

Figure 22 - Placement of Tubes, Controls and Filter Condenser

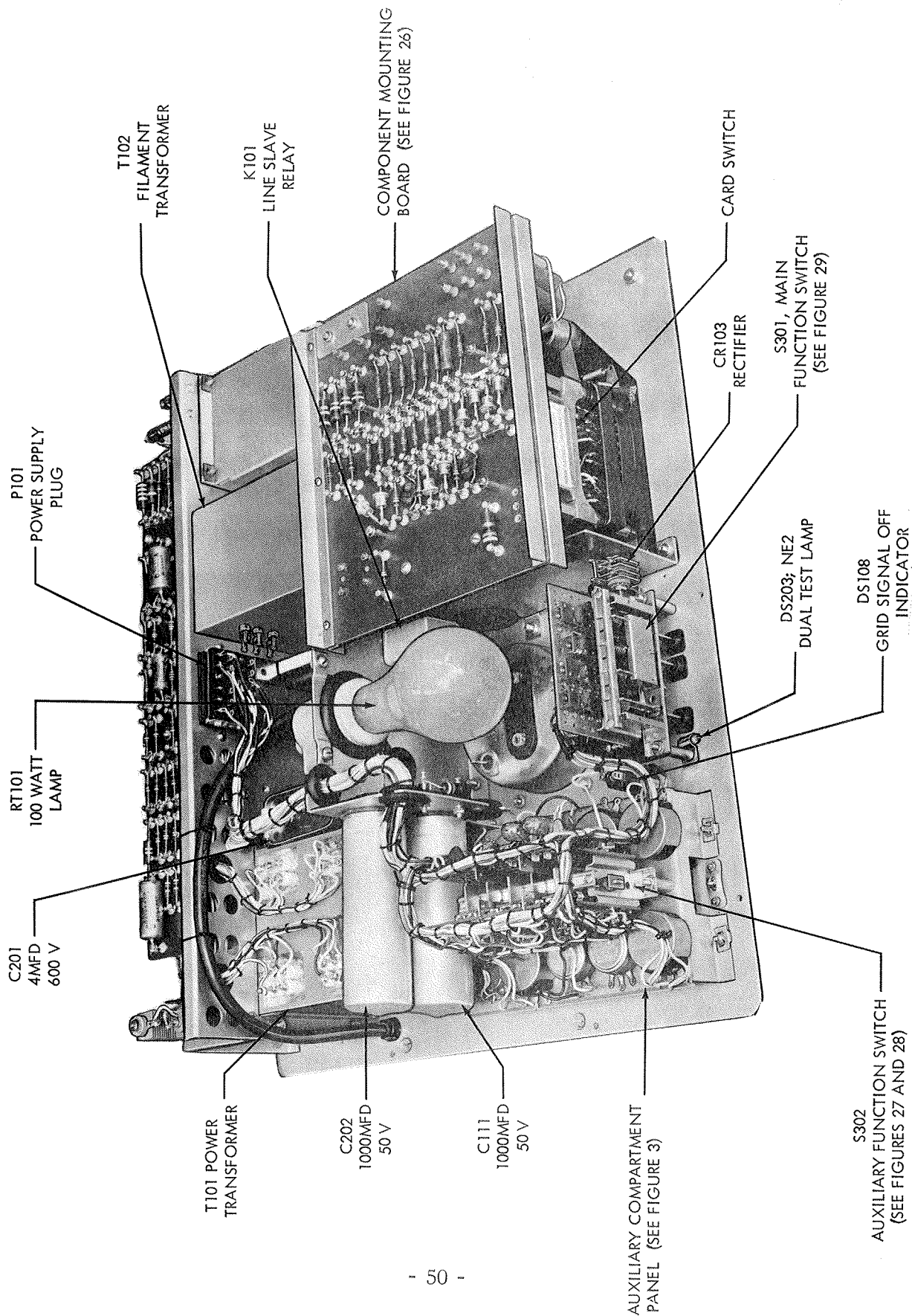


