

SUPPLEMENTARY DATA-EUROPEAN TUBE TYPES

MODEL 752-752A

TUBE TESTERS

XDUAL TEST. For dual triodes make normal Leakage test first then repeat Leakage test for 2nd section with S8 pressed. Proceed with 1st section GM test. On all dual tubes, for 2nd section test press S8 with button listed in the press column.

*Verify shorts by setting filament switch to OFF position.

★Approximate starting voltage for voltage regulator tubes.

†Read 0-100 milliamperes with S9 pressed.

VR. For voltage regulator tubes the figure in the MINIMUM MUT. COND. column indicates the nominal operating voltage.

#Set BIAS to 100, press proper button, then rotate BIAS dial counterclockwise until tube strikes.

‡For Model 752: A CA-4 Adapter is available for testing Compactron Tubes. The test Data is supplied in supplementary form with this Adapter.

PRINTED IN U. S. A.

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS	
1AJ4	1.4	7160-2300	25	---	X2	S5	175		
1C1	1.4	1740-3062	10	---	X2	S4	425		
1M3	1.4	4510-8000	---	100	---	S6	----	Adjust Bias to vary Bar length. Do not adjust Bias below 30	
1N3	1.4	4510-8000	---	100	---	S6	----	Adjust Bias to vary Bar length. Do not adjust Bias below 30	
2FY5	2.5	4320-5016	13	---	X10	S5	800		
2HA5	2.0	4310-5076	17	---	X10	S5	475		
3AJ8	3.0	4520-6137	15	---	X2	S5	475	Heptode Section	
3AJ8	3.0	4590-8032	20	---	X4	S5	475	Triode Section	
3BX6	3.0	4520-7819	10	---	X10	S5	400		
3BY7	3.0	4520-7819	17	---	X4	S5	550		
3FY5	3.0	4320-5016	13	---	X10	S5	800		
3HA5	2.5	4310-5076	17	---	X10	S5	475		
4BL8	4.3	4520-6371	12	---	X4	S5	625	Pent. Section	
4BL8	4.3	4590-1086	26	---	X4	S5	675	Triode Section	
4BN4	4.3	4320-5010	16	---	X10	S5	425		
4CM4	4.3	4520-1030	14	---	X10	S5	880		
4HA5	4.3	4310-5076	17	---	X10	S5	475		
4HG8	4.3	4520-8930	11	---	X10	S5	525	Pentode Section	
4HG8	4.3	4560-7030	33	---	X10	S5	380	Triode Section	
4MP12	5.0	3410-5620	18	---	X4	S5	575		
5AR4	5.0	8200-6400	0	68	SH	S3	650	X Dual Diode	
5MHH3	5.0	3465-1270	16	---	X10	S5	560	X Dual Triode	
6AJ8	6.3	4520-6137	15	---	X2	S5	475	Heptode Section	
6AJ8	6.3	4590-8032	20	---	X4	S5	475	Triode Section	
6AK8	6.3	4580-9070	15	---	X4	S5	175	Triode Section	
6AK8	6.3	4500-6070	0	35	SH	S1	400	Diode #1	
6AK8	6.3	4500-2137	0	78	SH	S1	400	X Dual Diode	
6AL3	OFF	4500-0090	USE THIS SETTING FOR SHORT CHECK ONLY						
6AL3	6.3	4500-0090	0	56	SH	---	800	Cap = P. Short on 1-2-3-4 Hold down S7 and press S3	
6AM5	6.3	4310-5720	26	---	X4	S5	400		
6AM6	6.3	4310-5726	11	---	X10	S5	300		
6AQ4	6.3	4310-7050	0	---	X10	S5	525		
6AQ8	6.3	4572-6183	14	---	X4	S5	625	X Dual Triode	
6BD7A	6.3	4520-1030	9	---	X1	S5	800	Triode Section	
6BD7A	6.3	4500-6830	0	27	SH	S1	400	X Dual Diode	
6BJ5	6.3	4310-5720	10	---	X10	S5	500		
6BK8	6.3	4590-6138	11	---	X4	S5	300		

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
6BL8	6.3	4520-6371	12	---	X4	S5	625	Pent. Sect.
6BL8	6.3	4590-1086	26	---	X4	S5	675	Triode Sect.
6BN5	6.3	4520-7938	24	---	X4	S5	450	
6BR5	6.3	4510-9020	Vary	100	SH	S6	----	Connect a 1 Megohm resistor
		from Plate Jack to octal test socket pin No. 7. Vary Bias to vary beam angle						
6BR7	6.3	4520-7839	20	---	X2	S5	375	
6BS7	6.3	4500-7839	20	---	X2	S5	375	Cap = G
6BT4	6.3	8100-2670	0	---	SH	S3	650	✕ Dual Diode (Use Hickok (Adapt. 1050-129
6BW6	6.3	4520-7839	18	---	X4	S5	575	
6BY7	6.3	4520-7819	17	---	X4	S5	550	
6CD7	6.3	7240-5080	Vary	100	SH	S6	----	Connect a 1 Megohm resistor
		from Plate Jack to pin No. 3 of large 7-pin socket. Connect a second 1 Megohm resistor from Plate Jack to pin No. 6 of large 7-pin socket. Eye One closes at Bias of about 35. Eye Two closes at Bias of about 68.						
6CF8	6.3	4590-6138	11	---	X4	S5	300	
6CH6	6.3	4520-7839	0	---	X10	S5	600	
6CJ5	6.3	1860-2570	21	---	X2	S5	475	Use Hickok Adapter Code No. 1050-129
6CK5	6.3	1860-2570	10	---	X10	S5	600	Use Hickok Adapter Code No. 1050-129
6CM4	6.3	4520-1030	14	---	X10	S5	875	
6CM5	6.3	7250-0480	32	---	X10	S5	450	Cap = P
6CN6	6.3	7250-0481	0	---	X10	S5	700	Cap = P
6CQ6	6.3	4310-5726	15	---	X4	S5	225	
6CT7	6.3	1860-2574	25	---	X2	S5	750	Pent. Sect.) Use Hickok
6CT7	6.3	1800-3070	0	61	SH	S1	400	Diode Sect.) Adapter Code No. 1050-129
6CU7	6.3	1860-2574	19	---	X2	S5	400	Hexode Sect.) Use Hickok
6CU7	6.3	1840-3076	27	---	X2	S5	475	Triode Sect.) Adapter Code No. 1050-129
6CV7	6.3	1830-2070	9	---	X1	S5	800	Triode Sect.) Use Hickok
6CV7	6.3	1800-6570	0	27	SH	S1	400	✕ Dual Diode) Adapter Code No. 1050-129
6CW7	6.3	4562-9371	24	---	X10	S5	375	✕ Dual Triode
6DC8	6.3	4520-6139	14	---	X4	S5	450	Pent. Sect.
6DC8	6.3	4500-8730	0	60	SH	S1	400	✕ Dual Diode
6DG7	6.3	4520-7839	0	---	X4	S5	500	
6DL4	6.3	4590-8020	14	---	X20	S5	470	
6DL5	6.3	4310-5620	10	---	X4	S5	600	
6DR8	6.3	4520-1639	0	44	SH	S1	650	Pent. Sect.
6DR8	6.3	4500-8730	0	43	SH	S1	400	✕ Dual Diode
6DS8	6.3	4570-1632	23	---	X1	S1	600	Heptode Sect.) Make no Gas
6DS8	6.3	4590-8030	7	---	X2	S1	300	Triode Sect.) Test
6DX8	6.3	4580-6970	10	---	X10	S5	630	Pent. Sect.
6DX8	6.3	4510-2030	12	---	X4	S5	630	Triode Sect.
6ES6	6.3	4370-6523	0	---	X1	S1	500	Make no Gas Test
6ET6	6.3	4310-6527	0	73	SH	S1	650	
6F12	6.3	4310-5726	11	---	X10	S5	300	
6F13	6.3	1860-2574	11	---	X10	S5	475	Use Hickok Adapter Code No. 1050-129
6F14	6.3	1860-2574	10	---	X10	S5	425	Use Hickok Adapter Code No. 1050-129
6F16	6.3	1860-2570	21	---	X2	S5	475	Use Hickok Adapter Code No. 1050-129
6F19	6.3	4520-7819	17	---	X4	S5	550	
6F21	6.3	4310-5726	15	---	X4	S5	225	
6FG6	6.3	4510-6030	45	---	X20	S5	----	Solid Bar)
6FG6	6.3	4510-6030	0	---	X20	S5	----	Split Bar)
		Jumper noval socket pins 7 & 9. Connect a 470K ohm, 1/2 watt, 10% resistor from this jumper to pin 6.						
6FY5	6.3	4320-5016	13	---	X10	S5	800	
6GJ7	6.3	5420-6710	10	---	X10	S5	475	Pentode Section
6GJ7	6.3	5490-8030	29	---	X10	S5	550	Triode Section

