



## MODEL 580 TUBE TESTER

### SUPPLEMENTARY DATA EUROPEAN TUBE TYPES

- † Note 1 Read 0-100 milliamperes with S3 pressed.
- ★ Note 2 Approximate starting voltage for voltage regulator tubes.
- ◆ Note 3 Filament Centering: Press S4 and S7. Adjust the filament centering control until the meter reads zero, then proceed with test.
- ✱ Note 4 Verify shorts by setting first Filament selector to "0".
- ⌘ Note 5 Dual Test: For dual triodes, make normal Leakage test first, then repeat Leakage test for second section with S6 pressed. Proceed with first section GM test. On all dual tubes, for second section test, press S6 with button listed in the press column.
- # Note 6 Set BIAS to 50 volts; press indicated button; then decrease BIAS until tube fires. Note the firing voltage. Reduce BIAS to 0 volts and take quality reading.

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3200-120

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TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
1AJ4	AGFO-BCOO	◆1.4	1.0	E	E	A	S4	600	
1C1	AGDO-COFB	1.4	1.0	E	A	A	S4	900	
1M3	DEAO-GOOO	◆1.4	Vary	E	A	G	S4	----	Vary Bias to vary bar length
1N3	DEAO-GOOO	◆1.4	Vary	E	A	G	S4	----	Vary Bias to vary bar length
2FY5	DCBO-EOAO	2.5	1.0	G	A	C	S4	8200	
3AJ8	DEBO-FACO	3.0	2.0	L	F	A	S4	1550	Heptode Sect.
3AJ8	DEJO-HOCO	3.0	1.0	F	A	B	S4	2000	Triode Sect.
3BY7	DEBO-GHAJ	3.0	2.0	L	F	B	S4	3800	
3FY5	DCBO-EOAO	3.0	1.0	G	A	C	S4	8200	
3MP26	DCAO-EFBO	3.0	10.0	G	G	B	S4	2650	
4BL8	DEBO-FCGO	4.3	3.2	L	K	B	S4	3450	Pent. Sect.
4BL8	DEJO-AOHO	4.3	2.0	F	A	B	S4	3150	Triode Sect.
4BN4	DCGO-EOFO	4.3	2.0	H	A	B	S4	4300	
4CM4	DEBO-AOCO	4.3	1.5	J	A	C	S4	8200	
4HA5	DCAO-EOBF	4.3	1.5	H	A	C	S4	9400	
4HG8	DEBO-HJAO	4.3	1.5	J	H	C	S4	7500	Pent. Sect.
4HG8	DEFO-GOAO	4.3	3.0	F	A	B	S4	3750	Triode Sect.
4MP12	DCAO-EFBO	4.3	6.0	J	J	B	S4	3450	
4MP26	DCAO-EFBO	4.3	10.0	G	G	B	S4	2650	
5MHH3	DCEF-BAGO	5.0	1.0	F	A	B	S4	4700	X Dual Triode
6AG6	BGEO-CDHO	6.3	2.0	H	H	C	S4	5700	
6AJ8	DEBO-FACO	6.3	2.0	L	F	A	S4	1550	Heptode Sect.
6AJ8	DEJO-HOCG	6.3	1.0	F	A	B	S4	2000	Triode Sect.
6AK8	DEHO-JOGO	6.3	1.0	F	A	A	S4	900	Triode Sect.
6AK8	DEOO-FOGO	6.3	0.0	B	A	B	S1	5000	Diode No. 1
6AK8	DEOO-BACG	6.3	0.0	A	D	G	S2	2600	X Dual Diode. Set load on 13. Read on 10000 scale
6AL3	DEOO-JOOO	6.3	0.0	A	D	G	S2	4700	Set load on 11. Cap = K. Read on 10000 scale
6AM5	DCAO-EGBO	6.3	13.5	L	L	A	S4	1600	
6AM6	DCAO-EGBF	6.3	2.0	L	L	B	S4	4700	
6AQ4	DCFO-GOBO	6.3	1.5	L	A	B	S4	5300	
6AQ8	DEGB-FAHC	6.3	1.0	E	A	B	S4	2550	X Dual Triode
6BD7A	DEBO-AOCO	6.3	3.0	L	A	A	S4	750	Triode Sect.
6BD7A	DEOO-FHCO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
6BJ5	DCAO-EGBO	6.3	5.5	L	L	C	S4	6300	
6BK8	DEJO-FACH	6.3	2.0	L	H	A	S4	1250	
6BL8	DEBO-FCGO	6.3	3.2	L	K	B	S4	3450	Pent. Sect.
6BL8	DEJO-AOHO	6.3	2.0	F	A	B	S4	3150	Triode Sect.
6BN5	DEAO-GJCH	6.3	9.4	K	K	B	S4	2000	
6BR3	DEOO-JOOO	6.3	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 10000 scale
6BR5	DEAO-OJBO	6.3	Vary	L	L	D	S4	----	Connect a 500K resistor be-
	tween "P" and pin 7 of any socket.				Vary	Bias to vary beam angle.			
6BR7	DEBO-GHCJ	6.3	3.0	L	F	A	S4	800	
6BS7	DEOO-GHCJ	6.3	3.0	L	F	A	S4	750	Cap = G
6BT4	HAOO-FBGO	6.3	0.0	A	E	G	S2	2500	X Dual Diode. Set load at 30. Read on 10000 scale. Use Hickok adapter Code 1050-129
6BW6	DEBO-GHCJ	6.3	8.5	J	J	B	S4	2300	
6BY7	DEBO-GHAJ	6.3	2.0	L	F	B	S4	3800	
6CD7	GBDO-EOHO	6.3	Vary	K	A	D	S4	----	Connect a 1 megohm resistor from "P" to pin No. 3 of any socket. Connect a second 1 megohm resistor from "P" to pin No. 6 of any socket. Eye one closes at Bias of about 5V. Eye two closes at Bias of about 25V
6CF8	DEJO-FACH	6.3	2.0	L	H	A	S4	1250	
6CH6	DEBO-GHCJ	6.3	2.5	L	K	C	S4	8200	
6CJ5	AHFO-BEGO	6.3	5.0	L	F	A	S4	630	Use Hickok adapter Code No. 1050-129
6CK5	AHFO-BEGO	6.3	7.0	L	L	C	S4	6300	Use Hickok adapter Code No. 1050-129
6CM4	DEBO-AOCO	6.3	1.5	J	A	C	S4	8750	
6CM5	BGEO-ODHO	6.3	8.2	F	F	C	S4	8800	Cap = P

