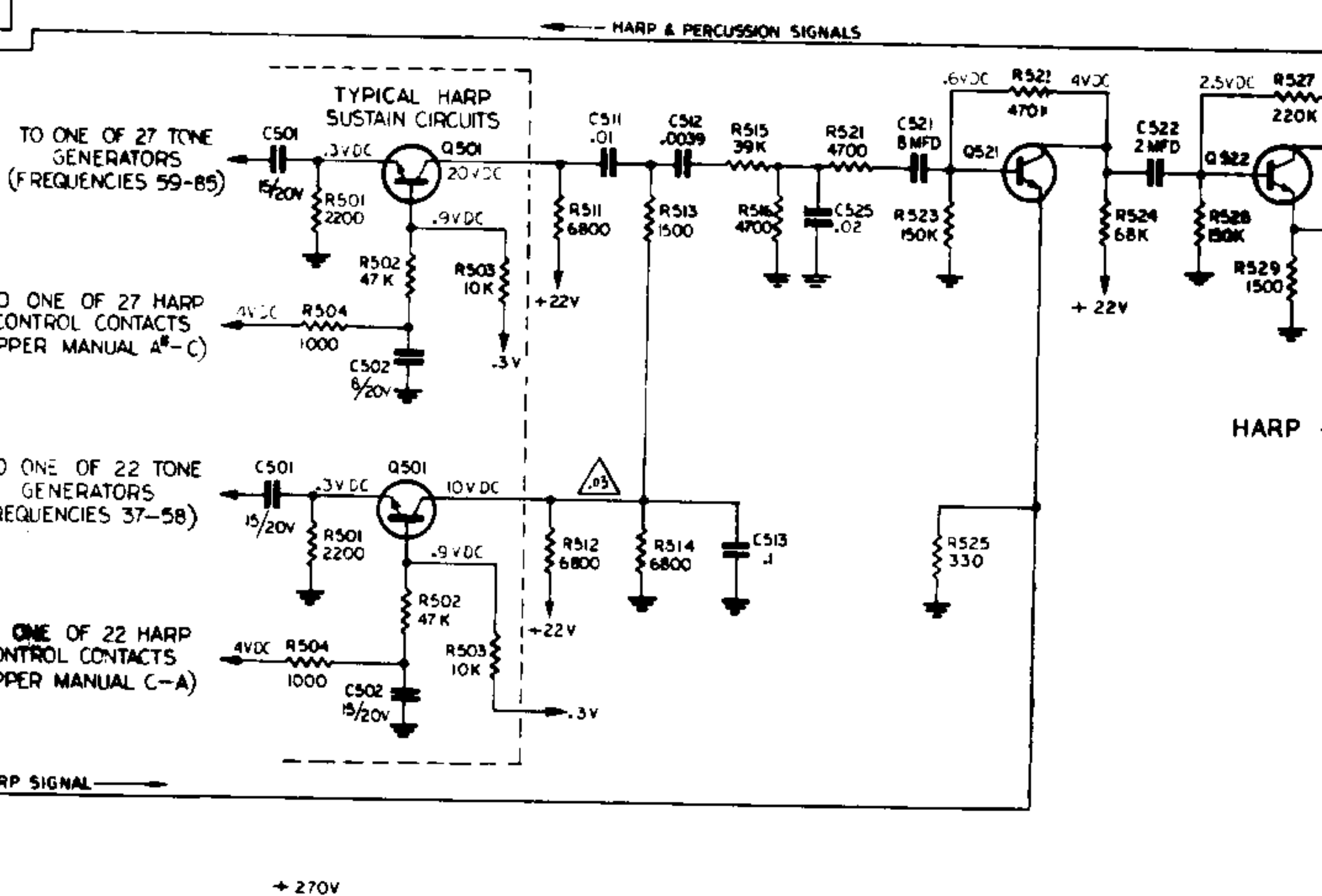
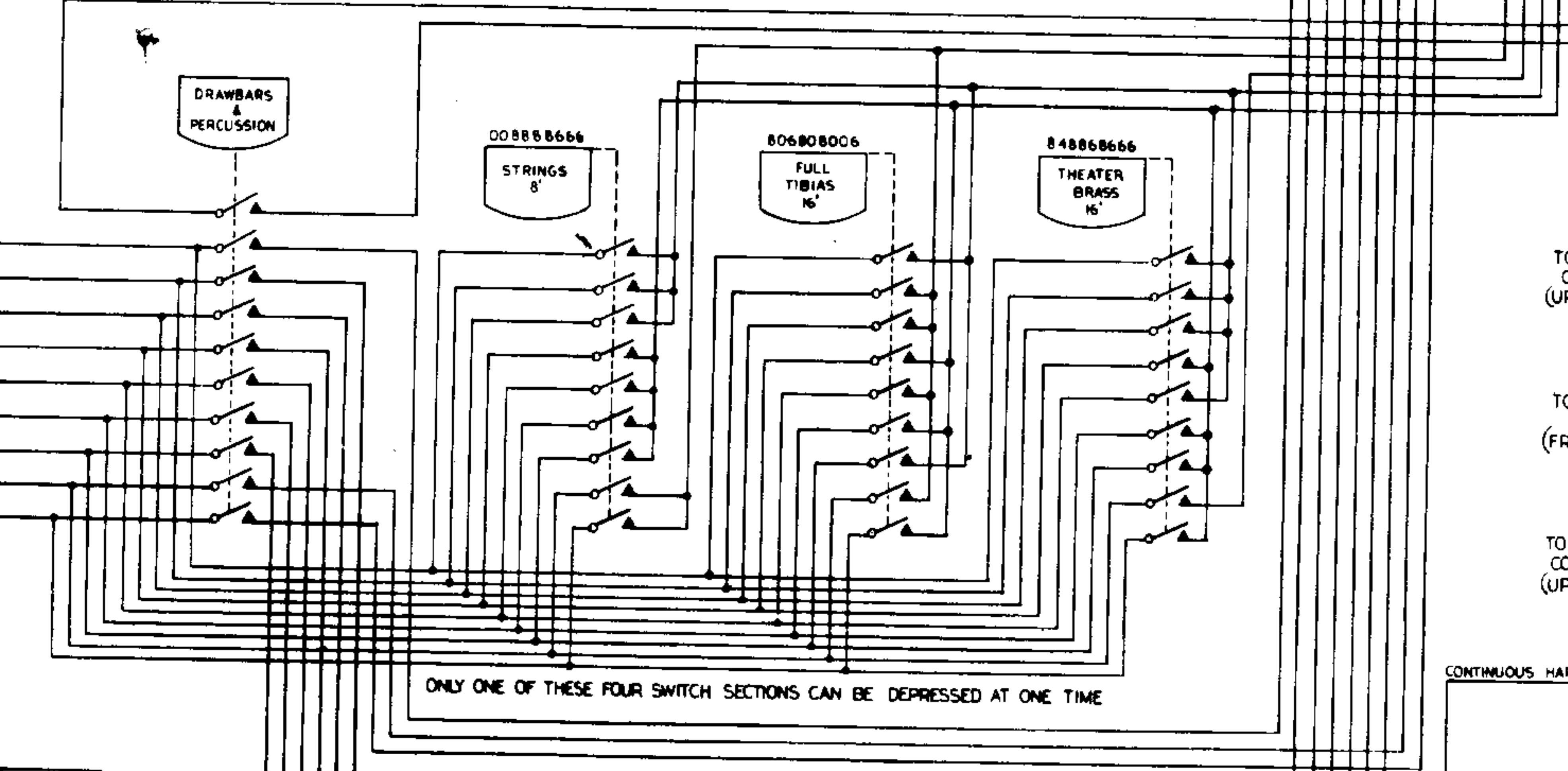
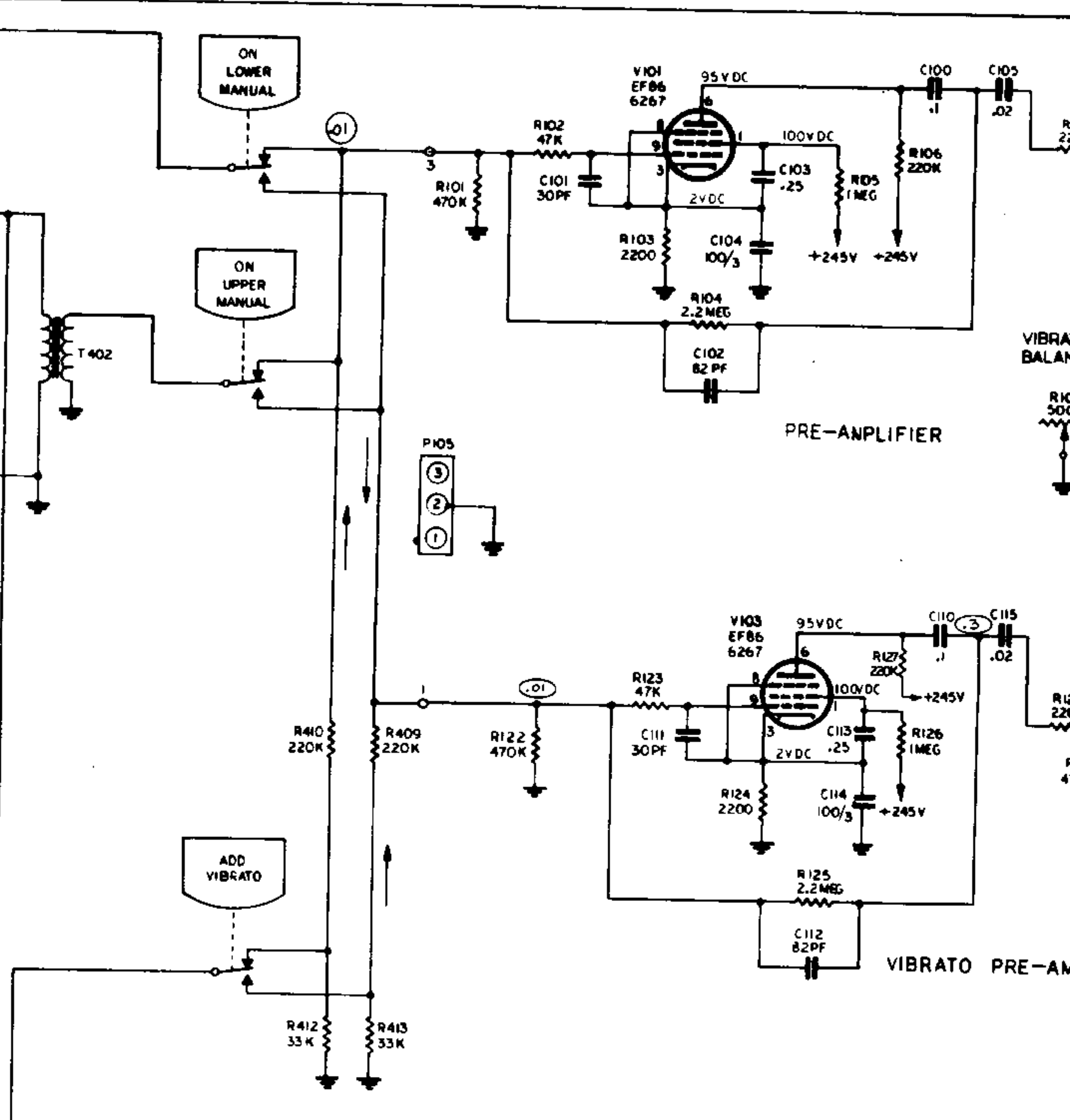
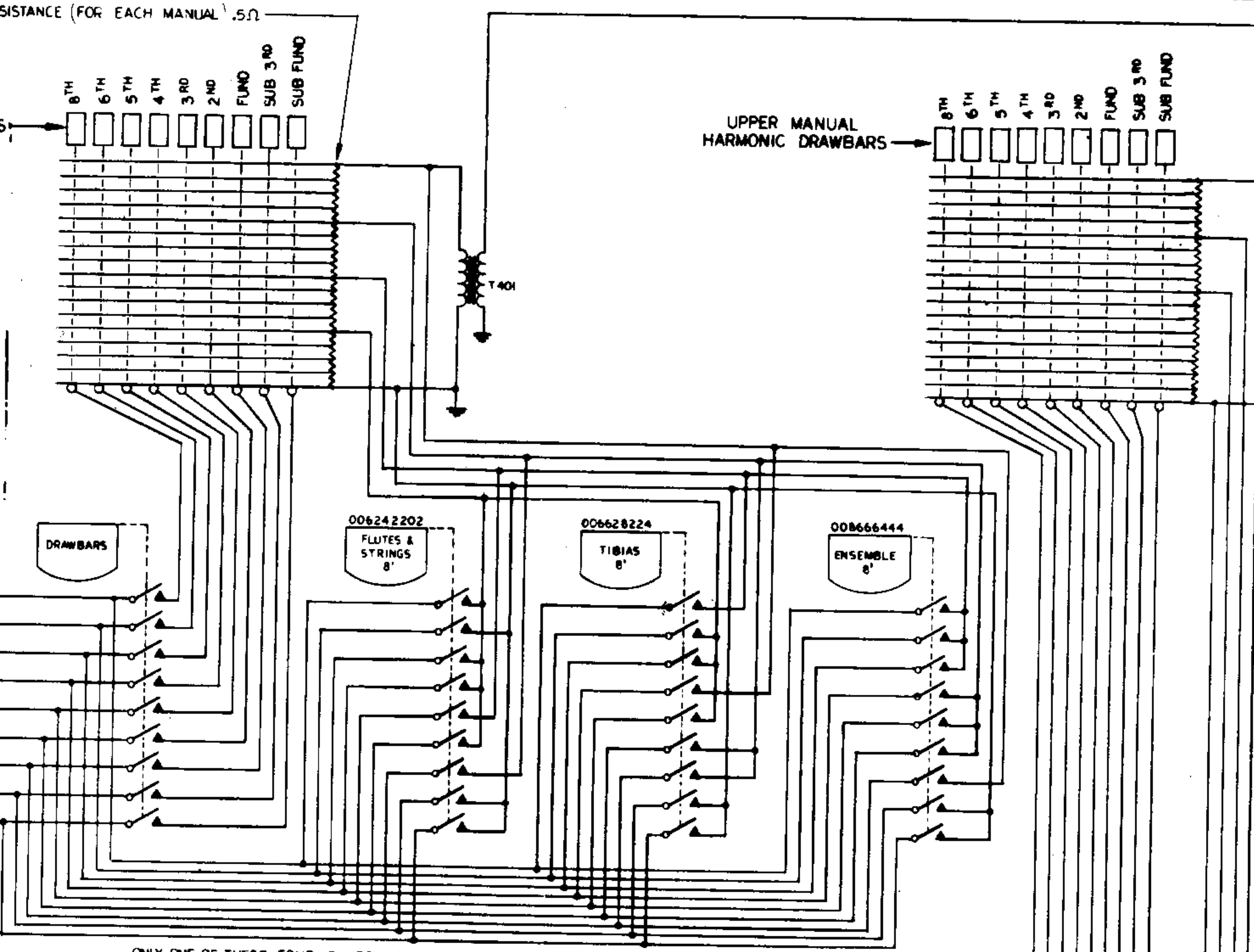


