

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
6CL8	Triode	1	4	22	10	8	---	---	2	1	4-5		
6CL8	Tetrode	4	4	9	10	8	---	7	6	9	4-5		
7D10		1	4	20	12	7	---	8	7	2	4-5		
7D11		1	2	9	9	7	---	4	3	5	2-7		
7DZ7	Pent-1	1	2	17	10	9	---	4	6	5	2-7		
7DZ7	Pent-2	1	2	15	10	9	---	4	3	1	2-7		
7GS7	Triode	5	4	7	10	8	---	---	2	1	4-5	Must show short on 3 - 8; Cathode short test	
7GS7	Pentode	5	4	0	21	8	---	7	6	9	4-5	Depress 3 - 8 together	
7GV7	Triode	5	4	7	10	8	---	---	1	9	4-5	Must show short on 6 - 8; Cathode short test	
7KY6		1	4	6	9	8	---	8	7	2	4-5	Depress 6 - 8 together	
7KZ6		1	4	6	8	8	---	8	7	2	4-5	Must show short on 3 - 9	
7MP18		1	3	10	13	8	1	6	5	7	3-4		
8A8	Triode	1	4	13	10	8	---	---	1	9	4-5		
8A8	Pentode	1	4	30	15	8	---	3	6	2	4-5		
8AC9	Diode	3	1	0	15	8	---	---	2	---	1-11	Key at 0; May show short on 3	
8AC9	Pentode	4	6	7	8	8	---	4	5	3	1-11	Key at 7	
8AC10	Triode-1	1	4	14	14	8	---	---	2	1	4-6	Key at 5	
8AC10	Triode-2	4	1	14	15	8	---	---	5	7	4-6	Key at 0	
8AC10	Triode-3	5	2	14	15	8	---	---	5	1	4-6	Key at 3	
8AL9	Triode	2	1	14	30	8	---	---	9	7	1-3	Key at 2	
8AL9	Pentode	2	6	10	15	8	---	2	7	3	4-6	Key at 5	
8AR11	Pent-2	1	3	7	30	8	---	5	4	7	1-3	Key at 2	
8AR11	Pent-1	1	9	7	30	8	---	4	3	5	1-3	Key at 8	
8AV11	Triode-1	1	6	15	15	8	---	---	2	1	4-6	Key at 5	
8AV11	Triode-3	1	6	15	15	8	---	---	7	3	4-6		
8AV11	Triode-2	1	3	15	15	8	---	---	7	9	4-6	Key at 2	
8B8	Triode	1	4	32	10	8	---	---	9	1	4-5		
8B8	Pentode	1	4	15	10	8	---	7	6	3	4-5		
8B10	Triode-1	1	1	28	10	8	---	---	6	5	1-11	Key at 0; Use black grid cap	
8B10	Triode-2	1	1	28	10	8	---	---	4	3	1-11		
8B10	Diode-1	3	7	0	16	8	---	---	3	---	1-11	Key at 6	
8B10	Diode-2	3	7	0	16	8	---	---	1	---	1-11		
8BA11	Pent-1	4	3	27	20	8	---	7	6	8	3-5	Key at 4; Use red grid cap	
8BA11	Pent-2	4	1	21	26	8	---	3	6	4	1-12	Key at 0	
8BA11	Triode	3	7	16	17	8	---	---	6	4	7-9	Key at 8	
8BM11	Pent-2	4	1	7	9	8	---	3	2	6	1-11	Key at 0	
8BM11	Pent-1	4	7	5	10	8	---	4	2	6	1-11	Key at 8	
8BN11	Pent-1	5	6	0	28	8	---	3	5	1	6-8	Key at 7	
6BN11	Pent-2	5	1	0	28	8	---	6	7	5	6-8	Key at 2	
8BQ7	Triode-1	1	4	15	11	8	---	---	6	7	4-5		

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
LEVER											FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
8BQ7	Triode-2	1	4	15	11	8	---	---	1	2	4 - 5	
8BQ11	Pent-2	1	3	14	23	8	---	5	4	7	1 - 3	Key at 2
8BQ11	Pent-1	1	9	14	23	8	---	4	3	5	1 - 3	Key at 8
8BU11	Triode-1	5	1	8	13	8	---	---	3	4	1 - 11	Key at 0
8BU11	Triode-2	5	1	8	13	8	---	---	7	6	1 - 11	
8BU11	Pentode	5	6	8	9	7?	---	3	4	2	1 - 11	Key at 7; Lever E?
8CB11	Pent-2	1	3	7	30	8	---	5	4	7	1 - 3	Key at 2
8CB11	Pent-1	1	9	7	30	8	---	4	3	5	1 - 3	Key at 8
8CL8	Triode	1	4	22	10	8	---	---	2	1	4 - 5	
8CL8	Tetrode	4	4	9	10	8	---	7	6	9	4 - 5	
8CW5		1	4	0	10	8	1-6-8	9	7	2	4 - 5	
8CY5		2	3	20	11	8	---	6	5	1	3 - 4	
8D8		1	4	17	30	8	---	1	6	9	4 - 5	Must show short on 2 - 7
8DX8	Triode	1	4	31	10	8	---	---	2	1	4 - 5	
8DX8	Pentode	1	4	26	11	8	---	9	6	8	4 - 5	
8FE5		1	2	5	6	8	---	4	3	5	2 - 7	
8FQ7	Triode-1	1	4	19	14	8	---	---	6	7	4 - 5	
8FQ7	Triode-2	1	4	19	14	8	---	---	1	2	4 - 5	
8FY7	*	4	4	15	10	8	---	---	3	2	4 - 6	* Key at 5; Use red grid cap
8FY7	*	1	1	0	9	8	---	---	7	5	4 - 6	* Key at 2
8GJ7	Triode	5	4	7	8	8	---	---	8	9	4 - 5	Must show short on 1 - 3; Cathode short test
8GJ7	Pentode	1	4	0	38	8	---	7	6	2	4 - 5	Depress 1 - 3 together
8GM6		4	3	4	10	8	---	6	5	1	3 - 4	
8GN8	Triode	4	4	9	10	8	---	---	3	2	4 - 5	
8GN8	Pentode	1	4	18	10	8	---	8	9	7	4 - 5	
8GU7	Triode-1	1	4	15	9	8	---	---	6	7	4 - 5	
8GU7	Triode-2	1	4	15	9	8	---	---	1	2	4 - 5	
8GX7	Triode	5	4	9	8	8	---	---	8	9	4 - 5	Must show short on 1 - 3; Cathode short test
8GX7	Pentode	4	4	5	7	8	---	7	6	2	4 - 5	Depress 1 - 3 together
8HA6		5	4	6	9	8	6	8	7	2	4 - 5	Must show short on 3 - 6 - 8 - 9
8HG8	Triode	1	4	5	10	8	---	---	7	6	4 - 5	May show short on 1 - 3; Cathode short test
8HG8	Pentode	1	4	7	25	8	---	9	8	2	4 - 5	Depress 1 - 3 together
8JK8	Triode-1	1	4	23	10	8	---	---	6	7	4 - 5	
8JK8	Triode-2	1	4	15	10	8	---	---	1	2	4 - 5	
8JT8	Triode	4	4	10	9	8	---	---	3	2	4 - 5	
8JT8	Pentode	1	4	0	17	7?	---	8	9	7	4 - 5	Lever E?
8JU8	Diode-1	3	4	0	16	8	7	---	8	---	4 - 5	Must show short on 2 - 8; Cathode short test Depress 8 - 9 together; Cathode short test - Depress 2 - 3 together

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
8JU8	Diode-2	3	4	0	16	8	---	---	7	---	4-5		
8JU8	Diode-3	3	4	0	16	8	1	---	2	---	4-5		
8JU8	Diode-4	3	4	0	16	8	---	---	1	---	4-5		
8JV8	Triode	4	4	4	9	8	---	---	3	2	4-5		
8JV8	Pentode	4	4	3	10	8	---	8	9	7	4-5		
8K11 *	Triode-2	1	1	33	10	8	---	---	5	7	1-12	* Key at 0; Use red grid cap	
8K11 *	Triode-1	1	6	27	10	8	---	---	2	1	1-12	* Key at 5	
8K11	Triode-3	1	6	33	10	8	---	---	7	3	1-12		
8KA8	Triode	4	4	2	10	8	---	---	1	2	4-5		
8KA8	Pentode	4	4	15	10	8	---	8	9	6	4-5		
8KR8	Triode	1	4	7	13	8	---	---	3	2	4-5		
8KR8	Pentode	1	4	5	11	8	---	8	9	7	4-5		
8KS8	Triode	5	4	14	13	8	---	---	3	2	4-5		
8KS8	Pentode	1	4	11	15	8	---	8	9	7	4-5		
8KT8	Triode	4	4	6	6	8	---	---	3	2	4-5		
8KT8	Pentode	2	4	0	44	8	---	8	9	7	4-5		
8LC8	Triode	1	4	29	10	8	---	---	1	2	4-5	May show short on 3	
8LC8	Pentode	4	4	8	16	8	---	8	9	6	4-5		
8LE8	Pent-1	5	4	0	27	8	---	8	1	9	4-5		
8LE8	Pent-2	5	4	0	33	8	---	8	6	9	4-5		
8LS6		1	4	25	34	8	9	3	7	2	4-5	Must show short on 3 - 9	
8LT8	Diode-1	3	4	0	15	8	---	---	8	---	4-5	May show short on 1	
8LT8	Diode-2	3	4	0	15	8	---	---	6	---	4-5		
8LT8	Pentode	5	4	0	22	8	---	2	3	9	4-5		
8LX8	Triode	1	4	11	16	8	---	---	1	9	4-5		
8LX8	Pentode	5	4	5	18	8	---	3	6	2	4-5		
8MD8	Triode-1	1	4	11	10	8	---	---	3	6	4-5		
8MD8	Triode-2	1	4	11	10	8	---	---	2	8	4-5		
8MD8	Triode-3	1	4	11	10	8	---	---	1	9	4-5		
8MU8	Triode	1	4	25	11	8	---	---	1	9	4-5		
8MU8	Pentode	1	4	14	16	8	---	3	6	2	4-5		
8MV8	Triode	1	4	15	18	8	---	---	3	2	4-5		
8MV8	Pentode	1	4	15	22	8	---	8	9	7	4-5		
8RHP1	Triode	1	4	32	10	8	---	---	9	1	4-5		
8RHP1	Pentode	1	4	15	10	8	---	7	6	3	4-5		
8U9	Triode	2	5	9	10	8	---	---	9	11	5-6		
8U9	Pentode	2	5	0	20	8	---	8	7	3	5-6		
8X9	Triode	4	5	10	14	8	---	---	9	11	5-6		
8X9	Pentode	2	5	0	39	8	---	8	7	3	5-6		
9A8	Triode	1	4	13	10	9	---	---	1	9	4-5		
9A8	Pentode	1	4	30	15	9	---	3	6	2	4-5		
9AB4		1	3	30	10	9	---	---	1	6	3-4		

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
		LEVER										
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
9AH9 *	Triode	1	1	8	13	8	---	---	3	2	1 - 11	* Key at 0; Must show short on 5 - 6
9AH9 *	Pentode	1	6	5	12	8	---	2	5	11	1 - 11	* Key at 7
9AK10	Triode-2	2	1	5	35	9	---	---	5	7	11	Key at 0
9AK10	Triode-1	2	5	5	34	9	---	---	8	4	7	Key at 6
9AK10	Triode-3	2	7	5	32	9	---	---	5	4	9	Key at 8
9AM10 *		1	4	13	18	8	---	---	2	1	4 - 6	* Key at 5
9AM10 *		3	1	13	18	8	---	---	5	7	4 - 6	* Key at 0
9AM10 *		5	2	13	18	8	---	---	5	1	4 - 6	* Key at 3
9AQ8	Triode-1	1	4	25	11	9	---	---	6	7	4 - 5	
9AQ8	Triode-2	1	4	25	11	9	---	---	1	2	4 - 5	
9BJ11	Pent-2	1	4	0	16	9	---	3	2	6	1 - 11	Key at 0
9BJ11	Pent-1	4	7	0	15	9	---	4	2	6	1 - 11	Key at 8
9CG8	Triode	1	4	18	12	9	---	---	2	1	4 - 5	Must show short on 3 - 8; Cathode short test
9CG8	Pentode	1	4	25	28	9	---	7	6	9	4 - 5	- Depress 3 - 8 together
9DK3		3	4	0	20	9	3 - 9	---	1 - 7	---	4 - 5	
9DZ8	Triode	1	4	20	18	9	---	---	9	1	4 - 5	
9DZ8	Pentode	2	4	7	12	9	---	7	6	3	4 - 5	
9EA8	Triode	1	4	18	11	9	---	---	1	9	4 - 5	
9EA8	Pentode	1	4	20	23	9	---	3	6	2	4 - 5	
9ED4	*	4	4	10	45	8	---	---	11	8	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 9; OK above 30; Cap goes to top of tube
9FG6	Triode	4	4	10	34	5	---	---	9	1	4 - 5	Must show short on 2 - 6 - 8
9FG6	Eye	7	4	0	0	5	2 - 8	---	6 - 7	---	4 - 5	See instructions for eye test
9GH8	Triode	1	4	25	10	9	---	---	1	9	4 - 5	
9GH8	Pentode	1	4	18	21	9	---	3	6	2	4 - 5	
9GV7	Triode	5	4	7	10	9	---	---	1	9	4 - 5	Must show short on 6 - 8; Cathode short test
9GV7	Pentode	5	4	0	22	9	---	2	3	7	4 - 5	Depress 6 - 8 together
9GV8	Triode	2	4	34	10	8	---	---	1	2	4 - 5	
9GV8	Pentode	2	4	7	10	8	---	7	6	9	4 - 5	
9JW8	Triode	5	4	10	15	9	---	---	1	9	4 - 5	
9JW8	Pentode	4	4	7	10	9	---	3	6	2	4 - 5	
9KC6		5	4	0	20	8	---	9	7	2	4 - 5	
9KG6	*	1	4	8	26	9	1-2-3	7	11	8	4 - 5	* Must use magnoval adapter; Black cap goes to top of tube; Must show short on 1 - 2 - 3 - 6 - 7 - 8
9KV8	Triode	1	4	31	10	9	---	---	3	2	4 - 5	
9KV8	Pentode	1	4	9	9	9	---	8	9	7	4 - 5	
9KX6		1	4	5	8	12	---	8	7	2	4 - 5	Must show short on 3 - 9
9KZ8	Pentode	4	4	9	10	9	---	7	6	2	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA

TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
9KZ8	Triode	3	4	15	18	9	---	---	1	9	4-5	Must show short on 3 - 9
9LA6		1	4	6	11	8	---	8	7	2	4-5	
9MD8	Triode-1	1	4	11	10	9	---	---	3	6	4-5	
9MD8	Triode-2	1	4	11	10	9	---	---	2	8	4-5	
9MD8	Triode-3	1	4	11	10	9	---	---	1	9	4-5	
9MHH3	Triode	1	3	16	13	8	---	---	2	5	3-4	
9MHH3	Triode	1	3	16	13	8	---	---	1	6	3-4	
9ML8	Triode-1	1	4	12	16	8	---	---	3	6	4-5	
9ML8	Triode-2	1	4	12	16	8	---	---	2	8	4-5	
9ML8	Triode-3	1	4	12	16	8	---	---	1	9	4-5	
9MN8 *	Triode-1	1	7	10	19	8	---	---	8	4	5	* Key at 6
9MN8 *	Triode-2	1	6	10	21	8	---	---	9	2	5	* Key at 5
9MN8 *	Triode-3	1	1	10	19	8	---	---	6	8	5	* Key at 0
9MP12		1	3	8	18	8	---	6	5	1	3-4	
9RA6		3	4	10	20	9	7	---	9	2	4-5	Must show short on 2 - 7; Grid short test - Depress 2 - 7 together
9RAL1	Triode-1	1	4	14	15	9	---	---	6	7	4-5	Must show short on 2 - 3
9RAL1	Triode-2	1	4	0	10	9	3	---	1	2	4-5	
9RAL1	Triode-1	1	4	14	15	9	---	---	6	7	4-5	Must show short on 2 - 3
9RAL1	Triode-2	1	4	0	10	9	3	---	1	9	4-5	
9RHH2	Triode	1	4	25	10	9	---	---	1	9	4-5	
9RHH2	Pentode	1	4	18	21	9	---	3	6	2	4-5	
9RHR2	Triode	1	4	25	10	9	---	---	1	9	4-5	
9RHR2	Pentode	1	4	18	21	9	---	3	6	2	4-5	
9V9	Triode	5	5	8	10	9	---	---	11	8	5-6	
9V9	Pentode	5	5	5	21	9	---	4	7	3	5-6	
10AF11 *	Triode-1	2	1	19	21	9	---	---	8	6	1-12	* Key at 0
10AF11 *	Triode-2	2	1	19	23	9	---	---	4	3	1-12	
10AF11 *	Pentode	2	6	5	21	9	---	2	7	3	4-6	* Key at 5
10AL11	Pent-1	4	1	17	10	9	---	9	8	5	1-3	Key at 2; Use red grid cap
10AL11	Pent-2	4	5	2	10	9	---	3	4	1	5-7	Key at 6
10CW5		1	4	0	10	9	1-6-8	9	7	2	4-5	May show short on 1 - 2 - 6 - 7 - 8 - 9
10DX8	Triode	1	4	31	10	9	---	---	2	1	4-5	
10DX8	Pentode	1	4	26	11	9	---	9	6	8	4-5	
10EM7	Triode-1	4	7	12	10	9	---	---	5	4	7-8	
10EM7	Triode-2	2	7	0	8	9	---	---	2	1	7-8	
10FD12	Pentode	1	4	21	17	11	---	1	6	2	4-5	
10FD12	Diode-1	3	4	0	20	11	---	---	7	---	4-5	
10FD12	Diode-2	3	4	0	20	11	---	---	8	---	4-5	? Maybe 10GF7
10FG7	Triode-1	5	4	27	10	9	---	---	8	9	4-5	
10FG7	Triode-2	2	4	2	10	7	---	---	6	2	4-5	
10FR7	Triode-1	4	4	10	13	9	---	---	6	7	4-5	Must show short on 2 - 3