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
6CN6	BGEO-ODHA	6.3	7.0	H	H	B	S4	5000	Cap = P
6CQ6	DEAO-EGBF	6.3	2.5	K	K	A	S4	1550	
6CT7	AHFO-BEGD	6.3	2.0	L	E	A	S4	1250	Pent. Sect. (Use Hickok
6CT7	AHOO-COGO	6.3	0.0	B	A	B	S1	5000	Diode Sect. (Adapter Code No. 1050-129)
6CU7	AHFO-BEGD	6.3	1.0	L	E	B	S4	1500	Hexode Sect. (Use Hickok
6CU7	AHDO-COGO	6.3	1.0	F	A	A	S4	1750	Triode Sect. (Adapter Code No. 1050-129)
6CV7	AHCO-BOGO	6.3	3.0	L	A	A	S4	750	Triode Sect. (Use Hickok
6CV7	AHOO-FEGO	6.3	0.0	B	A	B	S1	5000	X Dual Diode (Adapter Code No. 1050-129)
6CW7	DEFB-JCGA	6.3	1.5	F	A	B	S4	3750	X Dual Triode
6DC8	DEBO-FACJ	6.3	2.0	L	F	B	S4	2400	Pent. Sect.
6DC8	DEOO-GHCO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
6DG7	DCAO-EFGB	6.3	1.0	L	F	B	S4	2500	
6DL4	DECO-HOBO	6.3	1.2	H	A	C	S4	8450	
6DL5	DCAO-EFBO	6.3	9.0	L	L	B	S4	3150	
6DR8	DEBO-FACJ	6.3	1.0	C	C	A	S4	700	Pent. Sect.
6DR8	DEOO-HGCO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
6DS8	DEBO-FACG	6.3	1.0	C	C	A	S4	550	Heptode Sect.
6DS8	DEJO-HOCO	6.3	1.0	B	A	A	S4	900	Triode Sect.
6DX8	DEGO-FJGO	6.3	2.1	J	J	C	S4	6950	Pent. Sect.
6DX8	DEAO-BOCO	6.3	1.7	K	A	B	S4	2500	Triode Sect.
6ES6	DCAO-EFBG	6.3	1.0	C	A	A	S4	1200	
6ET6	DCAO-EFBG	6.3	1.0	C	A	A	S4	1300	
6F12	DCAO-EGBF	6.3	2.0	L	L	B	S4	4500	
6F13	AHFO-BEGD	6.3	1.8	K	K	B	S4	5650	Use Hickok Adapter Code No. 1050-129
6F14	AHFO-BEGD	6.3	1.3	L	G	C	S4	6700	Use Hickok Adapter Code No. 1050-129
6F16	AHFO-BEGO	6.3	2.5	L	F	A	S4	1450	Use Hickok Adapter Code No. 1050-129
6F19	DEBO-GHAJ	6.3	2.0	L	F	B	S4	3600	
6F21	DCAO-EGBF	6.3	2.5	L	K	A	S4	1550	
6FG6	DEAO-FOCO	6.3	1.0	L	L	D	S4	----	Split Bar (Jumper pins 7 and
6FG6	DEAO-FOCO	6.3	20.0	L	L	D	S4	----	Solid Bar (9 of any socket -
connect a 470K ohm resistor from this jumper to pin 6.									
6FY5	DCBO-EOAO	6.3	1.0	G	A	C	S4	8200	
6GJ7	DEBO-FGAO	6.3	1.2	J	G	C	S4	6950	Pent. Sect.
6GJ7	DEJO-HOAO	6.3	3.0	F	A	B	S4	5700	Triode Sect.
6GM8	DEGB-FAHC	6.3	1.2	B	A	A	S4	1630	X Dual Triode
6GV8	DEJO-FGHO	6.3	15.0	J	J	B	S4	4700	Pent. Sect.
6GV8	DEBO-AOCO	6.3	1.0	F	A	B	S4	3450	Triode Sect.
6GW8	DEHO-FCGO	6.3	7.0	L	L	C	S4	6300	Pent. Sect.
6GW8	DEAO-JOBO	6.3	1.5	L	A	A	S4	1000	Triode Sect.
6HG8	DEBO-HJAO	6.3	1.5	J	H	C	S4	7500	Pent. Sect.
6HG8	DEFO-GOAO	6.3	3.0	F	A	B	S4	3750	Triode Sect.
6HU6	DEAO-FOCO	6.3	1.0	L	A	D	S4	----	Split Bar (Jumper noval
6HU6	DEAO-FOCO	6.3	15.0	L	A	D	S4	----	Solid Bar (socket pins 7 & 9.
Connect a 100K ohm resistor from this jumper to pin 6.									
6HU8	DEFO-HJGO	6.3	2.0	L	L	B	S4	3900	Pent. No. 1
6HU8	DEBO-CAGO	6.3	2.0	L	L	B	S4	3900	Pent. No. 2
6JX8	DEBO-FGCA	6.3	1.0	H	B	A	S4	1400	Heptode Sect.
6JX8	DEJO-HOCO	6.3	1.0	D	A	B	S4	2350	Triode Sect.
6LD3	AHCO-BOGO	6.3	3.0	L	A	A	S4	750	Triode Sect. (Use Hickok Ad-
6LD3	AHOO-FEGO	6.3	0.0	B	A	B	S1	5000	X Dual Diode (apter 1050-129)
6N3	DEOO-JOCO	6.3	0.0	A	D	G	S2	4100	Set load at 7. Read on 10000 scale
6R3	DEOO-JOOO	6.3	0.0	A	D	G	S2	2600	Cap = K. Set load at 11. Read on 10000 scale.
6RK19	DEOO-JOOO	6.3	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 10000 scale.

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
6RP22	DEBO-FCAG	6.3	3.0	L	H	B	S4	4700	
6S2A	DBOO-O000	6.3	0.0	A	D	E	S2	22000	Cap = P. Read on 60000 scale
7AN7	DEFB-JCGA	7.5	1.5	J	A	B	S4	3750	X Dual Triode
7ES8	DEGB-FAHC	7.5	1.3	F	A	C	S4	8500	X Dual Triode
7HG8	DEBO-HJAO	7.5	1.5	J	H	C	S4	7500	Pent. Sect.
7HG8	DEFO-GOAO	7.5	3.0	F	A	B	S4	3750	Triode Sect.
8A8	DEBO-FCGO	7.5	2.0	J	J	B	S4	4000	Pent. Sect.
8A8	DEJO-AOHO	7.5	2.0	F	A	B	S4	3150	Triode Sect.
8B8	DECO-FGBO	7.5	6.0	F	F	B	S4	4300	Pent. Sect.
8B8	DEAO-JOHO	7.5	1.2	H	A	B	S4	1500	Triode Sect.
8CW5	DEBO-GJCO	7.5	12.5	J	J	B	S4	6300	
8D3	DCAO-EGBF	7.5	2.0	L	L	B	S4	4800	
8DX8	DEGO-FJGO	7.5	2.1	J	J	C	S4	6950	Pent. Sect.
8DX8	DEAO-BOCO	7.5	1.7	K	A	B	S4	2500	Triode Sect.
9A8	DEBO-FCGO	10.0	2.0	J	J	B	S4	4000	Pent. Sect.
9A8	DEJO-AOHO	10.0	2.0	F	A	B	S4	3100	Triode Sect.
9AB4	DCFO-AOGO	10.0	2.0	L	A	B	S4	3500	
9AK8	DEHO-JOGO	10.0	1.0	F	A	A	S4	900	Triode Sect.
9AK8	DEOO-FOGO	10.0	0.0	B	A	B	S1	5000	Diode No. 1
9AK8	DEOO-BACG	10.0	0.0	A	D	G	S2	2600	X Dual Diode. Set load on 13. Read on 10000 scale
9AQ8	DEGB-FAHC	10.0	1.0	E	A	B	S4	2550	X Dual Triode
9CG8	DEJO-FGHO	10.0	1.0	G	G	B	S4	3500	Pent. Sect.
9CG8	DEAO-BOCO	10.0	1.0	G	A	B	S4	4100	Triode Sect.
9D6	DCAO-EGBF	10.0	2.5	K	K	A	S4	1600	
9GV8	DEJO-FGHO	10.0	15.0	J	J	B	S4	4700	Pent. Sect.
9GV8	DEBO-AOCO	10.0	1.0	F	A	B	S4	3500	Triode Sect.
10LD3	AHCO-BOGO	12.6	3.0	L	A	A	S4	750	Triode Sect. (Use Hickok
10LD3	AHOO-FEGO	12.6	0.0	B	A	B	S1	5000	X Dual Diode (Adapter 1050-129
10LD12	DEHO-JOGO	25.0	1.0	F	A	A	S4	900	Triode Sect.
10LD12	DEOO-FOGO	25.0	0.0	B	A	B	S1	5000	Diode No. 1
10LD12	DEOO-BACG	25.0	0.0	A	D	G	S2	2600	X Dual Diode Set Load at 13. Read on 10000 scale.
10P18	DEBO-GJCO	50.0	12.5	J	J	C	S4	6300	
10PL12	DECO-FGBO	50.0	6.0	E	E	B	S4	4300	Pent. Sect.
10PL12	DEAO-JOHO	50.0	1.2	H	A	B	S4	1500	Triode Sect.
12AC5	AHFO-BECO	12.6	5.0	L	F	A	S4	600	Use Hickok Adapter Code No. 1050-129
12AJ7	DEBO-FACG	12.6	2.0	K	G	A	S4	1500	Heptode Sect.
12AJ7	DEJO-HOCO	12.6	1.0	F	A	B	S4	2350	Triode Sect.
12BR3	DEOO-JOOO	12.6	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 1000 scale.
12BX6	DEBO-GHAJ	12.6	2.0	J	J	B	S4	4500	
12DA6	DEBO-GHCJ	12.6	2.0	L	F	B	S4	2300	
12GB3	BGEO-ODHO	12.6	7.7	F	F	C	S4	8800	Cap = P
12HU8	DEFO-HJGO	12.6	2.0	L	L	B	S4	3900	Pent. No. 1
12HU8	DEBO-CAGO	12.6	2.0	L	L	B	S4	3900	Pent. No. 2
12RK19	DEOO-JOOO	12.6	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 10000 scale.
13CM5	BGEO-ODHO	12.6	8.2	F	F	C	S4	8800	Cap = P
14GW8	DEHO-FCGO	12.6	7.0	L	L	C	S4	6300	Pent. Sect.
14GW8	DEAO-JOHO	12.6	1.5	L	A	A	S4	1000	Triode Sect.
14K7	AHFO-BEGD	12.6	1.0	L	E	B	S4	1500	Hexode Sect. (Use Hickok Ad-
14K7	AHDO-COGO	12.6	1.0	F	A	A	S4	1750	Triode Sect. (apter 1050-129
14L7	AHCO-BOGO	12.6	3.0	L	A	A	S4	750	Triode Sect. (Use Hickok Ad-
14L7	AHOO-FEGO	12.6	0.0	B	A	B	S1	5000	X Dual Diode (apter 1050-129
15DQ8	DEHO-FJGO	17.0	2.1	J	J	C	S4	6950	Pent. Sect.
15DQ8	DEAO-BOCO	17.0	1.7	K	A	B	S4	2500	Triode Sect.
15EW7	DEGO-FOHO	17.0	11.0	L	A	A	S4	1250	Triode No. 1
15EW7	DEBO-AOJO	17.0	17.5	H	A	B	S4	4700	Triode No. 2
16A5	DEBO-GJCO	17.0	10.4	J	J	C	S4	5800	
16A8	DECO-FGBO	17.0	16.0	K	K	B	S4	4000	Pent. Sect.
16A8	DEAO-JOHO	17.0	1.0	F	A	A	S4	1400	Triode Sect.