Figure 23 - Assembly Identification and Miscellaneous Parts

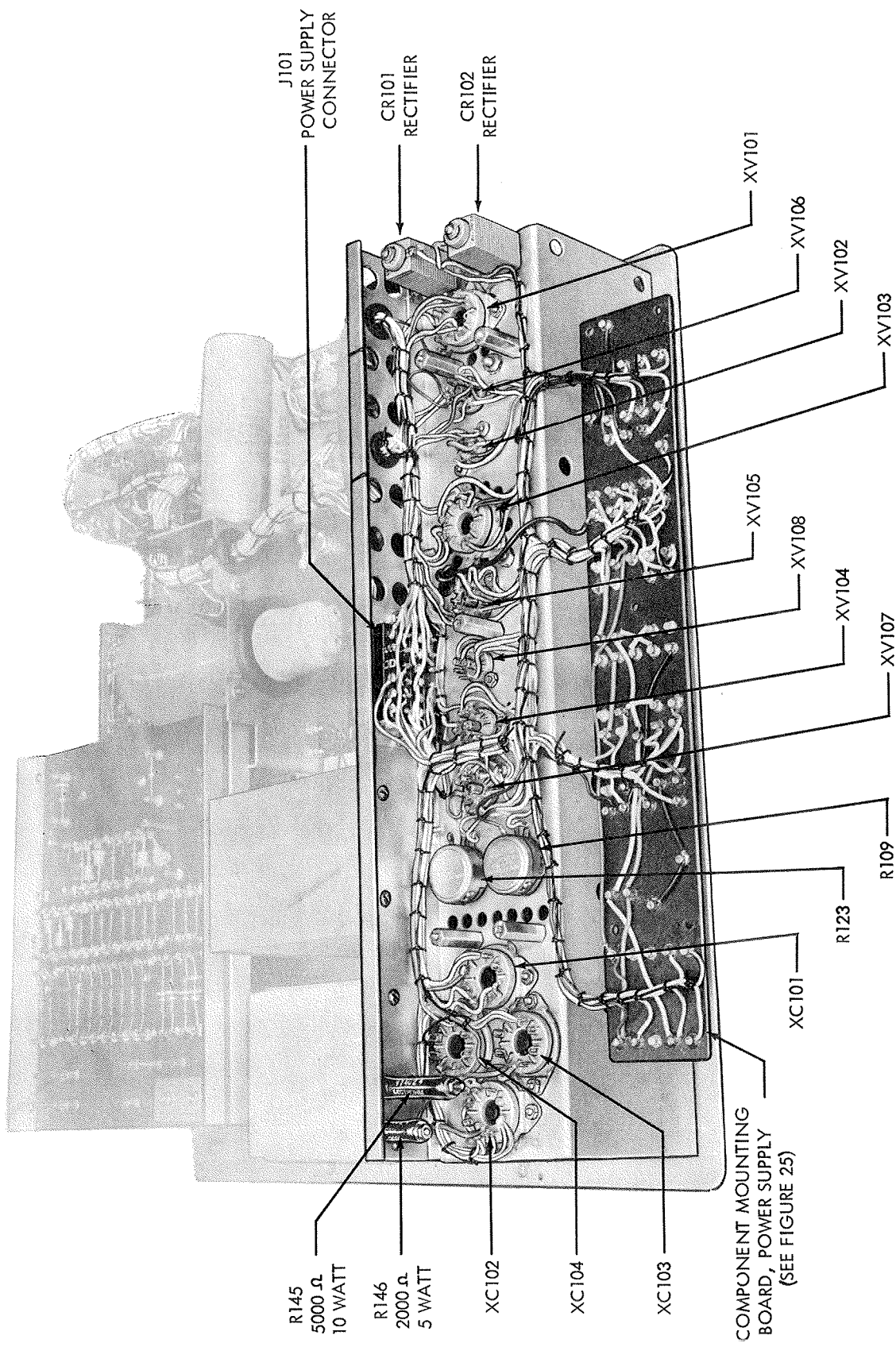
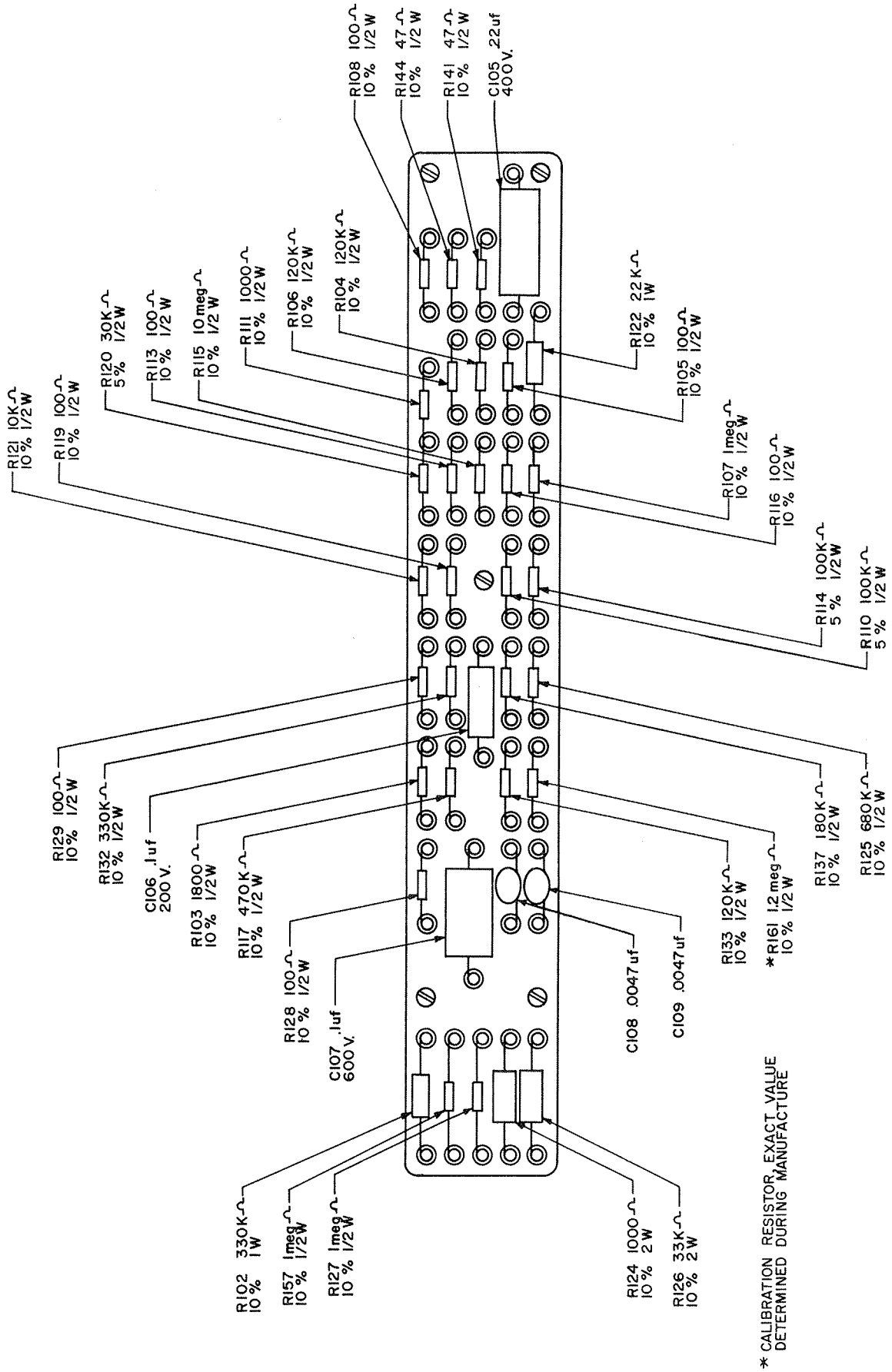