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
6GM8	6.3	4572-6183	19	---	SH	S1	875	✕ Dual Triode. Make no Gas Test
6GV8	6.3	4590-6780	36	---	X10	S5	380	Pentode Sect.
6GV8	6.3	4520-1030	23	---	X2	S5	960	Triode Sect.
6GW8	6.3	4580-6370	11	---	X10	S5	500	Pentode Sect.
6GW8	6.3	4510-9020	10	---	X2	S5	325	Triode Sect.
6HA5	6.3	4310-5076	17	---	X10	S5	475	
6HG8	6.3	4520-8930	11	---	X10	S5	525	Pentode Section
6HG8	6.3	4560-7030	33	---	X10	S5	380	Triode Section
6HU6	6.3	4510-6030	34	---	X20	S5	----	Solid Bar)
6HU6	6.3	4510-6030	0	---	X20	S5	----	Split Bar)
Jumper noval socket pins 7 & 9. Connect a 470 Kohm, 1/2 watt, 10% resistor from this jumper to pin 6.								
6HU8	6.3	4520-3170	14	---	X4	S5	770	Pent. No. 1
6HU8	6.3	4560-8970	14	---	X4	S5	770	Pent. No. 2
6JX8	6.3	4520-6731	12	---	X1	---	730	Heptode Sect. Hold down S1 and press S5.
6JX8	6.3	4590-8030	11	---	X4	S4	400	Triode Sect.
6LD3	6.3	1830-2070	9	---	X1	S5	800	Triode Sect.) Use Hickok
6LD3	6.3	1800-6570	0	27	SH	S1	400	✕ Dual Diode) Adapter Code No. 1050-129
6N3	6.3	4500-9030	0	50	SH	S3	525	
6R3	6.3	4500-0090	0	50	SH	---	650	Cap = P. Short on 1-2-3-4. Hold down S7 and press S3
6S2, A	6.3	4200-0000	0	85	SH	S6	400	Cap = P
6X6	6.3	2753-4086	100	100	SH	S6	----	Eyes open
6X6	6.3	2750-4386	100	100	SH	S6	----	Eyes closed
7AN7	7.5	4562-9371	24	---	X10	S5	375	✕ Dual Triode
7ES8	7.5	4572-6183	22	---	X10	S5	475	✕ Dual Triode
7HG8	7.5	4520-8930	11	---	X10	S5	525	Pent. Sect.
7HG8	7.5	4560-7030	33	---	X10	S5	380	Triode Sect.
8A8	10.0	4520-6371	12	---	X4	S5	625	Pent. Sect.
8A8	10.0	4590-1086	26	---	X4	S5	675	Triode Sect.
8B8	7.5	4530-6720	26	---	X4	S5	625	Pent. Sect.
8B8	7.5	4510-9080	0	---	X2	S5	775	Triode Sect.
8CW5	7.5	4520-7930	16	---	X10	S5	475	
8D3	6.3	4310-5726	11	---	X10	S5	300	
8DX8	7.5	4580-6970	10	---	X10	S5	630	Pent. Sect.
8DX8	7.5	4510-2030	12	---	X4	S5	400	Triode Sect.
9A8	10.0	4520-6371	12	---	X4	S5	625	Pent. Sect.
9A8	10.0	4590-1086	26	---	X4	S5	675	Triode Sect.
9AB4	10.0	4360-1070	14	---	X4	S5	625	
9AK8	10.0	4580-9070	15	---	X4	S5	175	Triode Sect.
9AK8	10.0	4500-6070	0	35	SH	S1	400	Diode No. 1
9AK8	10.0	4500-2137	0	78	SH	S1	400	✕ Dual Diode
9AQ8	10.0	4572-6183	14	---	X4	S5	625	✕ Dual Triode
9CG8	10.0	4590-6780	10	---	X4	S5	725	Pentode Section
9CG8	10.0	4510-2030	15	---	X10	S5	350	Triode Section
9D6	6.3	4310-5726	15	---	X4	S5	225	
9GV8	10.0	4590-6780	36	---	X10	S5	380	Pent. Sect.
9GV8	10.0	4520-1030	23	---	X2	S5	960	Triode Sect.
12AC5	12.6	1860-2570	21	---	X2	S5	475	Use Hickok Adapter Code No. 1050-129
12AJ7	12.6	4520-6137	15	---	X2	S5	475	Heptode Sect.
12AJ7	12.6	4590-8032	20	---	X4	S5	475	Triode Sect.
12BX6	12.6	4520-7819	10	---	X10	S5	400	
12DA6	12.6	4520-7839	12	---	X4	S5	475	
12GB3	12.6	2750-0480	35	---	X4	S5	725	Cap = P
12HU8	12.6	4520-3170	14	---	X4	S5	770	Pent. No. 1
12HU8	12.6	4560-8970	14	---	X4	S5	770	Pent. No. 2
12RK19	12.6	4500-0090	0	78	SH	---	400	Cap = P; Hold down S1 and press S7
13CM5	12.6	7250-0480	32	---	X10	S5	450	Cap = P