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
16AQ3	DEOO-JOOO	17.0	0.0	A	D	G	S2	3700	Cap = K. Set load on 11. Read on 10000 scale
17C8	DEBO-FACJ	17.0	2.0	L	E	A	S4	1400	Pent. Sect.
17C8	DEOO-GHCO	17.0	0.0	B	A	B	S1	5000	X Dual Diode
17EW8	DEGB-FAHC	17.0	2.1	K	A	B	S4	3650	X Dual Triode
17BR3	DEOO-JOOO	17.0	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 10000 scale.
17RK19	DEOO-JOOO	17.0	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 10000 scale.
17Z3	DEOO-JOOO	17.0	0.0	A	D	G	S2	2600	Cap = K. Set load at 11. Read on 10000 scale.
18GV8	DEJO-FGHO	17.0	15.0	J	J	B	S4	4700	Pent. Sect.
18GV8	DEBO-AOCO	17.0	1.0	F	A	B	S4	3500	Triode Sect.
18J6	DCEF-BAGO	17.0	1.1	F	A	B	S4	3300	X Dual Triode
19AJ8	DEBO-FACG	20.0	2.0	L	F	A	S4	1550	Heptode Sect.
19AJ8	DEJO-HOCO	20.0	1.0	F	A	B	S4	2000	Triode Sect.
19BR5	DEAO-OJBO	20.0	Vary	L	L	D	S4	----	Connect a 500K resistor between "P" and pin No. 7 of any socket. Vary Bias to vary beam angle.
19BX6	DEBO-GHAJ	20.0	2.0	J	J	B	S4	4500	
19BY7	DEBO-GHAJ	20.0	2.0	L	F	B	S4	3800	
19D8	DEBO-FACO	20.0	2.0	L	F	A	S4	1550	Heptode Sect.
19D8	DEJO-HOCO	20.0	1.0	F	A	B	S4	2000	Triode Sect.
19EW7	DEGO-FOHO	20.0	11.0	L	A	A	S4	1250	Triode No. 1
19EW7	DEBO-AOJO	20.0	17.5	H	A	B	S4	4700	Triode No. 2
19FL8	DEBO-FACJ	20.0	2.0	L	F	B	S4	2400	Pent. Sect.
19FL8	DEOO-GHCO	20.0	0.0	B	A	B	S1	5000	X Dual Diode
19G3	BGOO-OOOO	4.0	0.0	B	A	B	S1	5000	Cap = P
20EW7	DEGO-FOHO	20.0	11.0	L	A	A	S4	1250	Triode No. 1
20EW7	DEBO-AOJO	20.0	17.5	H	A	B	S4	4700	Triode No. 2
25E5	BGEO-ODHO	25.0	8.2	F	F	C	S4	8800	Cap = P
25BR3	DEOO-JOOO	25.0	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 10000 scale.
25RK19	DEOO-JOOO	25.0	0.0	A	D	G	S2	4000	Cap = K. Set load at 10. Read on 10000 scale.
26AQ8	DEGB-FAHC	25.0	1.0	E	A	B	S4	2550	X Dual Triode
28AK8	DEHO-JOGO	25.0	1.0	F	A	A	S4	900	Triode Sect.
28AK8	DEOO-FOGO	25.0	0.0	B	A	B	S1	5000	Diode No. 1
28AK8	DEOO-BACG	25.0	0.0	A	D	G	S2	2600	X Dual Diode. Set load on 13. Read on 10000 scale.
30A5	DJBO-GFAO	35.0	6.7	F	F	B	S4	5850	Before placing tube in socket jumper a 33 ohm, 2 watt resistor between pins 3 and 9 of the 9 pin miniature socket. Then proceed with test.
30AE3	DEOO-JOOO	25.0	0.0	A	D	G	S2	4700	Cap = K. Set load at 11. Read on 10000 scale
30L1	DEFB-JCGA	7.5	1.5	F	A	B	S4	3750	X Dual Triode.
31A3	AHOO-BOGO	35.0	0.0	A	D	G	S2	3700	Set load at 10. Read on 10000 scale. Use Hickok Adapter Code No. 1050-129
35D5	DEAO-FBCO	35.0	6.5	F	F	B	S4	5050	
38A3	DEOO-JOCO	35.0	0.0	A	D	G	S2	3700	Set load at 10. Read on 10000 scale.
45A5	AHFO-BEGO	50.0	7.0	L	L	C	S4	6300	
45B5	DEBO-GJCO	50.0	12.5	J	J	C	S4	6300	
90C1	OOOO-EOGO	OFF	---	F	A	VR	†S3	90V	★110V. Press S4. Regulation = 12V. From 1 to 40MA
95A1	OOOO-EOAO	OFF	---	F	A	VR	†S3	95V	Connect a 470K ohm resistor between pins 1 and 4 (any socket). ★110V Press S4. Regulation = 5V from 2 to 10 MA.
5920	DCEF-BAGO	6.3	1.8	F	A	B	S4	3800	X Dual Triode
6057	DEGB-FAHC	12.6	2.0	L	A	A	S4	1000	X Dual Triode
6059	DEBO-GHCJ	6.3	3.0	L	F	A	S4	800	
6060	DEGB-FAHC	12.6	1.0	F	A	B	S4	2500	X Dual Triode
6061	DEBO-GHCJ	6.3	8.5	J	J	B	S4	2300	
6063	DCOO-FAGO	6.3	0.0	A	E	G	S2	2400	X Dual Diode. Set load at 30. Read on 10000 scale