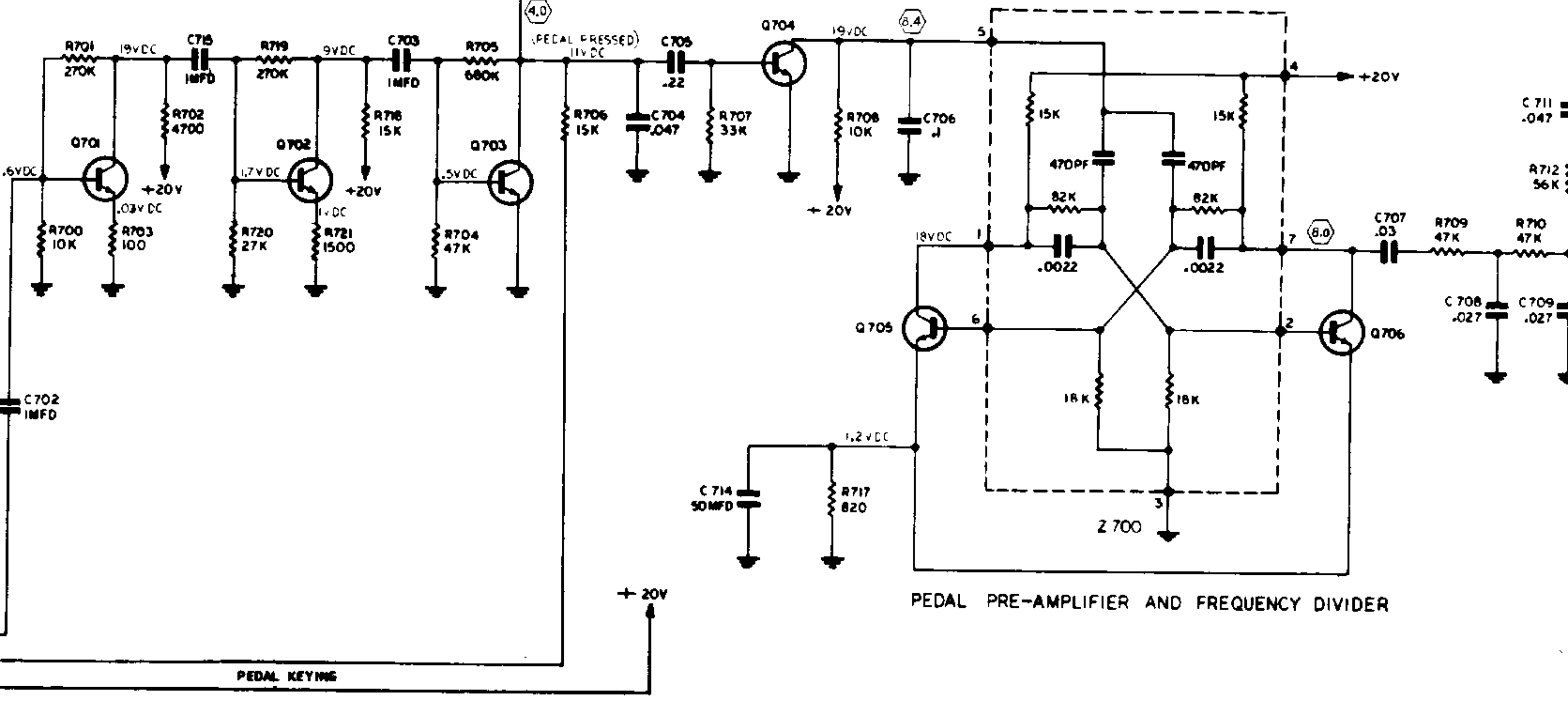
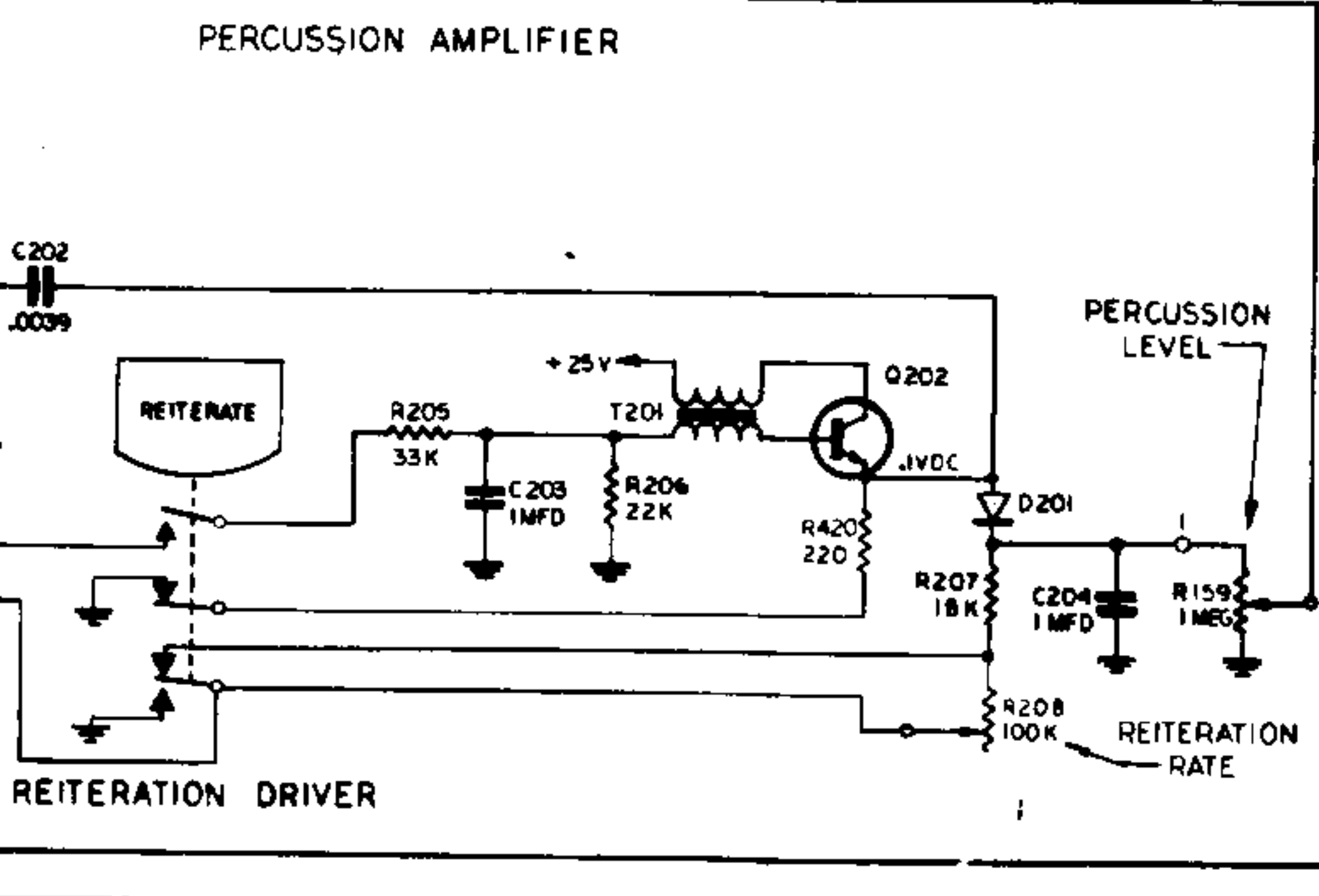
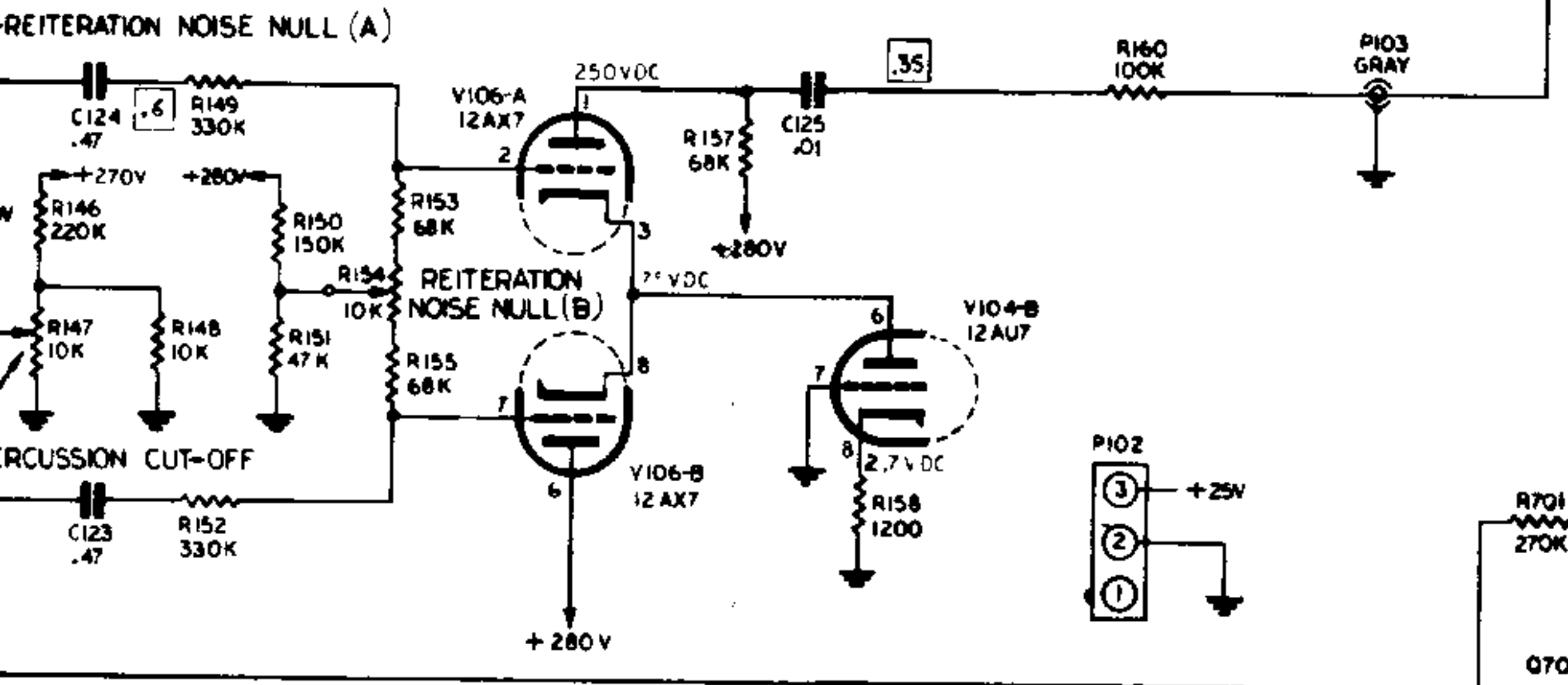
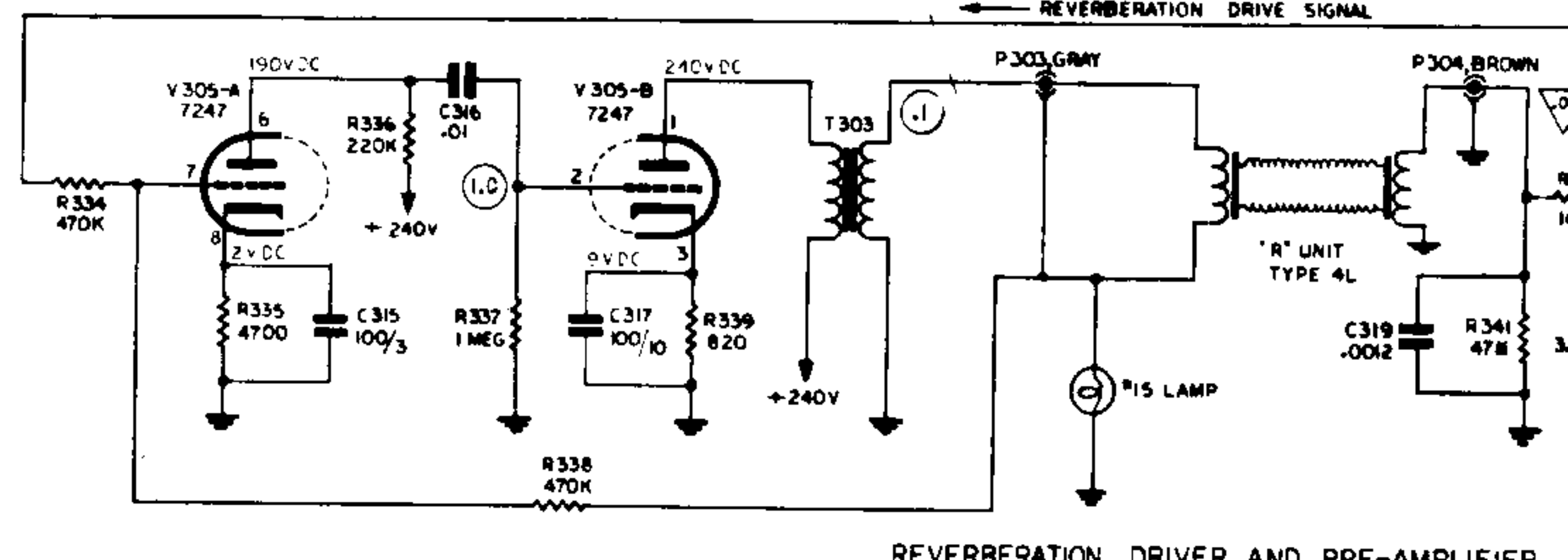
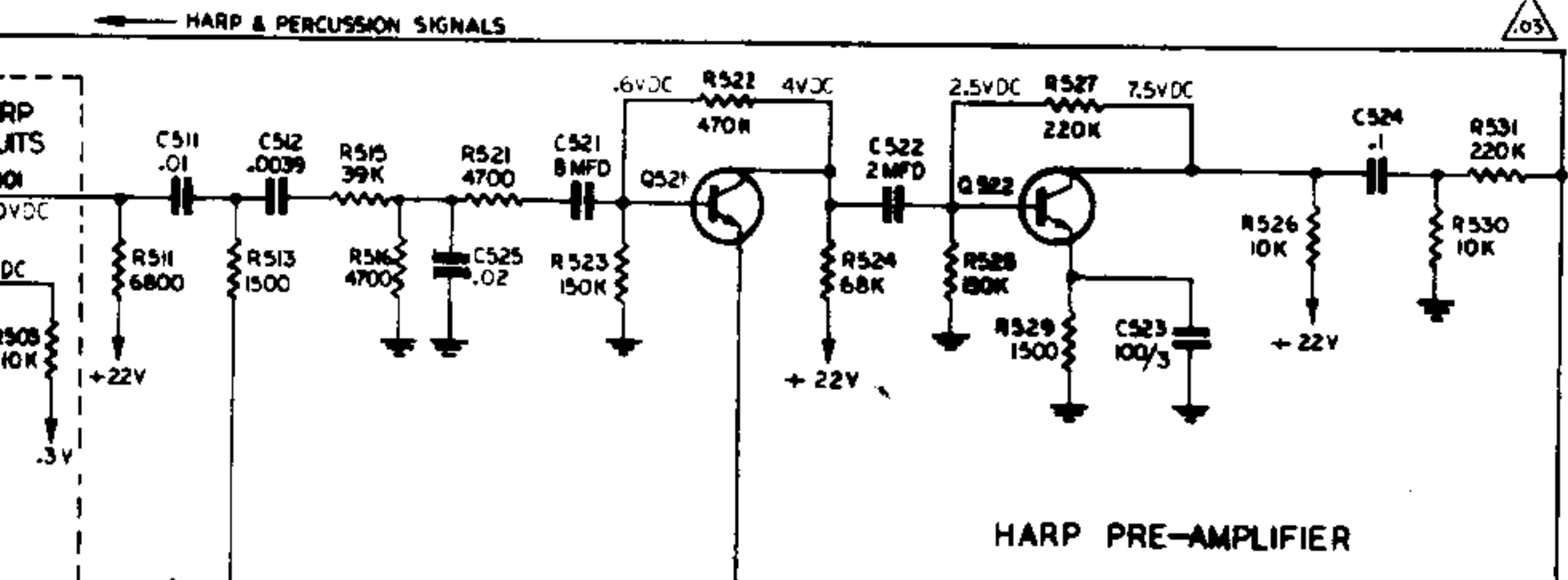
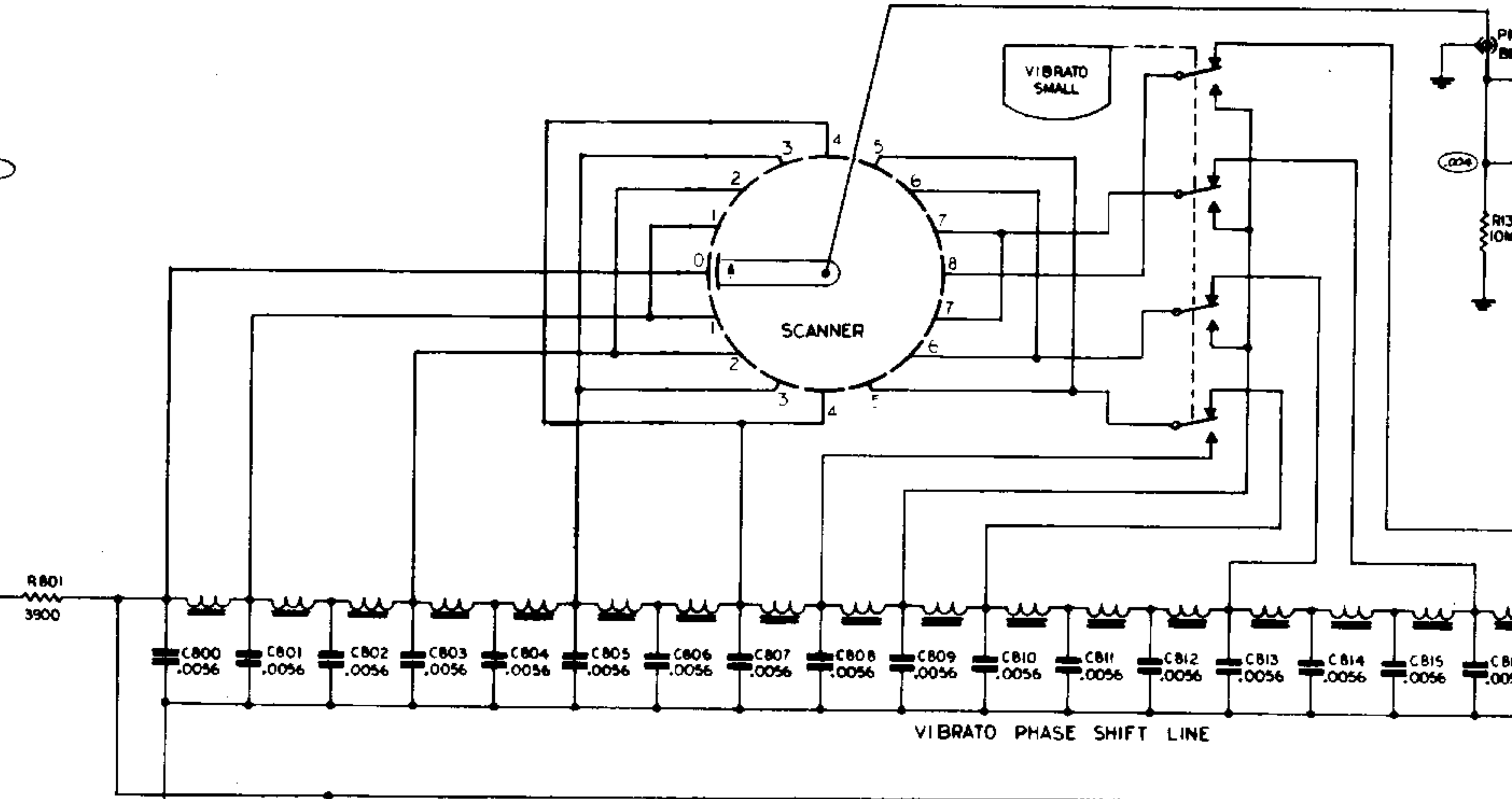
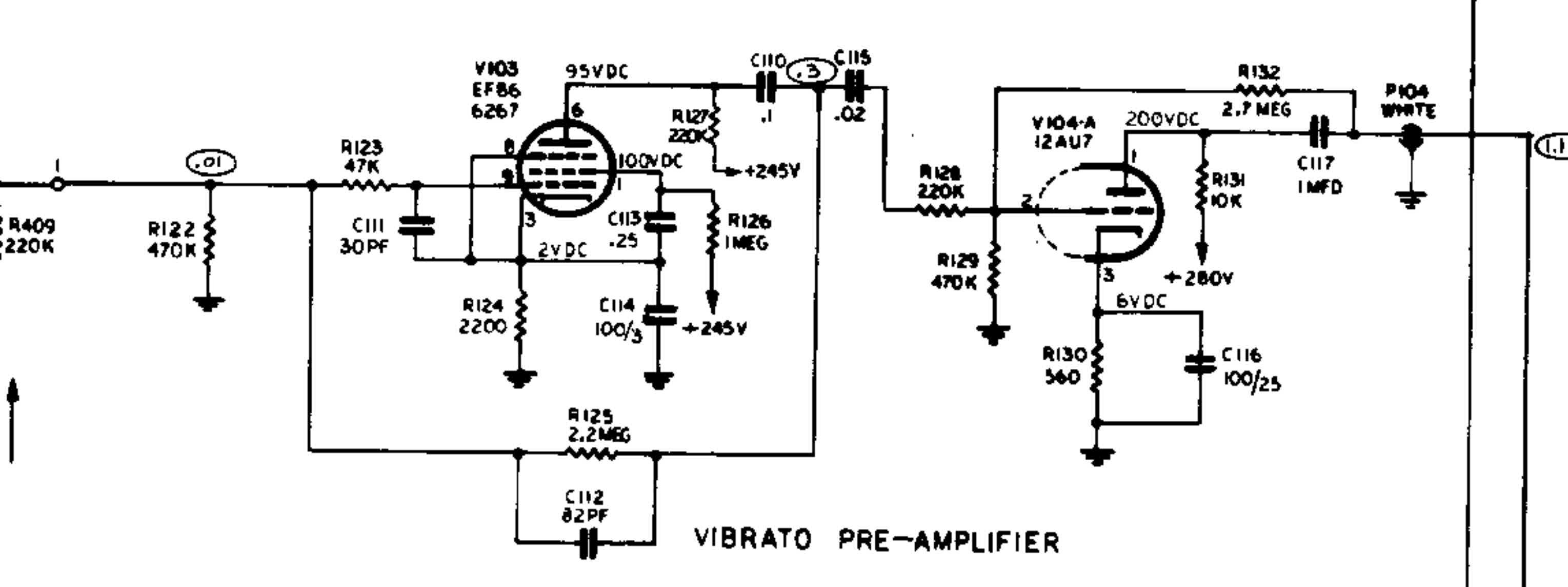
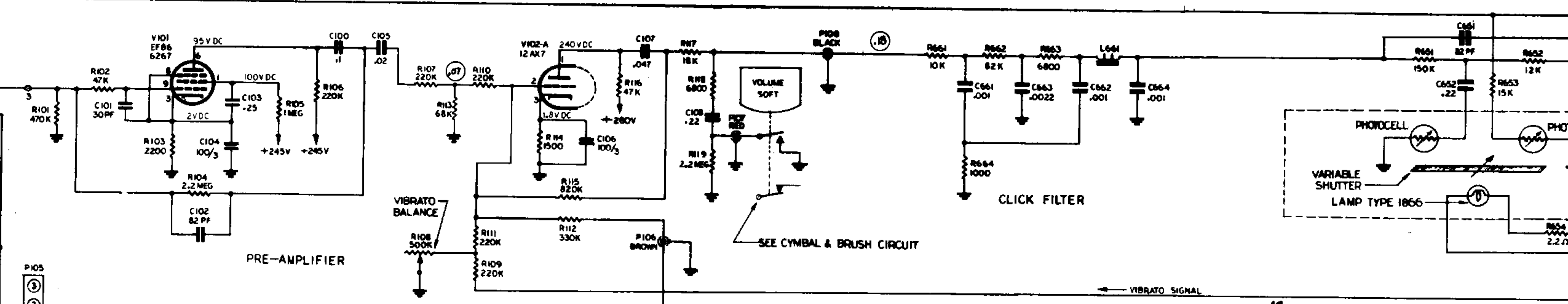
CONSOLE WIRING  
 DIAGRAM  
 E-100 LATER SERIES  
 FIGURE 27