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TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
10FR7	Triode-2	2	4	5	6	9	2	---	1	3	4-5	
10GF7	Triode-1	5	4	27	10	9	---	---	8	9	4-5	? Maybe 10FG7
10GF7	Triode-2	2	4	2	10	7	---	---	6	2	4-5	
10GH8	Triode	1	4	25	10	9	---	---	1	9	4-5	
10GH8	Pentode	1	4	18	21	9	---	3	6	2	4-5	
10GK6		1	4	21	10	9	---	8	7	2	4-5	Must show short on 3 - 9
10GN8	Triode	4	4	9	10	9	---	---	3	2	4-5	
10GN8	Pentode	1	4	18	10	9	---	8	9	7	4-5	
10GV8	Triode	2	4	34	10	8	---	---	1	2	4-5	
10GV8	Pentode	2	4	7	10	8	---	7	6	9	4-5	
10HA6		5	4	6	9	9	6	8	7	2	4-5	Must show short on 3 - 6 - 8 - 9
10HF8	Triode	2	4	36	10	9	---	---	3	2	4-5	
10HF8	Pentode	1	4	26	10	9	---	8	9	7	4-5	
10JA5	*	1	1	5	5	9	12	5	8	4	3	* Key at 2; Must show short on 5 - 6 - 12; Use red grid cap
10JA8	Triode	2	4	35	10	9	---	---	3	2	4-5	
10JA8	Tetrode	2	4	12	15	9	---	8	9	7	4-5	
10JT8	Triode	4	4	10	9	9	---	---	3	2	4-5	
10JT8	Pentode	1	4	0	17	9	---	8	9	7	4-5	
10JY8	Triode	5	4	13	9	9	---	---	3	2	4-5	
10JY8	Pentode	1	4	24	9	9	---	8	9	7	4-5	
10KR8	Triode	1	4	7	13	9	---	---	3	2	4-5	
10KR8	Pentode	1	4	5	11	9	---	8	9	7	4-5	
10KU8	Diode-1	3	4	---	24	9	2	---	3	---	4-5	
10KU8	Diode-2	3	4	---	24	9	3	---	2	---	4-5	
10KU8	Pentode	1	4	9	8	9	---	8	9	7	4-5	
10L14	Triode-1	1	4	25	11	12	---	---	6	7	4-5	
10L14	Triode-2	1	4	25	11	12	---	---	1	2	4-5	
10LB8	Triode	5	4	18	10	9	---	---	3	2	4-5	
10LB8	Pentode	2	4	7	18	9	---	8	9	7	4-5	
10LD6		1	4	5	15	9	6	8	7	2	4-5	Must show short on 3 - 6 - 8 - 9
10LD12	Triode	1	4	35	12	12	---	---	9	8	4-5	
10LD12	Diode-1	3	4	0	25	12	---	---	6	---	4-5	
10LD12	Diode-2	3	4	0	17	12	---	---	2	---	4-5	
10LD12	Diode-3	3	4	0	17	12	---	---	1	---	4-5	
10LD13	Triode	1	4	34	10	10	---	---	1	2	4-5	May show short on 7 - 8
10LD13	Diode-1	3	4	0	25	10	---	---	8	---	4-5	
10LD13	Diode-2	3	4	0	25	10	---	---	6	---	4-5	
10LE8	Pent-1	5	4	0	27	9	---	8	1	9	4-5	
10LE8	Pent-2	5	4	0	33	9	---	8	6	9	4-5	
10LM8	Triode	1	4	24	10	9	---	---	1	9	4-5	
10LM8	Pentode	4	4	3	12	7	---	3	6	2	4-5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
10LW8	Triode	5	4	10	16	9	---	---	3	2	4-5		
10LW8	Pentode	5	4	0	14	9	---	8	9	7	4-5		
10LY8	Triode	2	4	25	25	9	---	---	3	2	4-5		
10LY8	Pentode	1	4	7	12	9	---	8	9	7	4-5		
10LZ8	Triode	5	4	15	15	9	---	---	3	2	4-5		
10LZ8	Pentode	1	4	9	16	9	---	8	9	7	4-5		
10P18		1	4	5	9	13	1-6-8	9	7	2	4-5	Fil Cont - Set control "E" at 12; May show short on 1 - 2 - 6 - 8 - 9	
10T10		4	1	15	11	9	---	6	7	3	1-12	Key at 0; Use red grid cap	
10T10		5	7	10	10	9	---	3	4	1	5-7	Key at 6	
10Z10 *	Pent-1	1	5	21	11	9	---	8	2	4	5-7	* Key at 6; Use red grid cap	
10Z10 *	Pent-2	1	1	0	25	9	---	---	4-6	---	5-7	* Key at 0	
11AF9	Pent-1	1	5	7	11	9	---	9	11	8	5-6	May show short on 2	
11AF9	Pent-2	1	5	15	16	9	---	3	4	1	5-6		
11AR11	Pent-2	1	3	7	30	9	---	5	4	7	3-1	Key at 2; Use red grid cap	
11AR11	Pent-1	1	9	7	30	9	---	4	3	5	9-7		
11BM8	Triode	1	4	31	11	9	---	---	9	1	4-5		
11BM8	Pentode	1	4	10	12	9	---	7	6	3	4-5		
11BN11	Pent-1	5	6	0	28	9	---	3	5	1	6-8	Key at 7	
11BN11	Pent-2	5	1	0	28	9	---	6	7	5	6-8	Key at 2	
11BQ11	Pent-2	1	3	14	23	9	---	5	4	7	1-3	Key at 2	
11BQ11	Pent-1	1	9	14	23	9	---	4	3	5	1-3	Key at 8	
11BT11	Triode-1	4	1	5	87	9	---	---	9	73	1-3	Key at 2	
11BT11	Triode-2	54	41	10	11	9	---	---	17	83	1-3	Key at 5	
11BT11	Pentode	5	81	0	715	9	---	810	82	411	1-3	Key at 6	
11CA11	Triode-2	3	1	8	26	9	---	---	2	3	11	Key at 0; May show short on 7	
11CA11	Triode-1	3	1	8	24	9	---	---	4	6	11		
11CA11	Pentode	3	7	3	23	9	---	5	6	3	9	Key at 8	
11CF11 *	Pentode	1	1	12	12	9	---	4	3	5	11	* Key at 0	
11CF11 *	Diode-1	1	6	15	15	9	---	---	7	3	11	* Key at 5	
11CF11 *	Diode-2	1	7	15	17	9	---	---	3	2	11	* Key at 6	
11CH11 *	Triode-1	4	1	5	9	9	---	---	9	7	1-3	* Key at 2	
11CH11 *	Triode-2	5	4	10	15	9	---	---	1	8	1-3	* Key at 5	
11CH11 *	Pentode	5	5	10	13	9	---	---	8	4	1-3	* Key at 6	
11CY7	Triode-1	2	9	20	30	9	---	---	6	7	4-5	May show short on 2 - 3	
11CY7	Triode-2	2	9	20	5	9	2	---	1	3	4-5		
11DS5		1	3	13	14	9	1	6	5	7	3-4	Must show short on 1 - 7; Grid short test - Depress 1 - 7 together	
11FY7	Triode-1	4	4	15	10	9	---	---	3	2	4-5	Key at 5; Use red grid cap	
11FY7	Triode-2	1	1	0	9	9	---	---	7	5	4-5	Key at 2	
11HM7		1	6	9	9	6	---	8	7	2	4-5-6	Must show short on 3 - 9	
11KV8	Triode	1	4	31	10	9	---	---	3	2	4-5		

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
11KV8	Pentode	1	4	9	9	9	---	8	9	7	4-5		
11LQ8	Triode	5	4	8	11	9	---	---	3	2	4-5		
11LQ8	Pentode	1	4	7	11	9	---	---	3	2	4-5		
11LT8	Diode-1	3	4	0	15	9	---	---	8	---	4-5	May show short on 1	
11LT8	Diode-2	3	4	0	15	9	---	---	6	---	4-5		
11LT8	Pentode	5	4	0	22	9	---	2	3	9	4-5		
11LY6		3	4	8	28	9	---	8	7	2	5	Must show short on 3 - 9; Grid-3 short test - Depress 3 - 9 together	
11MS8	Triode	2	4	34	10	9	---	---	1	2	4-5		
11MS8	Pentode	2	4	7	7	9	---	7	6	9	4-5		
11R3		3	4	0	16	9	2	---	9	---	4-5	May show short on all pins	
11Y9	Pent-1	1	5	7	11	9	---	9	11	8	5-6		
11Y9	Pent-2	1	5	15	16	9	---	3	4	1	5-6		
12AC10 *	Triode-1	1	4	14	18	10	---	---	2	1	4-6	* Key at 5	
12AC10 *	Triode-2	3	1	13	27	10	---	---	5	7	4-6	* Key at 0	
12AC10 *	Triode-3	5	2	14	15	10	---	---	5	1	4-6	* Key at 3	
12AE10	Pent-1	4	1	10	17	10	---	6	7	3	1-12	Key at 0; Use red grid cap	
12AE10	Pent-2	5	7	0	9	10	---	3	4	1	5-6	Key at 6	
12AF4		2	3	24	11	10	1-2	---	7	6	3-4	Must show short on 1 - 2 - 6 - 7	
12AF11 *	Triode-1	2	1	19	21	10	---	---	8	6	1-12	* Key at 0; Use red grid cap	
12AF11 *	Triode-2	2	1	19	23	10	---	---	4	3	1-12		
12AF11 *	Pentode	2	6	5	21	10	---	2	7	3	1-12	* Key at 5	
12AJ7	Triode	5	4	11	12	10	---	---	8	9	4-5		
12AJ7	Heptode	5	4	9	15	10	---	1	6	2	4-5		
12AL11	Pent-1	4	1	17	10	10	---	9	8	5	1-3	Key at 2; Use red grid cap	
12AL11	Pent-2	4	5	2	10	10	---	3	4	1	5-7	Key at 6	
12AU8	Pentode	2	4	8	24	10	---	8	9	7	4-5		
12AU8	Triode	2	4	15	25	10	---	---	3	2	4-5		
12AW6		1	3	7	33	10	---	6	5	1	3-4		
12AX3		1	#1	0	6	10	2/10	---	#4	---	4-6	Key at 5; Must show short on 2 - 9; Use red grid cap	
12AX12		1	3	16	17	7	---	6	5	1	4-6		
12AY3		1	4	0	4	10	2	---	7	---	4-5	Must show short on 2 - 7	
12BB14	*	5	4	0	5	10	2-7	6	11	1	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cap goes to top of tube	
12BE3		3	1	0	16	10	12	---	6	---	1-3	Key at 2; Must show short on 6 - 12; Use red grid cap	
12BF11	Sect-1	4	1	23	15	10	---	6	7	3	1-12	Key at 0; Use red grid cap	
12BF11	Sect-2	1	7	7	10	10	---	5	6	3	7-9	Key at 8	
12BR3		3	4	0	15	10	2	---	9	---	4-5	May show short on 2 - 9	
12BS3		3	4	0	15	10	7	---	2	---	4-5		

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
12BT3		3	1	0	17	10	---	---	4	---	1 - 12	Key at 0; Use red grid cap
12BT6	Triode	1	3	12	29	10	---	---	7	1	3 - 4	
12BT6	Diode-1	3	3	0	25	10	---	---	5	---	3 - 4	
12BT6	Diode-2	3	3	0	25	10	---	---	6	---	3 - 4	
12BV11	Pent-1	4	6	9	15	10	---	3	4	1	6 - 8	Key at 7
12BV11	Pent-2	4	1	9	15	10	---	6	5	8	6 - 8	Key at 2
12CA4		2	4	0	1	10	---	---	1	---	4 - 5	
12CA4		2	4	0	1	10	---	---	7	---	4 - 5	
12CK3		1	4	0	4	10	2	---	7	---	4 - 5	Must show short on 2 - 7
12CL3		3	4	0	16	10	2	---	7	---	4 - 5	Must show short on 2 - 7
12CT3		3	4	0	17	10	2	---	6	---	4 - 5	Must show short on 2 - 6
12DA6		1	4	20	25	10	---	8	7	2	4 - 5	Must show short on 1 - 6
12DK6		1	3	6	29	10	---	6	5	1	3 - 4	
12DM4		1	7	---	4	10	---	---	5	---	7 - 8	
12DM7	Triode-1	1	9	12	32	7	---	---	6	7	4 - 5 - 9	
12DM7	Triode-2	1	9	12	32	7	---	---	1	2	4 - 5 - 9	
12DQ4		3	7	0	15	10	---	---	5	---	7 - 8	
12DQ6		1	2	0	4	10	---	4	11	5	2 - 7	
12DT7	Triode-1	1	9	12	32	7	---	---	6	7	4 - 5 - 9	
12DT7	Triode-2	1	9	12	32	7	---	---	1	2	4 - 5 - 9	
12DW4		3	4	-	16	10	7	---	2	---	4 - 5	May show short on 2 - 7
12DZ7	Pent-1	1	2	17	10	10	---	4	6	5	2 - 7	
12DZ7	Pent-2	1	2	15	10	10	---	4	3	1	2 - 7	
12DZ8	Triode	1	4	20	18	10	---	---	9	1	4 - 5	
12DZ8	Pentode	2	4	7	12	10	---	7	6	3	4 - 5	
12E13		1	2	9	9	7	---	4	3	5	2 - 7	
12FQ7	Triode-1	1	4	19	14	10	---	---	6	7	4 - 5	
12FQ7	Triode-2	1	4	19	14	10	---	---	1	2	4 - 5	
12FS5		4	3	20	33	10	---	---	5	1	3 - 4	Must show short on 2 - 7; Cathode short test
12FV7	Triode-1	2	5	17	10	10	---	---	6	7	4 - 5 - 9	Depress 2 - 7 together
12FV7	Triode-2	2	5	17	10	10	---	---	1	2	4 - 5 - 9	
12FX5		2	3	13	9	10	5	6	7	2	3 - 4	Must show short on 2 - 5
12G11	Pent-1	2	7	4	5	10	---	3	4	1	5 - 7	Key at 6
12G11	Pent-2	3	1	11	23	10	---	9	8	5 - 6	5 - 7	Key at 2
12GB3		3	2	0	17	10	---	4	11	5	2 - 7	
12GB7		2	2	7	10	10	---	4	11	5	2 - 7	
12GC5		1	4	7	7	10	1 - 3	8	9	6	4 - 5	Must show short on 1 - 3 - 6 - 8
12GE5		5	6	7	7	10	8 - 9	---	7 - 12	3	4 - 6	Key at 5; Must show short on 2 - 3 - 8 - 9; Red grid cap goes to adapter stud; Cathode short test - Depress 2 - 9 together