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
6065	DEAO-EGBF	6.3	2.5	L	K	A	S4	1500	
6066	DCAO-GOBO	6.3	3.0	L	A	A	S4	750	Triode Sect.
6066	DCOO-FEBO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
6067	DEGB-FAHC	12.6	8.5	L	A	A	S4	1400	X Dual Triode
6118	GBOO-COHA	6.3	3.0	L	A	A	S4	750	Triode Sect. Cap = G
6118	GBOO-EDHA	6.3	0.0	B	A	B	S1	5000	X Dual Diode
6132	DEBO-GHCJ	6.3	2.5	L	K	C	S4	8200	
6227	DEBO-GHCJ	6.3	1.0	K	K	B	S4	5700	
6252	AGFB-OCDO	12.6	10.0	K	K	B	S4	3800	Tetrode No. 1 ( Use Hickok Right Cap = P ( Adapter Tetrode No. 2 ( Code No. Left Cap = P ( 1050-107
6252	AGBF-OCDO	12.6	10.0	K	K	B	S4	3800	
6267	DEJO-FACH	6.3	2.0	L	H	A	S4	1250	
6374	DEOO-KOCO	6.3	0.0	A	D	G	S2	2500	Set load at 11. Read on 10000 scale.
6375	DEAO-HOOO	♦1.1	4.5	H	A	B	S4	2200	
6516	DCAO-EGBO	6.3	13.5	L	L	A	S4	1600	
6687	DCAO-EFBG	6.3	0.0	E	E	B	S4	1500	Grid No. 1
6687	DCGO-EFBA	6.3	4.0	E	E	A	S4	1350	Grid No. 3
6689	DEBO-FACJ	6.3	1.0	F	F	B	S4	5200	
6907	AGFB-OCDO	12.6	10.0	K	K	B	S4	3800	Tetrode No. 1 ( Use Hickok Right Cap = P ( Adapter Tetrode No. 2 ( Code No. Left Cap = P ( 1050-107
6907	AGBF-OCDO	12.6	10.0	K	K	B	S4	3800	
6927	DCEF-BAGO	6.3	1.1	F	A	B	S4	3300	X Dual Triode
7062	DEGB-FAHC	12.6	1.9	H	A	B	S4	4000	X Dual Triode
7320	DEBO-GJCO	6.3	7.2	L	L	C	S4	7000	
7534	BGEO-ODHO	6.3	15.5	L	H	C	S4	17400	Cap = P
7643	DEBO-FCGO	6.3	3.2	L	K	B	S4	3450	Pent. Sect.
7643	DEJO-AOHO	6.3	2.0	F	A	B	S4	3150	Triode Sect.
7693	DCAO-EFBG	6.3	1.0	F	F	B	S4	2100	
7694	DCAO-EFBG	6.3	1.0	L	F	B	S4	2300	
7788	DEBO-GFAH	6.3	1.2	G	H	D	S4	31500	
18045	DEBO-GHCJ	20.0	3.0	K	K	B	S4	6900	
18046	DEBO-GHCJ	20.0	3.0	K	K	B	S4	6900	
AX9903	AGFB-OCDO	12.6	12.0	L	J	C	S4	5000	Tetrode No. 1 ( Use Hickok Right Cap = P ( Adapter Tetrode No. 2 ( Code No. Left Cap = P ( 1050-107
AX9903	AGBF-OCDO	12.6	12.0	L	J	C	S4	5000	
AZ41	GHOO-FOOO	4.3	0.0	A	E	G	S2	2900	Diode No. 1. Set load on 22. Read on 10000 scale.
AZ41	GHOO-BOOO	4.3	0.0	A	E	G	S2	2900	Diode No. 2. Set load at 22 Read on 10000 scale. Use Hickok Adapter 1050-129
B36	GHDA-EBFC	12.6	8.0	L	A	B	S4	1700	X Dual Triode
B65	GHDA-EBFC	6.3	8.0	L	A	B	S4	1700	X Dual Triode
C3G	AHFO-CDGO	6.3	1.8	K	H	C	S4	8900	
CCA	DEGB-FAHC	6.3	100Ω	E	A	C	S4	8500	X Dual Triode
D77	DCOO-GBAE	6.3	0.0	A	D	G	S2	3300	X Dual Diode. Set load at 10. Read on 10000 scale
D152	DCOO-GBAE	6.3	0.0	A	D	G	S2	3300	X Dual Diode. Set load at 10. Read on 10000 scale.
DA90	GAOO-BOCO	1.4	0.0	B	A	B	S1	5000	
DAF91	AGFO-EDOO	♦1.4	1.0	E	E	A	S4	400	Pent. Sect.
DAF91	AGOO-COOO	1.4	0.0	B	A	B	S1	6200	Diode Sect.
DAF92	AGFO-BCOO	♦1.4	1.0	E	E	A	S4	400	Pent. Sect.
DAF92	AGOO-DOOO	1.4	0.0	B	A	B	S1	6200	Diode Sect.
DC70	DEAO-HOOO	♦1.1	4.5	H	A	B	S4	2200	
DC90	AGEO-BOOO	♦1.4	3.0	F	A	A	S4	750	
DCC90	AGEO-FOOO	♦3.0	2.5	E	A	A	S4	1100	Triode No. 1
DCC90	AGCO-BOOO	♦3.0	2.5	E	A	A	S4	1100	Triode No. 2
DDR7	CDAO-EGBO	6.3	13.5	L	L	B	S4	1600	
DF33	GBOO-CDOO	♦1.4	1.0	F	F	A	S4	450	Cap = G