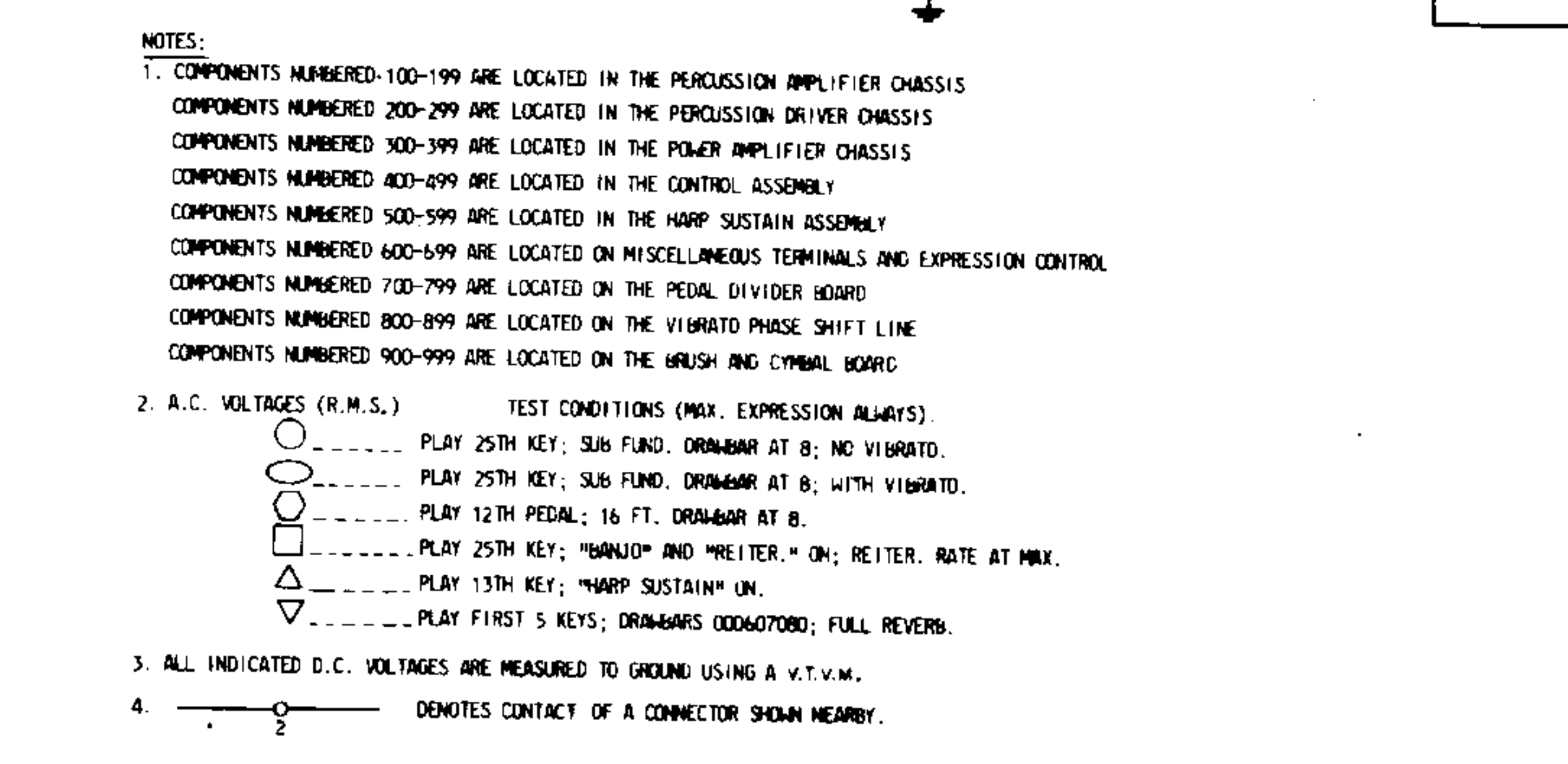
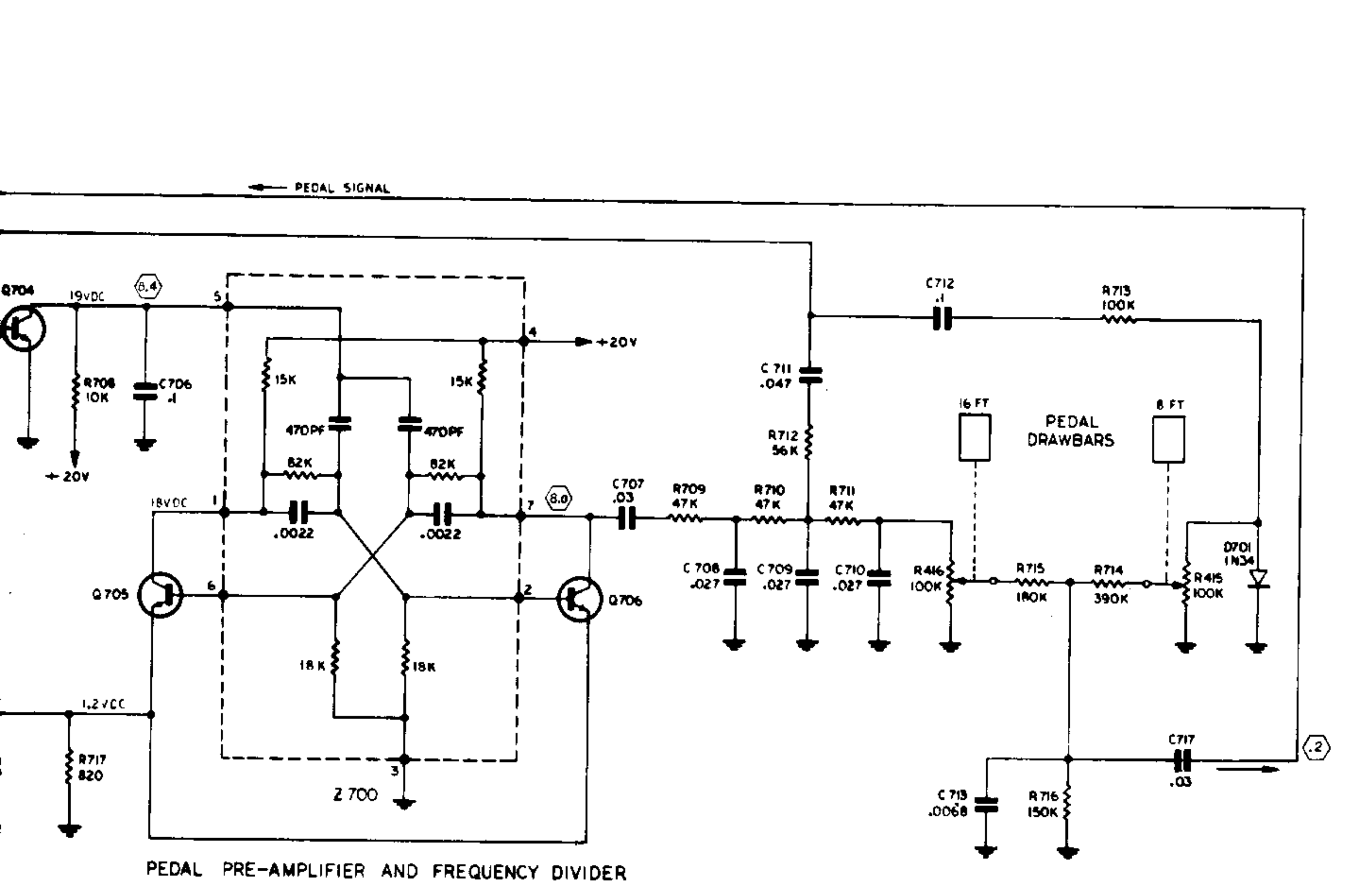
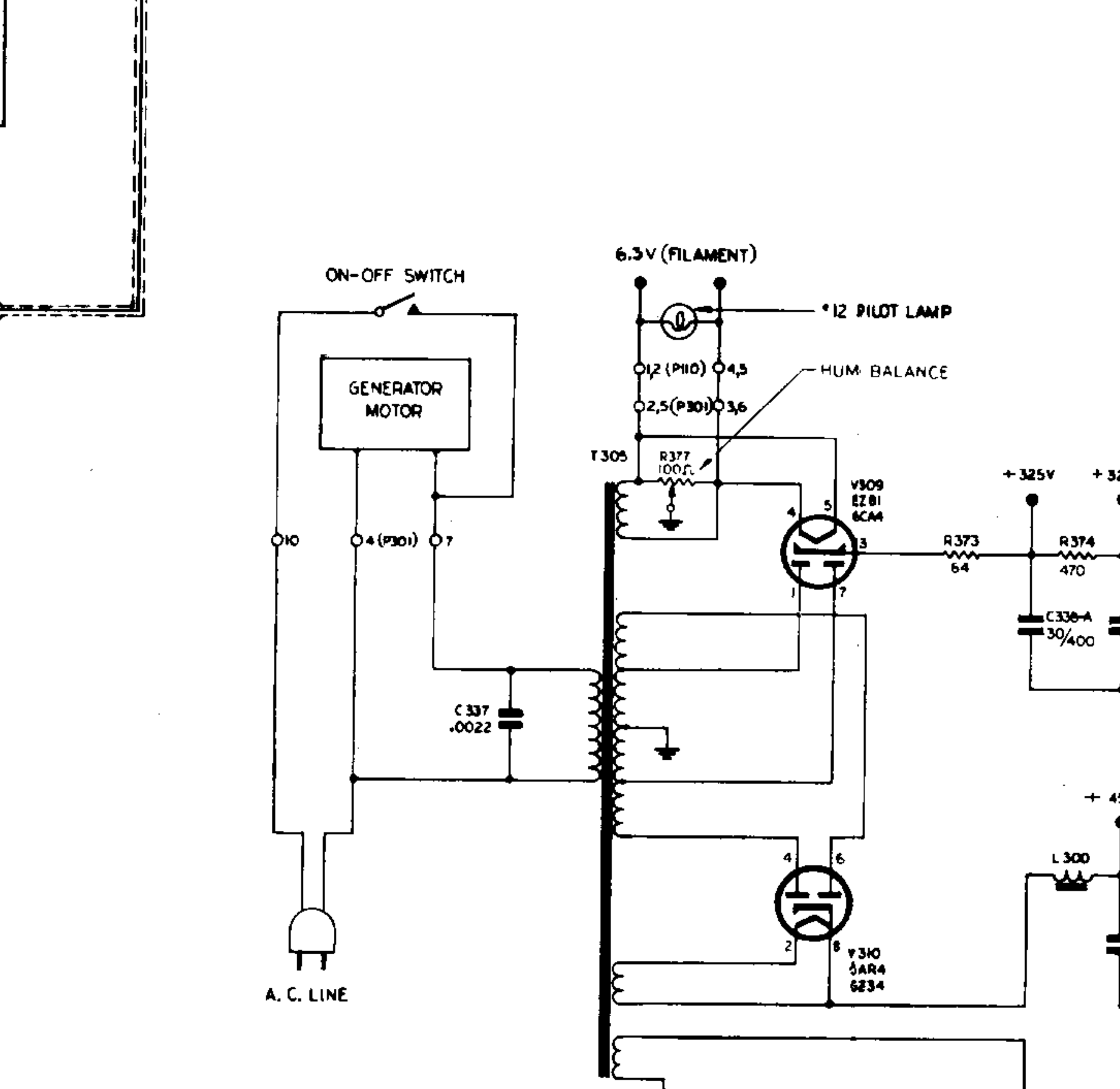
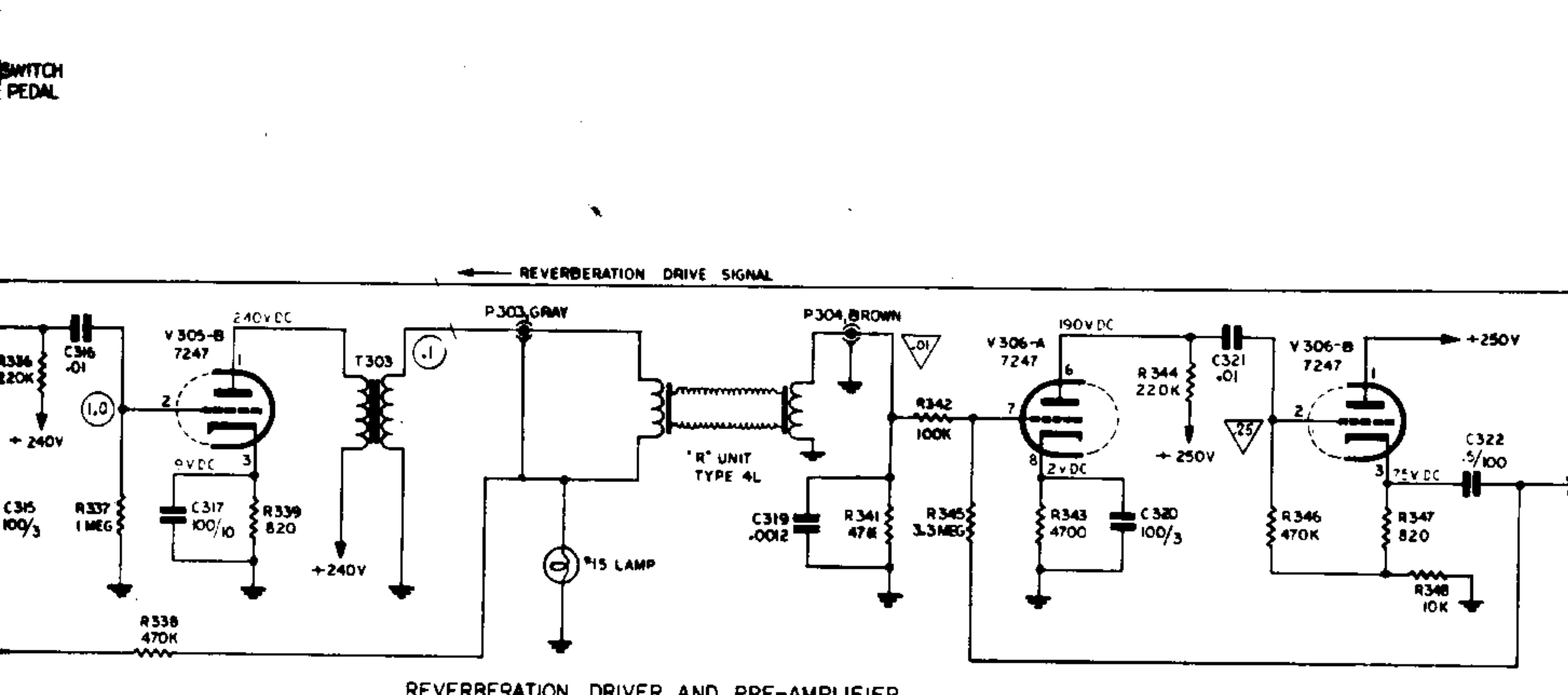
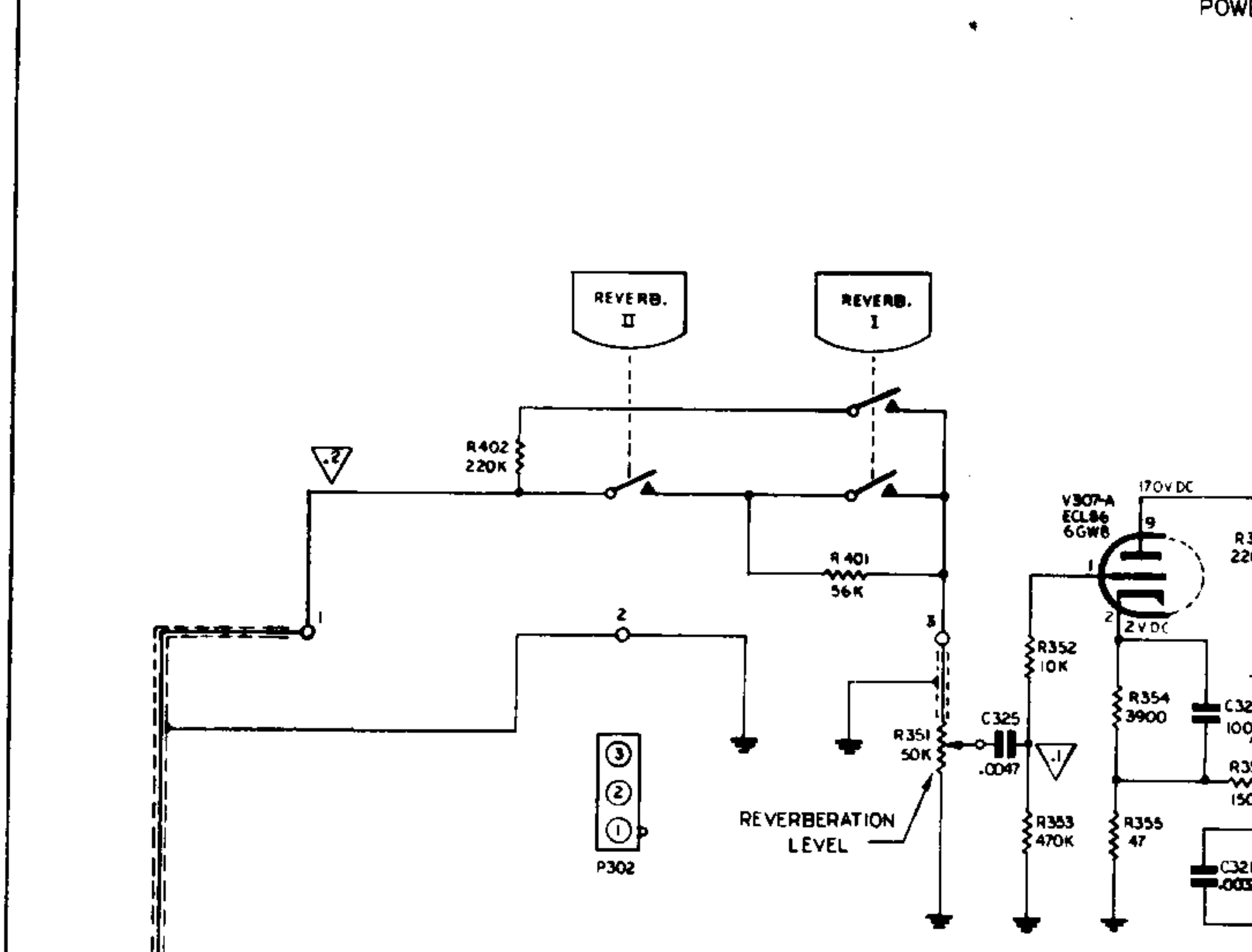
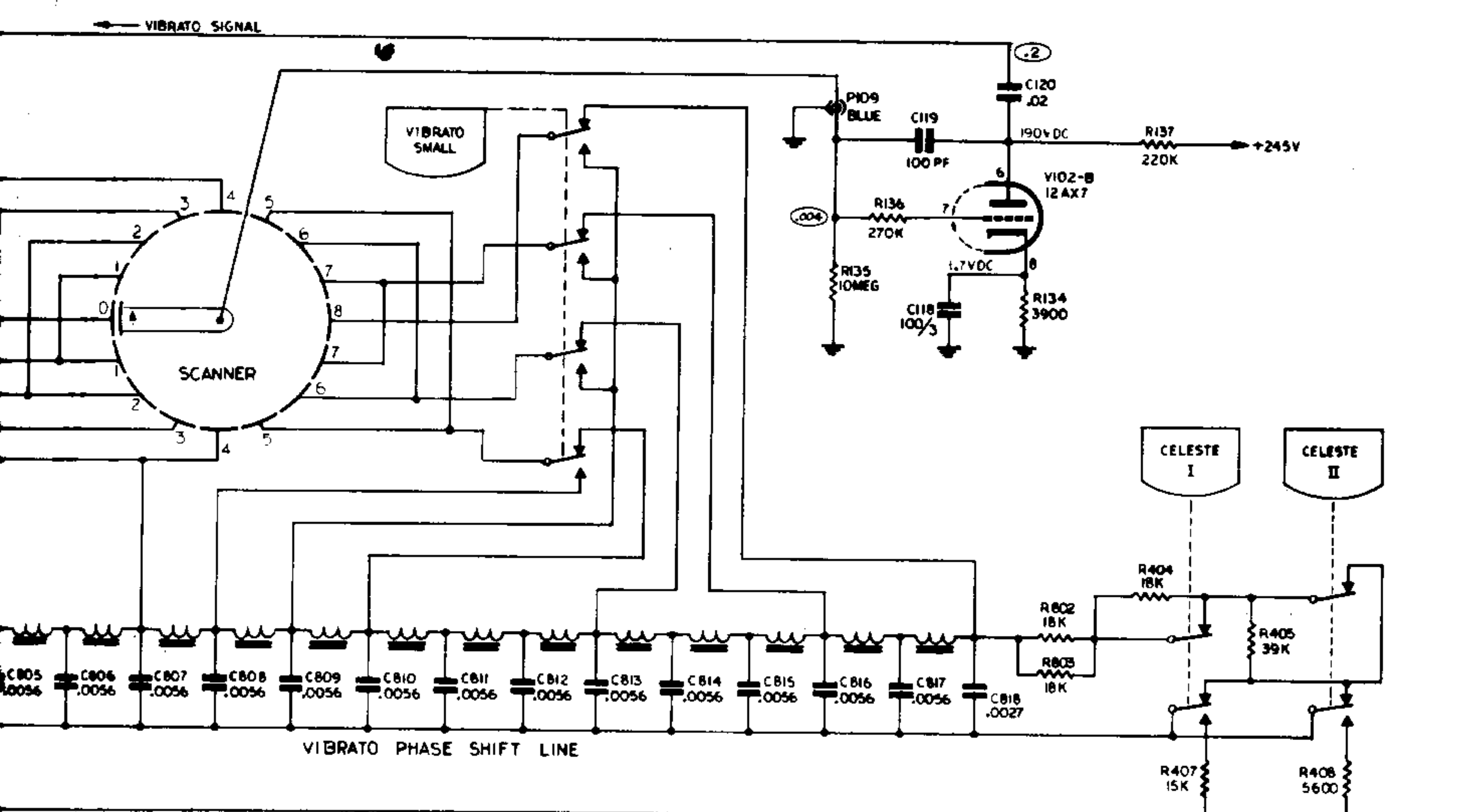
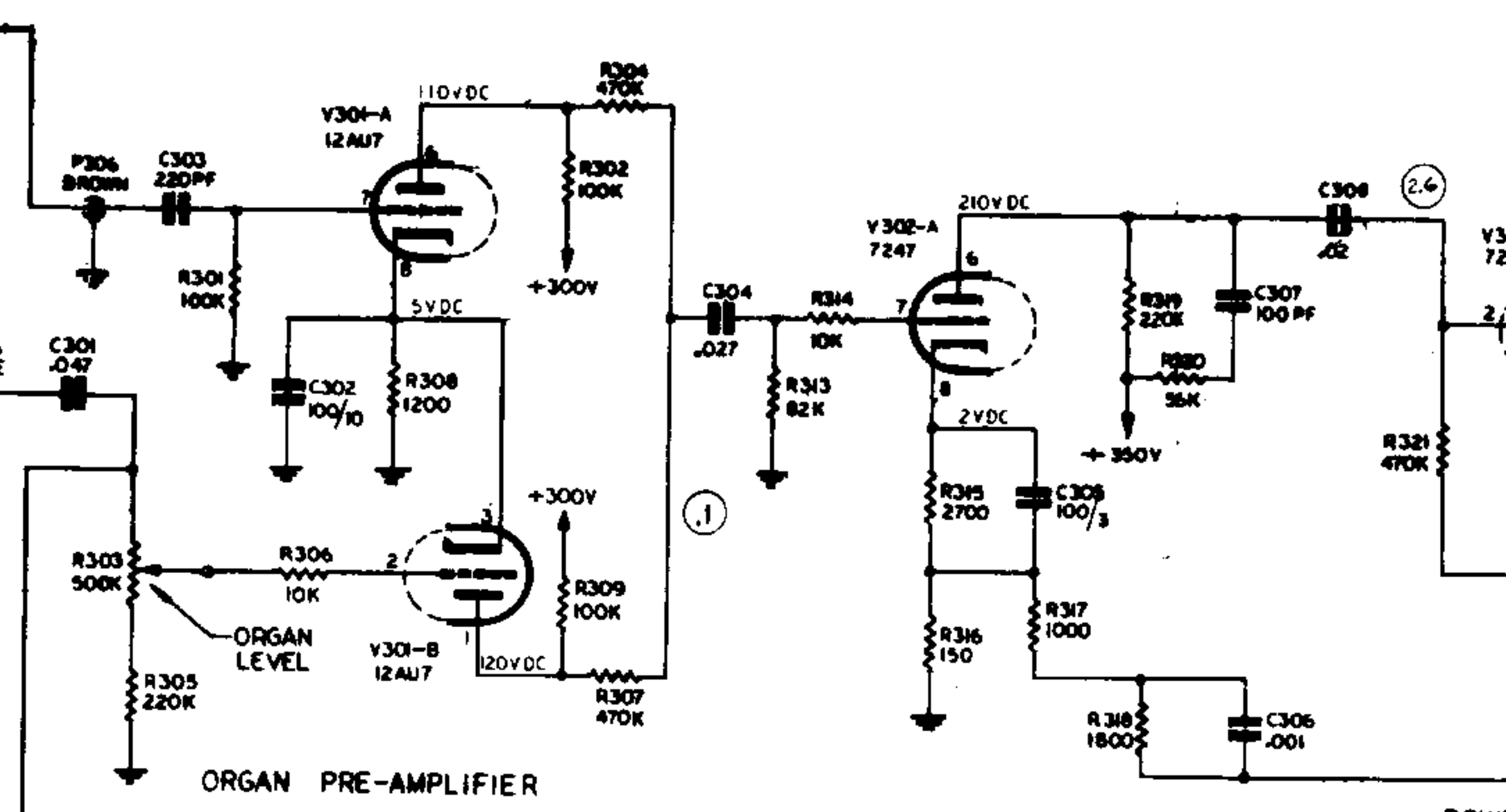
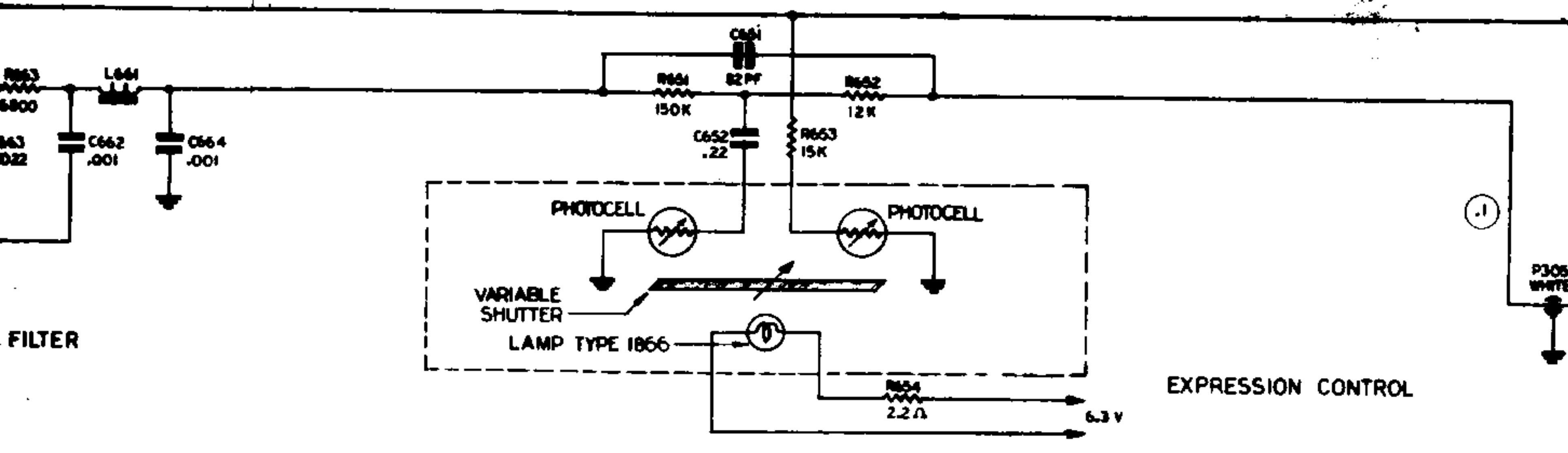