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
14GW8	12.6	4580-6370	11	---	X10	S5	500	Pent. Sect.
14GW8	12.6	4510-9020	10	---	X2	S5	325	Triode Sect.
14K7	12.6	1860-2574	19	---	X2	S5	400	Heptode Sect.) Use Hickok
14K7	12.6	1840-3076	27	---	X2	S5	475	Triode Sect.) Adapter Code No. 1050-129
14L7	12.6	1830-2070	9	---	X1	S5	800	Triode Sect.) Use Hickok
14L7	12.6	1800-6570	0	27	SH	S1	400	X Dual Diode) Adapter Code No. 1050-129
15DQ8	17.0	4580-6970	10	---	X10	S5	630	Pent. Sect.
15DQ8	17.0	4510-2030	12	---	X4	S5	630	Triode Sect.
16A5	17.0	4520-7930	23	---	X10	S5	350	
16A8	17.0	4530-6720	26	---	X4	S5	625	Pent. Sect.
16A8	17.0	4510-9080	0	---	X2	S5	775	Triode Sect.
16AQ3	17.0	4500-0090	0	56	SH	---	800	Fil. OFF for short check only. Short on 1-2-3-4 Cap = P. Hold down S7 and press S3
17C8	17.0	4520-6139	8	---	X4	---	350	Pent. Sect. Hold down S1 and press S5
17C8	17.0	4500-7839	0	30	SH	S1	400	X Dual Diode
17EW8	17.0	4572-6183	14	---	X10	S5	375	X Dual Triode
17Z3	17.0	4500-0090	0	50	SH	---	650	Cap = P. Short on 1-2-3-4 Hold down S7 and press S3
18GV8	17.0	4590-6780	36	---	X10	S5	380	Pentode Sect.
18GV8	17.0	4520-1030	23	---	X2	S5	960	Triode Sect.
18J6	17.0	4356-2170	17	---	X10	S5	325	X Dual Triode
19AJ8	20.0	4520-6137	15	---	X2	S5	475	Heptode Sect.
19AJ8	20.0	4590-8032	20	---	X4	S5	475	Triode Sect.
19BR5	20.0	4510-9020	Vary	100	SH	S6	----	Connect a 1 megohm resistor from Plate Jack to octal test socket pin No. 7. Vary Bias to vary beam angle.
19BX6	20.0	4520-7819	10	---	X10	S5	400	
19BY7	20.0	4520-7819	17	---	X4	S5	550	
19D8	20.0	4520-6137	15	---	X2	S5	475	Heptode Sect.
19D8	20.0	4590-8032	20	---	X4	S5	475	Triode Sect.
19EW7	20.0	4570-6080	34	---	X2	S5	650	Triode No. 1
19EW7	20.0	4520-1090	56	---	X10	S5	475	Triode No. 2
19FL8	20.0	4520-6139	14	---	X4	S5	450	Pent. Sect.
19FL8	20.0	4500-8730	0	60	SH	S1	400	X Dual Diode
19G3	4.3	7200-0000	0	15	SH	S3	800	Cap = P
25E5	25.0	7250-0480	32	---	X10	S5	450	Cap = P
26AQ8	25.0	4572-6183	14	---	X4	S5	625	X Dual Triode
28AK8	25.0	4580-9070	15	---	X4	S5	175	Triode Sect.
28AK8	25.0	4500-6070	0	35	SH	S1	400	Diode No. 1
28AK8	25.0	4500-2137	0	78	SH	S1	400	X Dual Diode
30A5	35.0	4950-7610	16	---	X10	S5	475	Before placing tube in socket, jumper a 33 ohm, 2 watt resistor between pins 3 and 9 on the 9-pin min. socket (counting counter clockwise) then proceed with test.
30AE3	OFF	4500-0090	--	---	---	---	----	For short test only
30AE3	25.0	4500-0090	0	56	SH	---	800	Short on 1-2-3-4. Cap = P Hold down S1 and press S7
30L1	7.5	4562-9371	24	---	X10	S5	375	X Dual Triode
31A3	35.0	1800-2070	0	48	SH	S3	500	Adj. Line Adj. to 625. Use Hickok Adapter Code No. 1050-129
35D5	35.0	4590-6870	0	---	X10	S4	300	
38A3	35.0	4500-9030	0	55	SH	S3	800	
45A5	50.0	1860-2570	10	---	X10	S5	600	Use Hickok Adapter Code No. 1050-129
45B5	50.0	4520-7930	16	---	X10	S5	475	
90C1	OFF	0000-5070	--	---	VR	† S9	90V	★ 110 1 to 40 ma Regulation = 14 volts
95A1	OFF	0000-5010	--	---	VR	† S9	95V	Connect 470K ohm resistor between pins 1 and 4 (any socket). ★110V 2 to 10 ma Regulation = 5V

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
5920	6.3	4356-2170	25	---	X10	S5	390	✕Dual Triode
6057	12.6	4572-6183	14	---	X4	S5	200	✕Dual Triode
6059	6.3	4520-7839	20	---	X2	S5	375	
6060	12.6	4572-6183	14	---	X4	S5	625	✕Dual Triode
6061	6.3	4520-7839	18	---	X4	S5	575	
6063	6.3	4300-6170	0	18	SH	S3	650	✕Dual Diode
6064	6.3	4310-5726	11	---	X10	S5	300	
6065	6.3	4310-5726	15	---	X4	S5	225	
6066	6.3	4310-7020	15	---	X4	S5	175	Triode Sect.
6066	6.3	4300-6520	0	30	SH	S1	400	✕Dual Diode
6067	12.6	4572-6183	25	---	X2	S5	675	✕Dual Triode
6118	6.3	7200-3081	15	---	X4	S5	175	Triode Sect. Cap = G
6118	6.3	7200-5483	15	30	SH	S1	400	✕Dual Diode
6132	6.3	4520-7839	0	---	X10	S5	600	
6227	6.3	4520-7839	15	---	X10	S5	425	
6252	12.6	7162-0340	29	---	X2	S5	775	Tetrode No. 1. Right Cap = P
6252	12.6	7126-0340	29	---	X2	S5	775	Tetrode No. 2. Left Cap = P
Use Hickok Adapter Code No. 1050-107								
6267	6.3	4590-6138	11	---	X4	S5	300	
6360	12.6	4531-8720	13	---	X4	S5	500	Tetrode No. 1
6360	12.6	4513-8720	13	---	X4	S5	500	Tetrode No. 2
6374	6.3	4500-0030	0	41	SH	S3	650	Cap = P
6375	1.1	4510-8000	26	---	X4	S5	425	
6516	6.3	4310-5720	26	---	X4	S5	400	
6686	6.3	4520-7839	10	---	X10	S5	450	
6687	6.3	4370-5621	0	---	X2	---	375	Ampl. Sect. Hold down S1 and press S5
6687	6.3	4310-5627	0	---	X2	S5	375	Osc. Sect.
6688	6.3	4520-7918	8	---	X10	S5	600	
6689	6.3	4520-6139	15	---	X10	S5	425	
6761	6.3	4520-1730	31	---	X10	S5	475	
6907	12.6	7162-0340	33	---	X4	S5	375	Right Cap = P) Use Hickok
6907	12.6	7126-0340	33	---	X4	S5	375	Left Cap = P) Adapter Code No. 1050-107
6922	6.3	4572-6183	21	---	X10	S5	675	✕Dual Triode
6927	6.3	4356-2170	17	---	X10	S5	325	✕Dual Triode
7062	12.6	4572-6183	15	---	X10	S5	400	✕Dual Triode
7308	6.3	4572-6183	21	---	X10	S5	675	✕Dual Triode
7320	6.3	4520-7930	14	---	X10	S5	475	
7534	6.3	7250-0480	55	---	X4	S5	600	
7643	6.3	4520-6371	12	---	X4	S5	625	Pent. Sect.
7643	6.3	4590-1086	26	---	X4	S5	675	Triode Sect.
7693	6.3	4310-5627	10	---	X4	S5	425	
7694	6.3	4310-5627	10	---	X2	S5	775	
7737	6.3	4520-7918	8	---	X10	S5	600	
7788	6.3	4520-7938	12	---	X20	S5	350	
18045	20.0	4520-7839	10	---	X10	S5	500	
18046	17.0	4520-7839	10	---	X10	S5	500	
AX9903	12.6	1762-0340	35	---	X4	S5	625	Right Cap = P) Use Hickok
AX9903	12.6	1726-0340	35	---	X4	S5	625	Left Cap = P) Adapter Code No. 1050-107
AZ41	4.3	7800-6000	0	0	SH	S3	400	Plate No. 1) Use Hickok
AZ41	4.3	8700-2000	0	0	SH	S3	400	Plate No. 2) Adapt. 1050-129
B36	12.6	7841-5263	23	---	X4	S5	400	✕Dual Triode
B65	6.3	7841-5263	23	---	X4	S5	400	✕Dual Triode
C3g	6.3	1860-3452	12	---	X10	S5	550	
CCa	6.3	4572-6183	21	---	X10	S5	675	✕Dual Triode
D77	6.3	3400-7215	0	78	SH	S1	400	✕Dual Diode
D152	6.3	3400-7215	0	78	SH	S1	400	✕Dual Diode
DA90	1.4	7100-2030	0	0	SH	S1	400	
DAF91	1.4	1760-5400	13	---	X1	S5	400	Pent. Sect.
DAF91	1.4	1700-3000	0	15	SH	S1	400	Diode Sect.
DAF92	1.4	1760-2300	13	---	X1	S5	400	Pent. Sect.
DAF92	1.4	1700-4000	0	15	SH	S1	400	Diode Sect.