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
DF61	CEDO-ABOO	♦1.1	1.0	E	E	A	S4	600	
DF62	CEDO-ABOO	♦1.1	1.0	D	D	A	S4	1250	
DF67	CEDO-ABOO	♦0.6	1.15	C	C	A	S4	60	
DF91	AGFO-BCOO	♦1.4	1.0	F	E	A	S4	550	
DF92	AGFO-BCOO	♦1.4	1.0	F	E	A	S4	630	
DF96	AGFO-BCOO	♦1.4	1.0	E	E	A	S4	530	
DF904	AGFO-BCOO	♦1.4	1.0	F	F	A	S4	550	
DH63	GBOO-COHA	6.3	3.0	L	A	A	S4	750	Triode Sect. Cap = G
DH63	GBOO-EDHC	6.3	0.0	B	A	B	S1	5000	X Dual Diode
DH77	DCAO-GOBO	6.3	3.0	L	A	A	S4	750	Triode Sect.
DH77	DCOO-EFBO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
DK91	GAFO-BCOD	*1.4	0.0	E	C	A	S4	300	Pent. Sect. Note 3
DK91	GADO-CBOF	*1.4	0.0	D	D	A	S4	500	Osc. Sect. Note 3
DL33	GBEO-CDOO	♦2.5	6.6	F	F	A	S4	1250	
DL35	GBEO-CDOO	♦1.4	7.0	E	E	A	S4	950	
DL36	GBED-CDOO	♦1.4	5.0	E	E	A	S4	1200	
DL63	GBOO-COHA	6.3	9.0	L	A	A	S4	1200	Triode Sect. Cap = G
DL63	GBOO-EDHC	6.3	0.0	B	A	B	S1	5000	X Dual Diode
DL66	CEDO-ABOO	♦1.1	1.4	C	C	A	S4	200	
DL67	CEDO-ABOO	♦1.1	1.0	C	C	A	S4	200	
DL91	AGCO-FDOO	♦1.4	4.5	D	D	A	S4	750	
DL92	GACO-BDOO	♦2.5	2.7	E	D	A	S4	500	
DL93	AGDO-FCOO	♦2.5	8.4	H	E	A	S4	1200	
DL94	GAFO-BCOO	♦3.0	4.5	E	E	A	S4	1250	
DL95	GACO-FDOO	♦3.0	4.5	E	E	A	S4	1250	
DL96	AGFO-BCOO	♦3.0	5.2	E	E	A	S4	850	
DL98	DECO-GAOO	♦2.5	25.0	K	H	A	S4	1150	
DM70	DEAO-GOOO	♦1.4	Vary	E	A	G	S4	----	Vary Bias to vary bar length
DM71	DEAO-GOOO	♦1.4	Vary	E	A	G	S4	----	Vary Bias to vary bar length
DP61	DCAO-EFGO	6.3	1.8	J	G	B	S4	3200	
DY30	GBOO-OOOO	1.1	0.0	A	E	E	S2	10000	Cap = P. Read on 60000 scale
DY86	DBOO-OOOO	1.4	0.0	A	D	E	S2	22000	Cap = P. Read on 60000 scale
DY87	DBOO-OOOO	1.4	0.0	A	D	E	S2	22000	Cap = P. Read on 60000 scale
E80CC	DEGB-FAHC	12.6	5.5	L	A	B	S4	1700	X Dual Triode
E80CF	DEBO-FCGO	6.3	3.2	L	K	B	S4	3450	Pent. Sect.
E80CF	DEJO-AOHO	6.3	2.0	F	A	B	S4	3150	Triode Sect.
E80F	DEJO-FACH	6.3	2.0	L	F	A	S4	1150	
E80L	DEBO-GHCJ	6.3	2.5	K	K	B	S4	5700	
E81CC	DEGB-FAHC	12.6	2.0	L	A	B	S4	3500	X Dual Triode
E81L	DEBO-GHCJ	6.3	2.0	K	K	C	S4	7200	
E82CC	DEGB-FAHC	12.6	8.5	L	A	A	S4	1400	X Dual Triode
E83CC	DEGB-FAHC	12.6	2.0	L	A	A	S4	1000	X Dual Triode
E83F	DEBO-FACJ	6.3	1.0	F	F	B	S4	5200	
E84L	DEBO-GJCO	6.3	7.2	L	L	C	S4	7000	
E86C	DEBO-AOCO	6.3	1.5	J	A	C	S4	8750	
E88CC	DEGB-FAHC	6.3	1.2	F	A	C	S4	7850	X Dual Triode
E90CC	DCEF-BAGO	6.3	1.8	F	A	B	S4	3800	X Dual Triode
E90F	DCAO-EFBG	6.3	1.0	F	F	B	S4	2100	
E91AA	DCOO-GBAE	6.3	0.0	A	D	G	S2	3300	X Dual Diode. Set load at 11. Read on 10000 scale.
E91H	DCAO-EFBG	6.3	0.0	E	E	B	S4	1500	Grid No. 1
E91H	DCGO-EFBA	6.3	4.0	E	E	A	S4	1350	Grid No. 3
E91N	DCAO-FOBE	6.3	#	A	F	G	S2	2400	Set load to 30. Fires about 2V. Read on 10000 scale
E92CC	DCFE-ABGO	6.3	1.7	H	A	B	S4	3750	X Dual Triode
E95F	DCAO-EFGO	6.3	1.8	J	G	B	S4	3200	
E99F	DCAO-EFBG	6.3	1.0	L	F	B	S4	2300	
E130L	BGEO-ODHO	6.3	14.0	H	F	C	S4	8800	Cap = P
E180CC	DEGB-FAHC	12.6	1.9	H	A	B	S4	4000	X Dual Triode
E180F	DEBO-GJAH	6.3	100 Ω	J	H	C	S4	9700	
E182CC	DEGB-JAFC	12.6	2.0	G	A	C	S4	10000	X Dual Triode
E182F	CJAO-FHDO	6.3	1.9	H	H	C	S4	8000	
E186F	DEBO-GJAH	6.3	100 Ω	J	H	C	S4	10000	

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
E188CC	DEGB-FAHC	6.3	120 Ω	F	A	C	S4	7250	X Dual Triode
E810F	DEBO-GFAH	6.3	1.2	G	H	D	S4	31500	
E2134	DCAO-EGBO	6.3	7.8	J	J	B	S4	6000	
EAA91	DCOO-GBAE	6.3	0.0	A	D	G	S2	3300	
EABC80	DEHO-JOGO	6.3	1.0	F	A	A	S4	900	X Dual diode. Set load at 10. Read on 10000 scale. Triode Sect. Diode No. 1
EABC80	DEOO-FOGO	6.3	0.0	B	A	B	S1	5000	
EABC80	DEOO-BACG	6.3	0.0	A	D	G	S2	2600	
EAF42	AHFO-BEGD	6.3	2.0	L	E	A	S4	1250	X Dual Diode. Set load on 13. Read on 10000 scale Pent. Sect. (Use Hickok Adapt-Diode Sect. (er 1050-129
EAF42	AHOO-COGO	6.3	0.0	B	A	B	S1	5000	
EB41	AHOO-FEGC	6.3	0.0	A	D	G	S2	3300	
EB91	DCOO-BGEA	6.3	0.0	A	D	G	S2	3300	X Dual Diode. Set load on 10. Read on 10000 scale
EBC33	AHCO-BOGO	6.3	6.0	L	A	A	S4	1250	Triode Sect. Cap = G
EBC33	AHOO-FEGO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EBC41	AHCO-BOGO	6.3	3.0	L	A	A	S4	750	Triode Sect. (Use Hickok Ad-
EBC41	AHOO-FEGO	6.3	0.0	B	A	B	S1	5000	X Dual Diode (apter 1050-129
EBC81	DEBO-AOCO	6.3	3.0	L	A	A	S4	750	Triode Sect.
EBC81	DEOO-FHCO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EBC90	DCAO-GOBO	6.3	3.0	L	A	A	S4	750	Triode Sect.
EBC90	DCOO-FEBO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EBC91	DCAO-GOBO	6.3	2.0	L	A	A	S4	1000	Triode Sect.
EBC91	DCOO-EFBO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EBF32	BGOO-CFHO	6.3	3.0	L	G	A	S4	750	Pent. Sect. Cap = G
EBF32	BGOO-EDHO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EBF80	DEBO-FACJ	6.3	2.0	L	E	A	S4	1400	Pent. Sect.
EBF80	DEOO-HGCO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EBF83	DEBO-FACJ	6.3	1.0	C	C	A	S4	700	Pent. Sect.
EBF83	DEOO-HGCO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EBF89	DEBO-FACJ	6.3	2.0	L	F	B	S4	2400	Pent. Sect.
EBF89	DEOO-HGCO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
EC80	DEBO-JOCO	6.3	1.5	L	A	C	S4	7600	
EC81	DEAO-HOCO	6.3	2.0	G	A	B	S4	2500	
EC86	DEBO-AOCO	6.3	1.5	J	A	C	S4	8700	
EC88	DECO-HOBO	6.3	1.2	H	A	C	S4	8450	
EC90	DCFO-EOGO	6.3	8.5	L	A	A	S4	1400	
EC91	DCFO-GOBO	6.3	1.5	L	A	B	S4	5300	
EC92	DCFO-AOGO	6.3	1.5	F	A	B	S4	3400	
EC93	DCFO-GOEO	6.3	2.6	E	A	B	S4	4100	
EC95	CDBO-EOGF	6.3	1.2	K	A	C	S4	6500	
EC97	DCBO-EOAO	6.3	1.0	G	A	C	S4	8200	
EC806S	DEBO-AOCO	6.3	1.5	J	A	C	S4	8700	
EC900	DCAO-EOBF	6.3	1.5	H	A	C	S4	9400	
ECC33	HGAD-BECF	6.3	4.0	L	A	B	S4	2550	X Dual Triode
ECC40	HAFC-EBDG	6.3	5.6	L	A	B	S4	1800	X Dual Triode. Use Hickok Adapter Code No. 1050-129
ECC81	DEGB-FAHC	12.6	2.0	L	A	B	S4	3500	X Dual Triode
ECC82	DEGB-FAHC	12.6	8.5	L	A	A	S4	1400	X Dual Triode
ECC83	DEGB-FAHC	12.6	2.0	L	A	A	S4	1000	X Dual Triode
ECC84	DEFB-JCGA	6.3	1.5	F	A	B	S4	3750	X Dual Triode
ECC85	DEGB-FAHC	6.3	1.0	F	A	B	S4	2500	X Dual Triode
ECC86	DEGB-FAHC	6.3	1.2	B	A	A	S4	1630	X Dual Triode
ECC88	DEGB-FAHC	6.3	1.2	F	A	C	S4	7850	X Dual Triode
ECC91	DCEF-BAGO	6.3	1.1	F	A	B	S4	3300	X Dual Triode
ECC186	DEGB-FAHC	12.6	8.5	L	A	A	S4	1400	X Dual Triode
ECC189	DEGB-FAHC	6.3	1.3	F	A	C	S4	8400	X Dual Triode
ECC230	GHDA-EBFC	7.5	40.0	G	A	B	S4	4200	X Dual Triode
ECC801S	DEGB-FAHC	12.6	2.0	L	A	B	S4	3500	X Dual Triode
ECC802S	DEGB-FAHC	12.6	8.5	L	A	A	S4	1400	X Dual Triode