RESISTANCE (FOR EACH MANUAL) .5Ω

BRUSH AND CYMBAL SIGNAL

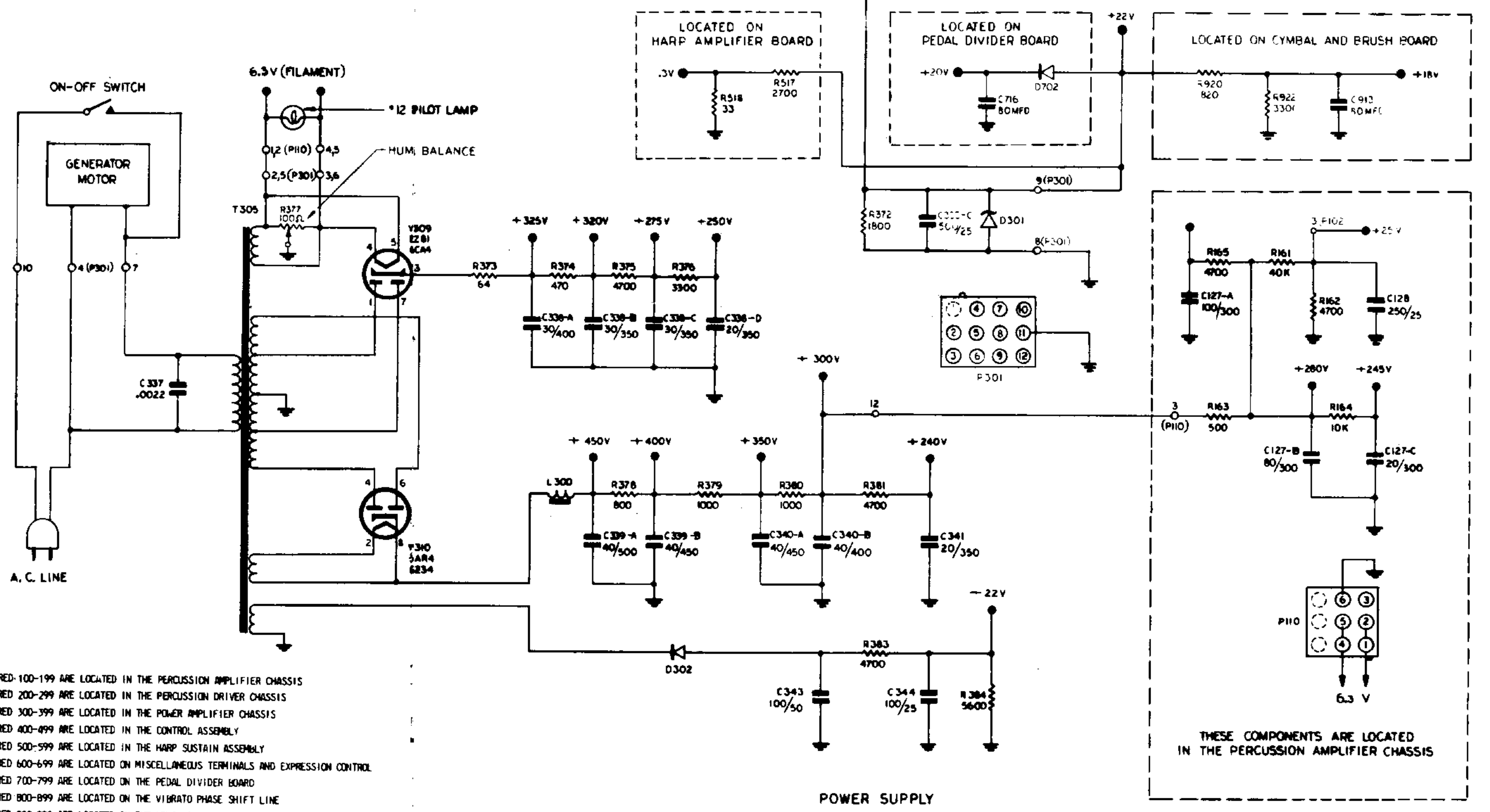
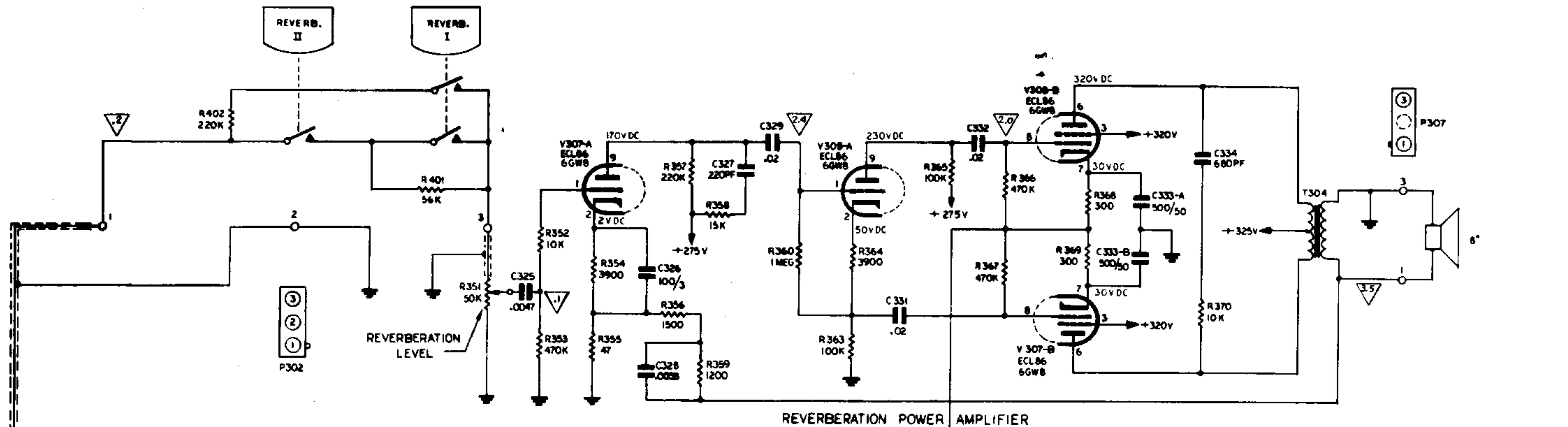
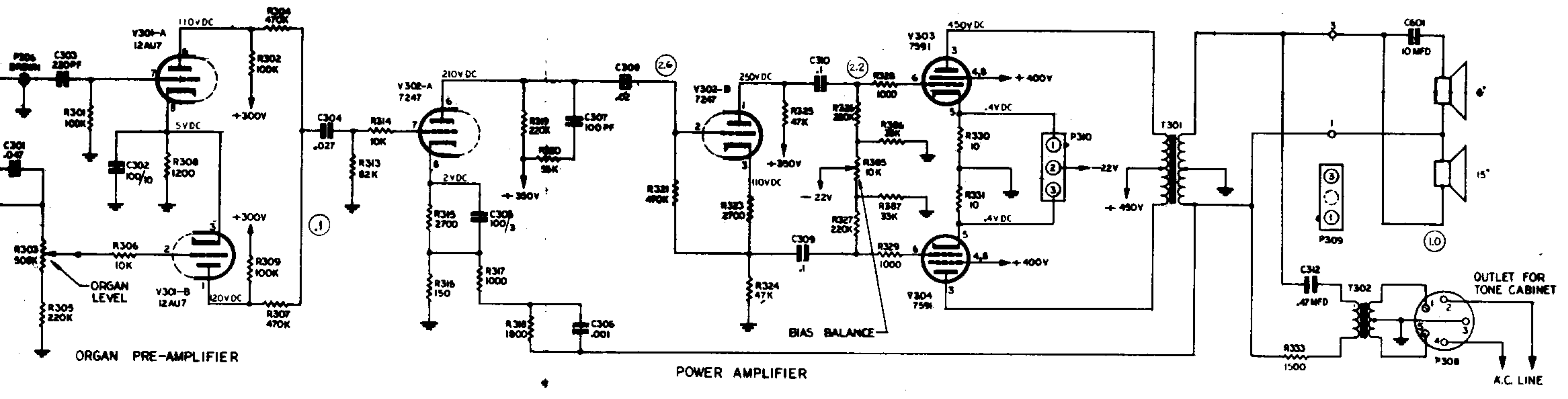






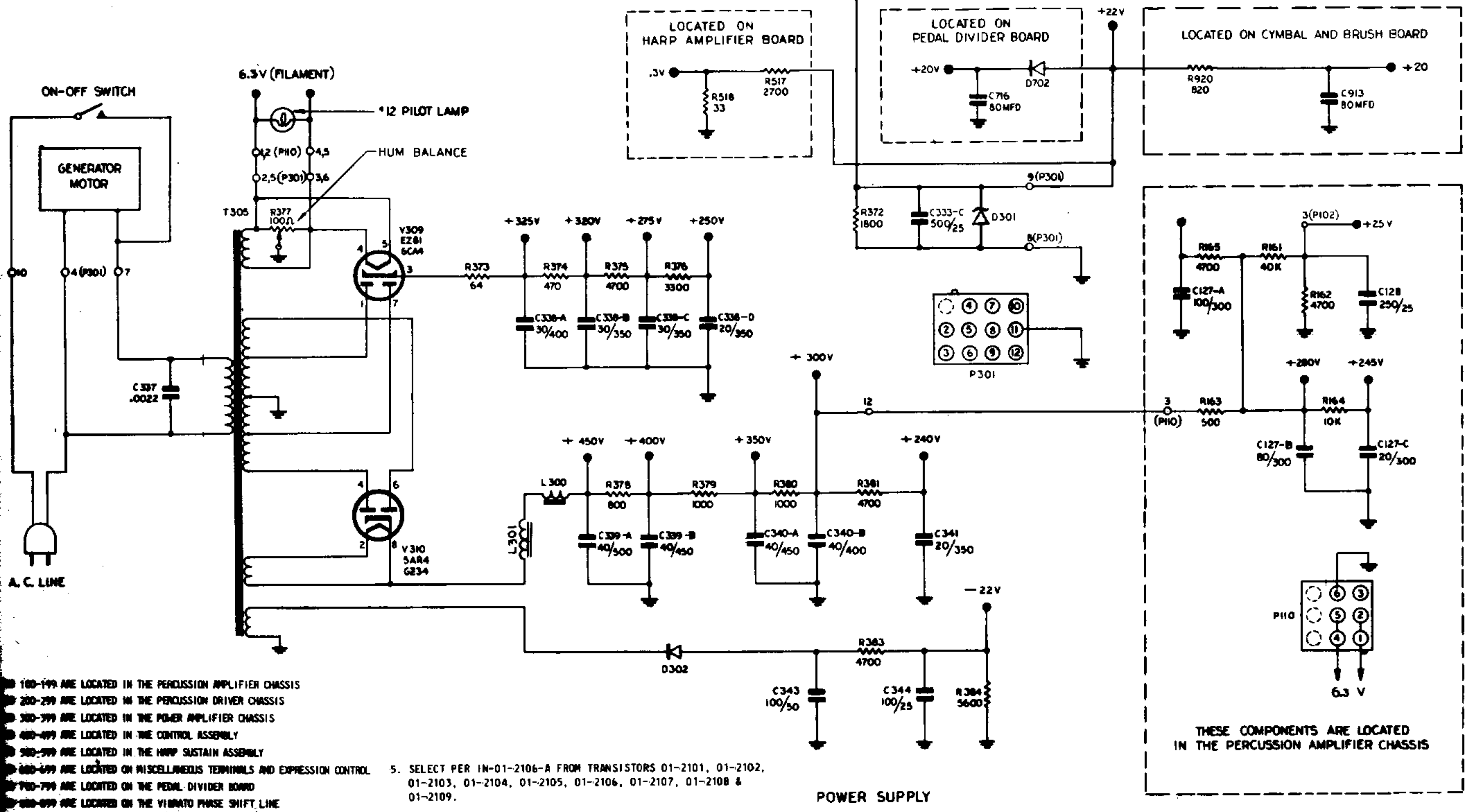
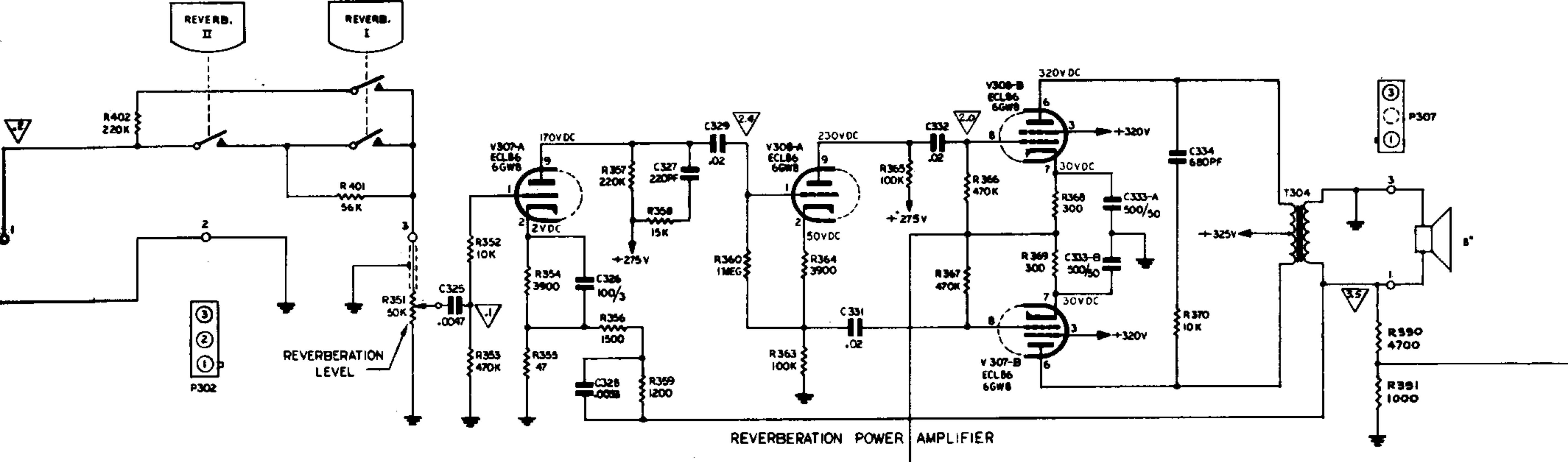
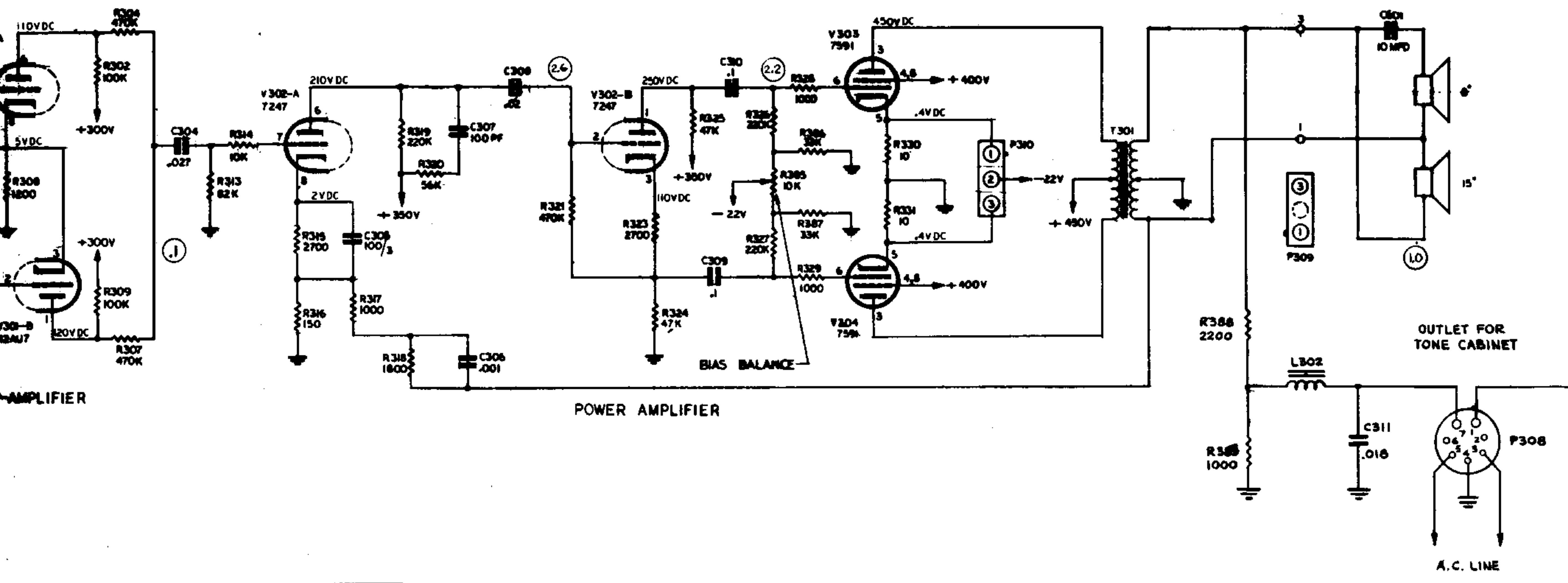
- NOTES:
- COMPONENTS NUMBERED 100-199 ARE LOCATED IN THE PERCUSSION AMPLIFIER CHASSIS  
 COMPONENTS NUMBERED 200-299 ARE LOCATED IN THE PERCUSSION DRIVER CHASSIS  
 COMPONENTS NUMBERED 300-399 ARE LOCATED IN THE POWER AMPLIFIER CHASSIS  
 COMPONENTS NUMBERED 400-499 ARE LOCATED IN THE CONTROL ASSEMBLY  
 COMPONENTS NUMBERED 500-599 ARE LOCATED IN THE HARP SUSTAIN ASSEMBLY  
 COMPONENTS NUMBERED 600-699 ARE LOCATED ON MISCELLANEOUS TERMINALS AND EXPRESSION CONTROL  
 COMPONENTS NUMBERED 700-799 ARE LOCATED ON THE PEDAL DIVIDER BOARD  
 COMPONENTS NUMBERED 800-899 ARE LOCATED ON THE VIBRATO PHASE SHIFT LINE  
 COMPONENTS NUMBERED 900-999 ARE LOCATED ON THE BRUSH AND CYMBAL BOARD
  - A.C. VOLTAGES (R.M.S.) TEST CONDITIONS (MAX. EXPRESSION ALWAYS):  
 ○ PLAY 25TH KEY; SUB FUND. DRAWBAR AT B; NO VIBRATO.  
 ○ PLAY 25TH KEY; SUB FUND. DRAWBAR AT B; WITH VIBRATO.  
 ○ PLAY 12TH PEDAL; 16 FT. DRAWBAR AT B.  
 ○ PLAY 25TH KEY; "BANJO" AND "REITER." ON; REITER. RATE AT MAX.  
 ○ PLAY 13TH KEY; "HARP SUSTAIN" ON.  
 △ PLAY FIRST 5 KEYS; DRAWBARS 000607080; FULL REVERB.
  - ALL INDICATED D.C. VOLTAGES ARE MEASURED TO GROUND USING A V.T.V.M.
  - DENOTES CONTACT OF A CONNECTOR SHOWN NEARBY.





- NOTES:
- COMPONENTS NUMBERED 100-199 ARE LOCATED IN THE PERCUSSION AMPLIFIER CHASSIS
  - COMPONENTS NUMBERED 200-299 ARE LOCATED IN THE PERCUSSION DRIVER CHASSIS
  - COMPONENTS NUMBERED 300-399 ARE LOCATED IN THE POWER AMPLIFIER CHASSIS
  - COMPONENTS NUMBERED 400-499 ARE LOCATED IN THE CONTROL ASSEMBLY
  - COMPONENTS NUMBERED 500-599 ARE LOCATED IN THE HARP SUSTAIN ASSEMBLY
  - COMPONENTS NUMBERED 600-699 ARE LOCATED ON MISCELLANEOUS TERMINALS AND EXPRESSION CONTROL
  - COMPONENTS NUMBERED 700-799 ARE LOCATED ON THE PEDAL DIVIDER BOARD
  - COMPONENTS NUMBERED 800-899 ARE LOCATED ON THE VIBRATO PHASE SHIFT LINE
  - COMPONENTS NUMBERED 900-999 ARE LOCATED ON THE BRUSH AND CYMBAL BOARD
2. A.C. VOLTAGES (R.M.S.) TEST CONDITIONS (MAX. EXPRESSION ALWAYS).
- PLAY 25TH KEY; SUB FUND. DRAWBAR AT B; NO VIBRATO.
  - PLAY 25TH KEY; SUB FUND. DRAWBAR AT B; WITH VIBRATO.
  - PLAY 12TH PEDAL; 16 FT. DRAWBAR AT B.
  - PLAY 25TH KEY; "HARPO" AND "REITER." ON; REITER. RATE AT MAX.
  - △ PLAY 15TH KEY; "HARP SUSTAIN" ON.
  - ▽ PLAY FIRST 5 KEYS; DRAWBARS 000607080; FULL REVERB.
3. ALL INDICATED D.C. VOLTAGES ARE MEASURED TO GROUND USING A V.T.V.M.
4. —○— DENOTES CONTACT OF A CONNECTOR SHOWN NEARBY.