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
12GJ5		1	4	2	5	10	1 - 2	7	12	6	4 - 5	Must show short on 1 - 2 - 6 - 7; Use red grid cap
12GK17		2	7	0	3	10	---	---	5	---	7 - 8	
12GN7		1	6	8	10	7	---	8	7	2	4 - 5 - 6	Must show short on 3 - 9
12GT5		2	4	6	7	10	1 - 2	7	9	6	4 - 5	Must show short on 1 - 2 - 6 - 7
12GV5	*	2	5	1	9	10	2	7	12	9	3 - 5	* Key at 4; Must show short on 1 - 2 - 7 - 8; Use red grid cap; Cathode short test - Depress 1 - 8 together
12GW6		3	2	0	17	10	---	4	11	5	2 - 7	
12HB25	*	5	4	0	5	10	2 - 7	6	11	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cap goes to top of tube
12HE7	Diode	3	1	0	15	10	---	---	2	---	1 - 11	Key at 0
12HE7	Pentode *	5	6	0	5	10	4	5	11	3	6 - 8	Key at 7; * CAUTION: Throw lever #4 to "W" position before inserting tube
12HG7		1	6	7	10	7	---	8	7	2	4 - 5 - 6	Must show short on 3 - 9
12HL5		5	4	0	6	10	1	9	7	2	4 - 5	Must show short on 1 - 2
12HL7		1	6	5	10	7	---	8	7	2	4 - 5 - 6	Must show short on 3 - 9
12HU8	Pent-1	5	4	6	8	10	---	1	3	2	4 - 5	
12HU8	Pent-2	5	4	6	8	10	---	9	8	6	4 - 5	
12JB6		2	4	1	6	10	1 - 2	7	12	6	4 - 5	Must show short on 1 - 2 - 6 - 7; Red grid cap goes to top of tube
12JF5	*	3	4	10	35	10	8 - 9	7	11	3	6	* Key at 5; Must show short on 2 - 3 - 8 - 9; Grid-1 short test - Depress 3 - 8 together; Cathode short test - Depress 2 - 9 together; Black grid cap goes to top of tube
12JM6	*	5	2	0	5	10	---	6	11	8	2 - 4	* Key at 3
12JN6		1	4	0	5	10	---	8	11	3	4 - 6	Must show short on 2 - 9
12JN8	Triode	2	4	15	18	10	---	---	2	1	4 - 5	
12JN8	Pentode	1	4	15	22	10	---	7	6	9	4 - 5	
12JQ6	Pentode	1	4	10	5	10	2 - 7	3	1	8	4 - 5	
12JQ6	Diode	3	4	0	22	10	---	---	6	---	4 - 5	
12JS6		5	4	0	6	10	1	6	11	8	2 - 4	Must show short on 1 - 6; Black cap goes to top of tube
12JT6		1	4	2	5	10	1	7	9	2	4 - 5	Must show short on 1 - 7
12JZ8	Pentode	2	7	7	7	10	1	3	12	2	7 - 9	Key at 8; Must show short on 1 - 2
12JZ8	Triode	2	4	30	10	10	---	---	7	2	4 - 6	Key at 5; Use red grid cap
12KA8	Triode	4	4	2	10	10	---	---	1	2	4 - 5	
12KA8	Pentode	4	4	15	10	10	---	8	9	6	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
12KG6	*	1	4	8	26	10	1-2-3	7	11	8	4-5	* Must use magnoval adapter; Must show short on 1-2-3-6-7-8; Cap goes to top of tube
12KL8	Pentode	4	4	13	10	10	---	6	7	2	4-5	
12KL8	Diode	3	4	0	27	10	---	---	8	---	4-5	
12MD8	Triode-1	1	4	11	10	10	---	---	3	6	4-5	
12MD8	Triode-2	1	4	11	10	10	---	---	2	8	4-5	
12MD8	Triode-3	1	4	11	10	10	---	---	1	9	4-5	
12ML8		1	4	12	16	10	---	---	3	6	4-5	
12ML8		1	4	12	16	10	---	---	2	8	4-5	
12ML8		1	4	12	16	10	---	---	1	9	4-5	
12MX8	Triode	1	4	12	24	10	---	---	8	9	4-5	
12MX8	Pentode	5	4	0	6	10	---	7	6	2	4-5	
12RK19		3	4	0	16	10	2	---	9	---	4-5	May show short on 2-6-7-9
12RLL3	Triode-1	5	9	14	12	7	---	---	6	7	4-5-9	
12RLL3	Triode-2	5	9	14	12	7	---	---	1	2	4-5-9	
12RLL5	Triode-1	1	4	19	14	10	---	---	6	7	4-5	
12RLL5	Triode-2	1	4	19	14	10	---	---	1	2	4-5	
12T10		4	1	15	11	10	---	6	7	3	1-12	Key at 0; Use red grid cap
12T10		5	7	10	10	10	---	3	4	1	1-12	Key at 6
												Must show short on 1-3-4-8; Use red grid cap; Cathode short test - Depress 3-8 together
13CM5		2	2	1	7	10	1	4	12	5	2-7	
13CW4		5	4	9	10	10	---	---	1	2	4-5	
13CW9		1	2	21	11	7	---	8	6	3	4-5	
13DR7	Triode-1	1	4	20	25	10	---	---	6	7	4-5	Must show short on 2-3
13DR7	Triode-2	2	4	21	5	10	2	---	1	3	4-5	
13FM7		4	5	0	23	10	1	---	4	9	5-7	Key at 6; Must show short on 1-9
13FM7		2	3	0	10	10	---	---	7	5	1-3	Key at 2; Use red grid cap
13FR7	Triode-1	4	4	10	13	10	---	---	6	7	4-5	Must show short on 2-3
13FR7	Triode-2	2	4	5	6	10	2	---	1	3	4-5	
												* Must use magnoval adapter; Must show short on 1-2-3-6-7-8; Cathode short test - Depress 3-8 together; Red grid cap goes to top of tube
13GB5	*	3	4	2	16	10	2-7-8	6	12	1	4-5	
13GF7	Triode-1	5	4	27	10	10	---	---	8	9	4-5	
13GF7	Triode-2	2	4	2	10	10	---	---	6	2	4-5	
13J10	Pent-1	1	5	21	11	10	---	8	2	4	5-7	Key at 6; Use red grid cap
13J10	Pent-2	1	1	0	25	10	---	---	4-6	---	1-12	Key at 0
13JT8	Triode	4	4	10	9	10	---	---	3	2	4-5	
13JT8	Pentode	1	4	0	17	10	---	8	9	7	4-5	
13JZ8 *	Pentode	2	1	4	10	10	7	8	4	6	11	* Key at 0; Must show short on 6-7

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
13JZ8 *	Triode	3	3	14	23	10	---	---	6	1	11	* Key at 4
13V10	Pent-1	4	1	10	21	10	---	6	7	3	1 - 11	Key at 0
13V10	Pent-2	1	7	10	10	---	5?	6?	3?	?	1 - 11	Key at 8
13Z10	Pent-1	1	5	21	11	10	---	8	2	4	5 - 7	Key at 6; Use red grid cap
13Z10	Pent-2	1	1	0	25	10	---	---	4 - 6	---	1 - 12	Key at 0
14BF11	Sect-1	4	1	23	15	10	---	6	7	3	1 - 12	Key at 0
14BF11	Sect-2	1	7	7	10	10	---	5	6	3	7 - 9	Key at 8
14BL11	Triode-1	1	1	13	17	10	---	---	7	5	1 - 11	Key at 0
14BL11	Triode-2	5	4	10	13	10	---	---	1	8	1 - 11	Key at 5
14BL11	Pentode	1	6	10	12	10	---	4	9	5	1 - 11	Key at 7
14BQ11	Pent-2	1	3	14	23	10	---	5	4	7	1 - 3	Key at 2
14BQ11	Pent-1	1	9	14	23	10	---	4	3	5	1 - 3	Key at 8
14BR11	Triode-1	4	1	5	7	10	---	---	6	8	1 - 11	Key at 0
14BR11	Triode-2	4	4	5	7	10	---	---	1	2	1 - 11	Key at 5
14BR11	Pentode	4	4	5	6	10	---	8	3	7	1 - 11	
14GW8	Triode	4	4	15	10	10	---	---	9	1	4 - 5	
14GW8	Pentode	1	4	19	10	10	---	3	6	8	4 - 5	
14JG8	Diode-1	3	4	0	16	10	---	---	2	---	4 - 5	
14JG8	Diode-2	3	4	0	17	10	---	---	6	---	4 - 5	
14JG8	Triode	2	4	35	10	10	---	---	9	8	4 - 5	
15A6		4	4	3	10	10	---	1	7	2	4 - 5	
15AF11	Pentode	4	8	2	10	10	---	4	9	5	6 - 8	Key at 7; Use red grid cap
15AF11	Diode-1	4	1	2	10	10	---	---	6	5	1 - 3	Key at 2
15AF11	Diode-2	4	1	2	10	10	---	---	8	6	1 - 12	Key at 0
15BD11	Triode-1	4	1	2	10	10	---	---	8	6	1 - 12	Key at 0; Use red grid cap
15BD11	Triode-2	4	1	2	10	10	---	---	4	3	1 - 12	
15BD11	Pentode	4	4	3	10	10	---	2	7	3	4 - 6	Key at 5
15CW5		1	4	0	9	10	1 - 6 - 8	9	7	2	4 - 5	May show short on 1 - 2 - 6 - 7 - 8 - 9
15DQ8	Triode	1	4	26	10	10	---	---	2	1	4 - 5	
15DQ8	Pentode	1	4	15	13	10	---	9	6	8	4 - 5	
15EW7	Triode-1	5	4	17	10	10	---	---	6	7	4 - 5	Must show short on 2 - 3
15EW7	Triode-2	2	4	1	10	10	3	---	1	2	4 - 5	
15FM7	Triode-1	4	5	0	23	10	1	---	4	9	5 - 7	Key at 6; Must show short on 1 - 9
15FM7	Triode-2	2	3	0	10	10	---	---	7	5	1 - 3	Key at 2; Use red grid cap
15FO7		8	2	13	14	7	6	3	1	4	2 - 7 - 9	
15FY7	Triode-1	4	4	15	10	10	---	---	3	2	4 - 6	Key at 5
15FY7	Triode-2	1	1	0	9	10	---	---	7	5	1 - 3	Key at 2
15HA6		5	4	6	9	10	6	8	7	2	4 - 5	Must show short on 3 - 6 - 8 - 9
15HB6		2	4	5	16	10	6	8	7	2	4 - 5	May show short on 3 - 6 - 8 - 9
15KY8	Triode	1	4	12	24	10	---	---	8	9	4 - 5	
15KY8	Pentode	5	4	0	6	10	---	7	6	2	4 - 5	
15LE8	Pent-1	5	4	0	27	10	---	8	1	9	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA

TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
15LE8	Pent-2	5	4	0	33	10	---	8	6	9	4 - 5	
15MF8 *	Pentode	2	7	5	17	10	1	3	12	2	7 - 9	* Key at 8; Must show short on 1 - 2
15MF8 *	Triode	2	4	8	30	10	---	---	7	2	4 - 6	* Key at 5; Use red grid cap
15MX8	Triode	1	4	12	24	10	---	---	8	9	5	
15MX8	Pentode	5	4	0	6	10	---	7	6	2	5	
16A		1	3	31	10	7	---	7	5	1	3 - 4	
16A5		1	4	7	7	11	---	9	7	2	4 - 5	
16A8	Triode	1	4	12	27	10	---	---	9	1	4 - 5	
16A8	Pentode	1	4	10	9	10	---	7	6	3	4 - 5	
16AK9	Pentode	2	1	31	14	7	---	---	6	5	1 - 7 - 9	Key at 8
16AK9	Triode-2	2	1	27	13	7	---	---	4	3	1 - 7 - 9	
16AK9	Triode-1	2	6	31	13	7	---	---	2	3	1 - 6 - 11	Key at 0
16AQ3		1	4	0	4	10	#	---	9	---	4 - 5	# W=1 - 2 - 3 - 6 - 7 - 8; May show short on all pins
16BQ11	Pent-1	1	3	15	25	10	---	5	4	7	1 - 3	Key at 2
16BQ11	Pent-2	1	9	14	25	10	---	4	3	5	1 - 3	Key at 8
16BX11	Triode-1	2	1	28	19	10	---	---	7	8	1 - 12	Key at 0
16BX11	Triode-2	2	1	28	19	10	---	---	6	5	1 - 12	
16BX11	Pentode	1	5	14	25	10	---	7	2	6	1 - 12	Key at 4; Use red grid cap
16CB28	*	3	3	3	19	10	2	7	11	9	3 - 5	* Key at 4; Must show short on 2 - 7
16GK6		1	4	10	10	11	---	8	7	2	4 - 5	Must show short on 3 - 9
16GY5		3	3	3	15	10	2	7	11	9	3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8; Cathode short test - Depress 1 - 8 together; Black grid cap goes to top of tube
16HB5	*	3	1	3	17	10	---	2	7	3	1 - 12	* Key at 0; Use red grid cap
16KA6		5	3	0	6	10	---	7	11	9	3 - 5	Key at 4; Must show short on 2 - 8; Black cap goes to top of tube
16KH8		3	4	35	20	10	---	---	1 - 9	2	4 - 5	
16KH8		1	4	23	15	10	---	9	3	2	4 - 5	
16KH8		1	4	23	15	10	---	9	8	6	4 - 5	
16LD6		1	4	5	15	10	6	8	7	2	4 - 5	Must show short on 3 - 6 - 8 - 9
16LU8	*	2	4	13	19	10	---	---	7	2	4 - 6	* Key at 5; Use red grid cap
16LU8	*	2	7	5	5	10	1	3	12	2	4 - 6	* Key at 8; Must show short on 1 - 2
16MY8 *	Triode	2	4	13	19	10	---	---	7	2	4 - 6	* Key at 5; Use red grid cap; Must show short on 1 - 2
16MY8 *	Pentode	2	7	5	5	10	1	3	12	2	4 - 6	* Key at 8
16Y9	Pent-1	1	5	7	11	11	---	9	11	8	5 - 6	
16Y9	Pent-2	1	5	15	16	11	---	3	4	1	5 - 6	
17A8	Triode	1	4	13	10	11	---	---	1	9	4 - 5	
17A8	Pentode	1	4	30	15	11	---	3	6	2	4 - 5	
17AB10	Pent-1	1	5	5	6	11	---	8	2	4	5 - 7	Key at 6

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
17AB10	?	4	1	0	6	11	---	---	4 - 6	---	5 - 7	Key at 0
17AX3		1	4	0	4	11	2	---	9	---	4 - 6	Key at 5; Must show short on 2 - 9; Use red grid cap
17AY3		1	4	0	4	11	2	---	7	---	4 - 5	Must show short on 2 - 7
17B4		1	2	40	4	11	---	---	3	5	2 - 7	
17BB14	*	5	4	0	5	11	2 - 7	6	11	1	4 - 5	* Must use magnoval adapter; Cap goes to top of tube; Must show short on 1 - 2 - 3 - 6 - 7 - 8
17BD11	Triode-2	4	1	2	10	11	---	---	4	3	1 - 12	Key at 0; Use red grid cap
17BD11	Triode-1	4	1	2	10	11	---	---	8	6	1 - 12	
17BD11	Pentode	4	4	3	10	11	---	2	7	3	4 - 6	Key at 5
17BE3		3	1	0	16	11	12	---	6	---	1 - 3	Key at 2; Must show short on 6 - 12; Use red grid cap
17BF11	Pent-1	4	1	21	15	11	---	6	7	3	1 - 12	Key at 0; Use red grid cap
17BF11	Pent-2	1	7	5	10	11	---	5	6	3	7 - 9	Key at 8
17BH3		1	4	0	4	11	2	---	7	---	4 - 5	Must show short on 2 - 7; Use red grid cap
17BJ6		4	3	10	10	11	---	6	5	1	3 - 4	
17BR3		1	4	0	4	11	2	---	9	---	4 - 5	Will show short on 2 - 9
17BS3		3	4	0	15	10	7	---	2	---	4 - 5	Must show short on 2 - 7
17BW3		3	1	0	15	11	---	---	4	---	1 - 11	Key at 0
17BZ3		3	1	0	15	11	---	---	4	---	1 - 11	Key at 0
17C9	Tetrode-1	4	4	5	9	10	---	8	9	7	4 - 5	Use red grid cap
17C9	Tetrode-2	3	4	9	23	10	---	2	3	1	4 - 5	
17CK3		1	4	0	4	11	2	---	7	---	4 - 5	Must show short on 2 - 7
17CL3		3	4	0	16	11	2	---	7	---	4 - 5	Must show short on 2 - 7
17CT3		3	4	0	17	10	2	---	6	---	4 - 5	Must show short on 2 - 6
17DM4		1	7	---	4	11	---	---	5	---	7 - 8	
17DQ4		3	7	0	15	11	---	---	5	---	7 - 8	
17DQ6		1	2	0	4	11	---	4	11	5	2 - 7	
17DW4		3	4	0	16	11	7	---	2	---	4 - 5	Must show short on 2 - 7
17EW8	Triode-1	1	5	21	13	11	---	---	6	7	4 - 5	
17EW8	Triode-2	1	5	21	13	11	---	---	1	2	4 - 5	
17FY7	Triode-1	4	4	15	10	11	---	---	3	2	4 - 6	Key at 5
17FY7	Triode-2	1	1	0	9	11	---	---	7	5	4 - 6	Key at 2
17GE5		5	6	7	7	11	8 - 9	7	12	3	4 - 6	Key at 5; Must show short on 2 - 3 - 8 - 9; Use red grid cap; Cathode short test - Depress 2 - 9 together
17GJ5		1	4	2	5	11	1 - 2	7	12	6	4 - 5	Must show short on 1 - 2 - 6 - 7; Use red grid cap
17GT5		2	4	6	7	11	1 - 2	7	9	6	4 - 5	Must show short on 1 - 2 - 6 - 7
17GT6		3	9	0	12	11	---	---	6	1	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
17GV5		2	5	1	9	11	2	7	12	9		3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8; Red grid cap goes to top of tube; Cathode short test - Depress 1 - 8 together
17GW6		3	2	0	17	10	---	4	11	5		2 - 7	
17GY5		3	3	3	15	11	2	7	11	9		3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8; Cathode short test - Depress 1 - 8 together; Black grid cap goes to top of tube
17HB25	*	5	4	0	5	11	2 - 7	6	11	1		4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cap goes to top of tube
17HC8	Triode	4	4	10	10	10	---	---	9	1		4 - 5	
17HC8	Pentode	1	4	15	10	10	---	7	6	3		4 - 5	
17HG8	Triode	1	4	5	10	11	---	---	7	6		4 - 5	May show short on 1 - 3; Cathode short test - Depress 1 - 3 together
17HG8	Pentode	1	4	7	25	11	---	9	8	2		4 - 5	
17JB6		2	4	1	6	11	1 - 2	7	12	6		4 - 5	Must show short on 1 - 2 - 6 - 7; Red grid cap goes to top of tube
17JF6		5	4	0	6	10	1 - 2	7	12	6		4 - 5	Must show short on 1 - 2 - 6 - 7; Red cap goes to top of tube
17JG6		1	4	10	28	10	1	6	9	2		4 - 5	Must show short on 1 - 7
17JK8	Triode-1	1	4	23	10	10	---	---	6	7		4 - 5	
17JK8	Triode-2	1	4	15	10	10	---	---	1	2		4 - 5	
17JM6		5	2	0	5	11	---	6	11	8		2 - 4	Key at 3; Black cap goes to top of tube
17JN6		1	4	0	5	11	---	8	11	3		4 - 6	Key at 5; Must show short on 2 - 9
17JQ6	Pentode	1	4	10	5	11	2 - 7	3	1	8		4 - 5	
17JQ6	Diode	3	4	0	22	11	---	---	6	---		4 - 5	
17JR6		4	4	5	20	11	1	6	9	2		4 - 5	Must show short on 1 - 7
17JS6		5	4	0	6	11	1	6	11	8		2 - 4	Key at 3; Black cap goes to top of tube; Must show short on 1 - 6
17JT6		1	4	2	5	11	1	7	9	2		4 - 5	Must show short on 1 - 7
17JZ8	Pentode	2	7	7	7	11	1	3	12	2		7 - 9	Key at 8; Must show short on 1 - 2; Use red grid cap
17JZ8	Triode	2	4	30	10	11	---	---	7	2		4 - 6	Key at 5
17KV6		5	4	0	5	10	1	7	9	2		4 - 5	Must show short on 1 - 7
17LD8	Triode	5	4	10	16	11	---	---	8	9		4 - 5	
17LD8	Pentode	5	4	0	5	11	---	7	6	2		4 - 5	
17RHH2	Triode-1	1	5	21	13	11	---	---	6	7		4 - 5	
17RHH2	Triode-2	1	5	21	13	11	---	---	1	2		4 - 5	
17RK19		1	4	0	4	11	2	---	9	---		4 - 5	
17W6		1	2	10	5	10	---	4	3	5		2 - 7	
17X10	Pent-1	5	4	0	6	11	---	7	1	3		4 - 6	Key at 5