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
ECC960	DCEF-BAGO	6.3	1.8	F	A	B	S4	3750	X Dual Triode
ECF80	DEBO-FCGO	6.3	3.2	L	K	B	S4	3450	Pent. Sect.
ECF80	DEJO-AOHO	6.3	2.0	F	A	B	S4	3150	Triode Sect.
ECF82	DEBO-FCGO	6.3	1.0	G	F	B	S4	3100	Pent. Sect.
ECF82	DEJO-AOHO	6.3	1.0	G	A	B	S4	4700	Triode Sect.
ECF83	DEJO-FGHO	6.3	2.3	D	D	A	S4	820	Pent. Sect.
ECF83	DEBO-COAO	6.3	3.7	E	A	B	S4	2300	Triode Sect.
ECF86	DEBO-HJAO	6.3	1.5	J	H	C	S4	7500	Pent. Sect.
ECF86	DEFO-GOAO	6.3	3.0	F	A	B	S4	3750	Triode Sect.
ECF801	DEBO-FGAO	6.3	1.2	J	G	C	S4	6950	Pent. Sect.
ECF801	DEJO-HOAO	6.3	3.0	F	A	B	S4	5700	Triode Sect.
ECF804	DEBO-FCGO	6.3	2.0	H	H	C	S4	6900	Pent. Sect.
ECF804	DEJO-AOHO	6.3	1.5	H	A	B	S4	4500	Triode Sect.
ECH35	BGOO-CDHE	6.3	1.0	M	G	B	S4	2200	Hexode Sect. Cap = G
ECH35	BGEO-FOHO	6.3	1.3	H	A	B	S4	2100	Triode Sect.
ECH42	AHFO-BEGD	6.3	1.0	L	E	B	S4	1500	Hexode Sect. (Use Hickok Ad-
ECH42	AHDO-COGO	6.3	1.0	F	A	B	S4	1750	Triode Sect. (dapter 1050-129
ECH81	DEBO-FACG	6.3	2.0	L	F	A	S4	1550	Heptode Sect.
ECH81	DEJO-HOCO	6.3	1.0	F	A	B	S4	2000	Triode Sect.
ECH83	DEBO-FACG	6.3	1.0	C	C	A	S4	550	Heptode Sect.
ECH83	DEJO-HOCO	6.3	1.0	B	A	A	S4	900	Triode Sect.
ECH84	DEBO-FGCA	6.3	1.0	H	B	A	S4	450	Heptode Sect.
ECH84	DEJO-HOCO	6.3	1.0	D	A	A	S4	1350	Triode Sect.
ECL80	DEJO-FHCG	6.3	6.7	J	J	B	S4	2100	Pent. Sect.
ECL80	DEBO-AOCO	6.3	2.0	F	A	A	S4	850	Triode Sect.
ECL82	DECO-FGBO	6.3	6.0	E	E	B	S4	4300	Pent. Sect.
ECL82	DEAO-JOHO	6.3	1.2	H	A	B	S4	1500	Triode Sect.
ECL84	DEHO-FJGO	6.3	2.1	J	J	C	S4	6950	Pent. Sect.
ECL84	DEAO-BOCO	6.3	1.7	K	A	B	S4	2500	Triode Sect.
ECL85	DEJO-FGHO	6.3	15.0	J	J	B	S4	4700	Pent. Sect.
ECL85	DEBO-AOCO	6.3	1.0	F	A	B	S4	3450	Triode Sect.
ECL86	DEHO-FCGO	6.3	7.0	L	L	C	S4	6300	Pent. Sect.
ECL86	DEAO-JOBO	6.3	1.5	L	A	A	S4	1000	Triode Sect.
EF22	HAFO-BCGD	6.3	2.0	L	F	B	S4	2800	
EF40	HAEO-BFGD	6.3	2.0	L	H	A	S4	1150	Use Hickok Adapter Code
EF41	AHFO-BEGO	6.3	5.0	L	F	A	S4	630	No. 1050-129
EF42	AHFO-BEGD	6.3	2.0	L	L	B	S4	5700	Use Hickok Adapter Code
EF80	DEBO-GHAJ	6.3	2.0	J	J	B	S4	4500	No. 1050-129
EF85	DEBO-GHAJ	6.3	2.0	L	F	B	S4	3800	Use Hickok Adapter Code
EF86	DEJO-FACH	6.3	2.0	L	H	A	S4	1260	No. 1050-129
EF89	DEBO-GHCJ	6.3	2.0	L	F	B	S4	2300	
EF91	DCAO-EGBF	6.3	2.0	L	L	B	S4	4800	
EF92	DCAO-EGBF	6.3	2.5	L	K	A	S4	1500	
EF93	DCAO-EFGB	6.3	1.0	F	F	A	S4	1900	
EF94	DCAO-EFGB	6.3	1.0	L	G	B	S4	2800	
EF95	DCAO-EFGO	6.3	2.0	J	G	B	S4	3100	
EF96	DCAO-EFGO	6.3	1.5	L	H	B	S4	3100	
EF97	DCAO-EFBG	6.3	1.0	B	A	A	S4	1260	
EF98	DCAO-EFBG	6.3	1.0	C	A	A	S4	1300	
EF183	DEBO-GHCJ	6.3	2.0	K	F	C	S4	7850	
EF184	DEBO-GHCJ	6.3	2.5	K	K	C	S4	9500	
EF731	CFAO-EGDO	6.3	1.1	F	F	B	S4	2800	
EF732	CFAO-EGDO	6.3	1.5	F	F	B	S4	3100	
EF800	DEBO-GHAJ	6.3	2.0	J	J	B	S4	4500	
EF804	DEJO-GHCA	6.3	2.0	L	H	A	S4	1260	
EF861	DEBO-GJAH	6.3	100Ω	J	H	C	S4	10000	
EH90	DCAO-EFBG	6.3	1.7	F	D	A	S4	700	Grid No. 1
EH90	DCGO-EFBA	6.3	1.7	F	D	A	S4	950	Grid No. 2