**CONSOLE SCHEMATIC  
DIAGRAM  
HAMMOND ORGAN  
E-100 SERIES  
FIGURE 28**

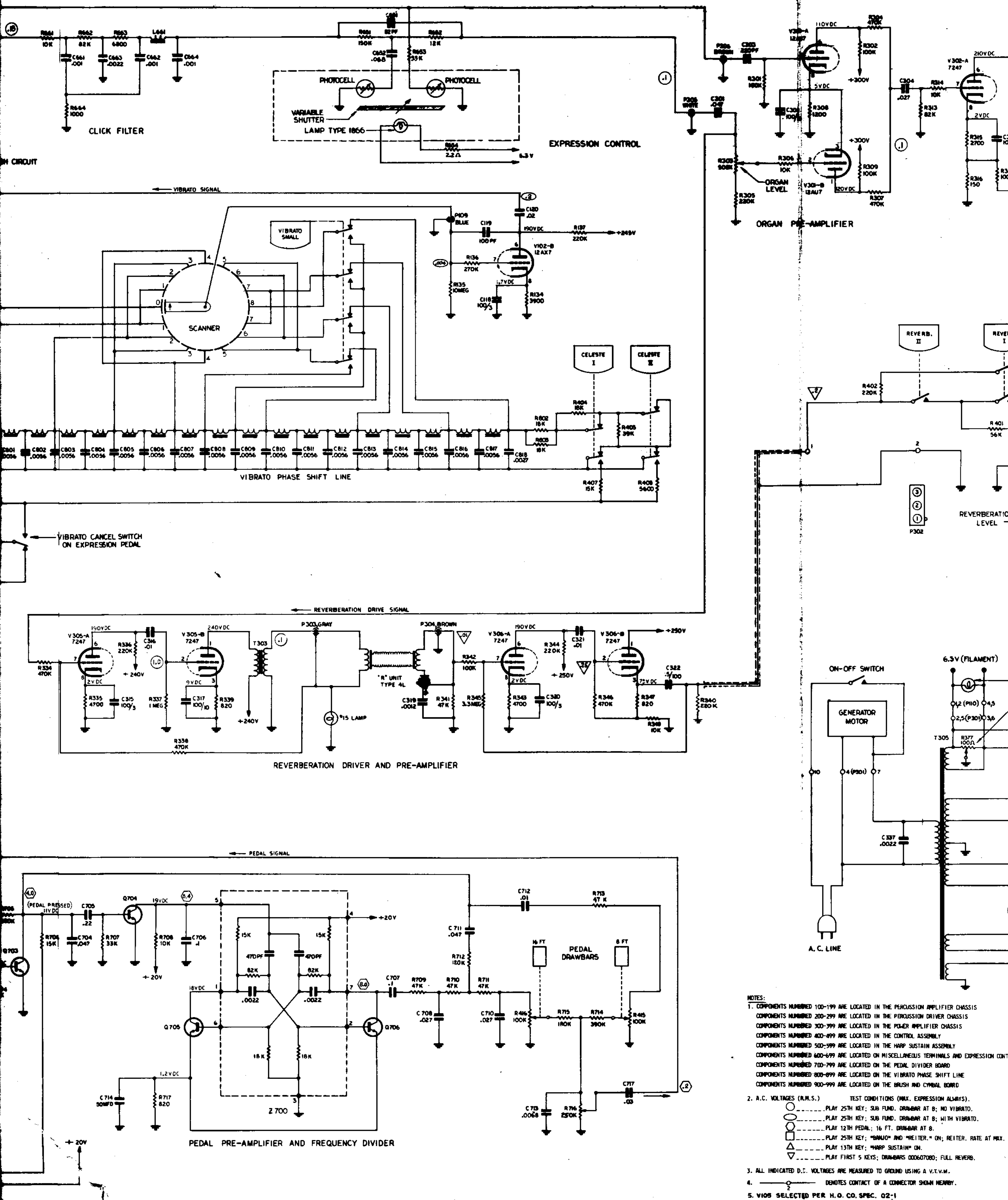


- 100-199 ARE LOCATED IN THE PERCUSSION AMPLIFIER CHASSIS
- 200-299 ARE LOCATED IN THE PERCUSSION DRIVER CHASSIS
- 300-399 ARE LOCATED IN THE POWER AMPLIFIER CHASSIS
- 400-499 ARE LOCATED IN THE CONTROL ASSEMBLY
- 500-599 ARE LOCATED IN THE HARP SUSTAIN ASSEMBLY
- 600-699 ARE LOCATED ON MISCELLANEOUS TERMINALS AND EXPRESSION CONTROL
- 700-799 ARE LOCATED ON THE PEDAL DIVIDER BOARD
- 800-899 ARE LOCATED ON THE VIBRATO PHASE SHIFT LINE
- 900-999 ARE LOCATED ON THE BRUSH AND CYMBAL BOARD

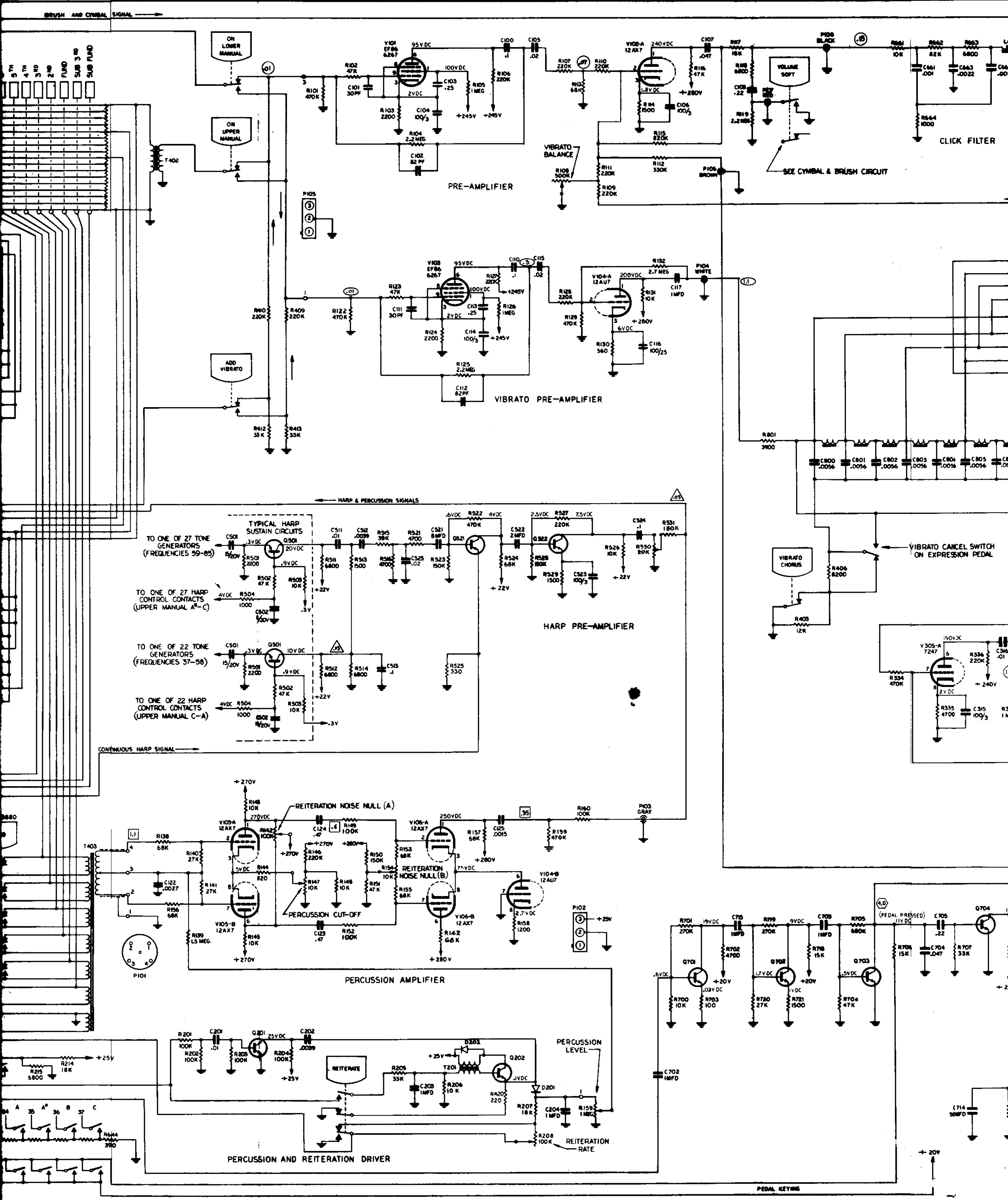
5. SELECT PER IN-01-2106-A FROM TRANSISTORS 01-2101, 01-2102, 01-2103, 01-2104, 01-2105, 01-2106, 01-2107, 01-2108 & 01-2109.

(A.) TEST CONDITIONS (MAX. EXPRESSION ALWAYS).  
 PLAY 25TH KEY; SUB FUND. DRUMMER AT 8; NO VIBRATO.  
 PLAY 25TH KEY; SUB FUND. DRUMMER AT 8; WITH VIBRATO.  
 PLAY 12TH PEDAL; 1/4 FT. DRUMMER AT 8.  
 PLAY 25TH KEY; "HARP" AND "MEETER" ON; REITER. RATE AT MAX.  
 PLAY 13TH KEY; "HARP SUSTAIN" ON.  
 PLAY FUND 5 KEYS; DRUMMER 00040700; FULL REVERB.  
 MULTIMETERS ARE REQUIRED TO MEASURE USING A V.T.V.M.  
 GROUND CONNECT OF A CONDUCTOR SIGN HEREBY.

**SCHEMATIC  
 DIAGRAM  
 (REVISED)  
 SERIES E 100  
 FIGURE 29**



- NOTES:**
- COMPONENTS NUMBERED 100-199 ARE LOCATED IN THE PERCUSSION AMPLIFIER CHASSIS  
 COMPONENTS NUMBERED 200-299 ARE LOCATED IN THE PERCUSSION DRIVER CHASSIS  
 COMPONENTS NUMBERED 300-399 ARE LOCATED IN THE POWER AMPLIFIER CHASSIS  
 COMPONENTS NUMBERED 400-499 ARE LOCATED IN THE CONTROL ASSEMBLY  
 COMPONENTS NUMBERED 500-599 ARE LOCATED IN THE HARP SUSTAIN ASSEMBLY  
 COMPONENTS NUMBERED 600-699 ARE LOCATED ON MISCELLANEOUS TERMINALS AND EXPRESSION CONTROL  
 COMPONENTS NUMBERED 700-799 ARE LOCATED ON THE PEDAL DIVIDER BOARD  
 COMPONENTS NUMBERED 800-899 ARE LOCATED ON THE VIBRATO PHASE SHIFT LINE  
 COMPONENTS NUMBERED 900-999 ARE LOCATED ON THE BRUSH AND CYMBAL BOARD
  - A.C. VOLTAGES (R.M.S.) TEST CONDITIONS (MAX. EXPRESSION ALWAYS).  
 ○ PLAY 25TH KEY; SUB FUND. DRAWBAR AT B; NO VIBRATO.  
 ○ PLAY 25TH KEY; SUB FUND. DRAWBAR AT B; WITH VIBRATO.  
 ○ PLAY 12TH PEDAL; 16 FT. DRAWBAR AT B.  
 ○ PLAY 25TH KEY; "BAND" AND "REITER" ON; REITER RATE AT MAX.  
 △ PLAY 13TH KEY; "HARP SUSTAIN" ON.  
 ▽ PLAY FIRST 5 KEYS; DRAWBARS 00607080; FULL REVERB.
  - ALL INDICATED D.C. VOLTAGES ARE MEASURED TO GROUND USING A V.T.V.M.
  - DENOTES CONTACT OF A CONNECTOR SHOWN NEARBY.
  - V105 SELECTED PER H.O. CO. SPEC. Q2-1



BRUSH AND CYMBAL SIGNAL

ON LOWER MANUAL

ON UPPER MANUAL

ADD VIBRATO

PRE-AMPLIFIER

VIBRATO PRE-AMPLIFIER

HARP PRE-AMPLIFIER

REITERATION NOISE NULL (A)

REITERATION NOISE NULL (B)

PERCUSSION AMPLIFIER

PERCUSSION AND REITERATION DRIVER

PERCUSSION LEVEL

REITERATION RATE

PEDAL KEYING

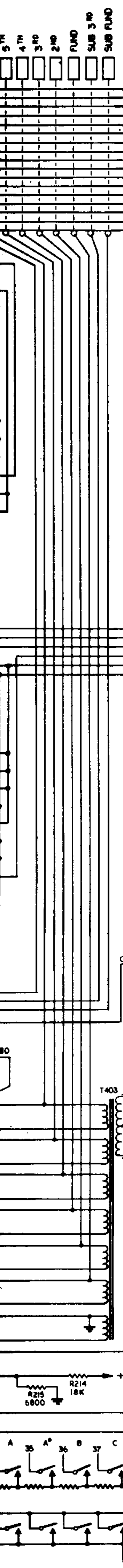
CLICK FILTER

SEE CYMBAL & BRUSH CIRCUIT

VIBRATO CANCEL SWITCH ON EXPRESSION PEDAL

VIBRATO CHORUS

(PEDAL PRESSED)



HARP & PERCUSSION SIGNALS

CONTINUOUS HARP SIGNAL

P101

P102

P103 GRAY

P104 WHITE

P105

P106 BROWN

P107

P108 BLACK

P109

P110

P111

P112

P113

TO ONE OF 27 TONE GENERATORS (FREQUENCIES 59-85)

TO ONE OF 27 HARP CONTROL CONTACTS (UPPER MANUAL A-C)

TO ONE OF 22 TONE GENERATORS (FREQUENCIES 37-58)

TO ONE OF 22 HARP CONTROL CONTACTS (UPPER MANUAL C-A)

TO ONE OF 27 TONE GENERATORS (FREQUENCIES 59-85)

TO ONE OF 27 HARP CONTROL CONTACTS (UPPER MANUAL A-C)

TO ONE OF 22 TONE GENERATORS (FREQUENCIES 37-58)

TO ONE OF 22 HARP CONTROL CONTACTS (UPPER MANUAL C-A)

TO ONE OF 27 TONE GENERATORS (FREQUENCIES 59-85)

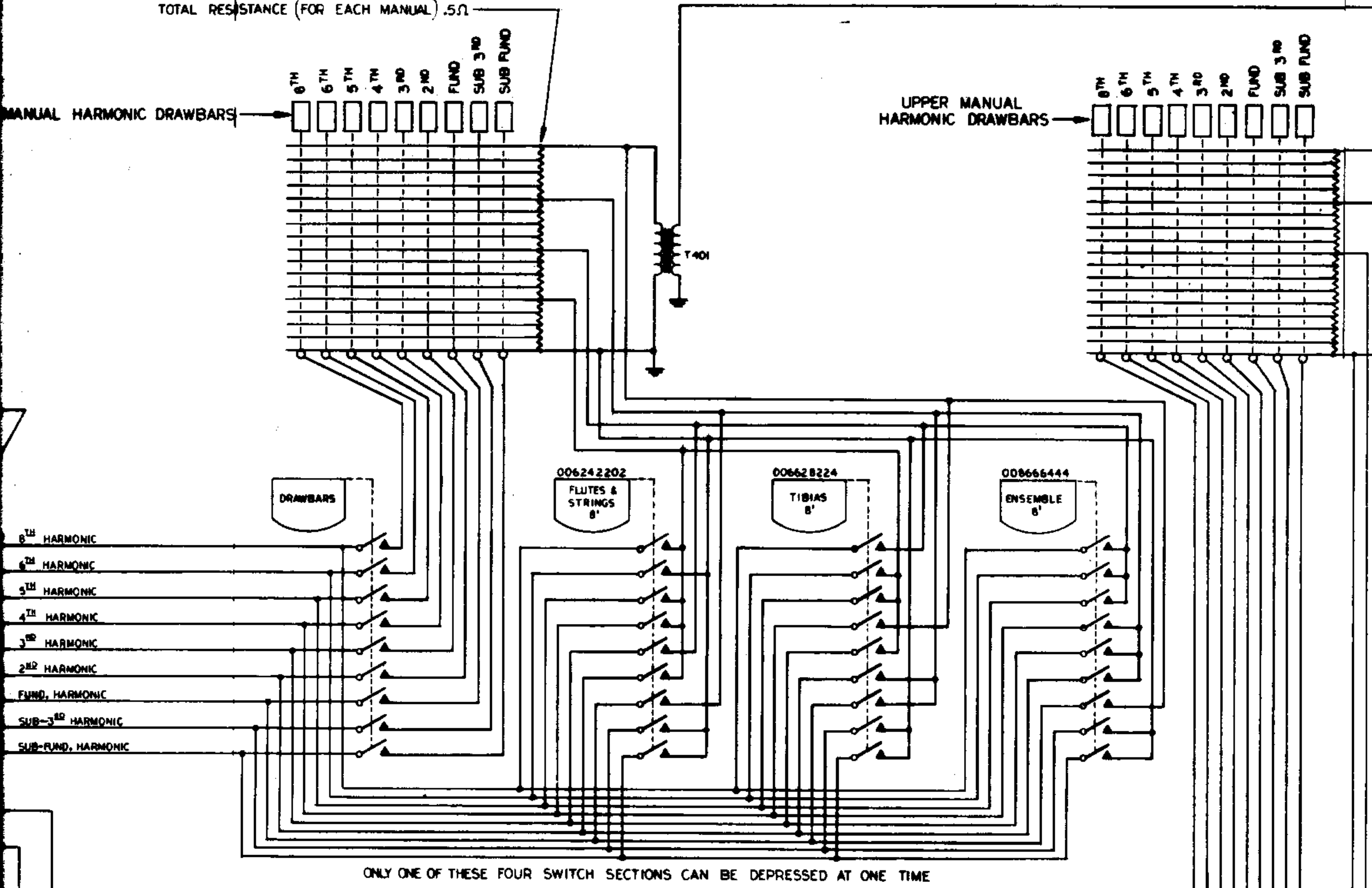
TO ONE OF 27 HARP CONTROL CONTACTS (UPPER MANUAL A-C)

TO ONE OF 22 TONE GENERATORS (FREQUENCIES 37-58)

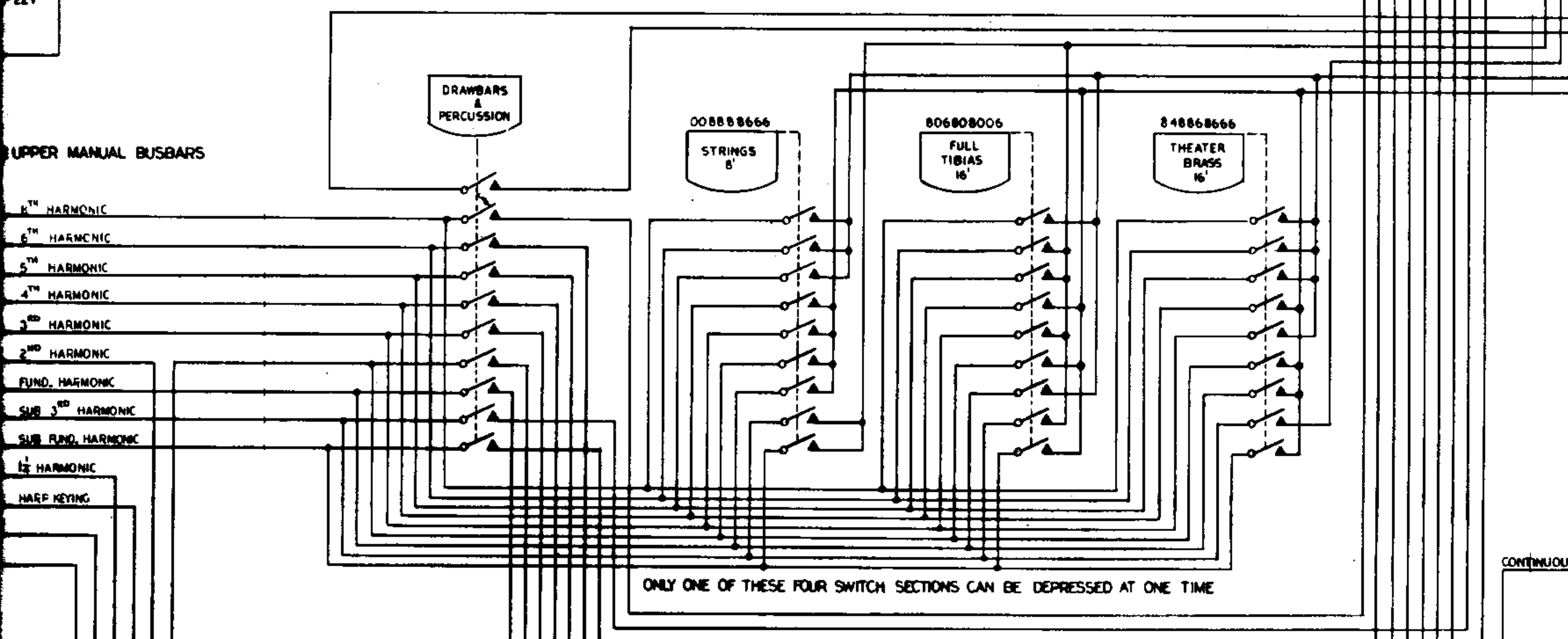
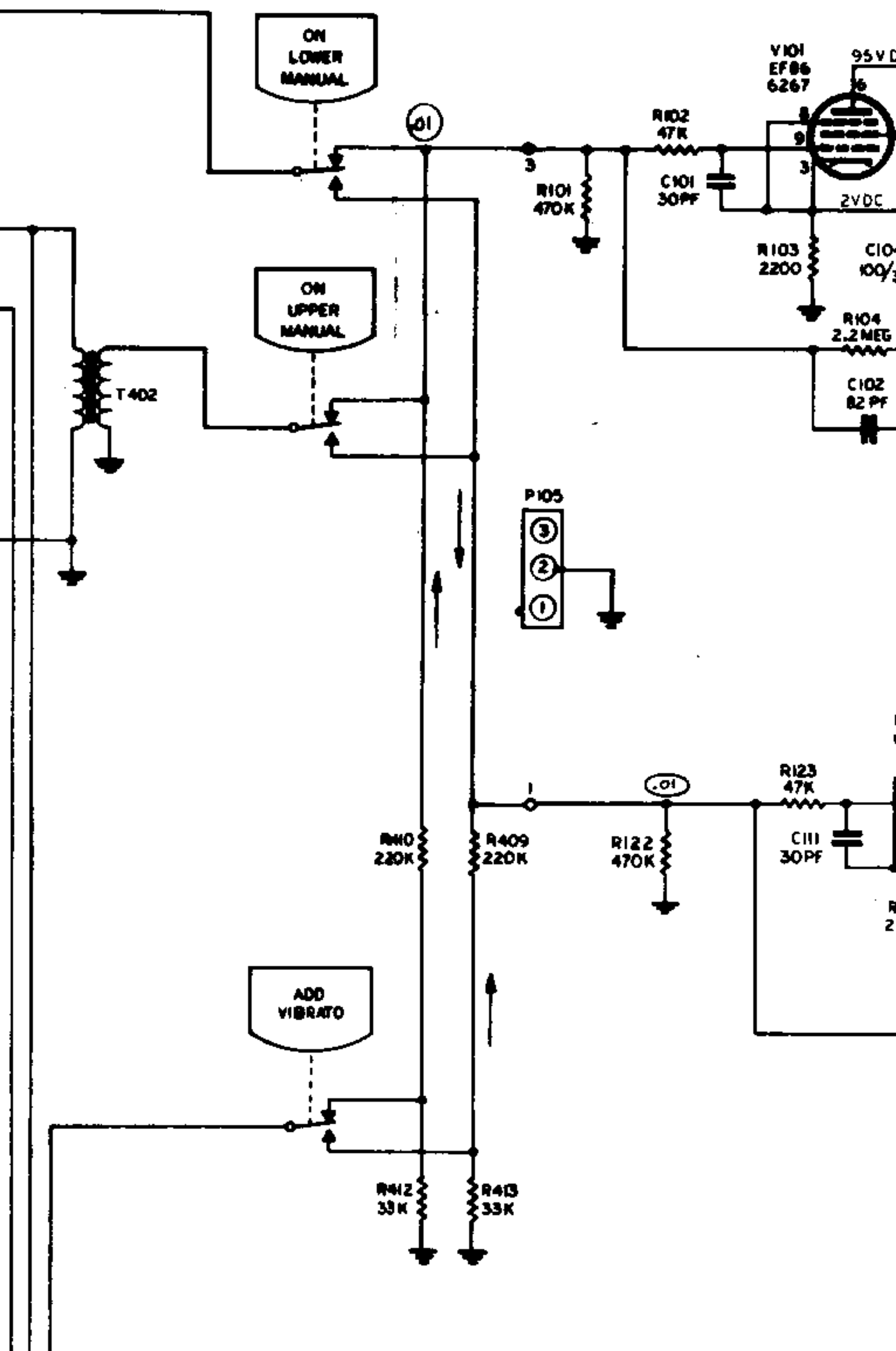
TO ONE OF 22 HARP CONTROL CONTACTS (UPPER MANUAL C-A)