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
17X10	Pent-2	4	1	0	42	11	---	6	4	7	4 - 6	Key at 0	
17Y9	Pent-1	1	5	7	11	11	---	9	11	8	5 - 6		
17Y9	Pent-2	1	5	15	16	11	---	3	4	1	5 - 6		
18AJ10	Pent-2	3	1	5	35	11	---	8	9	5	3	Key at 2	
18AJ10	Pent-1	3	5	5	24	11	---	3	4	1	7	Key at 6	
18DZ8	Triode	1	4	20	18	11	---	---	9	1	4 - 5		
18DZ8	Pentode	2	4	7	12	11	---	7	6	3	4 - 5		
18GB5	*	3	4	2	16	11	2 - 7 - 8	6	12	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 -- 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Red grid cap goes to top of tube	
18GD6		5	3	7	15	11	---	6	5	1	3 - 4		
18GV5		2	5	1	9	11	2	7	12	9	3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8; Red grid cap goes to top of tube	
18GV8	Triode	2	4	34	10	11	---	---	1	2	4 - 5		
18GV8	Pentode	2	4	7	10	11	---	7	6	9	4 - 5		
18RAL1	Triode-1	1	4	14	15	11	---	---	6	7	4 - 5	Must show short on 2 - 3	
18RAL1	Triode-2	1	4	0	10	11	3	---	1	2	4 - 5		
19A3		3	6	0	20	7	---	---	5	---	3 - 4 - 6		
19AJ8	Heptode	1	4	26	32	11	---	1	6	2	4 - 5		
19AJ8	Triode	1	4	26	11	11	---	---	8	9	4 - 5		
19AQ5		1	3	32	8	11	1	6	5	7	3 - 4	Must show short on 1 - 7	
19BR5	Triode	2	4	35	10	11	---	---	7	1	4 - 5	Must show short on 3 - 6 - 9	
19BR5	Eye	1	4	0	0	11	---	---	7-3-6-9	?	4 - 5	See instructions for eye test	
19BX6		1	4	8	28	11	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together	
19BY7		4	4	3	10	11	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together	
19CG3		5	1	0	5	11	---	---	4	---	1 - 11	Key at 0	
19DE3	*	3	6	0	20	11	1	---	4	---	8	* Key at 7; Grid cap goes to top of tube	
19DE7	Triode-1	1	4	20	14	11	---	---	6	7	4 - 5	Must show short on 2 - 3	
19DE7	Triode-2	2	4	7	6	11	3	---	1	2	4 - 5		
19DK3		3	4	0	20	11	3 - 9	---	2 - 7	---	4 - 5		
19DQ3	*	5	1	0	6	11	---	---	4	---	1 - 11	* Key at 0	
19EW7	Triode-1	5	4	17	10	11	---	---	6	7	4 - 5	Must show short on 2 - 3	
19EW7	Triode-2	2	4	1	10	11	3	---	1	2	4 - 5		
19EZ8	Triode-1	1	4	33	10	11	---	---	8	9	4 - 5		
19EZ8	Triode-2	1	4	33	10	11	---	---	6	7	4 - 5		
19EZ8	Triode-3	1	4	31	10	11	---	---	3	2	4 - 5		
19FL8	Pentode	1	4	20	18	11	---	1	6	2	4 - 5		
19FL8	Diode-1	3	4	0	22	11	---	---	7	---	4 - 5		
19FL8	Diode-2	3	4	0	22	11	---	---	8	---	4 - 5		

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
19FX5		2	3	13	9	11	5	6	7	2		3 - 4	Must show short on 2 - 5
19GQ7	Diode-1	3	4	0	15	11	---	---	8	---		4 - 5	
19GQ7	Diode-2	3	4	0	15	11	---	---	6	---		4 - 5	
19GQ7	Diode-3	3	4	0	15	11	---	---	2	---		4 - 5	
19HR6		4	3	6	10	11	---	6	5	1		3 - 4	
19HS6		1	3	15	19	11	---	6	5	1		4 - 5	
19JC6		1	4	5	24	11	3	8	7	2		4 - 5	Must show short on 1 - 2 - 6 - 7; Red cap goes to top of tube
19JN8	Pentode	1	4	15	22	11	---	7	6	9		4 - 5	
19JN8	Triode	2	4	15	18	11	---	---	2	1		4 - 5	
19KF6	*	5	4	0	5	11	1	6	9	7		4 - 5	* Must use magnoval adapter; Must show short on 1 - 7
19KG8	Triode	1	4	19	10	11	---	---	1	2		4 - 5	
19KG8	Pentode	4	4	8	10	11	---	7	6	9		4 - 5	
19MR9		5	3	7	15	11	---	6	5	1		3 - 4	
19Q9	Triode	5	4	9	10	11	---	---	9	8		4 - 5	
19Q9	Pentode	4	4	5	9	11	---	2	3	1		4 - 5	
19U3		1	4	0	4	10	---	---	9	---		4 - 5	
19W3		1	4	0	4	10	---	---	9	---		4 - 5	
19Y3		7	4	0	3	10	---	---	9	---		4 - 5	
20AQ3		1	4	0	4	11	#	---	9	---		4 - 5	# W = 1 - 2 - 3 - 6 - 7 - 8; May show short on all pins
20D4	Amp	1	4	14	31	7	---	1	6	2		4 - 5	
20D4	Osc	1	4	25	10	7	---	---	1	2		4 - 5	
20D4	Triode	1	4	25	13	7	---	---	8	9		4 - 5	
20EW7	Triode-1	5	4	17	10	11	---	---	6	7		4 - 5	Must show short on 2 - 3
20EW7	Triode-2	2	4	1	10	11	3	---	1	2		4 - 5	
20LF6	*	5	3	0	5	11	2	7	11	9		3 - 5	* Key at 4; Must show short on 1 - 2 - 7 - 8; Cap goes to top of tube
21A6		5	4	0	6	11	7	8	10	2		4 - 5	Must show short on 1 - 6 - 7 - 8 - 9
21AK6		1	3	32	10	11	---	6	5	1		3 - 4	
21EX6		1	2	0	4	11	---	8	11	15		2 - 7	
21GY5		3	3	3	15	11	2	7	11	9		3 - 5	Must show short on 1 - 2 - 7 - 8; Cathode short test - Depress 1 - 8 together; Black grid cap goes to top of tube
21HA6		5	4	6	9	11	2	---	5	1		3 - 4	Must show short on 2 - 7; Cathode short test Depress 1 - 7 together
21HB3		1	1	15	15	11	6	2	5	3		3 - 4	
21HB5		3	1	3	17	11	---	2	7	3		1 - 12	Key at 0; Use red grid cap
21HD5		5	1	0	5	11	9	5	7	3		1 - 11	Key at 0; Must show short on 5 - 9
21HJ5		1	1	0	4	11	9	5	7	3		1 - 11	Key at 0; Must show short on 5 - 9
21JS6	*	5	4	0	6	11	1	6	11	8		2 - 4	* Key at 3

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
21JV6		5	4	0	5	11	---	8	11	3		4 - 6	Key at 5; Must show short on 2 - 9
21JZ6		2	2	0	6	11	---	6	11	8		2 - 4	Key at 3; Black cap goes to top of tube
21KA6		5	3	0	6	11	---	7	11	9		3 - 5	Key at 4; Must show short on 2 - 8; Black cap goes to top of tube
21KQ6	*	5	4	0	5	11	6 - 8	3	11	1		4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cao goes to top of tube
21LG6		3	3	3	20	12	2	7	11	9		3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8
21LR8	Triode	5	4	8	14	11	---	---	8	9		4 - 5	
21LR8	Pentode	5	4	0	6	11	---	7	6	2		4 - 5	
21LU8	Triode	2	4	13	19	11	---	---	7	2		4 - 6	Key at 5; Use red grid cap
21LU8	Pentode	2	7	5	5	11	1	3	12	2		7 - 9	Key at 8; Must show short on 1 - 2
21MY8 *	Triode	2	4	13	19	11	---	---	7	2		4 - 6	* Key at 5; Must show short on 1 - 2; Use red grid cap
21MY8 *	Pentode	2	7	5	5	11	1	3	12	2		4 - 6	* Key at 8
22AL3		3	4	0	15	12	#	---	9	---		4 - 5	# Levers 1 - 2 - 3 - 6 - 7 - 8 must be thrown to "W"; May show short on 1 - 2 - 3 - 6 - 7 - 8 - 9
22BH3		1	4	0	4	12	2	---	7	---		4 - 5	Must show short on 2 - 7; Use red grid cap
22BW3		3	1	0	15	11	---	---	4	---		1 - 11	Key at 0
22JF6		5	4	0	6	11	1 - 2 - 9	7	12	6		4 - 5	Must show short on 1 - 2 - 6 - 7; Red cap goes to top of tube
22JG6		1	4	10	28	11	1	6	9	2		4 - 5	Must show short on 1 - 7
22JR6		4	4	5	20	11	1	6	9	2		4 - 5	Must show short on 1 - 7
22JS6		5	4	0	6	11	1	6	11	8		2 - 4	Key at 3; Must show short on 1 - 6; Black cap goes to top of tube
22JU6		1	4	7	32	11	6	1	12	2		4 - 5	Must show short on 1 - 2 - 6 - 7; Red grid cap goes to top of tube
22KM6		5	4	0	6	12	1 - 2	7	12	6		4 - 5	Must show short on 1 - 2 - 6 - 7; Red cap goes to top of tube
22KV6		5	4	0	7	11	1	7	9	2		4 - 5	Must show short on 1 - 7
23MB6	*	3	6	6	20	11	8 - 9	3	11	1		4	* Key at 5; Must show short on 2 - 3 - 8 - 9; Grid cap goes to top of tube
23Z9	Triode-1	5	4	8	20	11	---	---	7	8		4 - 6	Key at 5
23Z9	Triode-2	5	4	8	18	11	---	---	3	2		4 - 6	
23Z9	Pentode	5	6	0	7	11	---	3	11	2		4 - 6	Key at 7
24AX4		2	7	0	3	12	---	---	5	---		7 - 8	
24BF11	Pent-1	4	1	23	15	12	---	6	7	3		1 - 12	Key at 0; Use red grid cap
24BF11	Pent-2	1	7	7	10	12	---	5	6	3		1 - 12	Key at 8
24GA7	Diode	3	7	0	18	12	---	---	4	---		5 - 7	Key at 6; Must show short on 8 - 9
24GA7	Pentode	3	3	4	19	12	---	4 - 5	9	6		1 - 3	Key at 2; Must show short on 4 - 5

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT	
		A	B	C	D	E	W	X	Y	Z			
24JE6	Pentode	3	4	0	17	12	1-2	7	12	6	4-5	Must show short on 1-2-6-7; Red cap goes to top of tube	
24JZ8		2	7	7	7	12	1	3	12	2	7-9		Key at 8; Must show short on 1-2
24JZ8		2	4	30	10	12	---	---	7	2	4-6		Key at 5; Use red grid cap
24LQ6		3	4	0	17	12	1-2	7	12	6	4-5	Must show short on 1-2-6-7; Red cap goes to top of tube	
24LZ6		2	4	10	27	12	1-2	6	11	7	4-5	Must show short on 1-2-6-7	
25BB14	*	5	4	0	5	12	2-7	6	11	1	4-5	* Must use magnoval adapter; Must show short on 1-2-3-6-7-8; Cap goes to top of tube	
25CG3		3	1	0	15	12	---	---	4	---	1-11	Key at 0	
25CK3		1	4	0	4	12	2	---	7	---	4-5	Must show short on 2-7	
25CM3		3	4	0	17	12	2	---	7	---	4-5	Must show short on 2-7	
25CT3		3	4	0	17	12	2	---	6	---	4-5	Must show short on 2-6	
25DK3		3	4	0	20	12	3-9	---	2-7	---	4-5		
25DL3		3	4	0	17	12	*	---	7	---	4-5	* 2-3-6-8-9	
25DQ6		1	2	0	4	12	---	4	11	5	2-7		
25DT5		1	4	13	11	12	3	1	9	6	4-5	Must show short on 3-6	
25GB6		3	2	0	17	12	---	4	11	5	2-7		
25HX5	*	3	4	14	20	12	3-7	6	9	1	4-5	* Must use magnoval adapter; Must show short on 1-2-3-7; Grid short test - Depress 1-7 together; Cathode short test - Depress 2-3 together	
25JQ6	Pentode	1	4	10	5	12	2-7	3	1	8	4-5		
25JQ6	Diode	3	4	0	22	12	---	---	6	---	4-5		
25JZ8 *	Pentode	2	7	7	7	12	1	3	12	2	7-9	* Key at 8; Must show short on 1-2	
25JZ8 *	Triode	2	4	30	10	12	---	---	7	2	4-6	* Key at 5; Use red grid cap	
25KA6	*	5	3	0	6	12	---	7	11	9	3-5	* Key at 4; Must show short on 2-8; Cap goes to top of tube	
25MP20		1	3	12	20	12	---	6	5	1	3-4		
25RK19		1	4	0	4	12	2	---	9	---	4-5	Must show short on 2-9	
26AQ8	Triode-1	1	4	25	11	12	---	---	6	7	4-5		
26AQ8	Triode-2	1	4	25	11	12	---	---	1	2	4-5		
26DQ5		1	2	0	5	12	1-4	8	11	5	2-7	Must show short on 1-3-4-5-6-8; Grid short test - Depress 1-5 together; Screen short test - Depress 4-8 together; Cathode short test - Depress 3-6 together	
26HU5		3	7	35	20	12	5-6	3	11	1	8	Must show short on 1-2-5-6; Grid short test - Depress 1-5 together; Cathode short test - Depress 2-6 together	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
26HV5		5	1	5	30	12	---	---	7	2	1	Key at 0
26JG6		4	4	3	12	12	1	6	9	2	4 - 5	Must show short on 1 - 7
26LW6		1	7	0	5	12	1 - 4 - 6	3	11	5	7 - 8	Must show short on 1 - 2 - 5 - 6; Cathode short test - Depress 2 - 6 together
26LX6	*	3	4	15	20	11	1	6	11	8	2 - 4	* Key at 3; Must show short on 1 - 6
27GB5	*	3	4	2	16	12	2 - 7 - 8	6	12	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Red grid cap goes to top of tube
27KG6	*	1	4	8	26	12	1 - 2 - 3	7	11	8	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Black cap goes to top of tube
27LF6	*	5	3	0	5	12	2	7	11	9	3 - 5	* Key at 4; Must show short on 1 - 2 - 7 - 8; Cap goes to top of tube
28GB5	*	3	4	2	16	12	2 - 7 - 8	6	12	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Red grid cap goes to top of tube
28HA6		5	4	6	9	12	6	8	7	2	4 - 5	Must show short on 3 - 6 - 8 - 9
28HD5		5	1	0	5	12	9	5	7	3	1 - 11	Key at 0; Must show short on 5 - 9
29GK6		1	4	10	10	12	---	8	7	2	4 - 5	Must show short on 3 - 9
29KQ6	*	5	4	0	5	12	6 - 8	3	11	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cap goes to top of tube
29LE6	*	4	4	8	15	12	6 - 7 - 8	2	11	1	5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Grid-1 short test - Depress 1 - 8 together; Grid-2 short test - Depress 3 - 6 together; Screen short test - Depress 2 - 7 together; Grid cap goes to top of tube
30A3		1	4	0	4	12	#	---	9	---	4 - 5	# W = 1 - 2 - 3 - 6 - 7 - 8; May show short on 1 - 2 - 3 - 6 - 7 - 8 - 9
30A5		1	3	5	6	12	2	6	7	5	3 - 4	Must show short on 2 - 5
30AG11	Triode-1	2	9	16	23	12	---	---	2	3	7 - 9	Key at 8
30AG11	Diode-1	3	9	0	16	12	---	---	5	---	7 - 9	
30AG11	Triode-2	2	3	16	23	12	---	---	8	7	1 - 3	Key at 2
30AG11	Diode-2	3	3	0	16	12	---	---	5	---	1 - 3	
30C18	Triode	5	4	7	10	8	---	---	1	9	4 - 5	Must show short on 6 - 8; Cathode short test - Depress 6 - 8 together
30C18	Pentode	5	4	0	22	8	---	2	3	7	4 - 5	
30CW5		1	4	0	10	12	1 - 6 - 8	9	7	2	4 - 5	May show short on 1 - 2 - 6 - 7 - 8 - 9
30HD5		5	1	0	5	12	9	5	7	3	1 - 11	Key at 0; Must show short on 5 - 9