TUBE TYPE	SELECTORS	FIL	BIAS	PLT.	SCRN	RANGE	PRESS	MIN. MUT COND.	NOTATIONS
EK90	CDGO-EFBA	6.3	2.0	L	C	A	S4	300	Ampl. Sect. Osc. Sect.
EK90	CDAO-FEBG	6.3	0.0	F	F	B	S4	4500	
EL34	BGEO-CDHA	6.3	13.5	L	L	C	S4	6900	Cap = P
EL36	BGEO-ODHO	6.3	8.2	F	F	C	S4	8800	
EL37	BGEO-CDHO	6.3	10.0	H	H	B	S4	5000	Cap = P
EL38	BGEO-ODHA	6.3	7.0	H	H	B	S4	5000	
EL41	AHFO-BEGO	6.3	170Ω	H	H	B	S4	5000	Use Hickok Adapter Code No. 1050-129
EL42	AHFO-BEGO	6.3	360Ω	K	K	B	S4	2000	
EL81	DEBO-OGCF	6.3	38.5	K	K	B	S4	2900	Use Hickok Adapter Code No. 1050-129 Cap = P
EL83	DEBO-GACF	6.3	5.5	L	L	C	S4	6300	
EL84	DEBO-GJCO	6.3	7.3	L	L	C	S4	7200	Cap = P
EL85	DEAO-GJCF	6.3	360Ω	K	K	B	S4	2000	
EL86	DEBO-GJCO	6.3	12.5	J	J	C	S4	6300	Cap = P
EL90	DCGO-EFBO	6.3	8.5	J	J	B	S4	2300	
EL91	DCAO-EGBO	6.3	13.5	L	L	A	S4	1600	Cap = P
EL95	DCAO-EFBO	6.3	9.0	L	L	B	S4	3150	
EL360	BGEO-ODHO	6.3	8.2	F	F	C	S4	8800	Cap = P
EL803	DEBO-GACF	6.3	5.5	L	L	C	S4	6300	
EL821	DEBO-GHCJ	6.3	2.5	L	K	C	S4	8200	Pent. No. 1 Pent. No. 2
EL822	DEBO-GHCJ	6.3	2.5	L	K	C	S4	8200	
ELL80	DEFO-HJGO	6.3	2.0	L	L	B	S4	3900	Connect a 1 megohm resistor from "P" to pin No. 3 of any socket. Connect a second 1 megohm resistor from "P" to pin 6 of any socket. Eye one closes at Bias of about 5V. Eye two closes at Bias of about 25.0V.
EM34	GBDO-EOHO	6.3	Vary	K	A	D	S4	----	
EM80	DEAO-OJBO	6.3	Vary	L	L	D	S4	----	Connect a 500K resistor between "P" and pin 7 of any socket. Vary Bias to vary beam angle.
EM81	DEAO-OJBO	6.3	Vary	L	L	D	S4	----	Connect a 470K resistor from "P" to pin 7. Vary Bias to vary beam angle.
EM84	DEAO-FOCO	6.3	1.0	L	L	D	S4	----	Split Bar ( Jumper pins 7 & 9 Solid Bar ( of any socket.
EM84	DEAO-FOCO	6.3	20.0	L	L	D	S4	----	
EM87	DEAO-FOCO	6.3	1.0	L	A	D	S4	----	Split Bar ( Jumper Noval Solid Bar ( pins 7 & 9.
EM87	DEAO-FOCO	6.3	15.0	L	A	D	S4	----	
EQ80	EDGO-FAHJ	6.3	1.0	L	C	A	S4	500	Ampl. Sect. Jumper from pin No. 2 of any socket to "K".
EQ80	EDGJ-AFHB	6.3	5.0	F	C	A	S4	1050	Osc. Sect.
EY81	DEOO-JOOO	6.3	0.0	A	D	G	S2	2600	Cap = K. Set load at 11. Read on 10000 scale.
EY82	DEOO-JOCO	6.3	0.0	A	D	G	S2	4100	Set load at 7. Read on 10000 scale.
EY84	DEOO-OOCO	6.3	0.0	A	E	G	S2	4400	Cap = P. Set load at 11. Read on 10000 scale.
EY86	DBOO-OOOO	6.3	0.0	A	D	E	S2	22000	Cap = P. Read on 60000 scale.
EY87	DBOO-OOOO	6.3	0.0	A	D	E	S2	22000	Cap = P. Read on 60000 scale
EY88	DEOO-JOOO	6.3	0.0	A	D	G	S2	4700	Set load at 11. Cap = K. Read on 10000 scale.
EY91	DCOO-COBO	6.3	0.0	A	E	G	S2	2400	Set load at 30. Read on 10000 scale.
EZ35	GBOO-ECHA	6.3	0.0	A	E	G	S2	2400	✕ Dual Diode. Set load at 30. Read on 10000 scale.
EZ40	AHOO-FBGO	6.3	0.0	A	E	G	S2	2500	✕ Dual Diode. Set load at 30. Read on 10000 scale. Use Hickok Adapter Code 1050-129
EZ80	DEOO-GACO	6.3	0.0	A	E	G	S2	2500	✕ Dual Diode. Set load at 30. Read on 10000 scale.
EZ81	DEOO-GACO	6.3	0.0	A	D	G	S2	3300	✕ Dual Diode. Set load at 10. Read on 10000 scale.
EZ90	DCOO-FAGO	6.3	0.0	A	E	G	S2	2400	✕ Dual Diode. Set load at 30. Read on 10000 scale.
GZ30	HBOO-FDOO	5.0	0.0	A	D	G	S2	2700	✕ Dual Diode. Set load at 13. Read on 10000 scale.

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
GZ32	BHOO-FDOO	5.0	0.0	A	D	G	S2	2700	X Dual Diode. Set load at 12. Read on 10000 scale.
GZ33	BHOO-FDOO	5.0	0.0	A	H	G	S2	6000	X Dual Diode. Set load at 20. Read on 10000 scale.
GZ34	BHOO-FDOO	5.0	0.0	A	D	G	S2	3100	X Dual Diode. Set load at 13. Read on 10000 scale.
H63	GBOO-DOHA	6.3	2.0	L	A	A	S4	950	Cap = G
HABC80	DEHO-JOGF	20.0	3.0	L	A	A	S4	750	Triode Sect.
HABC80	DEOO-FBGC	20.0	0.0	A	D	F	S2	1200	X Dual Diode. Set load at 53. Read on 3000 scale.
HABC80	DEOO-AOGH	20.0	0.0	A	D	F	S2	1200	Diode No. 3. Set load at 53. Read on 3000 scale.
HBC90	DCAO-GOBO	12.6	3.0	L	A	A	S4	7500	Triode Sect.
HBC90	DCCO-FEBO	12.6	0.0	B	A	B	S1	5000	X Dual Diode
HBC91	DCAO-GOBO	12.6	2.0	L	A	A	S4	1000	Triode Sect.
HBC91	DCCO-FEBO	12.6	0.0	B	A	B	S1	5000	X Dual Diode
HCC85	DEGB-FAHC	17.0	1.1	F	A	B	S4	2900	X Dual Triode
HCH81	DEBO-FACG	12.6	2.0	K	G	A	S4	1500	Heptode Sect.
HCH81	DEJO-HOCO	12.6	1.0	F	A	B	S4	2350	Triode Sect.
HD14	GBOO-COOO	1.4	1.0	F	A	A	S4	200	Triode Sect. Cap = G
HD14	GBOO-EOOO	1.4	0.0	B	A	B	S1	5000	Diode Sect.
HD30	DECO-GAOC	2.5	25.0	K	H	A	S4	1150	
HD93	ABOO-OOCO	1.1	0.0	A	E	E	S2	10000	Cap = P. Read on 60000 scale.
HD94	GBEO-ODHO	6.3	22.5	L	H	B	S4	3500	Cap = P
HD96	GBEO-ODHO	25.0	22.5	L	H	B	S4	3500	Cap = P
HF93	DCAO-EFGB	12.6	1.0	L	F	B	S4	2800	
HF94	DCAO-EFGB	12.6	1.0	L	H	B	S4	3300	
HK90	CDGO-EFBA	12.6	2.0	L	C	A	S4	300	Ampl. Sect.
HK90	CDAO-FEBG	12.6	0.0	F	F	B	S4	4500	Osc. Sect.
HL90	DCAO-EFBO	20.0	8.5	J	J	B	S4	2300	
HL92	DCBO-GFAO	50.0	8.0	G	F	B	S4	4700	
HL94	DJBO-GFAO	35.0	6.7	F	F	B	S4	5850	Before placing tube in socket jumper a 33 ohm, 2 watt resistor between pins 3 and 9 of any socket. Then proceed with test.
HMO4	CDGO-EFBA	6.3	2.0	L	C	A	S4	300	Ampl. Sect.
HMO4	CDAO-FEBG	6.3	0.0	F	F	B	S4	4500	Osc. Sect.
HP6	DCAO-EGBF	6.3	2.0	L	L	B	S4	4700	
HY90	DCCO-EOGO	35.0	0.0	A	E	G	S2	5500	Set load at 12. Read on 10000 scale.
KT61	BGEO-CDHO	6.3	2.0	H	H	C	S4	5700	
KT66	BGEO-CDHO	6.3	15.0	L	L	B	S4	4000	
KT88	BGEO-CDHO	6.3	15.0	H	H	B	S4	3800	
KTZ63	GBOO-CDHE	6.3	3.0	L	F	A	S4	750	Cap = G
L63	GBEO-COHO	6.3	8.0	L	A	B	S4	1650	
L77	DCFO-EOGO	6.3	8.5	L	A	A	S4	1400	
LC900	DCAO-EOBF	3.0	1.5	H	A	C	S4	9400	
LN119	DECO-FGBO	6.3	6.0	E	E	B	S4	4300	Pent. Sect.
LN119	DEAO-JOHO	6.3	1.2	H	A	B	S4	1500	Triode Sect.
LN152	DEJO-FHCG	6.3	6.7	J	J	B	S4	2100	Pent. Sect.
LN152	DEBO-AOOO	6.3	2.0	F	A	A	S4	850	Triode Sect.
M8079	DCCO-GBAE	6.3	0.0	A	D	G	S2	3300	X Dual Diode. Set load on 11. Read on 10000 scale
M8081	DCEF-BAGO	6.3	1.1	F	A	B	S4	3300	X Dual Triode
M8100	DCAO-EFGO	6.3	2.0	J	G	B	S4	3100	
M8136	DEGB-FAHC	12.6	8.5	L	A	A	S4	1400	X Dual Triode
M8137	DEGB-FAHC	12.6	2.0	L	A	A	S4	1000	X Dual Triode
M8162	DEGB-FAHC	12.6	2.0	L	A	B	S4	3500	X Dual Triode
N17	GACO-BDOO	2.5	2.7	E	D	A	S4	500	
N18	GACO-FDOO	2.5	4.5	E	E	A	S4	1250	
N19	GAFO-BCOO	3.0	4.5	E	E	A	S4	1250	
N77	DCAO-EGBO	6.3	13.5	L	L	A	S4	1600	
N78	DCAO-EGBO	6.3	5.5	L	L	C	S4	6300	
N119	DEBO-GJCO	50.0	12.5	J	J	B	S4	6300	