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT.COND.	NOTATIONS
DC70	1. 1	4510-8000	26	---	X4	S5	425	
DC90	1. 4	7150-2000	16	---	X1	S5	675	
DCC90	3. 0	1750-6000	35	---	X2	S5	625	Triode No. 1
DCC90	3. 0	1730-2000	35	---	X2	S5	625	Triode No. 2
DDR7	6. 3	4310-5720	26	---	X4	S5	400	
DF33	1. 4	7200-3400	11	---	X2	S5	225	Cap = G
DF61	1. 4	3500-2041	0	0	SH	S1	300	Make no gas test
DF62	1. 1	3540-1200	14	---	X4	S4	225	
DF67	0. 6	3540-2100	28	---	X1	S5	60	
DF91	1. 4	1760-2300	0	---	X2	S4	225	
DF92	1. 4	7160-2300	19	---	X2	S5	325	
DF96	1. 4	7160-2300	25	---	X2	S5	175	
DF904	1. 4	1760-2300	14	---	X2	S5	275	
DH63	6. 3	7200-3081	15	---	X4	S5	175	Triode Sect. Cap = G
DH63	6. 3	7200-5483	15	30	SH	S1	400	X Dual Diode
DH77	6. 3	4310-7020	15	---	X4	S5	175	Triode Sect.
DH77	6. 3	4300-6520	0	30	SH	S1	400	X Dual Diode
DK91	*1. 4	1740-3062	10	---	X2	S4	425	
DL33	2. 5	7250-3400	0	---	X2	---	625	Hold down S1 and press S5
DL35	1. 4	7250-3400	18	---	X2	---	475	Hold down S1 and press S5
DL36	1. 4	7250-3400	0	---	X2	---	625	Hold down S1 and press S5
DL63	6. 3	2700-3080	19	---	X2	S5	625	Triode Sect. Cap = G
DL63	6. 3	2700-5480	19	64	SH	S1	400	X Dual Diode
DL66	1. 4	5340-1200	32	---	X1	---	400	Hold down S1 and press S6
DL67	1. 1	3540-1200	25	---	X1	S5	250	
DL91	1. 4	1730-2400	23	---	X2	S4	475	
DL92	2. 5	7130-2400	23	---	X2	S4	475	
DL93	2. 5	1740-2300	11	---	X2	---	600	Hold down S1 and press S5
DL94	3. 0	7160-2300	0	---	X4	---	300	Hold down S1 and press S5
DL95	3. 0	7130-2400	0	---	X4	---	300	Hold down S1 and press S5
DL96	2. 5	1760-2300	23	---	X2	S4	425	
DL98	2. 5	5430-7100	50	---	X2	S5	525	
DM70	1. 4	5410-8000	---	---	X2	S6	----	Adjust Bias to vary bar length. Do not adjust Bias below 30
DM71	1. 4	5410-8000	---	---	X2	S6	----	Adjust Bias to vary bar length. Do not adjust Bias below 30.
DP61	6. 3	4310-5672	17	---	X2	S5	725	
DY30	1. 1	7200-0000	0	80	SH	S6	400	Cap = P
DY86	1. 4	4200-0000	0	85	SH	S6	400	Cap = P
DY87	1. 4	4200-0000	0	85	SH	S6	400	Cap = P
E80CC	12. 6	4572-6183	17	---	X4	S5	425	X Dual Triode
E80CF	6. 3	5420-6371	12	---	X4	S5	625	Pent. Sect.
E80CF	6. 3	5490-1086	26	---	X4	S5	675	Triode Sect.
E80F	6. 3	5490-6138	15	---	X2	S5	575	
E80L	6. 3	5420-7839	15	---	X10	S5	425	
E81CC	12. 6	5472-6183	14	---	X4	S5	625	X Dual Triode
E81L	6. 3	5420-7839	10	---	X10	S5	450	
E82CC	12. 6	5472-6183	25	---	X2	S5	675	X Dual Triode
E83CC	12. 6	5472-6183	14	---	X4	S5	200	X Dual Triode
E83F	6. 3	5420-6139	15	---	X10	S5	425	
E84L	6. 3	5420-7930	14	---	X10	S5	475	
E86C	6. 3	5420-1030	14	---	X10	S5	880	
E88CC	6. 3	5472-6183	21	---	X10	S5	675	X Dual Triode
E90CC	6. 3	4356-2170	25	---	X10	S5	390	X Dual Triode
E90F	6. 3	4310-5627	10	---	X4	S5	425	
E91AA	6. 3	4300-7215	0	78	SH	S1	400	X Dual Diode
E91H	6. 3	4370-5621	0	---	X2	---	375	Ampl. Sect. Hold down S1 and press S5
E91H	6. 3	4310-5627	0	---	X2	S5	375	Osc. Sect.
E91N	6. 3	4310-6025	#	94	SH	S6	650	Strikes at about 27
E92CC	6. 3	4365-1270	15	---	X10	S5	375	X Dual Triode

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
E95F	6.3	4310-5620	10	---	X4	S5	675	
E99F	6.3	4310-5627	10	---	X2	S5	775	
E130L	6.3	7250-0480	55	---	X4	S5	600	
E180CC	12.6	5472-6183	15	---	X10	S5	400	X Dual Triode
E180F	6.3	5420-7918	8	---	X10	S5	600	
E182CC	12.6	5472-9163	17	---	X20	S5	500	X Dual Triode
E182F	6.3	9310-6840	13	---	X20	S5	300	
E186F	6.3	5420-7918	8	---	X10	S5	600	
E188CC	6.3	5472-6183	21	---	X10	S5	675	X Dual Triode
E810F	6.3	5420-7938	12	---	X20	S5	350	
E2134	6.3	4310-5720	15	---	X10	S5	375	
EEA91	6.3	4300-7215	0	78	SH	S1	400	X Dual Diode
EABC80	6.3	5480-9070	15	---	X4	S5	175	Triode Sect.
EABC80	6.3	5400-6070	0	35	SH	S1	400	Diode No. 1
EABC80	6.3	5400-2137	0	78	SH	S1	400	X Dual Diode
EAF42	6.3	8160-2574	25	---	X2	S5	375	Pent. Sect.) Use Hickok
EAF42	6.3	8100-3070	0	61	SH	S1	400	Diode Sect.) Adapter Code No. 1050-129
EB41	6.3	8100-6473	0	78	SH	S1	400	X Dual Diode. Use Hickok Adapter Code No. 1050-129
EB91	6.3	4300-7215	0	78	SH	S1	400	X Dual Diode
EBC3	6.3	2700-3080	19	---	X2	S5	625	Triode Sect. Cap = G
EBC3	6.3	2700-5480	19	64	SH	S1	400	X Dual Diode
EBC33	6.3	2700-3080	19	---	X2	S5	625	Triode Sect. Cap = G
EBC33	6.3	2700-5480	19	64	SH	S1	400	X Dual Diode
EBC41	6.3	8130-2070	9	---	S1	S5	800	Triode Sect.) Use Hickok
EBC41	6.3	8100-6570	0	27	SH	S1	400	X Dual Diode) Adapter Code No. 1050-129
EBC81	6.3	5420-1030	9	---	X1	S5	800	Triode Sect.)
EBC81	6.3	5400-8630	0	27	SH	S1	400	X Dual Diode)
EBC90	6.3	4310-7020	15	---	X4	S5	175	Triode Sect.
EBC90	6.3	4300-6520	0	30	SH	S1	400	X Dual Diode
EBC91	6.3	4310-7020	14	---	X4	S5	200	Triode Sect.
EBC91	6.3	4300-6520	0	30	SH	S1	400	X Dual Diode
EBF32	6.3	7200-3681	22	---	X2	S5	300	Pent. Sect. Cap = G
EBF32	6.3	7200-5481	22	32	SH	S1	400	X Dual Diode
EBF80	6.3	5420-6139	8	---	X4	---	350	Pent. Sect. Hold down S1 and press S5
EBF80	6.3	5400-7839	0	30	SH	S1	400	X Dual Diode
EBF83	6.3	5420-1639	0	44	SH	S1	650	Pent. Sect.
EBF83	6.3	5400-8730	0	43	SH	S1	400	X Dual Diode
EBF89	6.3	5420-6139	14	---	X4	S5	450	Pent. Sect.
EBF89	6.3	5400-8730	0	60	SH	S1	400	X Dual Diode
EC80	6.3	5410-9030	10	---	X20	S5	375	
EC81	6.3	5410-8030	28	---	X4	S5	625	
EC86	6.3	5420-1030	14	---	X10	S5	880	
EC88	6.3	5490-8020	14	---	X20	S5	470	
EC90	6.3	4360-1070	25	---	X2	S5	675	
EC91	6.3	4310-7050	0	---	X10	S5	525	
EC92	6.3	4360-1070	14	---	X4	S5	625	
EC93	6.3	4320-1050	16	---	X10	S4	400	
EC95	6.3	4320-5670	11	---	X10	S5	650	
EC97	6.3	4320-5016	13	---	X10	S5	800	
EC806S	6.3	4520-1030	14	---	X10	S5	875	
EC900	6.3	4310-5076	17	---	X10	S5	475	
ECC33	6.3	8741-5263	15	---	X4	S5	400	X Dual Triode
ECC40	6.3	8163-5274	20	---	X4	S5	450	X Dual Triode. Use Hickok Adapter Code No. 1050-129
ECC81	12.6	5472-6183	14	---	X4	S5	625	X Dual Triode
ECC82	12.6	5472-6183	25	---	X2	S5	675	X Dual Triode
ECC83	12.6	5472-6183	14	---	X4	S5	200	X Dual Triode
ECC84	6.3	5462-9371	24	---	X10	S5	375	X Dual Triode
ECC85	6.3	5472-6183	14	---	X4	S5	625	X Dual Triode