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
30HJ5		1	1	0	4	12	9	5	7	3	1 - 11	Key at 0; Must show short on 5 - 9	
30JZ6		2	2	0	6	12	---	6	11	8	2 - 4	Key at 3; Black cap goes to top of tube	
30KD6		5	3	0	5	12	2	7	11	9	3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8; Black cap goes to top of tube	
30KG6	*	1	4	8	26	12	1 - 2 - 3	7	11	8	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Black cap goes to top of tube	
30LW6		1	7	0	5	12	1 - 4 - 6	3	11	5	7 - 8	Must show short on 1 - 2 - 5 - 6; Cathode short test - Depress 2 - 6 together	
30MB6	*	3	6	6	20	12	8 - 9	3	11	1	4	* Key at 5; Must show short on 2 - 3 - 8 - 9; Grid cap goes to top of tube	
30MP23		3	3	5	22	12	5	6	7	2	4	Must show short on 2 - 5; Grid short test - Depress 2 - 5 together	
30MP27		3	3	5	20	12	5	6	7	2	4	Must show short on 2 - 5; Grid short test - Depress 2 - 5 together	
30PL12	Triode	1	4	12	27	10	---	---	9	1	4 - 5		
30PL12	Pentode	1	4	10	9	10	---	7	6	3	4 - 5		
31A3		2	1	0	3	13?	6	---	2	---	1 - 8	Fil Cont - Set control "E" at 12	
31AL10	Pentode	3	6	7	23	10	---	5	4	8	1 - 11	Key at 0	
31AL10	Triode-2	3	6	7	29	10	---	---	2	3	1 - 11		
31AL10	Triode-1	3	11	7	28	10	---	---	2	4	5 - 7	Key at 6	
31JS6		5	4	0	6	12	1	6	11	8	2 - 4	Key at 3; Must show short on 1 - 6; Black cap goes to top of tube	
31LQ6		3	4	0	19	12	1 - 2	7	12	6	4 - 5	Must show short on 1 - 2 - 6 - 7; Red cap goes to top of tube	
31LR8	Triode	5	4	8	14	12	---	---	8	9	4 - 5		
31LR8	Pentode	5	4	0	6	12	---	7	6	2	4 - 5		
31LZ6		2	4	10	27	12	1 - 2	6	11	7	4 - 5	Must show short on 1 - 2 - 6 - 7	
32A8	Triode	1	4	31	13	12	---	---	9	1	4 - 5		
32A8	Pentode	1	4	10	14	12	---	7	6	3	4 - 5		
32GA7	Diode	3	7	0	18	12	---	---	4	---	5 - 7	Key at 6; Must show short on 4 - 5	
32GA7	Pentode	3	3	4	19	12	---	4 - 5	9	---	1 - 3	Key at 2	
32HQ7	Diode	3	1	0	20	12	7	---	2	---	1 - 11	Key at 0	
32HQ7	Pentode *	4	8	10	13	12	1	4	11	3	8 - 6	Key at 7; Throw lever #1 to "W" position before inserting tube	
33GT7	Diode	3	3	0	15	13	---	---	6	---	3 - 5	Key at 4; Use red grid cap	
33GT7	Pentode	3	3	2	17	13	---	1	9	2	3 - 5		
33GY7	Diode	3	4	0	15	13	---	---	5	---	2 - 4	Key at 3; Use red grid cap	
33GY7	Pentode	3	3	2	18	13	---	2	9	1	3 - 5		
33HE7 *	Diode	3	10	0	15	13	---	---	2	---	1 - 11		
33HE7 *	Pentode	5	6	0	5	13	4	5	11	3	1 - 11		
33JR6		4	4	5	20	12	1	6	9	2	4 - 5	Must show short on 1 - 7	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
33JV6		5	4	0	5	13	---	8	11	3	4 - 6	Key at 5; Must show short on 2 - 9
34CD3		5	1	0	5	13	---	---	4	---	1 - 11	Key at 0
34CE3		5	1	0	5	13	---	---	4	---	1 - 11	Key at 0
34CM3		3	4	0	17	13	2	---	7	---	4 - 5	Must show short on 2 - 7
34DK3		3	4	0	20	13	3 - 9	---	2 - 7	---	4 - 5	
34R3		3	4	0	17	13	2	---	9	---	4 - 5	Must show short on 2 - 9
35C3		3	3	0	16	13	---	---	5	---	3 - 4	
35DZ8	Triode	1	4	20	18	13	---	---	9	1	4 - 5	
35DZ8	Pentode	2	4	7	12	13	---	7	6	3	4 - 5	
35LR6		5	4	0	6	13	1	6	11	8	2 - 4	Key at 3
36KD6		5	3	0	5	13	2	7	11	9	3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8; Black cap goes to top of tube
36LW6		1	7	0	5	13	1 - 4 - 6	3	11	5	7 - 8	Must show short on 1 - 2 - 5 - 6; Cathode short test - Depress 2 - 6 together
36MC6		3	4	15	20	13	6 - 7	1	11	2	5	Must show short on 1 - 2 - 6 - 7; Grid short test - Depress 2 - 6 together; Screen short test - Depress 1 - 7 together; Grid cap goes to top of tube
38HE7	Diode	3	1	0	15	13	---	---	2	---	1 - 11	Key at 0
38HE7	Pentode	5	6	0	5	13	4	5	11	3	6 - 8	Key at 7
38HK7	Diode	3	1	0	15	13	---	---	2	---	1 - 11	Key at 0
38HK7	Pentode *	5	6	0	5	13	4	5	11	3	6 - 8	Key at 7; * CAUTION - Throw lever #4 to "W" before inserting tube
40KD6		5	3	0	5	13	2	7	11	9	3 - 5	Key at 4; Must show short on 1 - 2 - 7 - 8; Cap goes to top of tube
40KG6	*	1	4	8	26	13	1 - 2 - 3	7	11	8	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Black cap goes to top of tube
40SUA		1	2	21	35	3	---	4	3	11	2 - 7	
42EC4	*	3	4	0	16	13	7 - 8	---	2	---	4 - 5	* Must use magnoval adapter; Must show short on 2 - 7 - 8; Cap goes to top of tube
42KN6		1	5	12	25	13	9	3	11	2	5 - 7	Key at 6; Must show short on 4 - 9; Black cap goes to top of tube
50BM8	Triode	2	4	32	10	14	---	---	9	1	4 - 5	
50BM8	Pentode	2	4	9	10	14	---	7	6	3	4 - 5	
50GY7 *	Diode	3	4	0	18	14	---	---	5	---	2 - 4	* Key at 3; Use red grid cap
50GY7 *	Pentode	3	3	2	18	14	---	2	9	1	2 - 4	* Key at 4
50HN5		5	4	0	25	14	1	9	7	2	4 - 5	Must show short on 1 - 2
50JY6		5	2	0	6	14	1	4	11	5	2 - 7	Must show short on 1 - 4
53HK7	Diode	3	1	0	15	14	---	---	2	---	1 - 11	Key at 0
53HK7	Pentode *	5	6	0	5	14	4	5	11	3	6 - 8	Key at 7; *CAUTION - Throw lever #4 to "W" before inserting tube

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
TUBE	SECTION	LEVER									FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z		
58HE7	Diode	3	1	0	15	14	---	---	2	---	1 - 11	Key at 0
58HE7	Pentode *	5	6	0	5	14	4	5	11	3	6 - 8	Key at 7; * CAUTION - Throw lever #4 to "W" before inserting tube
60HL5		5	4	0	14	14	1	9	7	2	4 - 5	Must show short on 1 - 2
163PEN		1	4	7	7	11	---	9	7	2	4 - 5	
171DDP	Pentode	4	4	12	10	11	---	9	7	2	4 - 5	
171DDP	Diode	3	4	0	23	11	---	---	8	---	4 - 5	
171DDP	Diode	3	4	0	23	11	---	---	7	---	4 - 5	
396A	Triode-1	1	1	21	9	7	---	---	4	3	1 - 9	
396A	Triode-2	1	1	21	9	7	---	---	6	7	1 - 9	
403B		1	3	22	16	7	---	6	5	1	3 - 4	Must show short on 2 - 7; Cathode short test - Depress 2 - 7 together
TJ880		1	4	10	6	7	---	8	7	2	4 - 5	Must show short on 1 - 3 - 6 - 9
2713		3	4	7	32	7	7	1	6	9	4 - 5	Must show short on 2 - 7
5763		1	4	27	10	7	8	6	1	9	4 - 5	Must show short on 8 - 9; Grid short test - Depress 8 - 9 together
5823		7	1	0	0	18	---	---	1	---	---	Must show short on 3 - 7
5844	Triode-1	1	3	10	14	7	---	---	2	5	3 - 4	
5844	Triode-2	1	3	10	14	7	---	---	1	6	3 - 4	
5845 *	Plate-1	4	3	0	50	5z	7	---	5	---	3 - 4	* CAUTION: Throw lever 7 to "W" position before inserting tube; Set switch "E" to #6 if there is no 5z position; Good tube reads above 30
5845 *	Plate-2	4	3	0	50	5z	7	---	1	---	3 - 4	
5896	Diode-1	1	3	0	5	7	---	---	5	---	3 - 6	
5896	Diode-2	1	3	0	5	7	---	---	1	---	3 - 6	
5933		7	1	20	10	7	---	2	12	3	1 - 5	Use red grid cap
6012		2	2	10	0	7	---	8	5	3	2 - 7	
6084		3	4	7	32	7	7	1	6	9	4 - 5	Must show short on 2 - 7
6085	Triode-1	1	9	27	10	7	---	---	1	2	4 - 5 - 9	
6085	Triode-2	1	9	27	10	7	---	---	6	7	4 - 5 - 9	
6094		4	3	5	8	7	6 - 7 - 9	2	4	1	3 - 5	Must show short on 1 - 2 - 4 - 6 - 7 - 9
6216A		1	4	5	8	7	6	7	1	2	4 - 5	Must show short on 1 - 3 - 6 - 8; Cathode short test - Depress 3 - 8 together
6227		1	4	10	16	7	---	8	7	2	4 - 5	Must show short on 1 - 6
CK6293		3	2	6	21	7	---	3	11	5	7	Must show short on 1 - 4 - 6; Cathode short test - Depress 1 - 4 - 6 together
CK6526		4	5	6	9	2	---	2	1	4	3 - 5	
PL6574		3	1	20	25	7	---	6	3	5	7	
6686		4	4	4	9	7	1	8	7	2	4 - 5	
6689		1	4	12	20	7	---	1	6	2	5	
6939	Pent-1	1	9	7	14	7	---	7	8	3	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
6939	Pent-2	1	9	7	14	7	---	7	6	1		4 - 5	
7058	Triode-1	1	4	12	32	10	9	---	6	7		4 - 5	
7058	Triode-2	1	4	12	32	10	9	---	1	2		4 - 5	
7119	Triode-1	1	8	27	5	7	---	---	9	7		4 - 5 - 8	
7119	Triode-2	1	8	27	5	7	---	---	1	2		4 - 5 - 8	
7233		3	4	16	18	7	*	---	1	2		5	* 3 - 6 - 7 - 9; Must show short on 1 - 2 - 3 - 6 - 7 - 9
7308	Triode-1	1	4	10	10	7	---	---	6	7		4 - 5	
7308	Triode-2	1	4	10	10	7	---	---	1	2		4 - 5	
7320		1	4	28	7	7	1	9	7	2		4 - 5	Must show short on 1 - 2
7360		4	4	0	32	7	---	2	6 - 7	3		4 - 5	
7586	*	2	4	18	10	7	---	---	1	2		4 - 5	*Use G-140 adapter; Connect red grid cap to G-140 plug
7643	Triode	1	4	15	10	7	---	---	1	9		4 - 5	
7643	Pentode	1	4	10	25	7	---	3	6	2		4 - 5	
7751		1	2	5	5	7	1	4	3	5		2 - 7	
7788		5	4	0	13	7	9	6	7	2		4 - 5	Must show short on 1 - 3 - 6 - 9
7802	Triode-1	2	7	2	9	7	---	---	2	1		7 - 8	
7802	Triode-2	2	7	3	9	7	---	---	5	4		7 - 8	
7868		1	4	14	10	7	6 - 7	1	9	2		4 - 5	Will show short on 1 - 2 - 6 - 7
7898	Triode-2	1	4	33	12	10	9	---	1	2		4 - 5	
7898	Triode-1	1	4	33	12	10	9	---	6	7		4 - 5	
7984		2	6	0	7	10	1	5	12	4		6 - 8	Key at 7; Must show short on 2 - 3 - 9 - 1 - 5; Use red grid cap; Cathode short test - Depress 2 - 3 - 9 together
8032		1	2	6	6	10	---	3	11	5		2 - 7	Must show short on 1 - 4 - 6; Cathode short test - Depress 1 - 4 - 6 together
8056		3	4	2	20	7	---	---	1	2		4 - 5	
8077		1	4	16	12	10	---	8	7	2		4 - 5	Must show short on 3 - 9
8102	Triode	5	4	10	11	10	---	---	1	3		4 - 5	
8102	Pentode	4	4	8	10	10	---	7	6	9		4 - 5	
8106		1	4	25	9	10	#	3	1	7		4 - 5	# Throw levers 6 - 8 - 9 to "W"; Must show short on 2 - 3 - 6 - 8 - 9; Cathode short test - Depress 2 - 6 - 9 together
8113		5	3	5	10	7	2	6	5	1		3 - 4	Must show short on 2 - 7; Cathode short test - Depress 2 - 7 together
8136		1	3	6	29	7	---	6	5	1		3 - 4	
8156		2	5	7	10	10	6 - 7 - 8	2	9	1		3 - 5	Key at 4; Must show short on 6 - 7 - 8 - 9 - 12; Use red grid cap; Cathode short tester - Depress 6 - 12 together
8203		3	4	19	16	7	---	---	1	2		4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA													
TUBE	SECTION	LEVER										FIL. CONT.	COMMENT
		A	B	C	D	E	W	X	Y	Z			
8233	*	1	4	5	7	7	---	3	1	8	4 - 5	* Must use magnoval adapter; Must show short on 2 - 6 - 7 - 9	
8278	*	1	4	5	6	7	7 - 8	1	9	3	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8	
8298		1	2	6	6	7	---	3	11	5	2 - 7	Must show short on 1 - 4 - 6; Cathode short test - Depress 1 - 4 - 6 together	
8417		1	2	7	7	7	---	4	3	5	2 - 7		
8425		1	3	16	29	7	---	6	5	1	3 - 4		
8441		5	4	12	10	7	---	---	1	2	4 - 5		
8532		1	3	33	6	7	1 - 5	---	7	6	3 - 4	Must show short on 1 - 5 - 6	
8552		1	2	6	6	10	---	3	11	5	2 - 7	Must show short on 1 - 4 - 6; Cathode short test - Depress 1 - 4 - 6 together	
8908		3	7	15	20	7	1 - 2	3	11	5	8	Must show short on 1 - 2 - 5 - 6; Grid-1 short test - Depress 1 - 5 together; Grid-3 short test - Depress 2 - 6 together	
8950	*	1	3	9	38	10	---	2 - 7	11	6	3 - 5	* Key at 4; Must show short on 1 - 2 - 7 - 8	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
A863		1	2	28	20	7	---	4	3	11	2-7	
A1834	Triode-1	1	7	30	4	7	---	---	5	4	7-8	
A1834	Triode-2	1	7	30	4	7	---	---	2	1	7-8	
AA91E	Diode-1	3	3	0	17	7	---	---	7	---	3-4	
AA91E	Diode-2	3	3	0	17	7	---	---	2	---	3-4	
ABC-91		1	2	31	11	10	---	4	3	5	2-7	
AR18	Triode	1	2	13	33	7	---	---	3	11	2-7	
AR18	Diode	3	2	0	27	7	---	---	4	---	2-7	
AR18	Diode	3	2	0	27	7	---	---	5	---	2-7	
AZ41	Plate-1	2	7	0	8	5Z	5	---	6	---	7-8	Set switch "E" to 5 if there is no 5Z position
AZ41	Plate-2	2	8	0	8	5Z	1	---	2	---	7-8	
B139	Triode-1	5	4	10	10	8	---	---	9	6	4-5	Must show short on 7 - 8; Cathode short test Depress 7 - 8 together
B139	Triode-2	5	4	10	10	8	---	---	3	2	4-5	
DA90		3	1	0	27	2	2-5	---	6	---	1-7	Must show short on 2 - 5 - 6; Plate short test Depress 2 - 6 together
DAC32	Triode	5	2	12	46	2	---	---	3	11	2-7	
DAC32	Diode	3	2	0	27	2	---	---	5	---	2-7	
DAF91	Pent	1	1	26	35	2	---	4	5	6	1-7	
DAF91	Diode	3	1	0	29	2	---	---	3	---	1-7	
DAF92	Pentode	1	1	26	35	2	---	---	4	---	1-7	
DAF92	Diode	3	1	0	29	2	---	---	4	---	1-7	
DAF96	Pent	4	7	17	41	2	---	4	5	6	1-7	
DAF96	Diode	3	7	0	28	2	---	---	3	---	1-7	
DC90		5	7	21	14	2	2-5	---	3	6	1-7	Must show short on 2 - 3 - 5 - 6; Grid short test - Depress 5 - 6 together; Plate short test Depress 2 - 3 together
DC96		5	1	35	10	2	2-5	---	3	6	1-7	Must show short on 2 - 3 - 5 - 6; Plate short test - Depress 2 - 3 together; Grid short test - Depress 5 - 6 together
DCC90	Triode-1	1	4	20	14	2	---	---	2	3	1-4-7	
DCC90	Triode-2	1	4	20	14	2	---	---	6	5	1-4-7	
DF11		4	2	13	20	2	---	6	5	7	2-3	Must show short on 8
DF33		1	2	25	40	2	---	4	3	11	2-7	
DF91		1	7	32	22	2	5	3	2	6	1-5-7	
DF92		1	7	27	29	2	5	3	2	6	1-5-7	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
DF96		5	7	6	37	2	---	3	2	6	1-5-7	
DF97		5	7	16	33	2	---	3	2	6	1-5-7	
DF904		1	7	27	32	2	5	3		11	2-7	
DK32	Amp	4	2	25	29	2	---	---	4-6	5	2-7	
DK32	Osc	2	2	14	36	2	---	---	2	6	1-5-7	
DK91	Amp	4	7	9	39	2	5	3		4	1-5-7	
DK91	Osc	2	7	10	39	2	5	---	3	4	1-5-7	
DK92	Amp	1	7	50	31	2	---	6	2	3-4	1-7	
DK92	Osc	1	7	36	10	2	---	5	3	4	1-7	
DK92	Osc	1	7	36	10	2	---	6	2	3-4	1-7	
DK96	Amp	5	7	27	40	2	---	---	3	4	1-7	
DK96	Osc	5	7	13	19	2	---	---	5	7	2-3	
DL11		4	2	13	10	2	---	6	5	7	2-3	
DL33		1	8	26	12	2	---	4	3	5	2-7-8	
DL35		1	2	27	13	2	---	4	3	5	2-7	
DL41		5	1	12	10	2	---	5	2	6	1-7-8	May show short on 3
DL92		1	5	27	14	2	6	4	2	3	1-5-7	Must show short on 2 - 6; Plate short test - Depress 2 - 6 together
DL93		1	5	26	12	2	6	3	2	4	1-5-7	Must show short on 2 - 6
DL94		1	5	27	15	2	---	3	2	6	1-5-7	
DL95		1	5	27	15	2	2	4	6	3	1-5-7	
DL96		1	5	30	10	2	---	3	2	6	1-5-7	
DL98	#	5	2	6	10	2	6	1	7	3	2-4-5	# CAUTION Lever 6 must be thrown to position "W" before inserting tube and must remain in position "W" throughout all tests, including short tests
DM70	Eye	3	4	0	0	2	---	---	1-8	---	4-5	See instructions for eye test
DM71	Eye	3	4	0	0	2	---	---	1-8	---	4-5	See instructions for eye test
DY80	#											# CAUTION - Levers 5 - 8 must be thrown to position "W" before inserting tube and must remain in position "W" throughout all tests, including short tests.
DY80		7	2	0	16	2	5-8	---	11	---	\$	\$ Fil Cont - 1 - 2 - 4 - 6 - 9; May show short on 3 - 7
DY86	#											# CAUTION - Levers 5 - 8 must be thrown to position "W" before inserting tube and must remain in position "W" throughout all tests, including short tests.