BRUSH AND CYMBAL SIGNAL

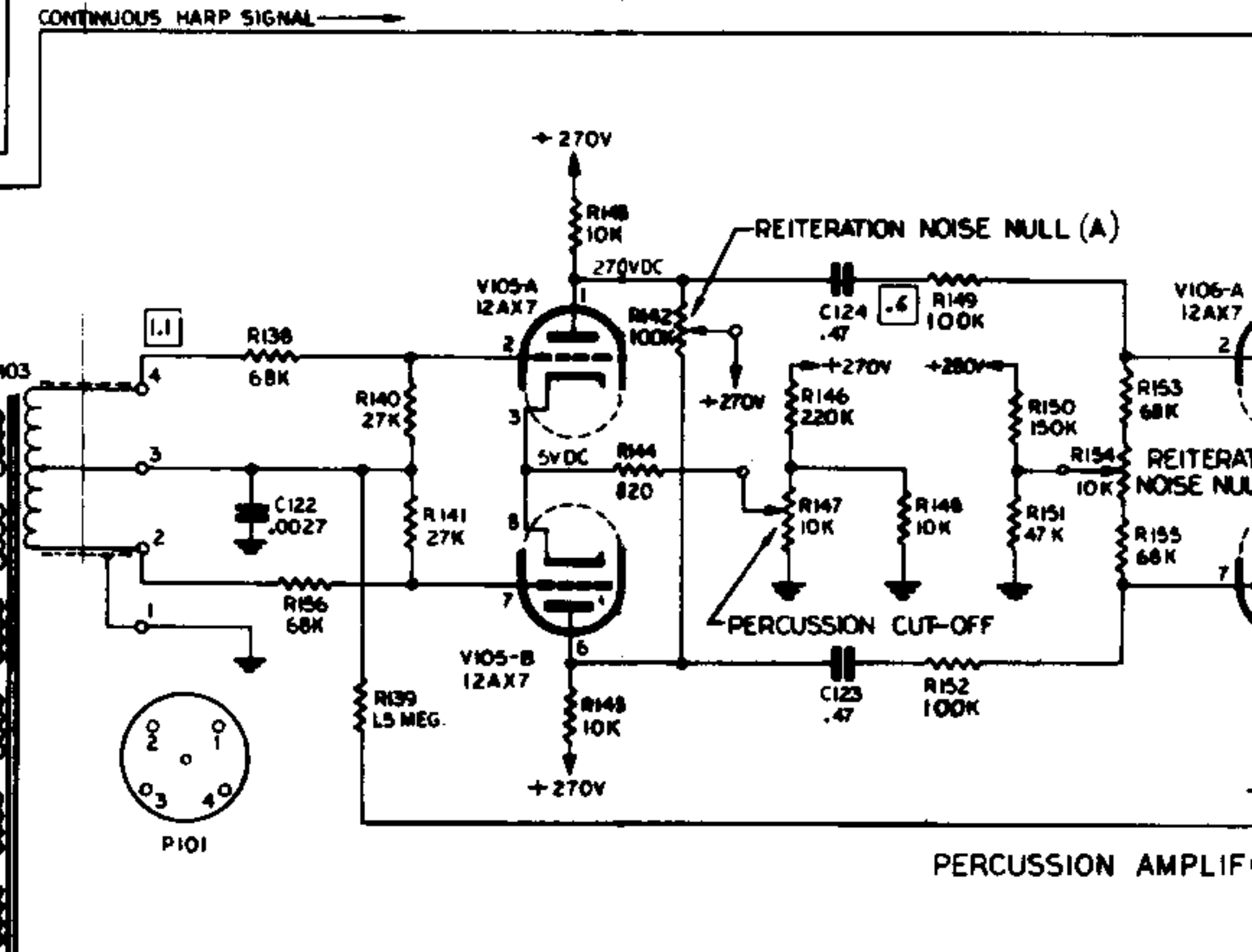
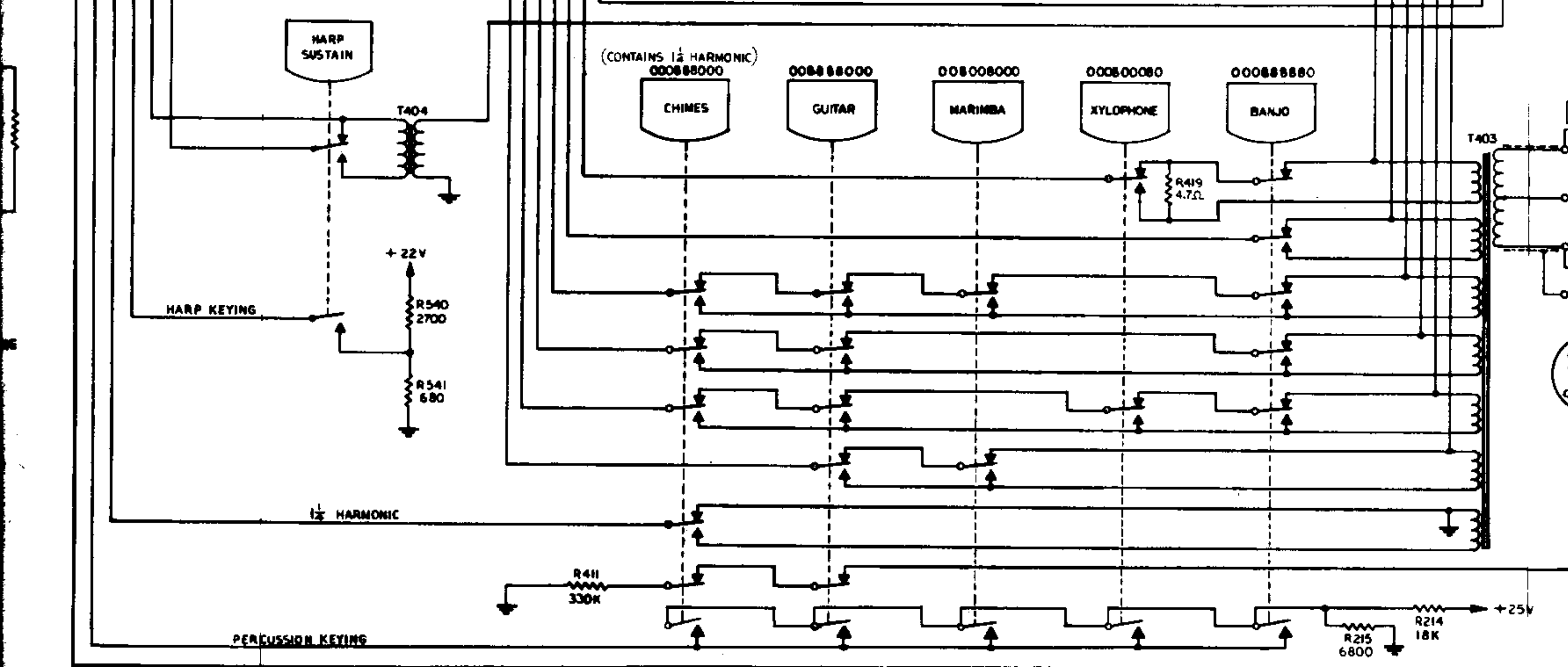
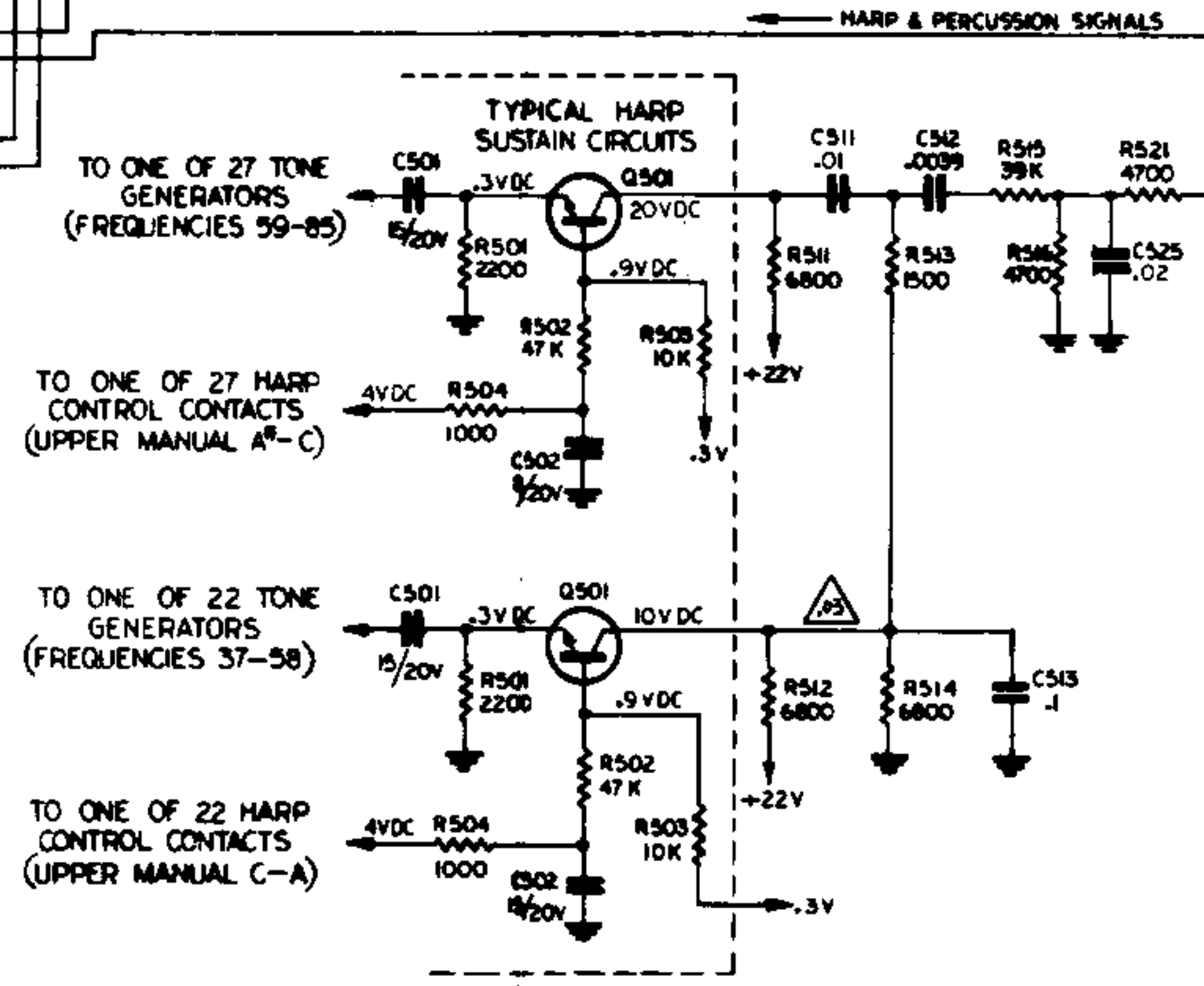
TOTAL RESISTANCE (FOR EACH MANUAL) .5Ω