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
ECC86	6.3	5472-6183	20	0	SH	S1	875	X Dual Triode. Make no gas test
ECC88	6.3	5472-6183	20	---	X10	S5	775	X Dual Triode
ECC91	6.3	4356-2170	25	---	X10	S5	390	X Dual Triode
ECC186	12.6	5472-6183	25	---	X2	S5	675	X Dual Triode
ECC189	6.3	5472-6183	22	---	X10	S5	475	X Dual Triode
ECC230	6.3	8741-5263	55	---	X4	S4	625	X Dual Triode
ECC801S	12.6	5472-6183	14	---	X4	S5	625	X Dual Triode
ECC802S	12.6	5472-6183	25	---	X2	S5	675	X Dual Triode
ECC960	6.3	4356-2170	25	---	X10	S5	390	X Dual Triode
ECF80	6.3	5420-6371	12	---	X4	S5	625	Pent. Sect.
ECF80	6.3	5490-1086	26	---	X4	S5	675	Triode Sect.
ECF82	6.3	5420-6370	12	---	X4	S5	475	Pent. Sect.
ECF82	6.3	5490-1080	10	---	X10	S5	525	Triode Sect.
ECF83	6.3	5490-6780	10	---	X2	S4	470	Pent. Sect.
ECF83	6.3	5420-3010	32	---	X2	S4	700	Triode Sect.
ECF86	6.3	5420-8930	11	---	X10	S5	525	Pent. Sect.
ECF86	6.3	5460-7030	33	---	X10	S5	375	Triode Sect.
ECF801	6.3	5420-6710	10	---	X10	S5	475	Pentode Section
ECF801	6.3	5490-8030	29	---	X10	S5	550	Triode Section
ECF804	6.3	4520-6370	15	---	X10	S5	450	Pentode Section
ECF804	6.3	4590-1080	17	---	X10	S5	500	Triode Section
ECH35	6.3	7200-3485	10	---	X2	S5	500	Hexode Sect. Cap = G
ECH35	6.3	7250-6084	15	---	X4	S5	475	Triode Sect.
ECH42	6.3	8160-2574	19	---	X2	S5	400	Hexode Sect.) Use Hickok
ECH42	6.3	8160-3076	27	---	X2	S5	475	Triode Sect.) Adapter Code No. 1050-129
ECH81	6.3	5420-6137	15	---	X2	S5	475	Heptode Sect.
ECH81	6.3	5490-8032	20	---	X4	S5	475	Triode Sect.
ECH83	6.3	5470-1632	23	---	X1	S1	600	Heptode Sect.) Make no
ECH83	6.3	5490-8030	7	---	X2	S1	300	Triode Sect.) Gas test
ECH84	6.3	5420-6731	12	---	X1	---	730	Heptode Sect. Hold down S1 and press S5
ECH84	6.3	5490-8030	11	---	X4	S4	400	Triode Sect.
ECL80	6.3	5490-6837	21	---	X4	S5	500	Pent. Sect.
ECL80	6.3	5420-1030	25	---	X2	S5	425	Triode Sect.
ECL82	6.3	5430-6720	26	---	X4	S5	625	Pent. Sect.
ECL82	6.3	5410-9080	0	---	X2	S5	775	Triode Sect.
ECL84	6.3	5480-6970	10	---	X10	S5	630	Pent. Sect.
ECL84	6.3	5410-2030	12	---	X4	S5	630	Triode Sect.
ECL85	6.3	5490-6780	36	---	X10	S5	380	Pent. Sect.
ECL85	6.3	5420-1030	23	---	X2	S5	960	Triode Sect.
ECL86	6.3	5480-6370	11	---	X10	S5	500	Pent. Sect.
ECL86	6.3	5410-9020	10	---	X2	S5	325	Triode Sect.
EF22	6.3	8160-2374	11	---	X10	S5	250	
EF40	6.3	8150-2674	10	---	X2	S5	600	Use Hickok Adapter Code No. 1050-129
EF41	6.3	8160-2570	21	---	X2	S5	475	Use Hickok Adapter Code No. 1050-129
EF42	6.3	8160-2574	10	---	X4	S5	725	Use Hickok Adapter Code No. 1050-129
EF80	6.3	5420-7819	10	---	X10	S5	400	
EF85	6.3	5420-7819	17	---	X4	S5	550	
EF86	6.3	5490-6138	11	---	X4	S5	300	
EF89	6.3	5420-7839	12	---	X4	S5	475	
EF91	6.3	4310-5726	11	---	X10	S5	300	
EF92	6.3	4310-5726	15	---	X4	S5	225	
EF93	6.3	4310-5672	0	---	X4	S5	500	
EF94	6.3	4310-5672	10	---	X4	S5	475	
EF95	6.3	4310-5620	10	---	X4	S5	675	
EF96	6.3	4310-5620	10	---	X4	S5	625	
EF97	6.3	4370-6523	0	---	X1	S1	500	Make no gas test
EF98	6.3	4310-6527	0	73	SH	S1	650	
EF183	6.3	5420-7819	17	---	X4	S5	650	