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
DY86		7	2	0	14	2	5 - 8	---	11	---	\$	\$ Fil Cont - 1 - 2 - 4 - 6 - 9; May show short on 3 - 7
DY87	#											# CAUTION - Levers 5 - 8 must be thrown to position "W" before inserting tube and must remain in position "W" throughout all tests, Including short tests.
DY87		7	2	0	14	2	5 - 8	---	11	---	\$	\$ Fil Cont must show short on 1 - 2 - 4 - 5 - 6 - 8 - 9
DY802	*	7	2	0	17	2	5 - 8	---	11	---	?	* CAUTION: Levers 5 - 8 must be thrown to "W" position before inserting tube and remain there for all tests; Must show short on 1 - 2 - 4 - 6 - 9
E55L	*	1	4	5	7	7	---	3	1	8	4 - 5	* Must use magnoval adapter; Must show short on 2 - 6 - 7 - 9
E80CC	Triode-1	1	9	10	22	7	---	---	6	7	4 - 5 - 9	
E80CC	Triode-2	1	9	10	22	7	---	---	1	2	4 - 5 - 9	
E80F		3	4	7	32	7	7	1	6	9	4 - 5	Must show short on 2 - 7
E80L		1	4	10	16	7	---	8	7	2	4 - 5	Must show short on 1 - 6
E81CC	Triode-1	1	9	32	10	7	---	---	1	2	4 - 5 - 9	
E81CC	Triode-2	1	9	32	10	7	---	---	6	7	4 - 5 - 9	
E81L		4	4	4	9	7	1	8	7	2	4 - 5	
E82CC	Triode-1	1	9	27	10	7	---	---	6	7	4 - 5 - 9	
E82CC	Triode-2	1	9	27	10	7	---	---	1	2	4 - 5 - 9	
E83CC	Triode-1	1	9	12	32	7	---	---	6	7	4 - 5 - 9	
E83CC	Triode-2	1	9	12	32	7	---	---	1	2	4 - 5 - 9	
E83F		1	4	12	20	7	---	1	6	2	5	
E84L		1	4	28	7	7	1	9	7	2	4 - 5	Must show short on 1 - 2
E88CC	Triode-1	1	4	6	12	7	---	---	6	7	4 - 5	
E88CC	Triode-2	1	4	6	12	7	---	---	1	2	4 - 5	
E90Z		2	3	0	3	7	---	---	1	---	3 - 4	
E90Z		2	3	0	3	7	---	---	6	---	3 - 4	
E91AA	Diode-1	3	3	0	17	7	---	---	7	---	3 - 4	
E91AA	Diode-2	3	3	0	17	7	---	---	2	---	3 - 4	
E91N		7	3	0	3	7	---	---	6	1	3 - 4	Must show short on 5 - 7
E180F		1	4	12	16	7	---	9	7	2	4 - 5	
E182CC	Triode-1	1	8	27	5	7	---	---	9	7	4 - 5 - 8	
E182CC	Triode-2	1	8	27	5	7	---	---	1	2	4 - 5 - 8	
E188CC	Triode-1	1	4	10	10	7	---	---	6	7	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
E188CC	Triode-2	1	4	10	10	7	---	---	1	2	4-5	
E235L		1	2	5	5	7	1	4	3	5	2-7	
E810F		5	4	0	13	7	9	6	7	2	4-5	Must show short on 1-3-6-9
EAA11	Diode-1	3	2	0	16	7	---	---	5	---	2-3	
EAA11	Diode-2	3	2	0	16	7	---	---	6	---	2-3	
EAA91	Diode-1	3	3	0	17	7	---	---	7	---	3-4	
EAA91	Diode-2	3	3	0	17	7	---	---	2	---	3-4	
EAA901	Diode-1	3	3	0	17	7	---	---	7	---	3-4	
EAA901	Diode-2	3	3	0	17	7	---	---	2	---	3-4	
EABC80	Triode	4	4	14	10	7	---	---	9	8	4-5	Correction (GK)
EABC80	Diode-1	3	4	0	24	7	---	---	6	---	4-5	Correction (GK)
EABC80	Diode-2	3	4	0	16	7	---	---	2	---	4-5	
EABC80	Diode-3	3	4	0	16	7	---	---	1	---	4-5	
EAC91	Triode	1	3	30	10	7	---	---	7	6	3-4	
EAC91	Diode	3	3	0	16	7	---	---	1	---	3-4	
*EAF42	Pent	1	1	8	29	7	---	5	2	6	1-8	
*EAF42	Diode	3	1	0	21	7	---	---	3	---	1-8	
EAF801	Diode	3	4	0	21	7	---	---	8	---	4-5	
EAF801	Pentode	4	4	30	32	7	---	1	6	2	4-5	
EAM86	Triode	5	4	9	14	7	---	---	1	8	4-5	
EAM86	Eye	7	4	0	0	7	---	---	6-7	---	4-5	See instructions for eye test
EB41	Diode-1	3	1	0	16	7	---	---	6	---	1-8	
EB41	Diode-2	3	1	0	16	7	---	---	4	---	1-8	
EB91	Diode-1	3	3	0	16	7	---	---	7	---	3-4	
EB91	Diode-2	3	3	0	16	7	---	---	2	---	3-4	
EBC11	Triode	1	2	27	10	7	---	---	6	7	3-4	
EBC11	Diode-1	3	2	0	20	7	---	---	5	---	3-4	
EBC11	Diode-2	3	2	0	20	7	---	---	4	---	3-4	
EBC33	Triode	1	2	30	10	7	---	---	3	11	2-7	
EBC33	Diode-1	3	2	0	19	7	---	---	5	---	2-7	
EBC33	Diode-2	3	2	0	19	7	---	---	4	---	2-7	
EBC41	Triode	4	1	13	10	7	---	---	2	3	1-8	
EBC41	Diode-1	3	1	0	22	7	---	---	5	---	1-8	
EBC41	Diode-2	3	1	0	22	7	---	---	6	---	1-8	
EBC81	Triode	4	4	11	10	7	---	---	1	2	4-5	
EBC81	Diode-1	3	4	0	27	7	---	---	8	---	4-5	
EBC81	Diode-2	3	4	0	25	7	---	---	6	---	4-5	
EBC90	Triode	1	3	13	30	7	---	---	7	1	3-4	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
EBC90	Diode-1	3	3	0	26	7	---	---	6	---	3 - 4	
EBC90	Diode-2	3	3	0	26	7	---	---	5	---	3 - 4	
EBC91	Triode	1	3	12	32	7	---	---	7	1	3 - 4	
EBC91	Diode-1	3	3	0	27	7	---	---	6	---	3 - 4	
EBC91	Diode-2	3	3	0	27	7	---	---	5	---	3 - 4	
EBF15	Pent	4	2	3	10	7	---	6	1	7	2 - 3	
EBF15	Diode	3	2	0	18	7	---	---	5	---	2 - 3	
EBF80	Pent	1	4	14	31	7	---	1	6	2	4 - 5	
EBF80	Diode-1	3	4	0	23	7	---	---	7	---	4 - 5	
EBF80	Diode-2	3	4	0	23	7	---	---	8	---	4 - 5	
EBF83	Pent	1	4	20	19	7	---	1	6	2	4 - 5	
EBF83	Diode-1	3	4	0	21	7	---	---	7	---	4 - 5	
EBF83	Diode-2	3	4	0	21	7	---	---	8	---	4 - 5	
EBF89	Pent	1	4	27	17	7	---	1	6	2	4 - 5	
EBF89	Diode-1	3	4	0	11	7	---	---	7	---	4 - 5	
EBF89	Diode-2	3	4	0	11	7	---	---	8	---	4 - 5	
EC80		1	1	35	5	7	2 - 7	---	3	8	1 - 4	Must show short on 2 - 3 - 7 - 8 individually
EC81		1	4	11	11	7	---	---	8	1	4 - 5	
EC86		1	4	10	9	7	6 - 8 - 9	---	1	2	4 - 5	Must show short on 1 - 2 - 3 - 6 - 7 - 8 - 9; Cathode short test - Depress 3 - 7 together
EC88		5	4	8	9	7	---	---	8	9	4 - 5	Must show short on 1 - 3 - 6 - 7 - 9
EC91		4	3	5	5	7	1	---	7	6	3 - 4	Must show short on 1 - 2 - 5 - 6
EC92		1	3	30	10	7	---	---	1	6	3 - 4	
EC95		1	3	17	10	7	---	6	5	2	3 - 4	Must show short on 1 - 7; Cathode short test Depress 1 - 7 together
EC97		1	3	13	10	7	---	---	5	2	3 - 4	Must show short on 1 - 7; Cathode short test Depress 1 - 7 together
EC900		1	3	13	10	7	2	---	5	1	3 - 4	Must show short on 2 - 7; Cathode short test Depress 2 - 7 together
ECC33	Triode-1	1	7	28	10	7	---	---	5	4	7 - 8	
ECC33	Triode-2	1	7	28	10	7	---	---	2	1	7 - 8	
ECC34	Triode-1	1	7	25	10	7	---	---	5	4	7 - 8	
ECC34	Triode-2	1	7	25	10	7	---	---	2	1	7 - 8	
ECC35	Triode-1	1	7	33	10	7	---	---	5	4	7 - 8	
ECC35	Triode-2	1	7	33	10	7	---	---	2	1	7 - 8	
ECC40	Triode-1	2	1	31	10	7	---	---	5	6	1 - 8	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
ECC40	Triode-2	2	1	31	10	7	---	---	2	3	1 - 8	
ECC81	Triode-1	1	9	32	9	7	---	---	6	7	4 - 5 - 9	
ECC81	Triode-2	1	9	32	9	7	---	---	1	2	4 - 5 - 9	
ECC82	Triode-1	1	9	27	10	7	---	---	1	2	4 - 5 - 9	
ECC82	Triode-2	1	9	27	10	7	---	---	6	7	4 - 5 - 9	
ECC83	Triode-1	1	9	8	38	7	---	---	6	7	4 - 5 - 9	
ECC83	Triode-2	1	9	8	38	7	---	---	1	2	4 - 5 - 9	
ECC84	Triode-1	5	4	9	10	7	---	---	9	6	4 - 5	Must show short on 7 - 8; Cathode short test, Section 1 - Depress 7 - 8 together
ECC84	Triode-2	5	4	9	10	7	---	---	3	2	4 - 5	
ECC85	Triode-1	1	5	21	13	7	---	---	6	7	4 - 5	
ECC85	Triode-2	1	5	21	13	7	---	---	1	2	4 - 5	
ECC86	Triode-1	2	4	10	10	7	---	---	6	7	4 - 5	
ECC86	Triode-2	2	4	10	10	7	---	---	1	2	4 - 5	
ECC86	Diode	3	2	0	18	7	---	---	4	---	4 - 5	
ECC88	Triode-1	1	4	6	12	7	---	---	6	7	4 - 5	
ECC88	Triode-2	1	4	6	12	7	---	---	1	2	4 - 5	
ECC91	Triode-1	1	3	16	13	7	---	---	2	5	3 - 4	
ECC91	Triode-2	1	3	16	13	7	---	---	1	6	3 - 4	
ECC189	Triode-1	2	4	12	10	7	---	---	6	7	4 - 5	
ECC189	Triode-2	2	4	12	10	7	---	---	1	2	4 - 5	
ECC801S	Triode-1	1	9	32	9	7	---	---	6	7	4 - 5 - 9	
ECC801S	Triode-2	1	9	32	9	7	---	---	1	2	4 - 5 - 9	
ECC802S	Triode-1	1	9	27	10	7	---	---	1	2	4 - 5 - 9	
ECC802S	Triode-2	1	9	27	10	7	---	---	6	7	4 - 5 - 9	
ECC808	Triode-1	5	4	16	17	7	---	---	7	9	4 - 5	
ECC808	Triode-2	5	4	16	17	7	---	---	3	1	4 - 5	
ECF12	Triode	5	2	23	10	7	---	---	5	4	2 - 3	
ECF12	Pent	4	2	10	15	7	---	6	1	7	2 - 3	
ECF80	Triode	1	4	14	10	7	---	---	1	9	4 - 5	
ECF80	Pent	1	4	23	16	7	---	3	6	2	4 - 5	
ECF82	Triode	1	4	28	8	7	---	---	1	9	4 - 5	
ECF82	Pent	1	4	14	29	7	---	3	6	2	4 - 5	
ECF83	Triode	3	4	15	17	7	---	---	3	2	4 - 5	
ECF83	Pentode	4	4	10	10	7	---	7	6	9	4 - 5	
ECF86	Triode	1	4	5	10	7	---	---	7	6	4 - 5	May show short on 1 - 3; Cathode short test - Depress 1 - 3 together
ECF86	Pent	1	4	7	25	7	---	9	8	2	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
ECF200	Triode	4	5	10	14	7	---	---	9	11	5-6	
ECF200	Pentode	2	5	0	39	7	---	8	7	3	5-6	
ECF201	Triode	5	5	9	10	7	---	---	9	11	5-6	
ECF201	Pentode	5	5	0	20	7	---	8	7	3	5-6	
ECF202	Triode	5	5	8	10	7	---	---	9	11	5-6	
ECF202	Pentode	5	5	5	30	7	---	8	7	3	5-6	
ECF801	Triode	5	4	7	8	7	---	---	8	9	4-5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
ECF801	Pentode	1	4	0	38	7	---	7	6	2	4-5	
ECF802	Triode	5	4	10	15	7	---	---	1	9	4-5	
ECF802	Pentode	4	4	7	11	7	---	3	6	2	4-5	
ECF805	Triode	5	4	7	10	7	---	---	1	9	4-5	
ECF805	Pentode	5	4	0	22	7	---	2	3	7	4-5	
ECH21	Pentode	3	1	10	25	7	---	5	2	6	8	
ECH21	Triode	3	1	5	29	7	---	---	3	4	8	
ECH35	Triode	1	2	30	10	7	---	---	6	5	2-7	
ECH35	Hexode	1	2	18	34	7	---	4	3	11	2-7	
ECH42	Triode	1	1	30	10	7	---	---	3	4	1-8	
ECH42	Hexode	1	1	5	38	7	---	5	2	6	1-8	
ECH81	Amp	1	4	14	31	7	---	1	6	2	4-5	
ECH81	Osc	1	4	25	10	7	---	---	1	2	4-5	
ECH81	Triode	1	4	25	13	7	---	---	8	9	4-5	
ECH83	Amp	1	4	17	29	7	---	1	6	2	4-5	
ECH83	Osc	3	4	10	23	7	---	---	1	2	4-5	
ECH83	Triode	1	4	27	10	7	---	---	8	9	4-5	
ECH84	Triode	5	4	9	17	7	---	---	8	9	4-5	
ECH84	Heptode	5	4	6	16	7	---	7	6	2	4-5	
ECH200	Triode	5	5	8	10	7	---	---	11	8	5-6	
ECH200	Pentode	5	5	5	21	7	---	4	7	3	5-6	
ECL11	Triode	5	2	29	10	7	---	---	6	7	2-3	
ECL11	Tetrode	1	2	26	10	7	---	4	1	5	2-3	
ECL80	Pent	1	4	26	10	7	---	8	6	9	4-5	
ECL80	Triode	1	4	34	10	7	---	---	1	2	4-5	
ECL82	Triode	1	4	31	11	7	---	---	9	1	4-5	
ECL82	Pent	1	4	10	12	7	---	7	6	3	4-5	
ECL84	Triode	1	4	31	10	7	---	---	2	1	4-5	
ECL84	Pent	1	4	26	11	7	---	9	6	8	4-5	
ECL85	Triode	2	4	34	10	7	---	---	1	2	4-5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
ECL85	Pentode	2	4	7	10	7	---	7	6	9	4-5	
ECL86	Triode	4	4	15	10	7	---	---	9	1	4-5	
ECL86	Pent	1	4	19	10	7	---	3	6	8	4-5	
ECLL800		3	4	35	20	7	---	---	1-9	2	4-5	
ECLL800		1	4	23	15	7	---	9	3	2	4-5	
ECLL800		1	4	23	15	7	---	9	8	6	4-5	
ED500	*	4	4	10	45	7	---	---	11	8	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 9; OK above 30; Cap goes to top of tube
EF12		4	2	11	10	7	---	6	5	7	2-3	
EF14		4	2	3	10	7	---	1	5	6	2-3	
EF15		4	2	0	11	7	---	6	5	7	2-3	
EF22		1	1	11	23	7	---	3	2	6	1-8	
EF37A		3	2	8	31	7	---	4	3	11	2-7	
EF39		4	2	11	10	7	---	4	3	11	2-7	
EF40		4	2	11	10	7	---	6	2	5	1-8	May show short on 3 - 7
EF40		5	1	7	27	7	---	6	2	5	1-8	May show short on 3 - 7
*EF41		1	1	8	32	7	---	5	2	6	1-8	
EF42		4	1	10	10	7	---	5	2	6	1-8	Must show short on 1 - 3; Cathode short test
EF80		1	4	8	29	7	3	8	7	2	4-5	Depress 1 - 3 together
EF83		5	4	0	28	7	---	1	6	9	4-5	May show short on 2 - 7
EF85		4	4	5	10	7	3	8	7	2	4-5	Depress 1 - 3 together
EF86		1	4	17	30	7	---	1	6	9	4-5	Must show short on 2 - 7
EF89		1	4	8	28	7	---	8	7	2	4-5	May show short on 1 - 6
EF91		1	4	8	28	7	---	8	7	2	4-5	
EF92		4	3	10	10	7	---	7	5	1	3-4	
EF92		4	3	14	10	7	---	7	5	1	3-4	
EF93		4	3	14	10	7	---	7	5	1	3-4	
EF93		1	3	28	15	7	---	6	5	1	3-4	
EF94		1	3	13	27	7	---	6	5	1	3-4	Must show short on 2 - 7; Cathode short test
EF95		1	3	22	16	7	---	6	5	1	3-4	Depress 2 - 7 together
EF97		5	3	0	9	7	---	6	5	1	3-4	
EF98		5	3	0	9	6	---	6	5	1	3-4	
EF183		1	4	5	23	7	---	8	7	2	4-5	Must show short on 1 - 3; Cathode short test
EF184		1	4	5	25	7	---	8	7	2	4-5	Depress 1 - 3 together
EF804		4	4	9	17	7	---	8	7	9	4-5	Must show short on 2 - 6