Figure 24 - Power Supply Component Location



* CALIBRATION RESISTOR EXACT VALUE DETERMINED DURING MANUFACTURE

Figure 25 - Power Supply Component Board

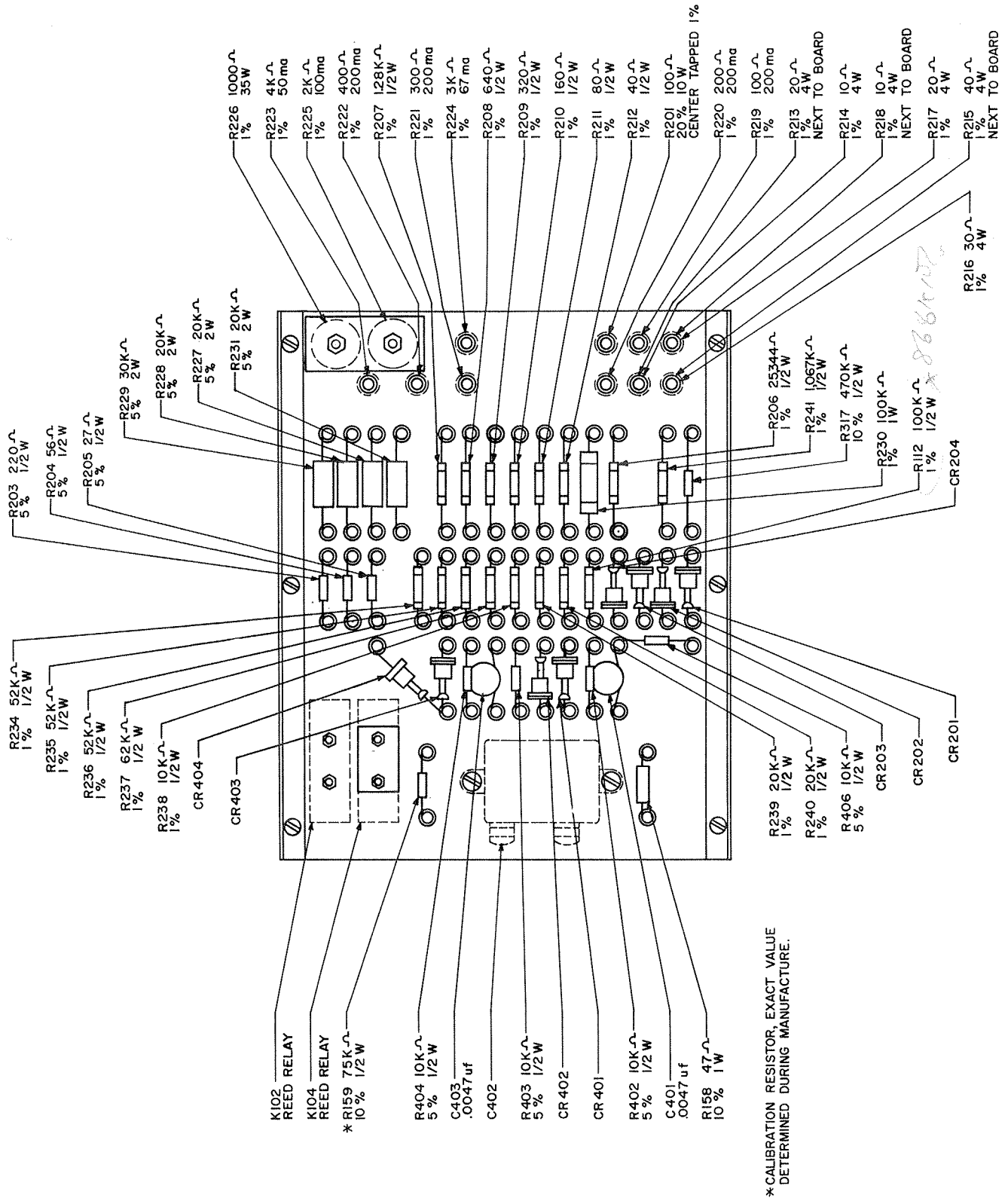


Figure 26 - Card Switch Component Mounting Board

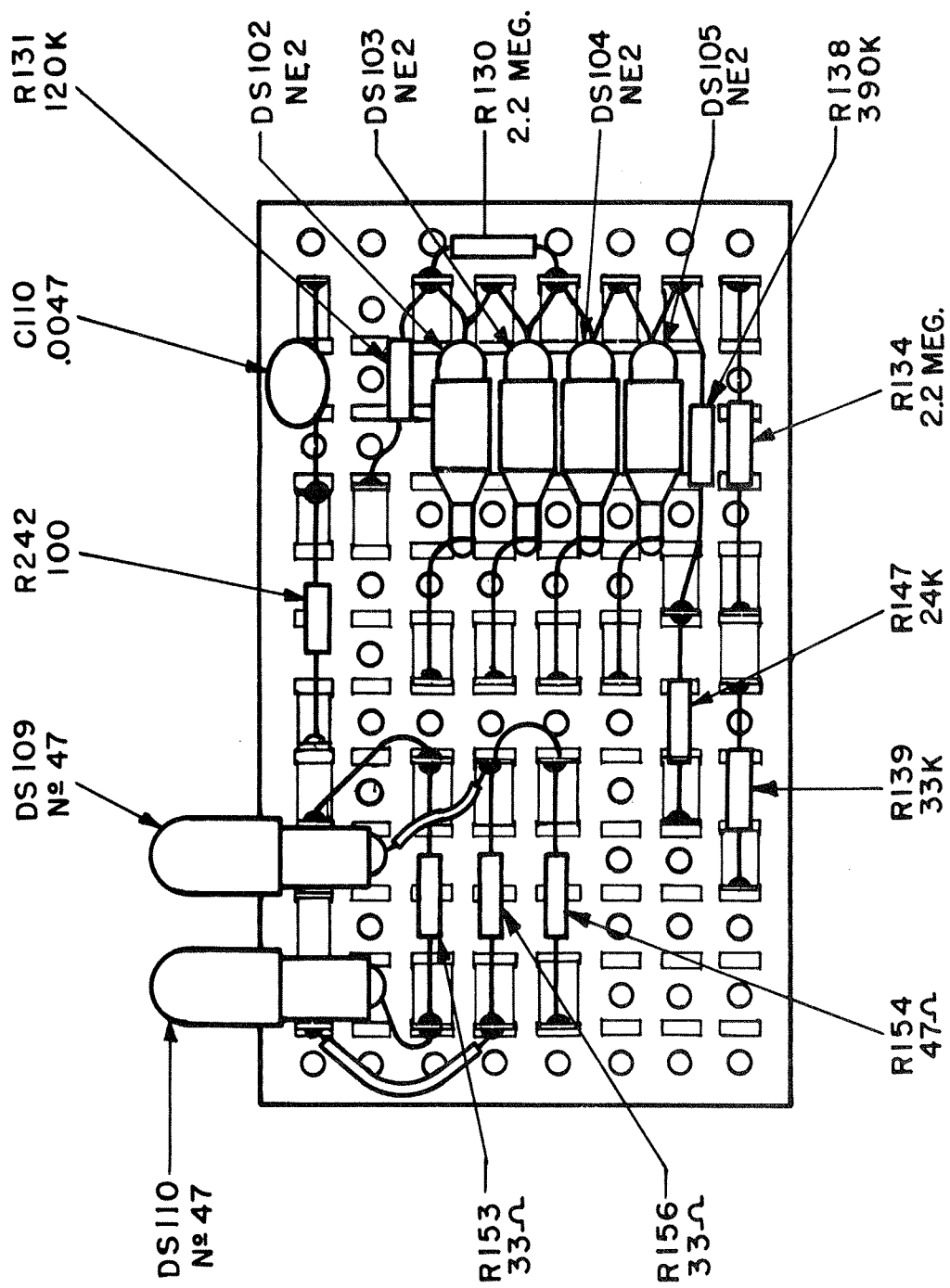


Figure 27 - Auxiliary Function Switch - Inside View

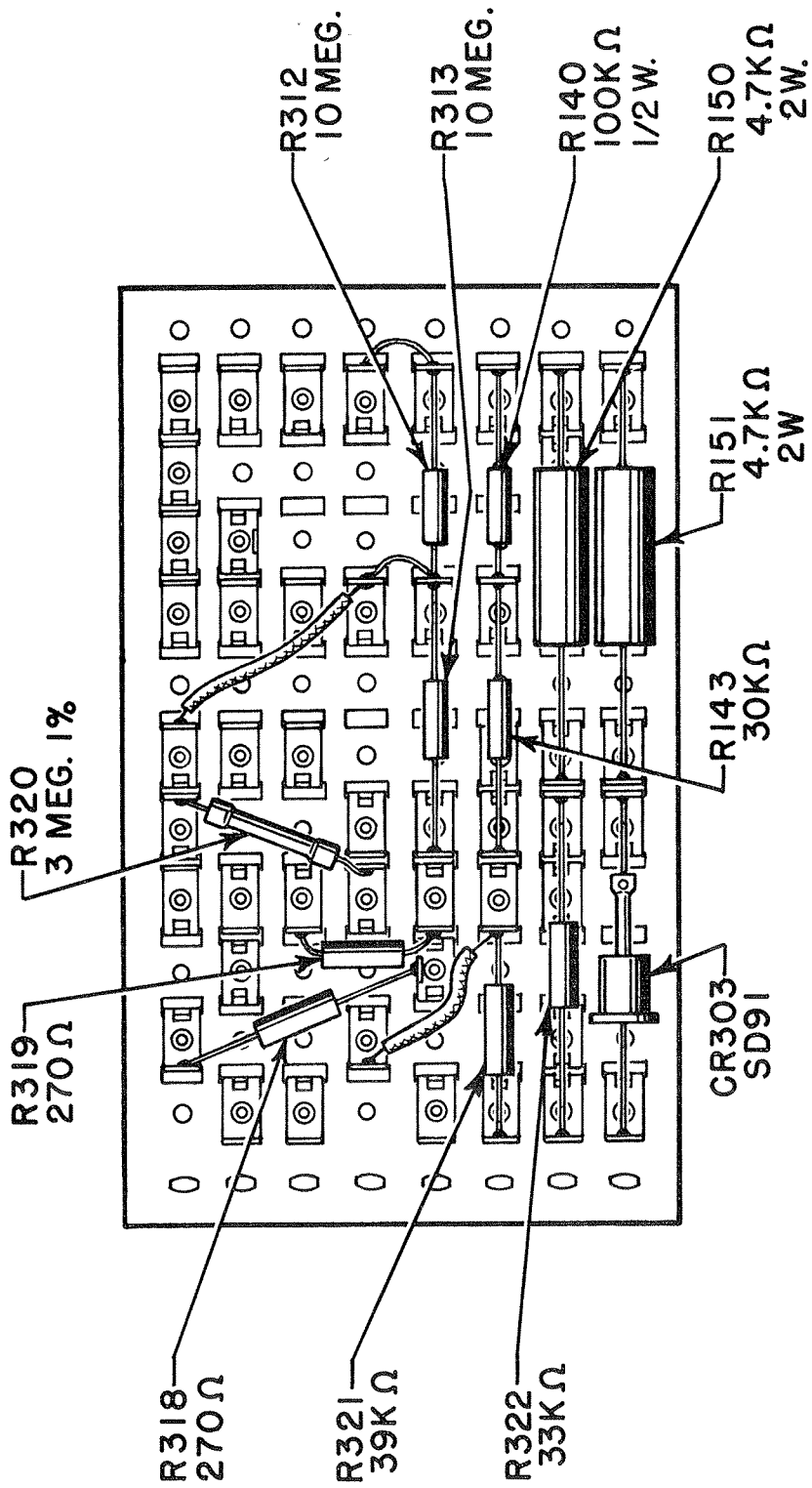


Figure 28 - Auxiliary Function Switch - Outside View

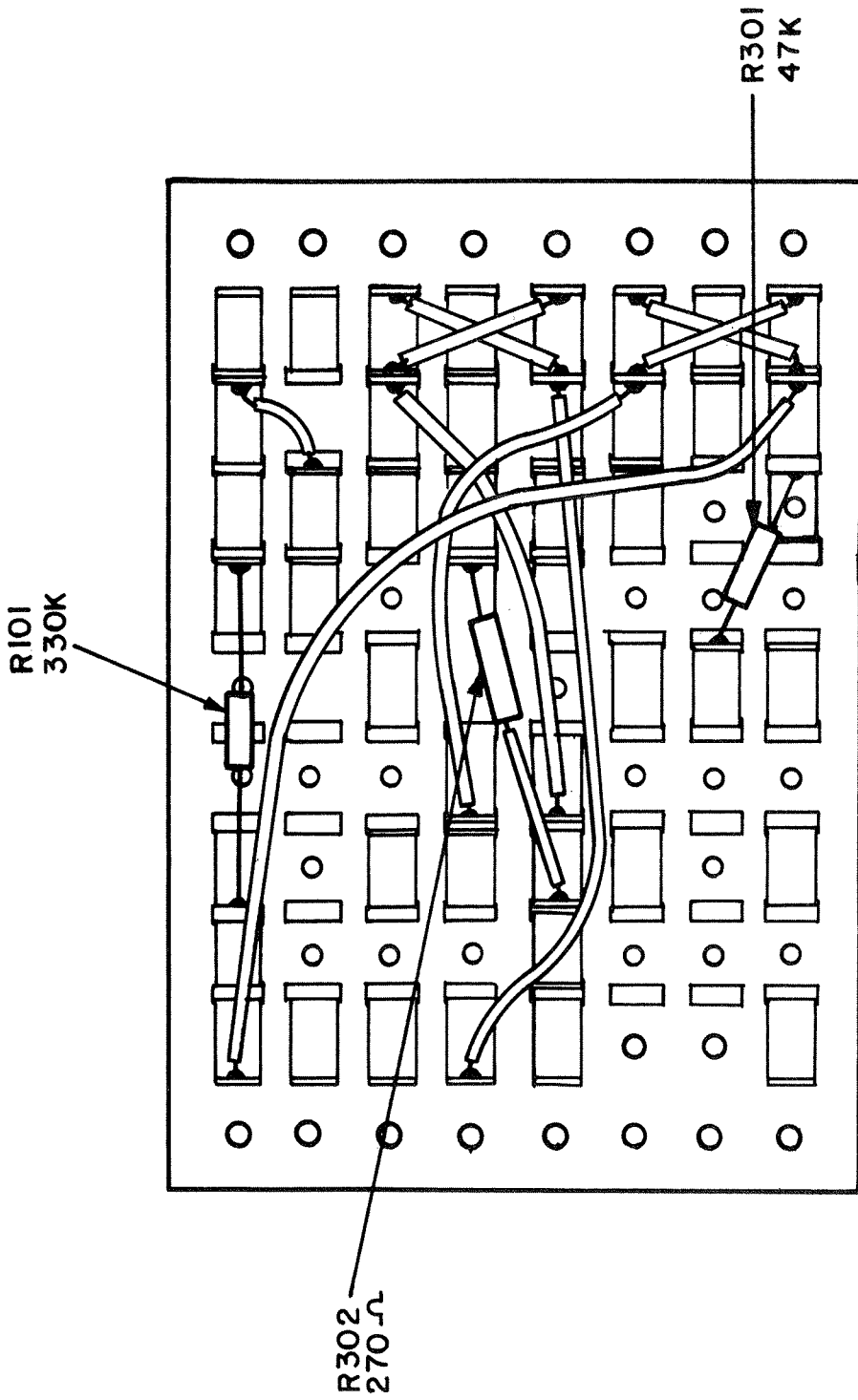


Figure 29 - Main Function Switch

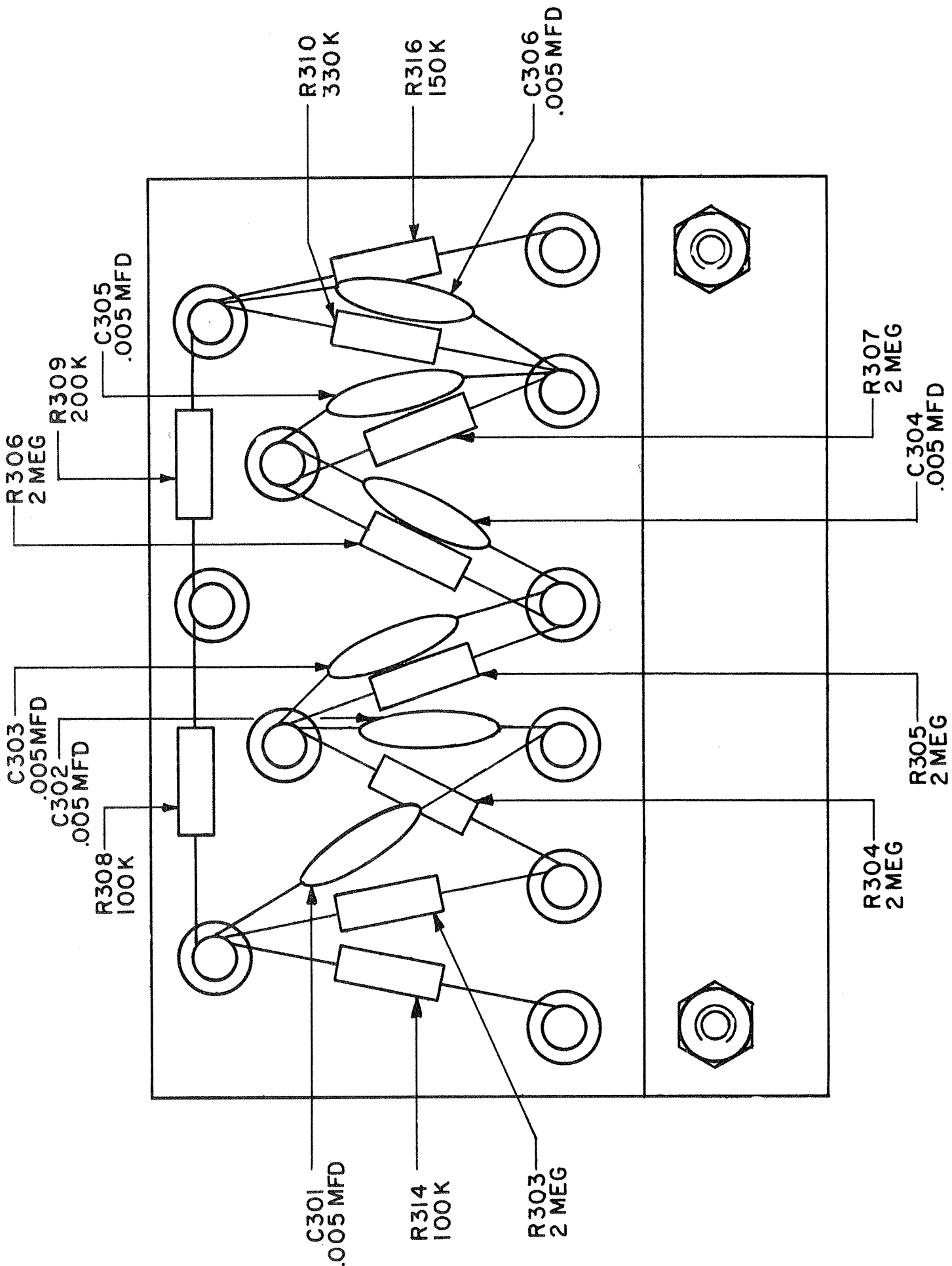


Figure 30 - Short Test Assembly

7. PARTS LIST

7.1 Introduction

Reference designations have been assigned to identify all maintenance parts of the equipment. They are used for marking the equipment (adjacent to the part they identify when practical) and are included on drawings, diagrams and the parts list. The letters of a reference designation indicate the kind of part (generic