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
EF184	6.3	5420-7819	10	---	X10	S5	500	
EF731	6.3	6310-5740	13	---	X4	S5	475	
EF732	6.3	6310-5740	16	---	X4	S5	475	
EF800	6.3	5420-7819	10	---	X10	S5	400	
EF804	6.3	5490-7831	11	---	X4	S5	300	
EF861	6.3	5420-7918	8	---	X10	S5	600	
EH90	6.3	4310-5627	16	---	X1	S5	300	Grid No. 1
EH90	6.3	4370-5621	0	---	X1	S5	775	Grid No. 3
EK90	6.3	4370-5621	0	---	X2	---	250	Ampl. Sect. Hold down S1 and press S5
EK90	6.3	4310-6027	20	---	X10	S5	400	Osc. Sect.
EL34	6.3	7250-3481	23	---	X10	S5	375	
EL36	6.3	7250-0480	32	---	X10	S5	450	Cap = P
EL37	6.3	7250-3481	17	---	X10	S5	300	
EL38	6.3	7250-0481	0	---	X10	S5	700	Cap = P
EL41	6.3	8160-2570	10	---	X10	S5	600	Use Hickok Adapter Code No. 1050-129
EL42	6.3	8160-2570	17	---	X4	S5	500	Use Hickok Adapter 1050-129
EL81	6.3	5420-0731	51	---	X10	S5	275	Cap = P
EL83	6.3	5420-7136	0	---	X10	S5	550	
EL84	6.3	5420-7930	14	---	X10	S5	475	
EL85	6.3	5420-7938	17	---	X4	S5	500	
EL86	6.3	5420-7930	16	---	X10	S5	475	
EL90	6.3	4310-5620	18	---	X4	S5	575	
EL91	6.3	4310-5720	26	---	X4	S5	400	
EL95	6.3	3410-5620	10	---	X4	S5	600	
EL360	6.3	7250-0480	32	---	X10	S5	450	Cap = P
EL803	6.3	5420-7136	0	---	X10	S5	550	
EL821	6.3	5420-7839	0	---	X10	S5	600	
EL822	6.3	5420-7839	0	---	X10	S5	600	
ELL80	6.3	5420-3170	14	---	X4	S5	770	Pent. No. 1
ELL80	6.3	5460-8970	14	---	X4	S5	770	Pent. No. 2
EM34	6.3	7240-5080	Vary	100	SH	S6	----	Connect a 1 megohm resistor from Plate Jack to pin No. 3 of large 7 pin socket. Connect a second 1 megohm resistor from Plate Jack to pin No. 6 of large 7 pin socket. Eye One closes at Bias of about 35. Eye Two closes at Bias of about 68.
EM80	6.3	5410-9020	Vary	100	SH	S6	----	Connect a 1 megohm resistor from Plate Jack to octal test socket pin No. 7. Vary Bias to vary beam angle.
EM81	6.3	5410-9020	Vary	100	SH	S6	----	Connect a 1 megohm resistor from Plate Jack to octal test socket, pin No. 7. Vary Bias to vary beam angle.
EM84	6.3	5410-6030	45	---	X20	S5	----	Solid Bar)
EM84	6.3	5410-6030	0	---	X20	S5	----	Split Bar) Jumper noval socket pins 7 and 9. Connect a 470K ohm, 1/2 watt, 10% resistor from this jumper to pin 6.
EM87	6.3	5410-6030	34	---	X20	S5	----	Solid Bar)
EM87	6.3	5410-6030	0	---	X20	S5	----	Split Bar) Jumper noval socket pins 7 and 9. Connect a 100K ohm, 1/2 watt, 10% resistor from this jumper to pin 6.
EQ80	6.3	5470-1639	29	---	X2	S5	300	
EY80	6.3	5400-9030	0	55	SH	S3	650	
EY81	6.3	5400-0090	0	50	SH	---	650	Cap = P Short on 1-2-3-4 Hold down S1 and press S3
EY82	6.3	5400-9030	0	50	SH	S3	525	
EY84	6.3	5400-0030	0	41	SH	S3	650	Cap = P
EY86	6.3	4200-0000	0	85	SH	S6	400	Cap = P
EY87	6.3	4200-0000	0	85	SH	S6	400	Cap = P
EY88	OFF	5400-0090	Use this setting for short check only					
EY88	6.3	5400-0090	0	56	SH	---	800	Cap = P. Short on 1-2-3-4 Hold down S7 and press S3
EY91	6.3	4300-1020	0	18	SH	S3	650	
EZ35	6.3	7200-5381	0	20	SH	S3	650	X Dual Diode
EZ40	6.3	8100-6270	0	0	SH	S3	650	X Dual Diode (Use Adapter 1050-129)
EZ80	6.3	5400-7130	0	0	SH	S3	650	X Dual Diode
EZ81	6.3	5400-7130	0	42	SH	S3	650	X Dual Diode
EZ90	6.3	4300-6170	0	18	SH	S3	650	X Dual Diode
GZ30	5.0	8200-6400	0	57	SH	S3	650	X Dual Diode

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT.COND.	NOTATIONS	
GZ32	5.0	8200-6400	0	55	SH	S3	650	X Dual Diode	
GZ33	5.0	8200-6400	0	62	SH	S3	800	X Dual Diode	
GZ34	5.0	8200-6400	0	68	SH	S3	650	X Dual Diode	
H63	6.3	7200-4081	12	---	X4	S5	225	Cap = G	
HABC80	20.0	5480-9076	15	---	X4	S5	175	Triode Sect.	
HABC80	20.0	5400-6273	0	78	SH	S1	400	X Dual Diode	
HABC80	20.0	5400-1078	0	78	SH	S1	400	Diode No. 3	
HBC90	12.6	4310-7020	15	---	X4	S5	175	Triode Sect.	
HBC90	12.6	4300-6520	0	30	SH	S1	400	X Dual Diode	
HBC91	12.6	4310-7025	14	---	X4	S5	200	Triode Sect.	
HBC91	12.6	4300-6527	0	30	SH	S1	400	X Dual Diode	
HCC85	17.0	5472-6183	14	---	X10	S5	375	X Dual Triode	
HCH81	12.6	5420-6137	15	---	X2	S5	475	Heptode Sect.	
HCH81	12.6	5490-8032	20	---	X4	S5	475	Triode Sect.	
HD14	1.4	7200-3000	0	---	X1	S5	175	Triode Sect. Cap = G	
HD14	1.4	7200-5000	0	0	SH	S1	400	Diode Sect.	
HD30	2.5	5430-7100	50	---	X2	S5	525		
HD93	1.1	2100-0000	0	80	SH	S6	400	Cap = P	
HD94	6.3	7250-0480	28	---	X10	S4	350	Cap = P	
HD96	25.0	7250-0480	28	---	X10	S4	350	Cap = P	
HF93	12.6	4310-5672	0	---	X4	S5	500		
HF94	12.6	4310-5672	10	---	X4	S5	475		
HK90	12.6	4370-5621	0	---	X2	---	250	Ampl. Sect. Hold down S1 and press S5	
HK90	12.6	4310-6027	20	---	X10	S5	400	Osc. Sect.	
HL90	20.0	4310-5620	18	---	X4	S5	575		
HL92	50.0	4320-7610	13	---	X10	----	475	Hold down S1 and press S5	
HL94	35.0	9450-7610	16	---	X10	S5	475	Before placing tube in socket	
		jumper a 33 ohm, 2 watt resistor between pins 3 and 9 on the 9 pin min. socket (counting counter clockwise) then proceed with test.							
HM04	6.3	4370-5621	0	---	X2	---	250	Ampl. Sect. Hold down S1 and press S5	
HM04	6.3	4310-6027	20	---	X10	S5	400	Osc. Sect.	
HP6	6.3	4310-5726	11	---	X10	S5	300		
HY90	35.0	4300-5070	0	50	SH	S3	650		
KT61	6.3	7250-3480	10	---	X10	S5	450		
KT66	6.3	7250-3481	17	---	X10	S5	300		
KT88	6.3	7250-3481	13	---	X20	S5	225		
KTZ63	6.3	7200-3485	21	---	X2	S5	375	Cap = G	
L63	6.3	7250-3080	23	---	X4	S5	400		
L77	6.3	4360-1070	25	---	X2	S5	675		
LC900	2.5	4310-5076	17	---	X10	S5	475		
LN119	50.0	5430-6720	26	---	X4	S5	625	Pent. Sect.	
LN119	50.0	5410-9080	0	---	X2	S5	775	Triode Sect.	
LN152	6.3	5490-6837	21	---	X4	S5	500	Pent. Sect.	
LN152	6.3	5420-1030	25	---	X2	S5	425	Triode Sect.	
M8079	6.3	4300-7215	0	78	SH	S1	400	X Dual Diode	
M8081	6.3	4356-2170	17	---	X10	S5	325	X Dual Triode	
M8100	6.3	4310-5620	10	---	X4	S5	675		
M8136	12.6	5472-6183	25	---	X2	S5	675	X Dual Triode	
M8137	12.6	5472-6183	14	---	X4	S5	200	X Dual Triode	
M8162	12.6	5472-6183	14	---	X4	S5	625	X Dual Triode	
N17	2.5	7130-2400	23	---	X2	S4	475		
N18	3.0	7130-2400	0	---	X4	---	300	Hold down S1 and press S5	
N19	3.0	7160-2300	0	---	X4	---	300	Hold down S1 and press S5	
N77	6.3	4310-5720	26	---	X4	S5	400		
N78	6.3	4310-5720	10	---	X10	S5	500		
N119	50.0	4520-7930	16	---	X10	S5	475		
N144	6.3	4310-5720	26	---	X4	S5	400		
N151	6.3	8160-2570	17	---	X4	S5	500	Use Hickok Adapter Code No. 1050-129	
N152	20.0	5420-0839	42	---	X10	S5	375	Cap = P	
N153	12.6	5420-7136	8	---	X10	S5	475		
N154	17.0	5420-7930	23	---	X10	S5	350		