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
EF806S		1	4	17	30	7	---	1	6	9	4 - 5	Must show short on 2 - 7
EFL200	Pent-1	1	5	7	11	7	---	9	11	8	5 - 6	
EFL200	Pent-2	1	5	15	16	7	---	3	4	1	5 - 6	
EH90	Amp	4	3	7	28	7	---	6	5	7	3 - 4	
EH90	Osc	1	3	22	10	7	---	---	6	1	3 - 4	
EH900S	Amp	4	3	6	25	7	---	6	5	7	3 - 4	
EH900S	Osc	1	3	25	8	7	---	---	6	1	3 - 4	
EK11		1	3	2	26	5	---	---	7	4	1 - 7	
EK90	Amp	4	3	7	27	7	---	6	5	7	3 - 4	
EK90	Osc	1	3	21	9	7	---	---	6	1	3 - 4	
EL11		1	2	18	10	7	---	6	5	7	2 - 3	
EL12		1	2	18	7	7	---	6	5	7	2 - 3	
EL13		1	2	25	10	7	---	6	5	7	2 - 3	
EL32		1	2	29	10	7	---	4	3	11	2 - 7	
EL33		1	2	22	10	7	---	4	3	5	2 - 7	
EL34		1	2	15	7	7	---	4	3	5	2 - 7	
EL36		2	2	1	7	7	1	4	12	5	2 - 7	Must show short on 1 - 3 - 4 - 8; Use red grid cap; Cathode short test - Depress 3 - 8 together
EL37		1	7	8	11	7	---	4	3	5	2 - 7	
EL38		1	2	13	10	6	---	4	11	5	2 - 7	
*EL41		1	1	12	10	7	---	5	2	6	1 - 8	Must show short on 3 - 7; Cathode short test Depress 3 - 7 together
EL81		5	4	5	6	7	7	8	11	2	4 - 5	Must show short on 1 - 6 - 7 - 8 - 9
EL82		1	4	7	10	7	---	9	7	2	4 - 5	
EL83		5	4	7	9	7	---	1	7	2	4 - 5	
EL84		1	4	28	7	7	1	9	7	2	4 - 5	Must show short on 1 - 2; Grid short test - Depress 1 - 2 together
EL85		1	4	30	10	7	1	9	7	2	4 - 5	Must show short on 1 - 2 - 6 - 8; Grid short test - Depress 1 - 2 together; Suppressor short test - Depress 6 - 8 together
EL86		1	4	0	10	6	1 - 6 - 8	9	7	2	4 - 5	May show short on 1 - 2 - 6 - 7 - 8 - 9; Grid short test - Depress 1 - 2 together; Plate short test - Depress 7 - 8 together; Screen short test - Depress 6 - 9 together
EL90		1	3	32	8	7	1	6	5	7	3 - 4	Must show short on 1 - 7; Grid short test - Depress 1 - 7 together

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78						LEVER				FIL. CONT.	COMMENT	
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
EL91		1	3	31	10	7	---	7	5	1	3 - 4	May show short on 1 - 7; Grid short test - Depress 1 - 7 together
EL95		1	3	25	10	7	1	6	5	7	3 - 4	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Red grid cap goes to top of tube
EL500	*	3	4	2	16	7	2 - 7 - 8	6	12	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8
EL503	*	1	4	5	6	7	7 - 8	1	9	3	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Red grid cap goes to top of tube
EL504	*	3	4	2	16	7	2 - 7 - 8	6	12	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Black cap goes to top of tube
EL505	*	1	4	8	26	7	1 - 2 - 3	7	11	8	4 - 5	Must show short on 3 - 6 - 8 - 9
EL802		1	4	5	15	7	6	8	7	2	4 - 5	
EL821		1	4	20	12	7	---	1	3	2	4 - 5	
ELL80	Pent-1	5	4	6	8	7	---	9	8	6	4 - 5	
ELL80	Pent-2	5	4	6	8	7	---	---	5	7	2 - 3	
EM11	Triode	1	2	31	10	7	---	---	5 - 6 - 1	---	2 - 3	See instructions for eye test
EM11	Eye	1	2	0	0	7	---	---	3 - 6 - 5	---	2 - 7	See instructions for eye test
EM34		7	2	0	0	7	---	---	3	4	2 - 7	
EM35	Triode	1	2	13	25	7	---	---	3 - 6 - 5	---	2 - 7	See instructions for eye test
EM35	Eye	7	2	0	0	7	---	---	7	1	4 - 5	May show short on 3 - 6 - 9
EM80	Triode	1	4	19	20	7	---	---	7 - 9	---	4 - 5	See instructions for eye test
EM80	Eye	7	4	0	0	7	3 - 6	---	7	1	4 - 5	Must show short on 3 - 8 - 9
EM81	Triode	1	4	34	24	7	---	---	7 - 9	---	4 - 5	See instructions for eye test
EM81	Eye	7	4	0	0	7	3 - 8	---	7 - 9	---	4 - 5	See instructions for eye test
EM84	Triode	3	4	25	45	7	---	---	9	1	4 - 5	Must show short on 2 - 6 - 8; Correction (GK)
EM84	Eye	4	4	0	0	7	2 - 8	---	7 - 6	---	4 - 5	See instructions for eye test
EM87	Triode	5	4	15	20	7	---	---	9	1	4 - 5	Must show short on 2 - 6 - 8
EM87	Eye	7	4	0	0	7	2 - 8	---	6 - 7	---	4 - 5	See instructions for eye test; Target short test - Depress 2 - 6 - 8 together
EN32		3	1	20	25	7	---	6	3	5	7	
EQ80		5	4	10	32	7	---	1	6	7	4 - 5	Must show short on 3 - 8

EL 509 →

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
EY51		1	2	0	21	7	---	---	11	---	1 - 2	Connect two bottom leads to octal sockets Pins 1 and 2. Top lead connect to grid cap
EY80		3	4	0	18	7	---	---	9	---	4 - 5	
EY81		3	4	0	16	7	2	---	9	---	4 - 5	May show short on all pins
EY82		3	4	0	18	7	---	---	9	---	4 - 5	
EY86	#											# CAUTION - Levers 5 - 8 must be thrown to position "W" before inserting tube and must remain in position "W" throughout all tests, including short tests.
EY86		7	2	0	14	7	5 - 8	---	11	---	\$	\$ Fil Cont must show short on 1 - 2 - 4 - 6 - 9
EY87	#	7	2	0	14	7	5 - 8	---	11	---	\$	# CAUTION - Levers 5 - 8 must be thrown to position "W" before inserting tube and must remain in position "W" throughout all tests, including short tests. \$ Fil Cont - Must show short on 1 - 2 - 4 - 6 - 9
EY88		1	4	0	4	7	*	---	9	---	4 - 5	May show short on 1 - 2 - 3 - 6 - 7 - 8 - 9; * W = 1 - 2 - 3 - 6 - 7 - 8
EY500	*	3	4	0	16	7	7 - 8	---	2	---	4 - 5	* Must use Magnoval adapter; Must show short on 2 - 7 - 8; Cap goes to top of tube
EZ11	Plate-1	1	2	0	5	7	---	---	6	---	2 - 3	
EZ11	Plate-2	1	2	0	5	7	---	---	5	---	2 - 3	
EZ35	Plate-1	2	2	0	3	7	---	---	3	---	2 - 7	
EZ35	Plate-2	2	2	0	3	7	---	---	5	---	2 - 7	
EZ80	Plate-1	2	4	0	4	7	---	---	1	---	4 - 5	
EZ80	Plate-2	2	4	0	4	7	---	---	7	---	4 - 5	
EZ81	Plate-1	2	4	0	1	7	---	---	1	---	4 - 5	
EZ81	Plate-2	2	4	0	1	7	---	---	7	---	4 - 5	
EZ90	Plate-1	2	3	0	3	7	---	---	1	---	3 - 4	
EZ90	Plate-2	2	3	0	3	7	---	---	6	---	3 - 4	
GY501	* #	7	4	0	17	4	2 - 8	---	11	---	4 - 5	* Must use magnoval adapter; # CAUTION: Levers 2 - 8 must be thrown to position "W" before inserting tube and must remain in position "W" throughout all tests, including short tests; Must show short on 1 - 9
GZ30	Plate-1	2	2	0	2	6	---	---	6	---	2 - 8	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
GZ30	Plate-2	2	2	0	2	6	---	---	4	---	2 - 8	
GZ32	Plate-1	2	2	0	2	6	---	---	4	---	2 - 8	
GZ32	Plate-2	2	2	0	2	6	---	---	6	---	2 - 8	
GZ34	Plate-1	1	2	0	4	6	---	---	4	---	2 - 8	
GZ34	Plate-2	1	2	0	4	6	---	---	6	---	2 - 8	
HBC90	Triode	1	3	13	30	10	---	---	7	1	3 - 4	
HBC90	Diode-1	3	3	0	26	10	---	---	5	---	3 - 4	
HBC90	Diode-2	3	3	0	26	10	---	---	6	---	3 - 4	
HBC91	Triode	1	3	12	32	10	---	---	7	1	3 - 4	
HBC91	Diode-1	3	3	0	27	10	---	---	6	---	3 - 4	
HBC91	Diode-2	3	3	0	27	10	000	000	5	---	3 - 4	
HCC85	Triode-1	1	5	21	13	11	---	---	6	7	4 - 5	
HCC85	Triode-2	1	5	21	13	11	---	---	1	2	4 - 5	
HCH81	Triode	5	4	11	12	10	---	---	8	9	4 - 5	
HCH81	Pentode	5	4	9	15	10	---	1	6	2	4 - 5	
HF93		1	3	28	15	10	---	6	5	1	3 - 4	
HK90	Amp	4	3	7	27	10	---	6	5	7	3 - 4	
HK90	Osc	1	3	21	9	10	---	---	6	1	3 - 4	
HL92		1	3	8	8	14	2	6	7	5	3 - 4	Must show short on 2 - 5; Grid short test - Depress 2 - 5 together; Fil Cont - Set control "E" at 12
HL94		1	3	5	6	12	2	---	5	1	3 - 4	Must show short on 2 - 5
HY90	Amp	2	3	0	1	13	6	---	5	---	3 - 4 - 6	
KT66		1	2	14	9	7	---	4	3	5	2 - 7	
KT88		1	2	0	10	7	---	4	3	5	2 - 7	Correction (GK)
LC900		1	3	13	10	4	2	---	5	1	3 - 4	Must show short on 2 - 7; Cathode short test Depress 2 - 7 together
LCF80	Triode	1	4	14	10	7	---	---	1	9	4 - 5	
LCF80	Pentode	1	4	23	16	7	---	3	6	2	4 - 5	
LCF200	Triode	4	5	10	14	7	---	---	9	11	5 - 6	
LCF200	Pentode	2	5	0	39	7	---	8	7	3	5 - 6	
LCF201	Triode	2	5	9	10	7	---	---	9	11	5 - 6	
LCF201	Pentode	2	5	0	20	7	---	8	7	3	5 - 6	
LCF801	Triode	5	4	7	8	6	---	---	8	9	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
LCF801	Pentode	1	4	0	38	6	---	7	6	2	4 - 5	
LCF802	Triode	1	4	11	16	7	---	---	1	9	4 - 5	
LCF802	Pentode	5	4	5	18	7	---	3	6	2	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
LCH200	Triode	5	5	8	10	6	---	---	11	8	5 - 6	
LCH200	Pentode	5	5	5	21	6	---	4	7	3	5 - 6	
LCL80	Triode	1	4	14	18	6	---	---	1	2	4 - 5	
LCL80	Pentode	1	4	14	17	6	---	8	6	9	4 - 5	
LCL84	Triode	1	4	31	10	9	---	---	2	1	4 - 5	
LCL84	Pentode	1	4	26	11	9	---	9	6	8	4 - 5	
LCL85	Triode	2	4	34	10	8	---	---	1	2	4 - 5	
LCL85	Pentode	2	4	7	10	8	---	7	6	9	4 - 5	
LF183		1	4	5	23	6	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
LF184		1	4	5	25	6	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
LFL200	Pent-1	1	5	7	11	9	---	9	11	8	5 - 6	
LFL200	Pent-2	1	5	15	16	9	---	3	4	1	5 - 6	
LL86		1	4	0	10	9	1 - 6 - 8	9	7	2	4 - 5	May show short on 1 - 2 - 6 - 7 - 8 - 9
LL505	*	1	4	8	26	12	1 - 2 - 3	7	11	8	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cap goes to top of tube
LL509	*	1	4	8	26	12	1 - 2 - 3	7	11	8	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Black cap goes to top of tube
LL521	*	5	4	0	5	11	6 - 8	3	11	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cap goes to top of tube
LL802		1	4	5	15	9	6	8	7	2	4 - 5	Must show short on 3 - 6 - 8 - 9
LY81		3	4	0	16	9	2	---	9	---	4 - 5	May show short on all pins
LY88		3	4	0	15	12	#	---	9	---	4 - 5	# Levers 1 - 2 - 3 - 6 - 7 - 8 must be thrown to "W"; May show short on 1 - 2 - 3 - 6 - 8 - 9
M8096		1	4	27	10	7	8	6	1	9	4 - 5	Must show short on 8 - 9; Grid short test - Depress 8 - 9 together
N22LL	*	5	4	0	5	11	1	6	9	7	4 - 5	* Must use magnoval adapter; Must show short on 1 - 7
PABC80	Triode	4	4	10	10	9	---	---	9	8	4 - 5	
PABC80	Diode-1	3	4	0	23	9	---	---	6	---	4 - 5	
PABC80	Diode-2	3	4	0	16	9	---	---	2	---	4 - 5	
PABC80	Diode-3	3	4	0	16	9	---	---	1	---	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA											FIL. CONT.	COMMENT	
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z			
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78													
This supplementary chart provides settings for tubes which fall into the following classification:													
1. Foreign Tubes													
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.													
PC86		2	4	19	10	5	1-2-6	---	9	8	4-5	Must show short on 1-2-3-6-7-8-9; Plate short test - Depress 1-9 together; Grid short test - Depress 2-6-8 together; Cathode short test - Depress 3-7 together	
PC88		5	4	6	11	5	1-3-6	---	8	7-9	4-5		
PC95		5	3	5	15	5	---	---	5	2	3-4	Must show short on 1-3-6-7-9	
PC900		1	3	13	10	5	2	---	5	1	3-4	Must show short on 1-7 Must show short on 2-7; Cathode short test Depress 2-7 together	
PCC84	Triode-1	5	4	10	10	8	---	---	9	6	4-5	Must show short on 7-8; Cathode short test, Section 1 - Depress 7-8 together	
PCC84	Triode-2	5	4	10	10	8	---	---	3	3	4-5		
PCC85	Triode-1	1	4	25	11	9	---	---	6	7	4-5	Correction 6-1-70	
PCC85	Triode-2	1	4	25	11	8	---	---	1	2	4-5	Correction 6-1-70	
PCC88	Triode-1	2	4	12	10	7	---	---	6	7	4-5		
PCC88	Triode-2	2	4	12	10	7	---	---	1	2	4-5		
PCC189	Triode-1	2	4	12	10	8	---	---	6	7	4-5		
PCC189	Triode-2	2	4	12	10	8	---	---	1	2	4-5		
PCF80	Triode	5	4	12	10	8	---	---	1	9	4-5		
PCF80	Pent	1	4	18	19	8	---	---	3	6	2	4-5	
PCF82	Triode	1	4	28	8	9	---	---	1	9	4-5		
PCF82	Pent	1	4	14	29	9	---	---	3	6	2	4-5	May show short on 1-3; Cathode short test - Depress 1-3 together
PCF86	Triode	1	4	5	10	8	---	---	7	6	4-5		
PCF86	Pentode	1	4	7	25	8	---	---	9	8	2	4-5	
PCF200	Triode	4	5	10 8	14 9	8	---	---	9	11	5-6		
PCF200	Pentode	2	5	0	20 32	8	---	---	8	7	3	5-6	
PCF201	Triode	2	5	9	10	8	---	---	9	11	5-6		
PCF201	Pentode	2	5	0	20	8	---	---	8	7	3	5-6	Must show short on 1-3; Cathode short test Depress 1-3 together
PCF801	Triode	5	4	7	8	8	---	---	8	9	4-5		
PCF801	Pentode	1	4	0	38	8	---	---	7	6	2	4-5	
PCF802	Triode	5	4	10	15	9	---	---	---	1	9	4-5	
PCF802	Pentode	4	4	7	10	9	---	---	3	6	2	4-5	Must show short on 6-8; Cathode short test Depress 6-8 together
PCF805	Triode	5	4	7	10	8	---	---	2	3	7	4-5	
PCF805	Pentode	5	4	0	22	8	---	---	---	11	8	5-6	
PCH200	Triode	5	5	8	10	9	---	---	---	---	---		