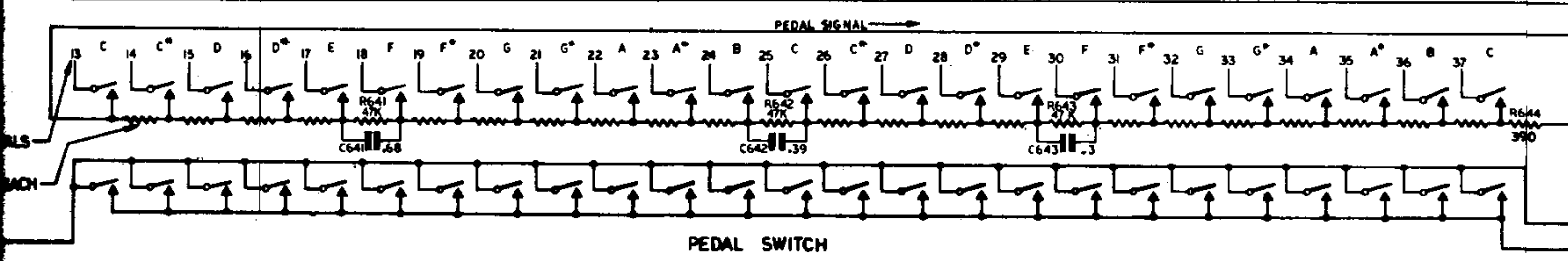
ONLY ONE OF THESE FOUR SWITCH SECTIONS CAN BE DEPRESSED AT ONE TIME



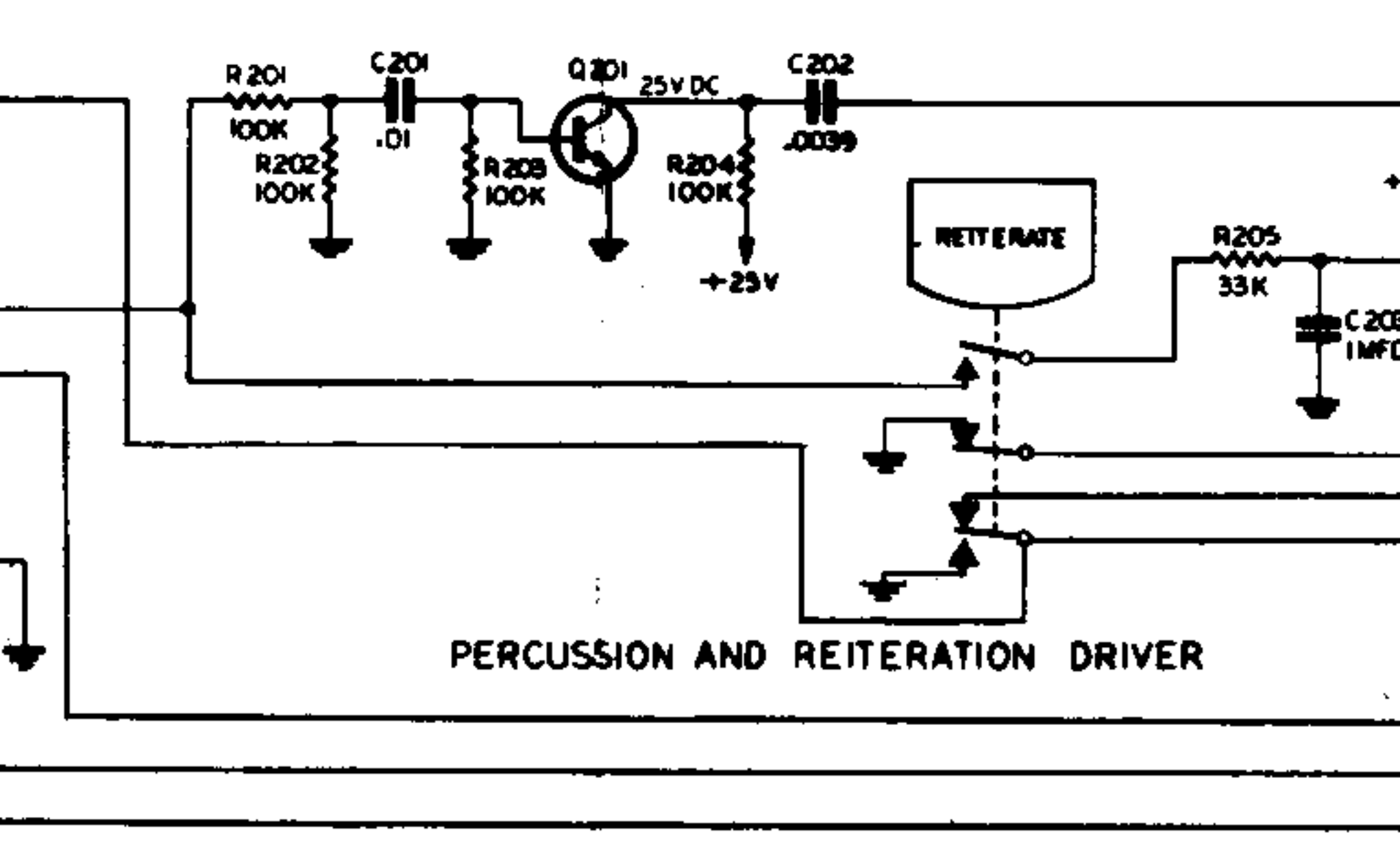
ONLY ONE OF THESE FOUR SWITCH SECTIONS CAN BE DEPRESSED AT ONE TIME



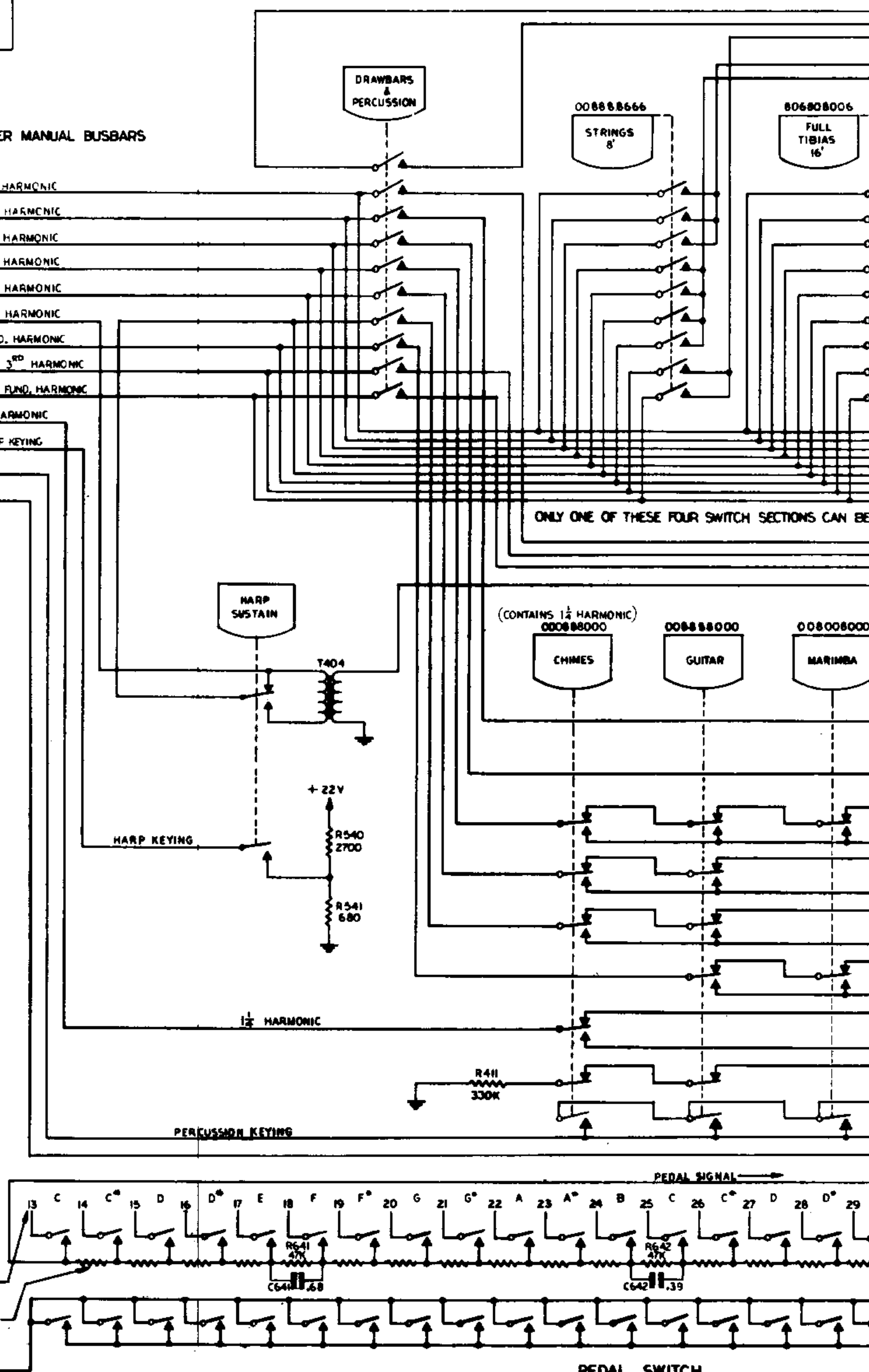
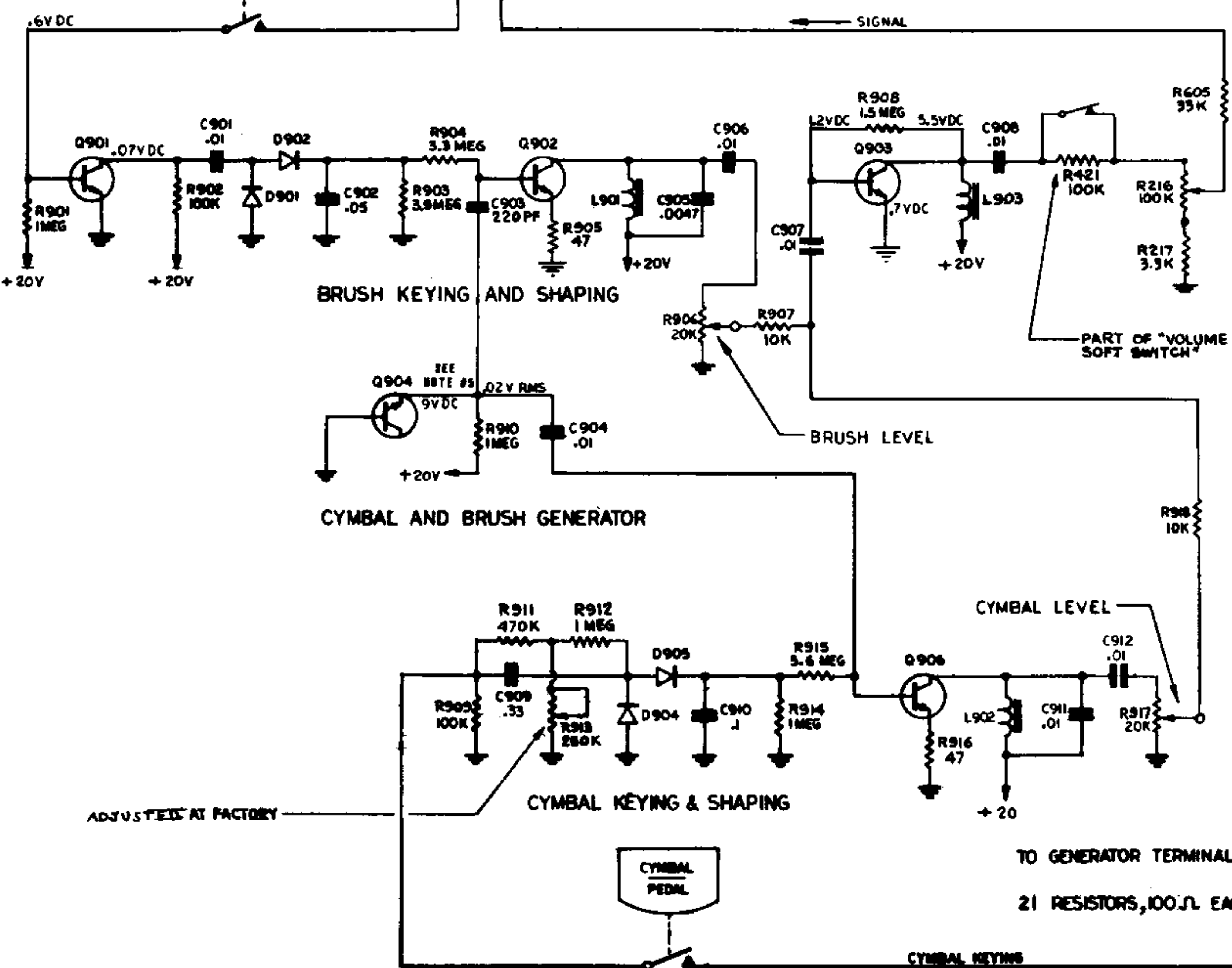
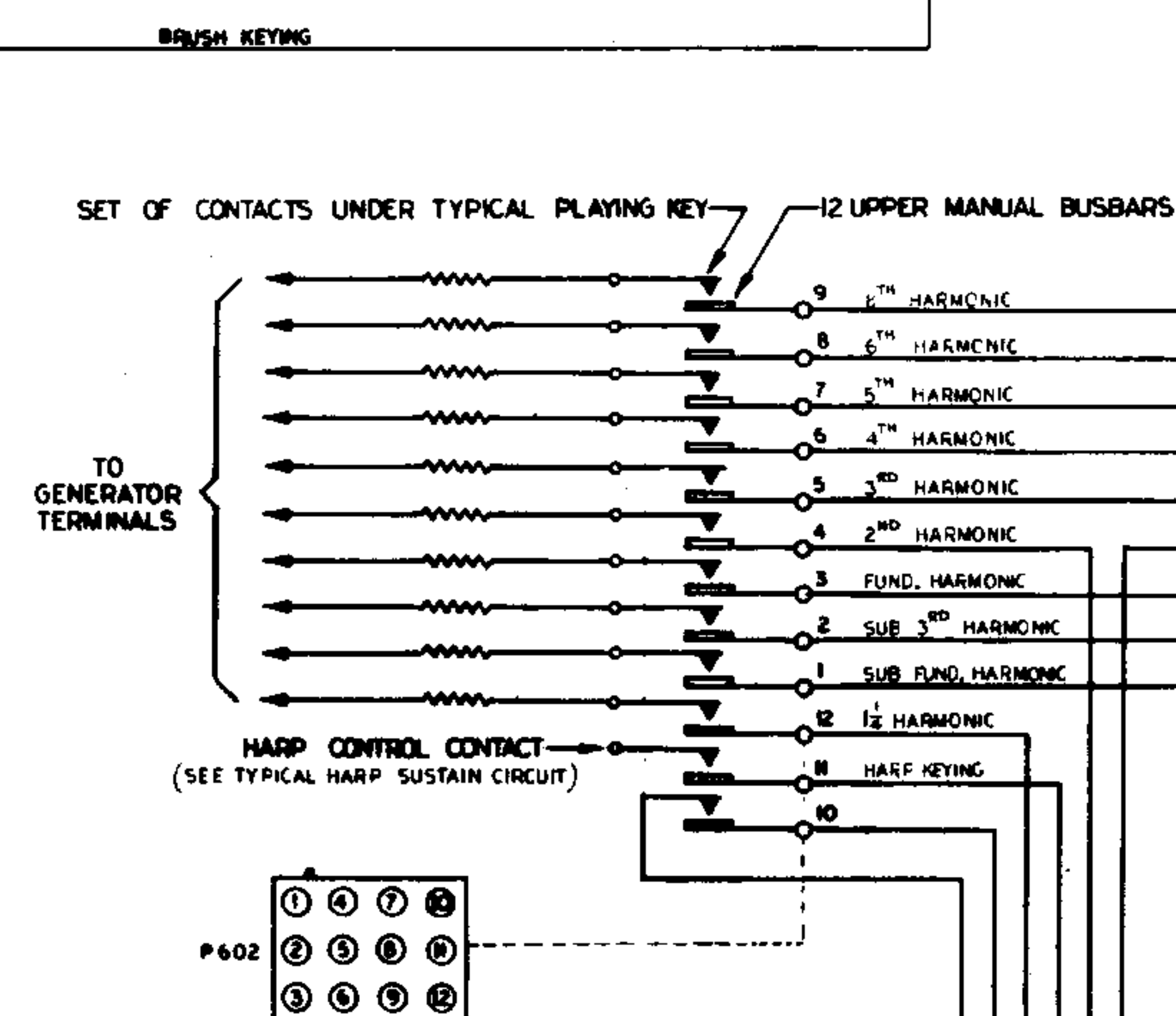
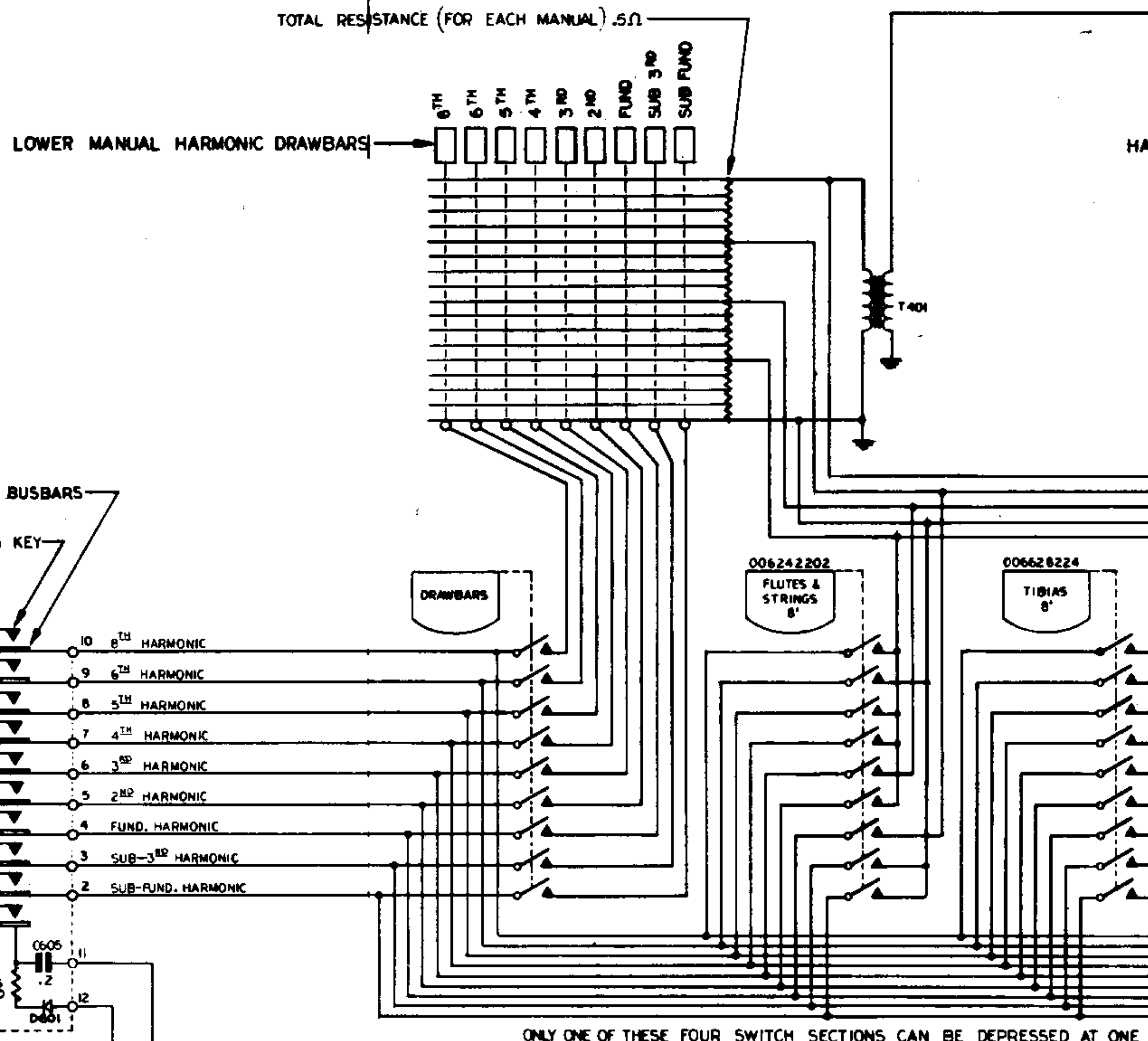
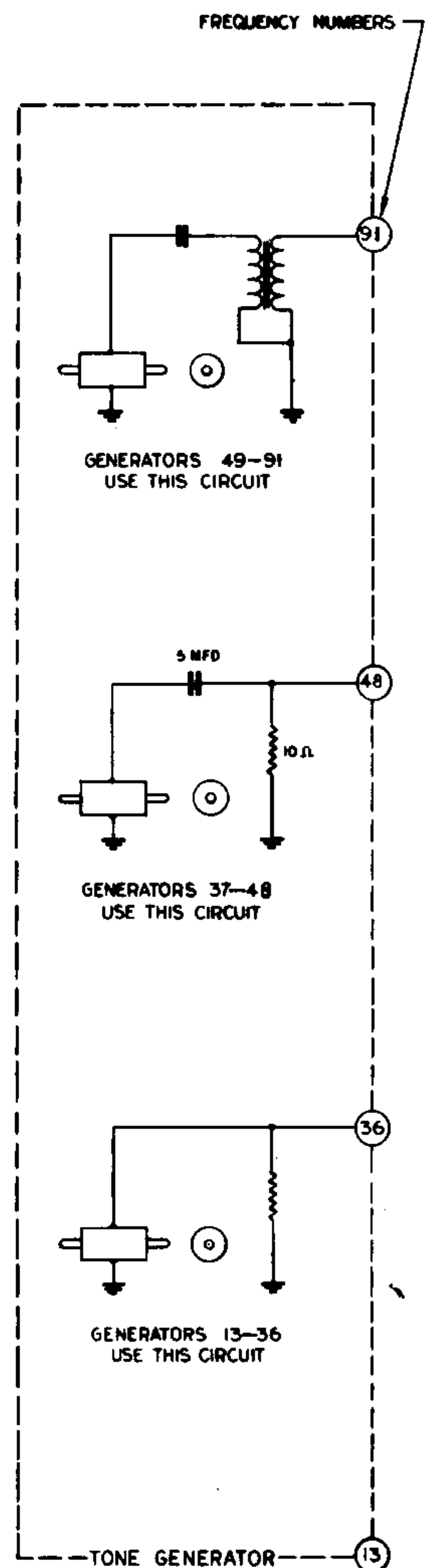
PERCUSSION AMPLIFIER