group), such as resistor, capacitor, electron tube, etc. The number differentiates between parts of the same group. Parts associated directly with the complete equipment are numbered from 1 to 99. Parts associated with the power supply circuit are numbered from 100 to 199; parts associated with automatic circuit selection from 200 to 299; parts associated with automatic tube pin selection from 300 to 399; and those associated with the test socket sub assembly from 400 to 499. Sockets associated with a particular plug-in device such as an electron tube, fuse or lamp are identified by a reference designation which includes the reference designation of the plug-in device. For example, the socket for electron tube V101 is designated XV101 and the socket for plug-in capacitor C101 is XC101.

7.2 Maintenance Parts List

Table 7-1 lists all maintenance parts for the equipment. Column 1 lists the reference designations in alpha numeric sequence. Column 2 refers to explanatory notes that may appear in paragraph 7.5 below. Column 3 gives the name and a brief description of all key parts (parts differing from any part previously listed in the table). The name and description are omitted for other parts and the notation "Same as (followed by the reference designation of the corresponding key part)" is substituted.

Column 4 indicates how the part is used and gives its functional location in the equipment. It also includes the pictorial illustration, if any, on which the part is identified.

7.3 Stock Number Identification

Stock numbers of parts used in this equipment can be obtained by referring to the Stock Number Identification Table (SNIT) published by E. S. O.

7.4 List of Manufacturers.

Table 7-2 lists manufacturers of parts used in the equipment. The first column indicates the abbreviations used in Table 7-1 to identify manufacturers.

7.5 Notes