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA

MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
PCH200	Pentode	5	5	5	21	9	---	7	6	3	5-6	Must show short on 3 - 8; Cathode short test Depress 3 - 8 together
PCL81	Triode	1	4	30	10	10	---	---	7	1	4-5	
PCL81	Pent	1	4	14	10	10	---	2	6	9	4-5	
PCL82	Triode	1	4	12	27	10	---	---	9	1	4-5	
PCL82	Pentode	1	4	10	9	10	---	7	6	3	4-5	
PCL84	Triode	1	4	26	10	10	---	---	2	1	4-5	
PCL84	Pent	1	4	15	13	10	---	9	6	8	4-5	
PCL85	Triode	2	4	34	10	11	---	---	1	2	4-5	
PCL85	Pentode	2	4	7	10	11	---	7	6	9	4-5	
PCL86	Triode	4	4	15	10	10	---	---	9	1	4-5	
PCL86	Pentode	1	4	19	10	10	---	3	6	8	4-5	
PD500	*	4	4	10	45	8	---	---	11	8	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 9; OK above 30; Cap goes to top of tube
PF86		4	4	7	20	5z	---	1	6	9	4-5	Set switch "E" to 6 if there is no 5Z position; Must show short on 2 - 7
PFL200	Pent-1	1	5	7	11	11	---	9	11	8	5-6	
PFL200	Pent-2	1	5	15	16	11	---	3	4	1	5-6	
PL36		2	2	0	5	12	1-3	4	11	5	2-7	Must show short on 1 - 3 - 4 - 8; Cathode short test - Depress 1 - 8 together; Screen short test - Depress 3 - 4 together
PL81		5	4	0	6	11	7	8	10	2	4-5	Must show short on 1 - 6 - 7 - 8 - 9
PL82		1	4	7	7	11	---	9	7	2	4-5	
PL83		4	4	3	10	10	---	1	7	2	4-5	
PL84		1	4	2	10	10	1-6-8	9	7	2	4-5	May show short on 1 - 2 - 6 - 7 - 8 - 9
PL500	*	3	4	2	16	12	2-7-8	6	12	1	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Use Red grid cap
PL504	*	3	4	2	16	12	2-7-8	6	12	1	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Red grid cap goes to top of tube
PL505	*	1	4	8	26	13	1-2-3	7	11	8	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Black cap goes to top of tube

PL508 3 4 8 26 11 2-8-9 3 6 1 4-5 Magnoval

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
PL521	*	5	4	0	5	11	6 - 8	3	11	1	4 - 5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cap goes to top of tube
PM84	Triode	4	4	10	34	5	---	---	9	1	4 - 5	Must show short on 2 - 6 - 8
PM84	Eye	7	4	0	0	5	2 - 8	---	6 - 7	---	4 - 5	See instructions for eye test
PY80		1	4	0	4	10	---	---	9	---	4 - 5	
PY81		7	4	0	4	10	2	---	9	---	4 - 5	Must show short on 2 - 9; Plate short test - Depress 2 - 9 together
PY82		7	4	0	3	10	---	---	9	---	4 - 5	
PY83		7	4	0	3	11	---	---	9	---	4 - 5	
PY88		1	4	0	4	12	#	---	9	---	4 - 5	# "W" = 1 - 2 - 3 - 6 - 7 - 8; May show short on 1 - 2 - 3 - 6 - 7 - 8 - 9
PY500	*	3	4	0	16	13	7 - 8	---	2	---	4 - 5	* Must use Magnoval adapter; Must show short on 2 - 7 - 8; Cap goes to top of tube
UAA91	Diode-1	3	3	0	16	11	---	---	7	---	3 - 4	
UAA91	Diode-2	3	3	0	16	11	---	---	2	---	3 - 4	
UABC80	Triode	1	4	35	12	12	---	---	9	8	4 - 5	
UABC80	Diode-1	3	4	0	25	12	---	---	6	---	4 - 5	
UABC80	Diode-2	3	4	0	17	12	---	---	2	---	4 - 5	
UABC80	Diode-3	3	4	0	17	12	---	---	1	---	4 - 5	
*UBC41	Triode	4	1	15	10	10	---	---	2	3	1 - 8	
*UBC41	Diode-1	3	1	0	27	10	---	---	6	---	1 - 8	
*UBC41	Diode-2	3	1	0	27	10	---	---	5	---	1 - 8	
UBC81	Triode	1	4	34	10	10	---	---	1	2	4 - 5	
UBC81	Diode-1	3	4	0	25	10	---	---	8	---	4 - 5	
UBC81	Diode-2	3	4	0	25	10	---	---	6	---	4 - 5	
UBF15	Pent	1	2	13	18	12	---	6	1	7	2 - 3	
UBF15	Diode-1	3	2	0	19	12	---	---	5	---	2 - 3	
UBF15	Diode-2	3	2	0	19	12	---	---	4	---	2 - 3	
UBF80	Pent	4	4	12	10	11	---	1	6	2	4 - 5	
UBF80	Diode-1	3	4	0	23	11	---	---	8	---	4 - 5	
UBF80	Diode-2	3	4	0	23	11	---	---	7	---	4 - 5	
UBF89	Pent	1	4	21	17	11	---	1	6	2	4 - 5	
UBF89	Diode-1	3	4	0	20	11	---	---	7	---	4 - 5	
UBF89	Diode-2	3	4	0	20	11	---	---	8	---	4 - 5	
UC92		1	3	30	10	9	---	---	1	6	3 - 4	
UCC85	Triode-1	1	4	25	11	12	---	---	6	7	4 - 5	
UCC85	Triode-2	1	4	25	11	12	---	---	1	2	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z		
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
UCF12	Triode	1	2	27	10	11	---	---	5	4	2 - 3	
UCF12	Pentode	4	2	13	14	11	---	6	1	7	2 - 3	
UCH42	Triode	5	1	25	10	10	---	---	3	4	1 - 8	
UCH42	Hexode	4	1	16	10	10	---	5	2	6	1 - 8	
UCH81	Heptode	1	4	26	32	11	---	1	6	2	4 - 5	
UCH81	Triode	1	4	26	11	11	---	---	8	9	4 - 5	
UCL81	Triode	4	4	10	10	13	---	---	7	1	4 - 5	Must show short on 3 - 8; Cathode short test Depress 3 - 8 together
UCL81	Pent	1	4	15	10	13	---	2	6	9	4 - 5	
UCL82	Triode	2	4	32	10	14	---	---	9	1	4 - 5	
UCL82	Pentode	2	4	9	10	14	---	7	6	3	4 - 5	
UF11		4	2	8	10	10	---	6	5	7	2 - 3	
UF15		4	2	3	10	12	---	6	5	7	2 - 3	
UF41		1	1	20	20	10	---	5	2	6	1 - 8	
UF80		1	4	8	28	11	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
UF85		4	4	3	10	11	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
UF89		1	4	20	25	10	---	8	7	2	4 - 5	Must show short on 1 - 6
UL41		1	1	4	10	14	---	5	2	6	1 - 8	Must show short on 3 - 7; Cathode short test Depress 3 - 7 together; Fil Cont - Set Control "E" at 12
UL84		1	4	5	9	13	1 - 6 - 8	9	7	2	4 - 5	Fil Cont - Set Control "E" at 12; May show short on 1 - 2 - 6 - 8 - 9; Grid short test - Depress 1 - 2 together; Screen short test - Depress 6 - 8 - 9 together; Correction (GK)
UM11	Triode	5	2	23	10	10	---	---	5	7	2 - 3	
UM11	Eye	4	2	0	0	10	---	---	5 - 6 - 1	---	2 - 3	See instructions for eye test
UM35	Triode	4	1	4	10	10	---	---	6	5	1 - 8	
UM35	Eye	7	1	0	0	10	---	---	3 - 6 - 4	---	1 - 8	See instructions for eye test
UM80	Triode	2	4	35	10	11	---	---	7	1	4 - 5	Must show short on 3 - 6 - 9
UM80	Eye	1	4	0	0	11	---	---	7-3-6-9	---	4 - 5	See instructions for eye test
UY11		1	2	0	4	14	---	---	5	---	2 - 3	Fil Cont - Set Control "E" at 12
UY41	#	2	1	0	3	13	6	---	2	---	1 - 8	# Fil Cont - Set control "E" at 12; Fil Cont - Set Control "E" at 12
UY85		3	4	0	16	13	1 - 6	---	9	---	4 - 5	

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
XC95		1	3	17	10	4	---	6	5	2	3-4	Must show short on 1 - 7; Cathode short test Depress 1 - 7 together
XC97		1	3	13	10	4	---	---	5	2	3-4	Must show short on 1 - 7; Cathode short test Depress 1 - 7 together
XC900		1	3	13	10	2	2	---	5	1	3-4	Musat show short on 2 - 7; Cathode short test - Depress 2 - 7 together
XCC189	Triode-1	2	4	12	10	6	---	---	6	7	4-5	
XCC189	Triode-2	2	4	13	10	6	---	---	1	2	4-5	
XCF80	Triode	1	4	14	10	6	---	---	1	9	4-5	
XCF80	Pentode	1	4	23	16	6	---	3	6	2	4-5	
XCF801	Triode	5	4	7	8	5	---	---	8	9	4-5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
XCF801	Pentode	1	4	0	38	5	---	7	6	2	4-5	
XCL82	Triode	1	4	32	10	8	---	---	9	1	4-5	
XCL82	Pentode	1	4	15	10	8	---	7	6	3	4-5	
XCL84	Triode	1	4	31	10	8	---	---	2	1	4-5	
XCL84	Pentode	1	4	26	11	8	---	9	6	8	4-5	
XCL85	Triode	2	4	34	10	8	---	---	1	2	4-5	
XCL85	Pentode	2	4	7	10	8	---	7	6	9	4-5	
XF86		4	4	7	20	4	---	1	6	9	4-5	May show short on 2 - 7
XF183		1	4	5	23	5	---	8	7	2	4-5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
XF184		1	4	5	25	5	---	8	7	2	4-5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together
XL36		2	2	1	7	10	1	4	12	5	2-7	Must show short on 1 - 3 - 4 - 8; Use red grid cap; Cathode short test - Depress 1 - 4 together
XL84		1	4	28	7	8	1	9	7	2	4-5	Must show short on 1 - 2
XL86		1	4	0	10	8	1-6-8	9	7	2	4-5	May show short on 1 - 2 - 6 - 7 - 8 - 9
XL500	*	3	4	2	16	10	2-7-8	6	12	1	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Cathode short test - Depress 3 - 8 together; Red grid cap goes to top of tube
XL504	*	3	4	2	16	10	2-7-8	6	12	1	4-5	* Must use magnoval adapter; Must show short on 1 - 2 - 3 - 6 - 7 - 8; Red grid cap goes to top of tube
XY88		1	4	0	4	11	#	---	9	---	4-5	# "W" = 1 - 2 - 3 - 6 - 7 - 8; May show short on 1 - 2 - 3 - 6 - 7 - 8 - 9

PRECISION 10-12, 10-15, 10-20, 10-22, 10-54 TUBE TEST DATA												
MRC (GK), (FH), 3-61, 6-1-70; 4-1-74; 2-15-75; 2-1-78							LEVER				FIL. CONT.	COMMENT
TUBE	SECTION	A	B	C	D	E	W	X	Y	Z	FIL. CONT.	COMMENT
This supplementary chart provides settings for tubes which fall into the following classification:												
1. Foreign Tubes												
* - Denotes tubes with special European 8-pin miniature basing. The PRECISION No. G-118 adapter, designed especially for these tubes, is required.												
YC97		1	3	13	10	5	---	---	5	2	3 - 4	Must show short on 1 - 7; Cathode short test Depress 1 - 7 together
YC98		9	6	15	21	7	1	5	7	2	4 - 5	
YF183		1	4	5	25	5X	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together; Set Switch "E" to No. 6 if there is no 5X position
YF184		1	4	5	25	5X	---	8	7	2	4 - 5	Must show short on 1 - 3; Cathode short test Depress 1 - 3 together; Set Switch "E" to No. 6 if there is no 5X position
YL1370		1	2	6	6	7	---	3	11	5	2 - 7	Must show short on 1 - 4 - 6; Cathode short test - Depress 1 - 4 - 6 together
YL1371		1	2	6	6	10	---	3	11	5	2 - 7	Must show short on 1 - 4 - 6; Cathode short test - Depress 1 - 4 - 6 together
Z900T		7	1	0	0	18	---	---	1	---	---	Must show short on 3 - 7