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS	
N309	12.6	5420-7136	8	---	X10	S5	475		
N329	17.0	5420-7930	23	---	X10	S5	350		
N359	20.0	5420-0839	42	---	X10	S5	375	Cap = P	
N709	6.3	5420-7930	14	---	X10	S5	475		
N727	6.3	4310-5620	18	---	X4	S5	575		
OM4	6.3	7200-3080	19	---	X2	S5	625	Triode Sect. Cap = G	
OM4	6.3	7200-5480	19	64	SH	S1	400	X Dual Diode	
PABC80	10.0	5480-9070	15	---	X4	S5	175	Triode Sect.	
PABC80	10.0	5400-6070	0	35	SH	S1	400	Diode No. 1	
PABC80	10.0	5400-2137	0	78	SH	S1	400	X Dual Diode	
PC86	4.3	5420-1030	14	---	X10	S5	875		
PC95	3.0	4320-5670	11	---	X10	S5	650		
PC97	4.3	4310-5620	12	---	X4	---	625	Hold down S1 and press S5	
PCC84	7.5	5462-9371	24	---	X10	S5	375	X Dual Triode	
PCC85	10.0	5472-6183	14	---	X4	S5	625	X Dual Triode	
PCC88	7.5	5472-6183	20	---	X10	S5	775	X Dual Triode	
PCC189	7.5	5472-6183	22	---	X10	S5	475	X Dual Triode	
PCF80	10.0	5420-6371	12	---	X4	S5	625	Pent. Sect.	
PCF80	10.0	5490-1086	26	---	X4	S5	675	Triode Sect.	
PCF82	10.0	5420-6370	12	---	X4	S5	475	Pent. Sect.	
PCF82	10.0	5490-1080	10	---	X10	S5	525	Triode Sect.	
PCF86	7.5	5420-8930	11	---	X10	S5	525	Pent. Sect.	
PCF86	7.5	5460-7030	33	---	X10	S5	380	Triode Sect.	
PCL82	17.0	5430-6720	26	---	X4	S5	625	Pent. Sect.	
PCL82	17.0	5410-9080	0	---	X2	S5	775	Triode Sect.	
PCL84	17.0	5480-6970	10	---	X10	S5	630	Pent. Sect.	
PCL84	17.0	5410-2030	12	---	X4	S5	630	Triode Sect.	
PCL85	17.0	5490-6780	36	---	X10	S5	380	Pent. Sect.	
PCL85	17.0	5420-1030	23	---	X2	S5	960	Triode Sect.	
PCL86	12.6	5480-6370	11	---	X10	S5	500	Pent. Sect.	
PCL86	12.6	5410-9020	10	---	X2	S5	325	Triode Sect.	
PF86	4.3	5490-6138	11	---	X4	S5	300		
PL21	6.3	4310-6025	#	93	SH	S6	650	Strikes about 26	
PL36	25.0	7250-0480	32	---	X10	S5	450	Cap = P	
PL81	20.0	5420-0839	42	---	X10	S5	375	Cap = P	
PL82	17.0	5420-7930	23	---	X10	S5	350		
PL83	12.6	4520-7136	8	---	X10	S5	475		
PL84	17.0	5420-7930	30	---	X10	S5	475	Hold down "Life Test"	
PLL80	12.6	5420-3170	14	---	X4	S5	770	Pent. No. 1	
PLL80	12.6	5460-8970	14	---	X4	S5	770	Pent. No. 2	
PMO4	6.3	4310-5672	0	---	X4	S5	500		
PMO5	6.3	4310-5620	10	---	X4	S5	675		
PMO7	6.3	4310-5726	11	---	X10	S5	300		
PY80	20.0	5400-9030	0	50	SH	S3	650		
PY81	17.0	5400-0090	0	50	SH	---	650	Cap = P: Short on 1-2-3-4 Hold down S7 and press S3	
PY82	20.0	5400-9030	0	50	SH	S3	650		
PY88	OFF	5400-0090	Use this setting for short check only						
PY88	25.0	5400-0090	0	56	SH	---	800	Cap = P. Short on 1-2-3-4 Hold down S7 and press S3	
QA2403	6.3	4310-5726	11	---	X10	S5	300		
QA2406	12.6	5472-6183	14	---	X4	S5	625	X Dual Triode	
QQEO2/5	12.6	5431-8720	12	---	X10	S5	425	Tetrode No. 1	
QQEO2/5	12.6	5413-6720	12	---	X10	S5	425	Tetrode No. 2	
QQEO3/12	12.6	5431-8720	13	---	X4	S5	500	Tetrode No. 1	
QQEO3/12	12.6	5413-6720	13	---	X4	S5	500	Tetrode No. 2	
QQEO3/20	12.6	7162-0340	29	---	X2	S5	775	Right Cap = P. Use Hickok Adapter Code No. 1050-107	
QQEO3/20	12.6	7126-0340	29	---	X2	S5	775	Left Cap = P	
QQEO6/40	12.6	7162-0340	35	---	X4	S5	625	Right Cap = P. Use Hickok Adapter Code No. 1050-107	
QQEO6/40	12.6	7126-0340	35	---	X4	S5	625	Left Cap = P	
QQVO3/10	12.6	5431-8720	13	---	X4	S5	500	Tetrode No. 1	