The following provides additional information about items listed in Table 7-1.

- a. Neon Glow Lamps DS300 through DS305, are selected for uniform striking voltage and should be replaced as a set.
- b. Diodes CR401 through CR404 are supplied as a matched set. Do not attempt to replace individual units.

TABLE 7-1 PARTS LIST

REF. DESIG.	NOTES	ITEM NAME AND DESCRIPTION	LOCATING FUNCTION
A1		PIN STRAIGHTENER ASSEMBLY, ELECTRON TUBE: combination 7 pin miniature and 9 pin noval on common mtg. base, Duro part no. D-279-S	Used to straighten and align tube pins before inserting in test socket. Figure 2.
C101		CAPACITOR, FIXED, ELECTROLYTIC: 3 sections, 15 μ f, 450v dcw ea section, MIL-C-62A type no. CE53F150R	Input filter capacitor to extra high B+ supply. Figure 22
C101A		part of C101	
C101B		part of C101	Output filter capacitor to extra high B+ supply. Figure 22.
C101C		part of C101	Filter capacitor in +150v short test supply. Figure 22.
C102		CAPACITOR, FIXED, ELECTROLYTIC: 2 sections, 20 μ f, 450 v dcw ea section, MIL-C-62A type no. CE52F200R	Filter capacitor in unregulated B+ supply circuit. Figure 22.
C102A		part of C102	
C102B		part of C102	Supplies power to cardswitch release solenoid L101. Figure 22.
C103		CAPACITOR, FIXED, ELECTROLYTIC: one 25 μ f section, 450v dcw, MIL-C-62A type no. CE51F250R	Input capacitor to -150v regulated power supply. Figure 22.
C104		CAPACITOR, FIXED, ELECTROLYTIC: one 35 μ f section, 450v dcw, MIL-C-62A type no. CE51F350R	Output capacitor to -150v regulated power supply. Figure 22.
C105		CAPACITOR, FIXED, PAPER DIELECTRIC: single 220,000 μ mf section, \pm 10%, 400v dcw, MIL-C-25C type no. CP05A1KE224K1	Filter capacitor in main regulated B+ power supply circuit. Figure 25.
C106		CAPACITOR, FIXED, PAPER DIELECTRIC: single 100,000 μ mf section, \pm 10%, 200 v dcw, MIL-C-25C type no. CP05A1KC104K1	Filter capacitor in grid circuit of V105B. Fig. 25.