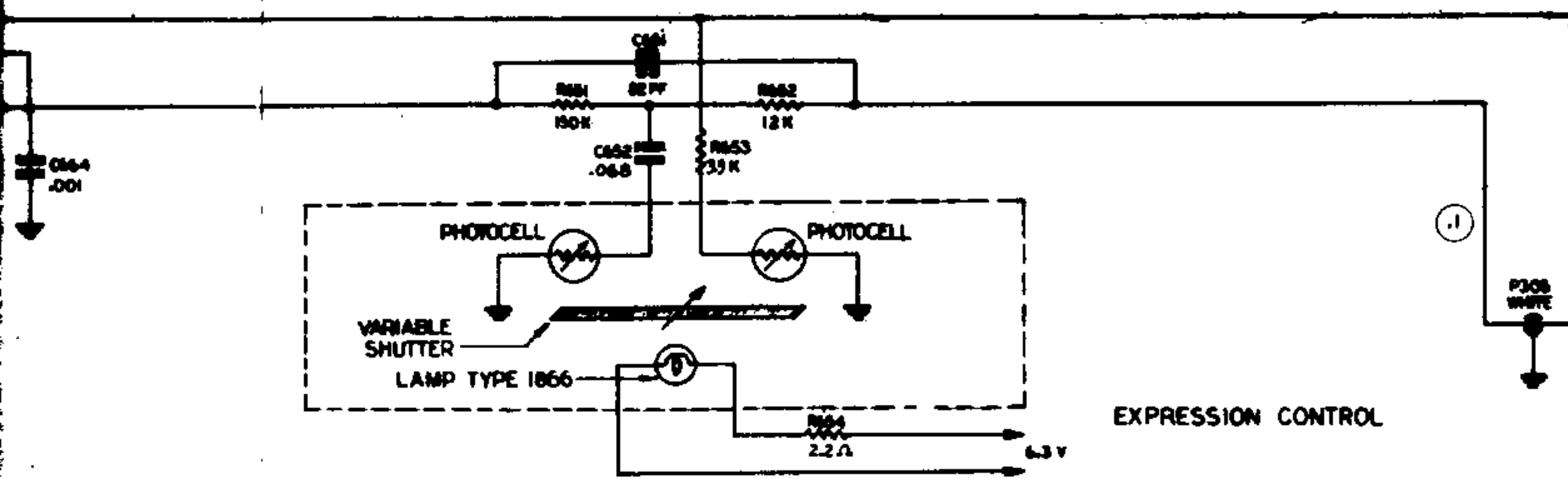
PEDAL SWITCH



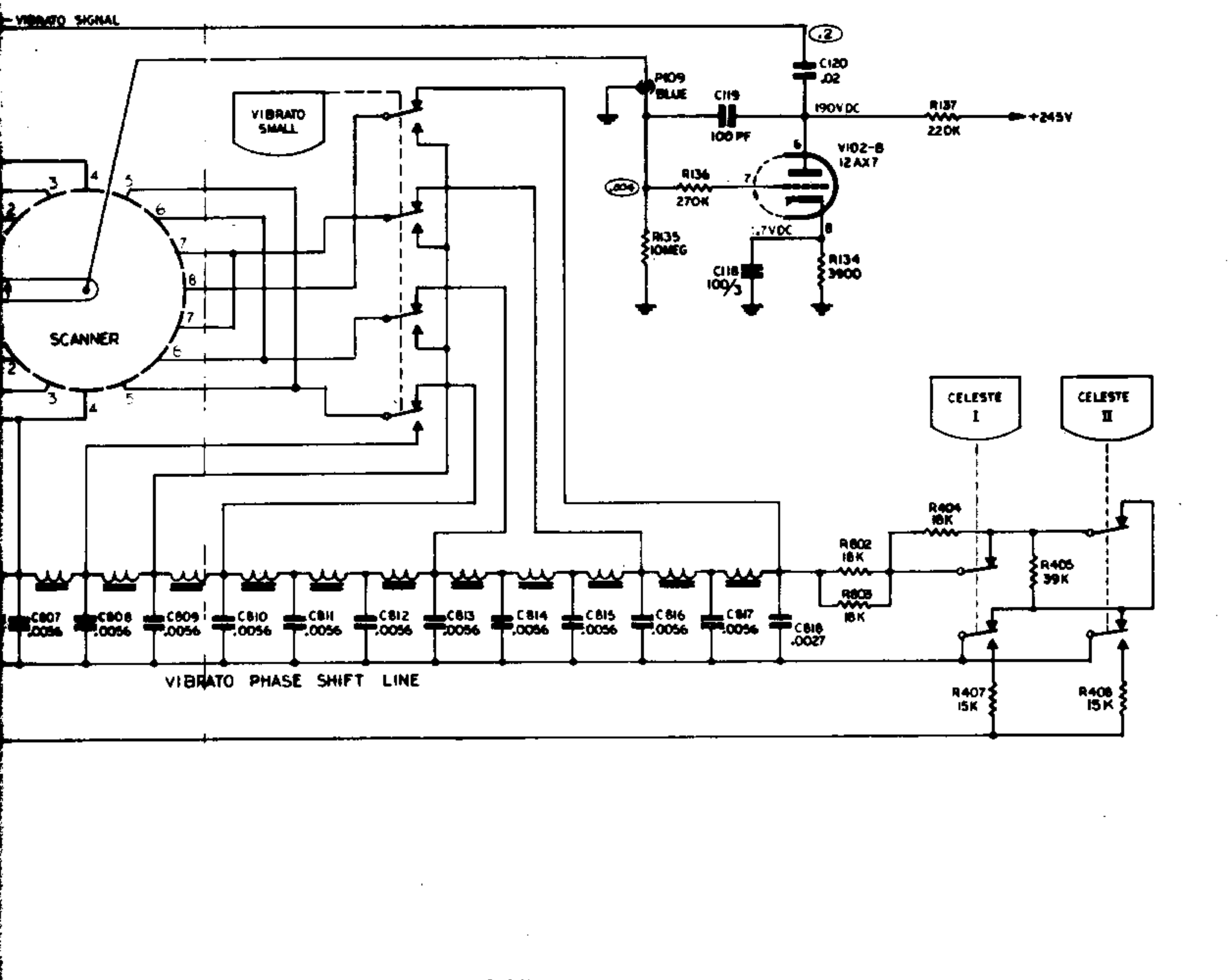
PERCUSSION AND REITERATION DRIVER



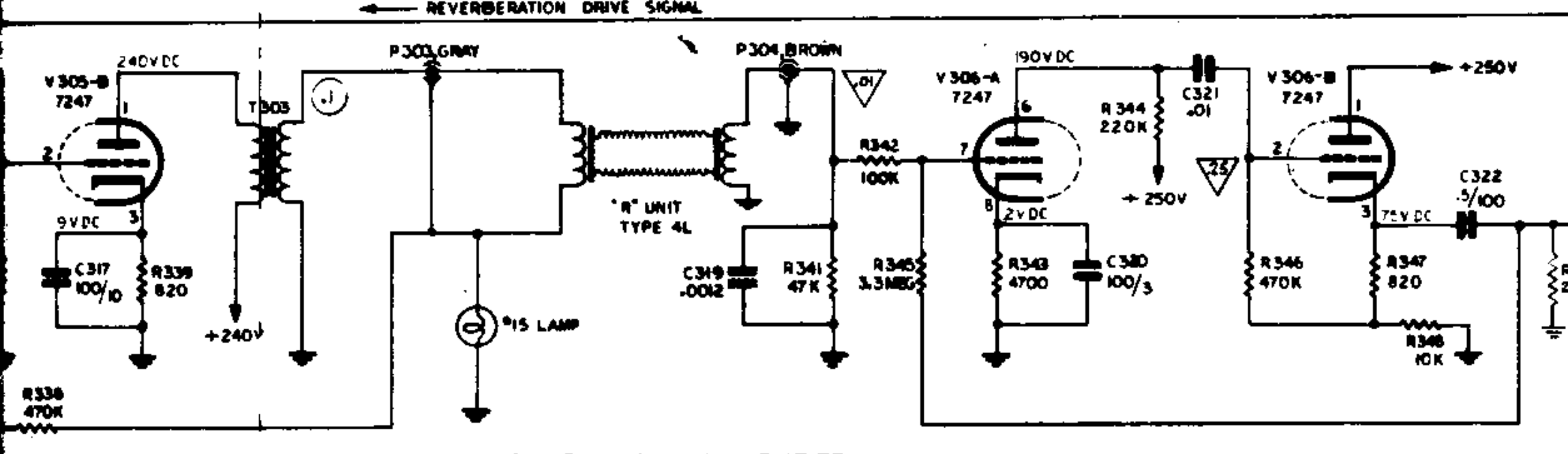




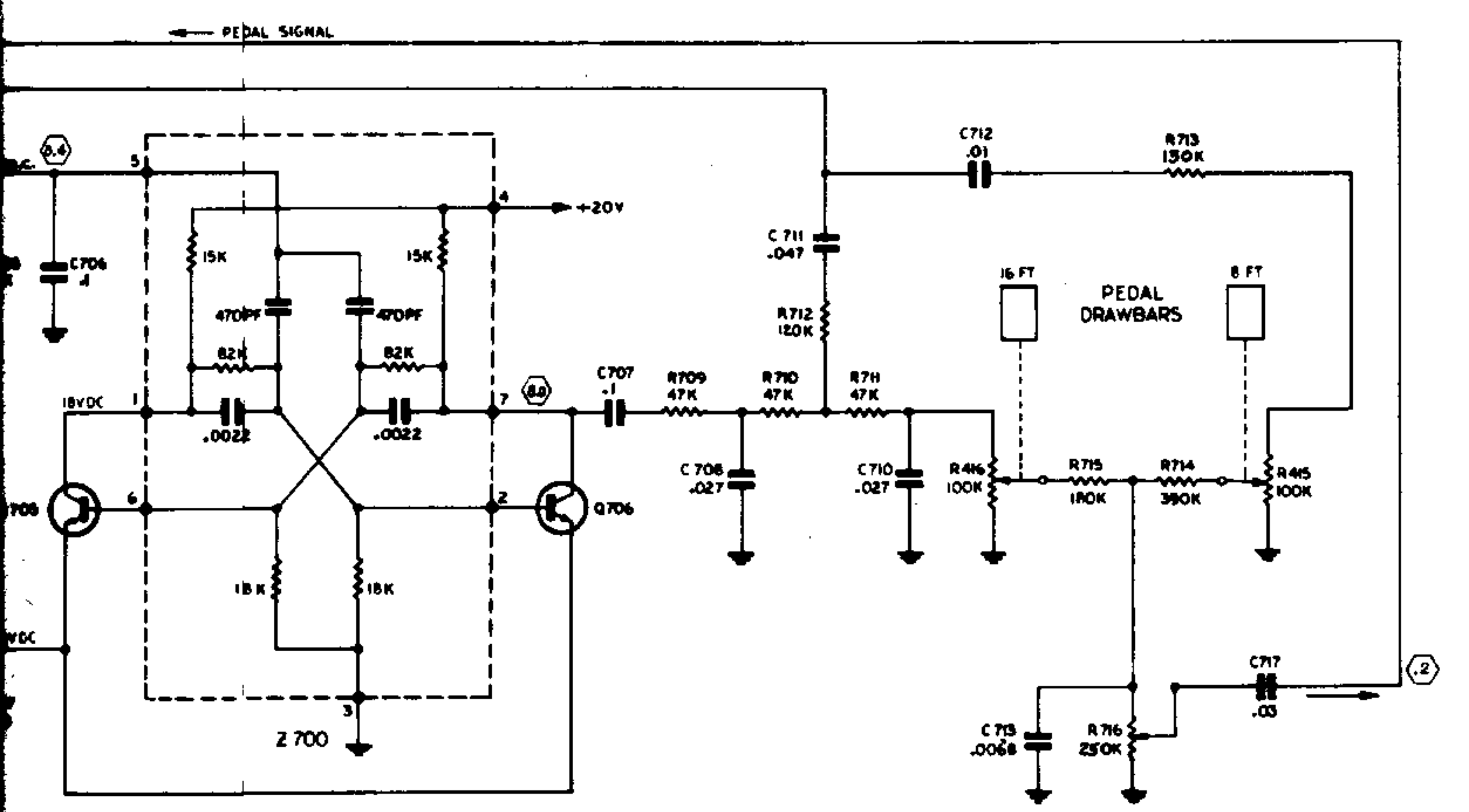
EXPRESSION CONTROL



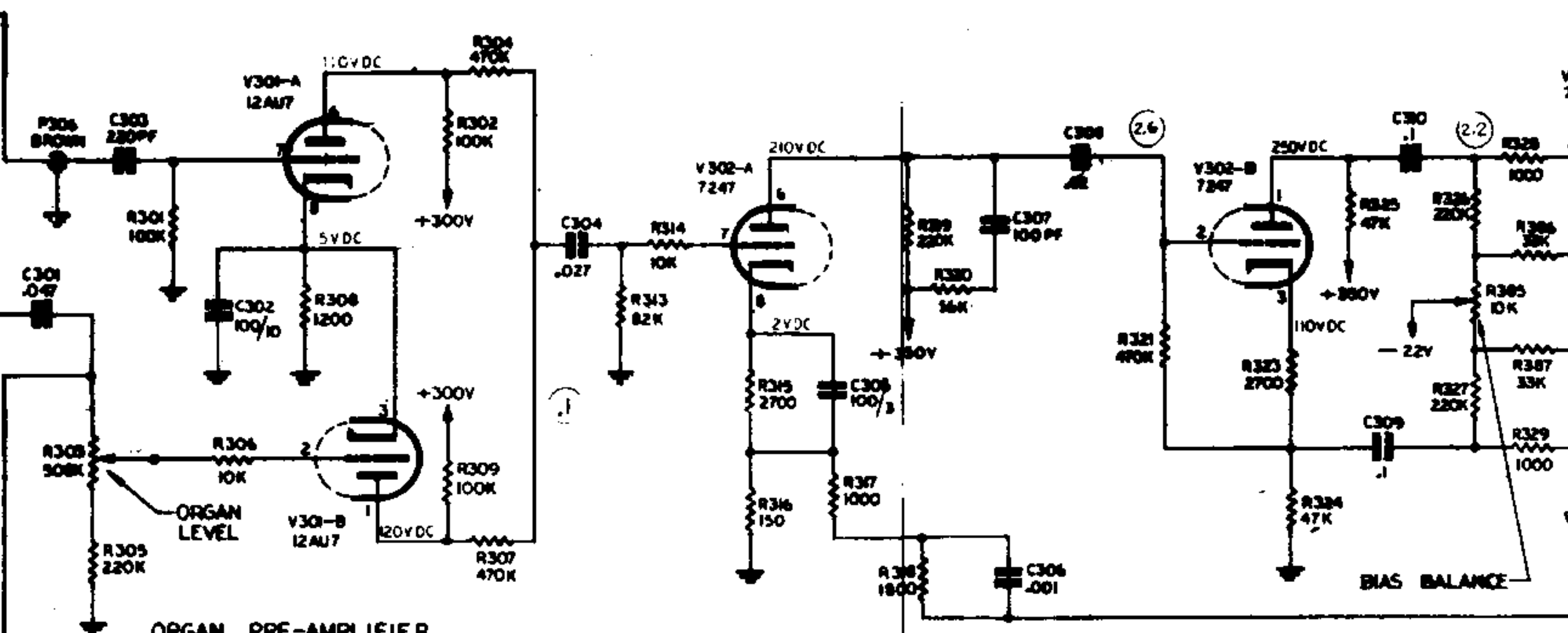
VIBRATO PHASE SHIFT LINE



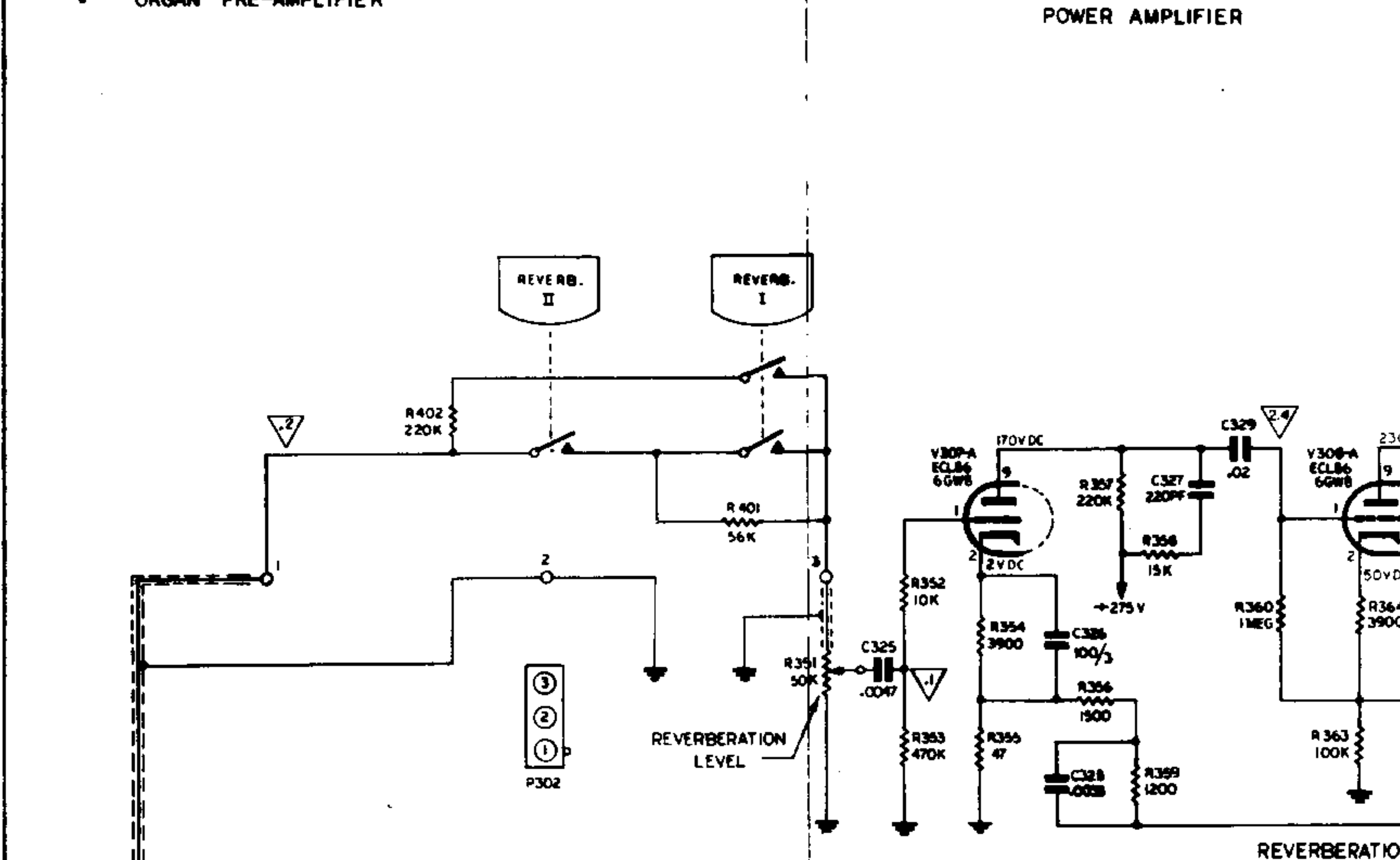
REVERBERATION DRIVER AND PRE-AMPLIFIER



PEDAL PRE-AMPLIFIER AND FREQUENCY DIVIDER

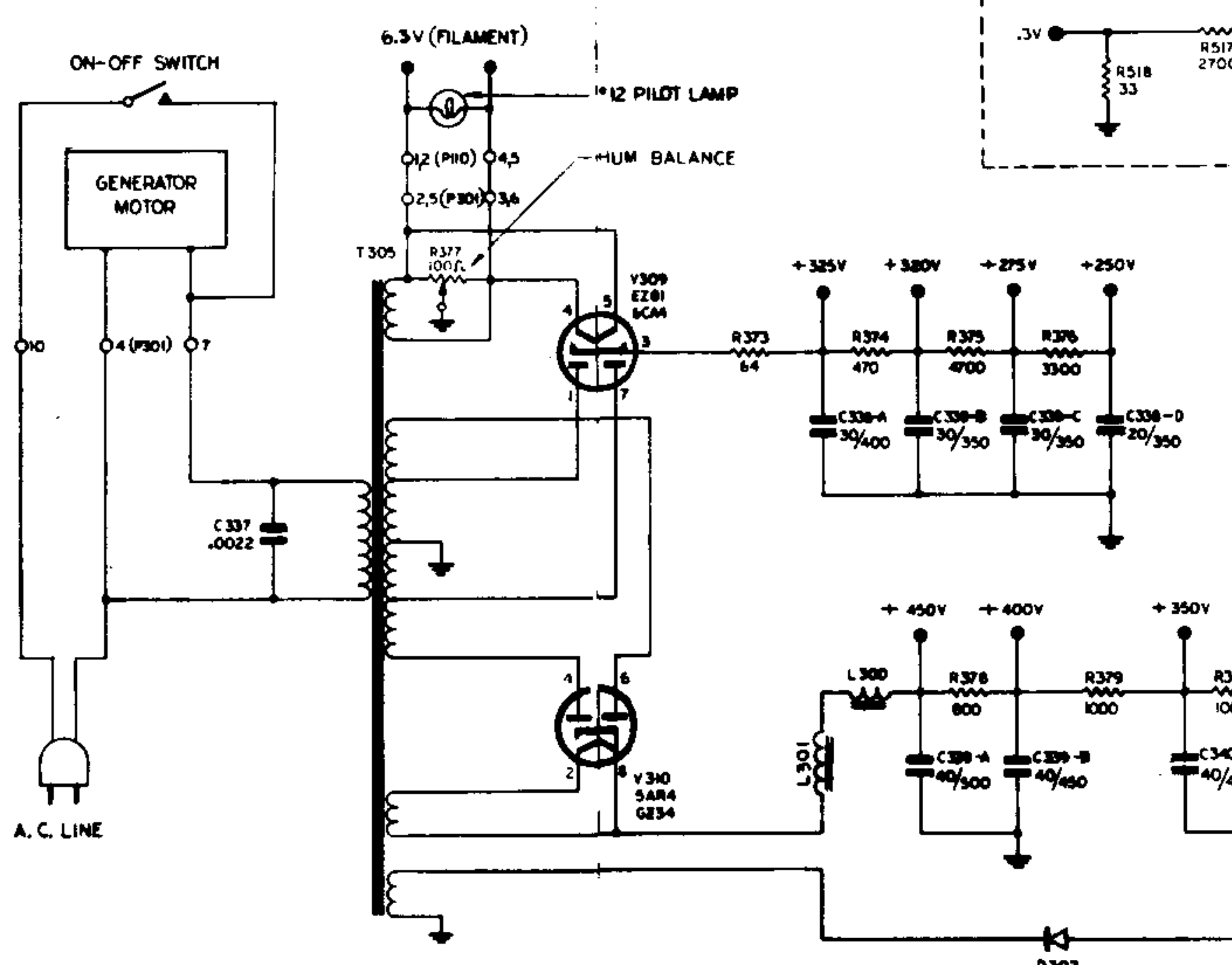


ORGAN PRE-AMPLIFIER



POWER AMPLIFIER

REVERBERATION

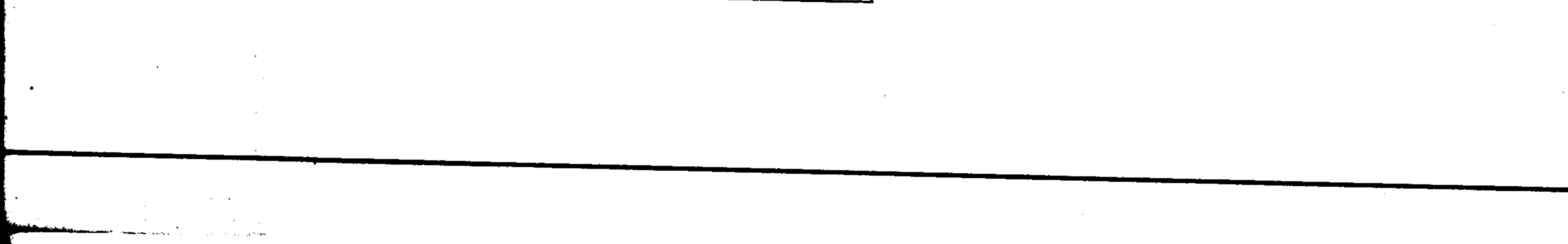
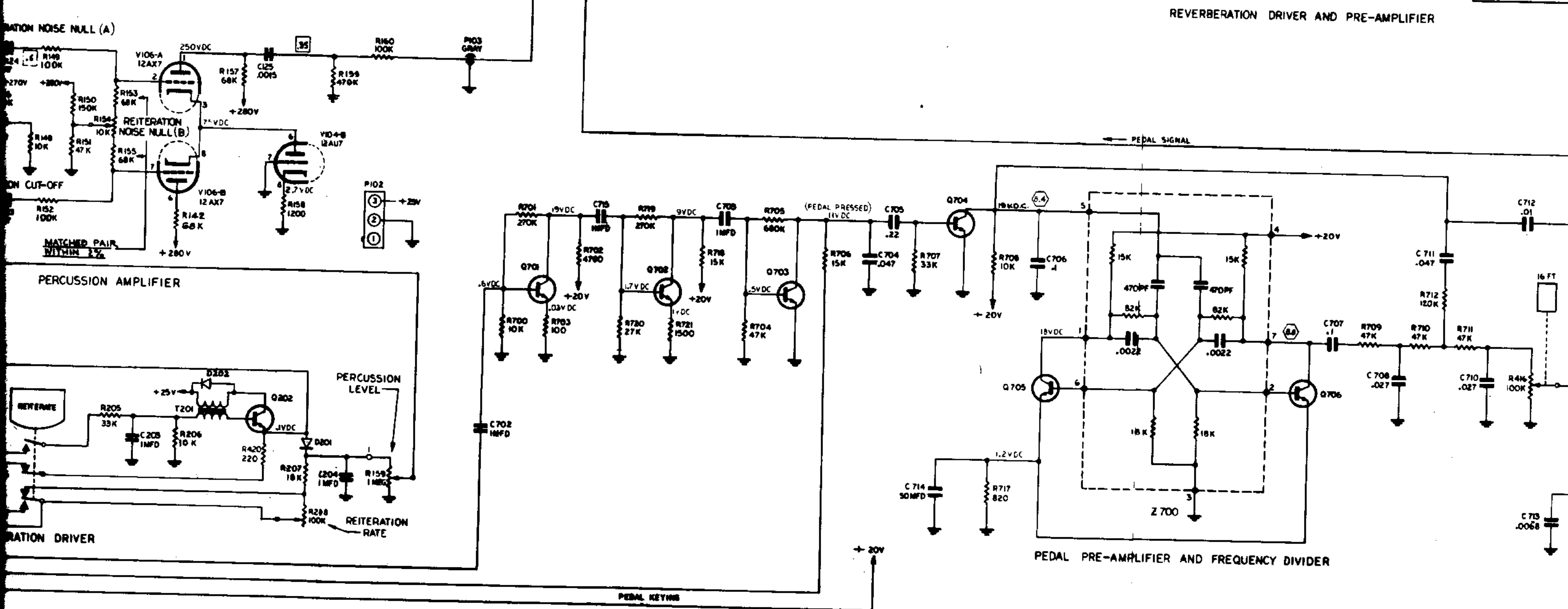
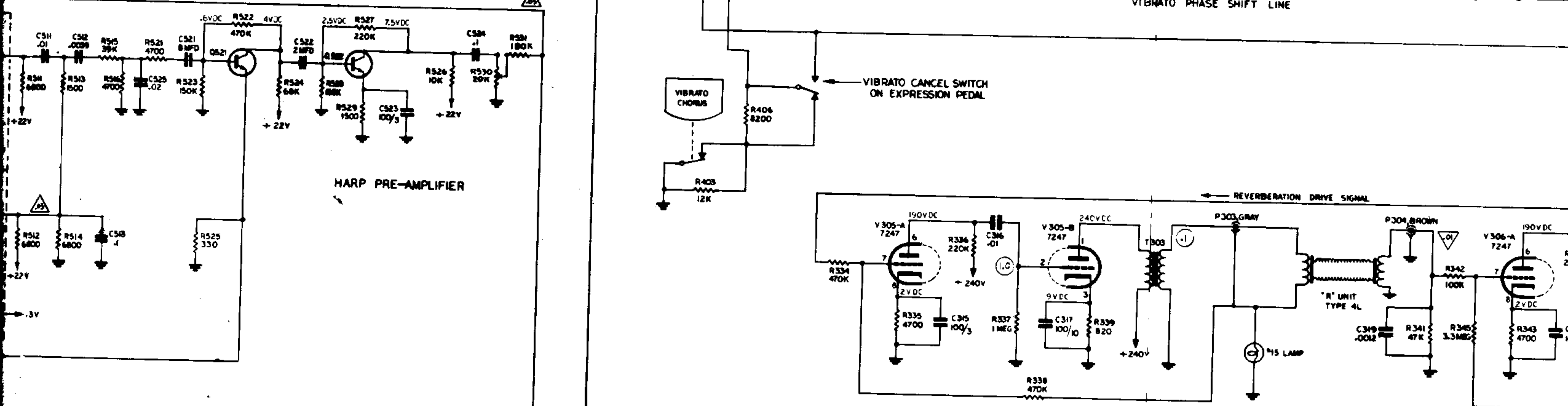
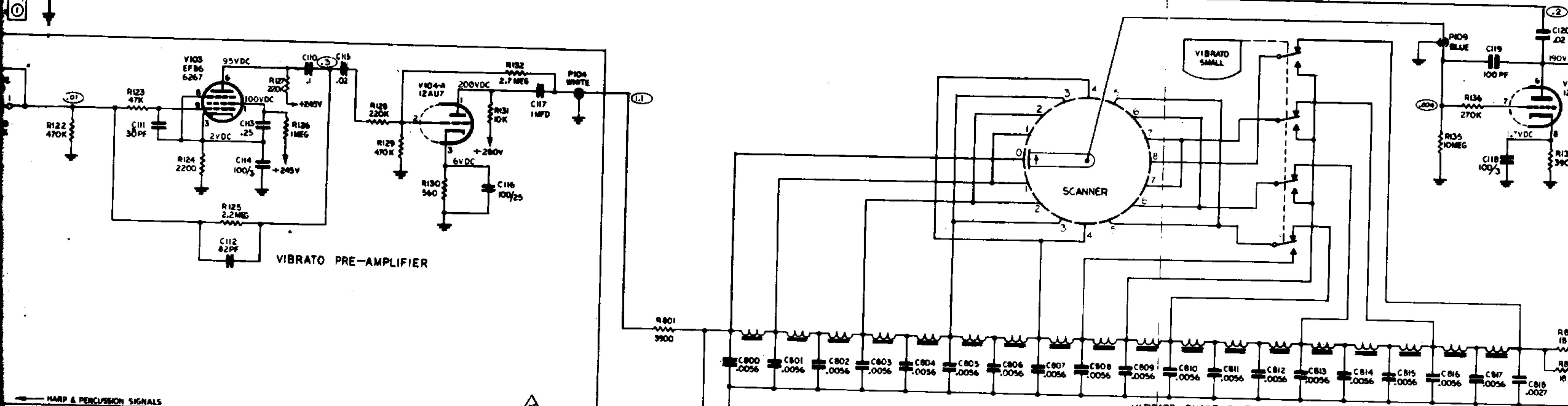
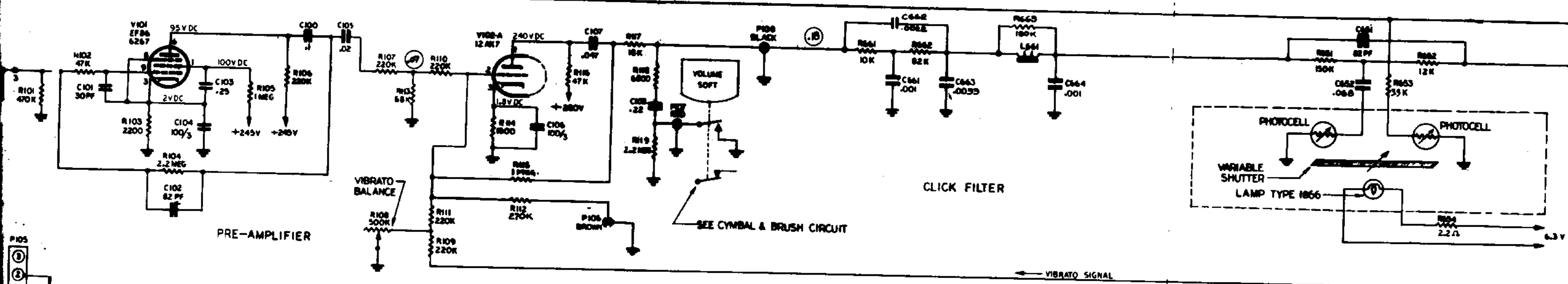


GENERATOR MOTOR

A. C. LINE

- NOTES:
- COMPONENTS NUMBERED 100-199 ARE LOCATED IN THE PERCUSSION AMPLIFIER CHASSIS  
COMPONENTS NUMBERED 200-299 ARE LOCATED IN THE PERCUSSION DRIVER CHASSIS  
COMPONENTS NUMBERED 300-399 ARE LOCATED IN THE POWER AMPLIFIER CHASSIS  
COMPONENTS NUMBERED 400-499 ARE LOCATED IN THE CONTROL ASSEMBLY  
COMPONENTS NUMBERED 500-599 ARE LOCATED IN THE HARP SUSTAIN ASSEMBLY  
COMPONENTS NUMBERED 600-699 ARE LOCATED ON MISCELLANEOUS TERMINALS AND EXPRESSION CONTROL  
COMPONENTS NUMBERED 700-799 ARE LOCATED ON THE PEDAL DIVIDER BOARD  
COMPONENTS NUMBERED 800-899 ARE LOCATED ON THE VIBRATO PHASE SHIFT LINE  
COMPONENTS NUMBERED 900-999 ARE LOCATED ON THE HARP AND CYMBAL BOARD
  - A.C. VOLTAGES (R.M.S.) TEST CONDITIONS (MAX. EXPRESSION ALWAYS).  
    - PLAY 25TH KEY; SUB FUND. DRAWBAR AT 8; NO VIBRATO.
    - PLAY 25TH KEY; SUB FUND. DRAWBAR AT 8; WITH VIBRATO.
    - PLAY 12TH PEDAL; 16 FT. DRAWBAR AT 8.
    - PLAY 25TH KEY; "HARP" AND "REITER." ON; REITER. RATE AT MAX.
    - △ PLAY 13TH KEY; "HARP SUSTAIN" ON.
    - ▽ PLAY FIRST 5 KEYS; DRAWBARS 000607000; FULL REVERB.
  - ALL INDICATED D.C. VOLTAGES ARE MEASURED TO GROUND USING A V.T.V.M.
  - DENOTES CONTACT OF A CONNECTOR SHOWN NEARBY.
  - V105 SELECTED PER H.O. CO. SPEC. Q2-1





TOTAL RESISTANCE (FOR EACH MANUAL) .5Ω

LOWER MANUAL HARMONIC DRAWBARS

UPPER MANUAL HARMONIC DRAWBARS