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
QQVO3/10	12.6	5413-6720	13	---	X4	S5	500	Tetrode No. 2
QQVO3/20A	12.6	7162-0340	29	---	X2	S5	775	Right Cap = P. Use Hickok Adapter Code No. 1050-107
QQVO3/20A	12.6	7126-0340	29	---	X2	S5	775	Left Cap = P
QS95/10	OFF	0000-5010	---	---	VR	† S9	95V	★ 110V From 2 to 10 ma Regulation = 5 volts
Connect a 470K ohm resistor between pins 1 and 4 on any socket.								
STV-85/10	OFF	0000-1020	---	---	VR	† S9	85V	★ 125V From 1 to 10 ma Regulation = 3 volts
STV-108/30	OFF	0000-5020	---	---	VR	† S9	108V	★ 115V From 5 to 30 ma Regulation = 2 volts
STV-150/30	OFF	0000-5020	---	---	VR	† S9	150V	★ 155V From 5 to 30 ma Regulation = 2 volts
U26	6.3	4200-0000	0	85	SH	S6	400	Cap = P
U49	6.3	4200-0000	0	85	SH	S6	400	Cap = P
U70	6.3	7200-5381	0	20	SH	S3	650	X Dual Diode
U78	6.3	4300-6170	0	18	SH	S3	650	X Dual Diode
U119	35.0	5400-9030	0	55	SH	S3	800	
U152	20.0	5400-9030	0	50	SH	S3	650	
U153	17.0	5400-0090	0	50	SH	---	650	Cap = P. Short on 1-2-3-4 Hold down S7 and press S3
U154	20.0	5400-9030	0	50	SH	S3	650	
U192	20.0	5400-9030	0	50	SH	S3	650	
U381	35.0	5400-9030	0	55	SH	S3	800	
U709	6.3	5400-7130	0	42	SH	S3	650	X Dual Diode
UABC80	25.0	5480-9070	15	---	X4	S5	175	Triode Sect.
UABC80	25.0	5400-6070	0	35	SH	S1	400	Diode No. 1
UABC80	25.0	5400-2137	0	78	SH	S1	400	X Dual Diode
UAF42	12.6	8160-2574	25	---	X2	S5	375	Pent. Sect.) Use Hickok
UAF42	12.6	8100-3070	0	61	SH	S1	400	Diode Sect.) Adapter Code No. 1050-129
UBC41	12.6	8130-2070	9	---	X1	S5	800	Triode Sect.) Use Hickok
UBC41	12.6	8100-6570	0	27	SH	S1	400	X Dual Diode) Adapter Code No. 1050-129
UBC81	12.6	5420-1030	9	---	X1	S5	800	Triode Sect.
UBC81	12.6	5400-8630	0	27	SH	S1	400	X Dual Diode
UBF80	17.0	5420-6139	8	---	X4	---	350	Pent. Sect. Hold down S1 and press S5
UBF80	17.0	5400-7839	0	30	SH	S1	400	X Dual Diode
UBF89	20.0	5420-6139	14	---	X4	S5	450	Pent. Sect.
UBF89	20.0	5400-8730	0	60	SH	S1	400	X Dual Diode
UC92	10.0	4360-1070	14	---	X4	S5	625	
UCC85	25.0	5472-6183	14	---	X4	S5	625	X Dual Triode
UCH42	12.6	8160-2574	19	---	X2	S5	400	Heptode Sect.) Use Hickok
UCH42	12.6	8140-3076	27	---	X2	S5	475	Triode Sect.) Adapter Code No. 1050-129
UCH81	20.0	5420-6137	15	---	X2	S5	475	Heptode Sect.
UCH81	20.0	5490-8032	20	---	X4	S5	475	Triode Sect.
UCL82	50.0	5430-6720	26	---	X4	S5	625	Pent. Sect.
UCL82	50.0	5410-9080	0	---	X2	S5	775	Triode Sect.
UF41	12.6	8160-2570	21	---	X2	S5	475	Use Hickok Adapter Code No. 1050-129
UF80	20.0	5420-7819	10	---	X10	S5	400	
UF85	20.0	5420-7819	17	---	X4	S5	550	
UF89	12.6	5420-7839	12	---	X4	S5	475	
UL41	50.0	8160-2570	10	---	X10	S5	600	Use Hickok Adapter Code No. 1050-129
UL84	50.0	5420-7930	16	---	X10	S5	475	
UM80	20.0	5410-9020	Vary	100	SH	S6	----	Connect a 1 megohm resistor from Plate Jack to octal socket pin No. 7. Vary Bias to vary beam angle.

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS	
UY41	35.0	8100-2070	0	48	SH	S3	500	Adj. Line Adj. to 625. Use Hickok Adapter Code No. 1050-129	
UY85	35.0	5400-9030	0	55	SH	S3	800		
W17	1.4	7160-2300	0	---	X2	S4	225		
W77	6.3	4310-5726	15	---	X4	S5	225		
X17	✱ 1.4	7140-3062	10	---	X2	S4	425		
X719	6.3	5420-6137	15	---	X2	S5	475	Heptode Sect.	
X719	6.3	5490-8032	20	---	X4	S5	475	Triode Sect.	
X727	6.3	4370-5621	0	---	X2	---	250	Ampl. Sect. Hold down S1 and press S5	
X727	6.3	4310-6027	20	---	X10	S5	400	Osc. Sect.	
XC95	2.0	4320-5670	11	---	X10	S5	650		
XC97	2.5	4320-5016	13	---	X10	S5	800		
XC900	2.0	4310-5076	17	---	X10	S5	475		
XCC189	4.3	5472-6183	22	---	X10	S5	475	X Dual Triode	
XCF80	4.3	5420-6371	12	---	X4	S5	625	Pent. Sect.	
XCF80	4.3	5490-1086	26	---	X4	S5	675	Triode Sect.	
XCH81	3.0	5420-6137	15	---	X2	S5	475	Heptode Sect.	
XCH81	3.0	5490-8032	20	---	X4	S5	475	Triode Sect.	
XCL82	7.5	5430-6720	26	---	X4	S5	625	Pent. Sect.	
XCL82	7.5	5410-9080	0	---	X2	S5	775	Triode Sect.	
XCL84	7.5	5480-6970	10	---	X10	S5	630	Pent. Sect.	
XCL84	7.5	5410-2030	12	---	X4	S5	630	Triode Sect.	
XCL85	10.0	5490-6780	36	---	X10	S5	380	Pent. Sect.	
XCL85	10.0	5420-1030	23	---	X2	S5	960	Triode Sect.	
XF80	3.0	5420-7819	10	---	X10	S5	400		
XF85	3.0	5420-7819	17	---	X4	S5	550		
XF183	3.0	5420-7819	17	---	X4	S5	650		
XF184	3.0	5420-7819	10	---	X10	S5	500		
XL36	12.6	7250-0480	32	---	X10	S5	450	Cap = P	
XL84	7.5	5420-7930	14	---	X10	S5	475		
XL86	7.5	5420-7930	16	---	X10	S5	475		
XY88	OFF	5400-0090	Use this setting for short check only.						
XY88	17.0	5400-0090	0	56	SH	---	800	Cap = P. Short on 1-2-3-4 Hold down S7 and press S3	
YC95	3.0	4320-5670	11	---	X10	S5	650		
YC97	3.0	4320-5016	13	---	X10	S5	800		
YCC189	5.0	5472-6183	22	---	X10	S5	475	X Dual Triode	
YF183	4.3	5420-7819	17	---	X4	S5	650		
YF184	4.3	5420-7819	10	---	X10	S5	500		
Z63	6.3	7200-3485	21	---	X2	S5	375	Cap = G	
Z77	6.3	4310-5726	11	---	X10	S5	300		
Z150	6.3	8160-2574	10	---	X4	S5	725	Use Hickok Adapter Code No. 1050-129	
Z152	6.3	5420-1819	10	---	X10	S5	400		
Z719	6.3	5420-7819	10	---	X10	S5	400		
Z729	6.3	5490-6138	11	---	X4	S5	300		
ZD17	1.4	7160-5400	13	---	X1	S5	400	Pent. Sect.	
ZD17	1.4	7100-3000	0	15	SH	S1	400	Diode Sect.	
ZD152	6.3	5420-6139	8	---	X4	---	350	Pent. Sect. Hold down S1 and press S5	
ZD152	6.3	5400-7839	0	30	SH	S1	400	X Dual Diode	