TABLE 7-1 PARTS LIST (Cont)

REF. DESIG.	NOTES	ITEM NAME AND DESCRIPTION	LOCATING FUNCTION
C107		CAPACITOR, FIXED, PAPER DIELECTRIC: Single 100,000 μf section, $\pm 10\%$, 600v dcw, MIL-C-25C type no. CP05A1KF104K1	Filter capacitor in grid circuit V107A aux. B+ supply. Figure 25.
C108		CAPACITOR, FIXED, CERAMIC DIELECTRIC: single 4700 μf section, $\pm 10\%$ - 20%, 500v dcw, Erie part no. ED-.0047	Filter capacitor in grid circuit of V107B of +150 regulated short test supply. Figure 25.
C109		Same as C108	Bypass capacitor to chassis from 0 volts. Figure 25.
C110		Same as C108	Filter capacitor in positive bias supply connected to R136. Figure 27.
C111		CAPACITOR, FIXED, ELECTROLYTIC: one 1000 μf section, 50 v dcw, hermetically sealed, Hickok part no. 3085-124	Filter capacitor in overload circuit of regulated main B+ supply circuit. Figure 23
C112 thru C200		not used	
C201		CAPACITOR, FIXED, PAPER DIELECTRIC: one 4 μf section, $\pm 10\%$, 600v dcw, MIL-C-25C type no. CP70B1EF405K1	Input capacitor for rectifier under test. Fig. 23.
C202		same as C111	Cathode bypass capacitor for self bias on tube under test. Figure 23.
C203-C300		not used	
C301		same as C108	Stabilizing capacitor for short test neon DS301. Figure 30.
C302		same as C108	Stabilizing capacitor for short test neon DS302. Figure 30.
C303		same as C108	Stabilizing capacitor for short test neon DS303. Figure 30

TABLE 7-1 PARTS LIST (Cont)

REF. DESIG.	NOTES	ITEM NAME AND DESCRIPTION	LOCATING FUNCTION
C304		same as C108	Stabilizing capacitor for short test neon DS304. Figure 30.
C305		same as C108	Stabilizing capacitor for short test neon DS305. Figure 30.
C306		same as C108	Bypass capacitor for R310 in short test circuit, Figure 30.
C307 thru C400		not used	
C401		same as C108	Bypass capacitor in meter bridge circuit. Figure 26.
C402		CAPACITOR, FIXED, ELECTROLYTIC: one 1000 μ f section, 6v dcw, hermetically sealed, Hickok part no. 3085-125	Differential capacitor in Gm bridge circuit. Figure 26.
C403		same as C108	Bypass capacitor across 10v RMS input to Gm bridge. Figure 26
CR101		RECTIFIER, METALLIC: Full-wave circuit, single phase, full-wave rectification, Int. Rect. part no. 61-24-33.	Rectifier in -150 regulated power supply circuit. Figure 24.
CR102		same as CR101	same as CR101
CR103		RECTIFIER, METALLIC: full-wave bridge, single phase, full-wave rectification, Int. Rect. part no. 59-1028.	Rectifier for power supply of slave relay K101. Figure 23.
CR104 thru CR200		not used	
CR201		SEMICONDUCTOR DEVICE, DIODE: silicon type, Int. Rect. part no. SD-91.	Part of dc filament rectifier. Figure 26.

TABLE 7-1 PARTS LIST (Cont)

REF. DESIG.	NOTES	ITEM NAME AND DESCRIPTION	LOCATING FUNCTION
CR202		same as CR201	(same as CR201)
CR203		same as CR201	(same as CR201)
CR204		same as CR201	(same as CR201)
CR205 thru CR300		not used	
CR301		same as CR201	Overload protection diode for meter M301. Figure 2.
CR302		same as CR201	same as CR301
CR303		same as CR201	Rectifier for filament standardization circuit. Figure 28.
CR304 thru CR400		not used	
CR401 402 403 404	b	SEMICONDUCTOR DEVICE SET, DIODE: silicon type, Hickok part no. 3870-42 (Matched set of 4)	Matched diodes in Gm bridge circuit.
DS101		LAMP, GLOW: neon gas type, 1/25w, 65v ac - 90 v dc striking voltage, Hickok part no. 12270-43	Blown fuse indicator lamp for fuse F101 in Aux B+ supply circuit. Figure 2.
DS102		same as DS101	Reference voltage regulator in +150v short test supply circuit. Figure 27
DS103		same as DS101	(same as DS102)
DS104		same as DS101	(same as DS102)
DS105		same as DS101	(same as DS102)
DS106		LAMP, INCANDESCENT: 6 to 8v, 0.15 amp, GE part no. 47	Cathode Activity test "On" indicator u/w XDS106. Figure 2.