TUBE TYPE	SELECTORS	FIL	BIAS	PLT.	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
N144	CDAO-EGBO	6.3	13.5	L	L	B	S4	1600	Use Hickok Adapter Code No. 1050-129 Cap = P
N151	AHFO-BEHO	6.3	360 Ω	K	K	B	S4	2000	
N152	DEBO-OHCJ	20.0	23.0	J	J	B	S4	4100	
N153	DEBO-GACF	12.6	2.9	J	J	C	S4	6000	
N154	DEBO-GJCO	17.0	10.4	J	J	C	S4	6400	
N309	DEBO-GACF	12.6	2.9	J	J	C	S4	6000	
N329	DEBO-GJCO	17.0	10.4	J	J	C	S4	6400	
N359	DEBO-OHCJ	20.0	23.0	J	J	B	S4	4100	
N709	DEBO-GJCO	6.3	7.2	L	L	C	S4	7000	
N727	DCGO-EFBO	6.3	8.5	J	J	B	S4	2300	
OM4	AHCO-BOGO	6.3	6.0	L	A	A	S4	1250	Triode Sect. Cap = G
OM4	AHOO-FEGO	6.3	0.0	B	A	B	S1	5000	X Dual Diode
PABC80	DEHO-JOGO	10.0	1.0	F	A	A	S4	900	Triode Sect.
PABC80	DEOO-FOGO	10.0	0.0	B	A	B	S1	5000	Diode No. 1
PABC80	DEOO-BACG	10.0	0.0	A	D	G	S2	2600	X Dual Diode. Set load on 13. Read on 10000 scale.
PC86	DEBO-AOCO	4.3	1.5	J	A	C	S4	8750	
PC95	DCBO-EOGF	3.0	1.2	K	A	C	S4	6500	
PC97	DCBO-EOAO	4.3	1.0	G	A	C	S4	8200	
PCC84	DEFB-JCGA	7.5	1.5	F	A	B	S4	3750	X Dual Triode
PCC85	DEGB-FAHC	10.0	1.0	F	A	B	S4	2500	X Dual Triode
PCC88	DEGB-FAHC	7.5	1.2	F	A	C	S4	7850	X Dual Triode
PCC189	DEGB-FAHC	7.5	1.3	F	A	C	S4	8400	X Dual Triode
PCF80	DEBO-FCGO	10.0	2.0	J	J	B	S4	3450	Pent. Sect.
PCF80	DEJO-AOHO	10.0	2.0	F	A	B	S4	3150	Triode Sect.
PCF82	DEBO-FCGO	10.0	1.0	G	F	B	S4	3100	Pent. Sect.
PCF82	DEJO-AOHO	10.0	1.0	G	A	B	S4	4700	Triode Sect.
PCF86	DEBO-HJAO	7.5	1.5	J	H	C	S4	7500	Pent. Sect.
PCF86	DEFO-GOAO	7.5	3.0	F	A	B	S4	3750	Triode Sect.
PCL82	DECO-FGBO	17.0	6.0	E	E	B	S4	4300	Pent. Sect.
PCL82	DEAO-JOHO	17.0	1.2	H	A	B	S4	1500	Triode Sect.
PCL84	DEHO-FJGO	17.0	2.1	J	J	C	S4	6950	Pent. Sect.
PCL84	DEAO-BOCO	17.0	1.7	K	A	B	S4	2500	Triode Sect.
PCL85	DEJO-FGHO	20.0	15.0	J	J	B	S4	4700	Pent. Sect.
PCL85	DEBO-AOCO	20.0	1.0	F	A	B	S4	3450	Triode Sect.
PCL86	DEHO-FCGO	12.6	7.0	L	L	C	S4	6300	Pent. Sect.
PCL86	DEAO-JOBO	12.6	1.5	L	A	A	S4	1000	Triode Sect.
PF86	DEJO-FACH	4.3	2.0	L	H	A	S4	1260	
PL21	DCAO-FOBE	6.3	#	A	F	F	S2	2000	Set load at 80. Fires about 2V. Read on 3000 scale.
PL36	BGEO-ODHO	25.0	8.2	F	F	C	S4	8800	Cap = P
PL81	DEBO-OHCJ	20.0	23.0	J	J	B	S4	4100	Cap = P
PL82	DEBO-GJCO	17.0	10.4	J	J	C	S4	5800	
PL83	DEBO-GACF	12.6	2.9	J	J	C	S4	6300	
PL84	DEBO-GJCO	12.6	12.5	J	J	C	S4	7200	
PLL80	DEFO-HJGO	12.6	2.0	L	L	B	S4	3900	Pent. No. 1
PLL80	DEBO-CAGO	12.6	2.0	L	L	B	S4	3900	Pent. No. 2
PMO4	DCAO-EFGB	6.3	1.0	F	F	A	S4	1900	
PMO5	DCAO-EFGO	6.3	2.0	J	G	B	S4	3100	
PMO7	DCAO-EGBF	6.3	2.0	L	L	B	S4	4800	
PY80	DEOO-JOCO	20.0	0.0	A	E	G	S2	5500	Set load on 12. Read on 10000 scale.
PY81	DEOO-JOOO	17.0	0.0	A	D	G	S2	2600	Cap = K. Set load at 11. Read on 10000 scale.
PY82	DEOO-JOCO	17.0	0.0	A	E	G	S2	5500	Set load at 12. Read on 10000 scale.
PY88	DEOO-JOOO	25.0	0.0	A	D	G	S2	4700	Cap = K. Set load on 11. Read on 10000 scale.
QA2403	DCAO-EGBF	6.3	2.0	L	L	B	S4	4800	
QA2406	DEGB-FAHC	12.6	2.0	L	A	B	S4	3500	X Dual Triode
QQEO2/5	DECA-HGBO	12.6	3.5	K	H	C	S4	6500	Tetrode No. 1
QQEO2/5	DEAC-FGBO	12.6	3.5	K	H	C	S4	6500	Tetrode No. 2

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
QQEO3/12	DECA-HGBO	12.6	10.0	J	H	B	S4	2100	Tetrode No. 1
QQEO3/12	DEAC-FGBO	12.6	10.0	J	H	B	S4	2100	Tetrode No. 2
QQEO3/20	AGFB-OCDO	12.6	10.0	K	K	B	S4	3800	Tetrode No. 1 ( Use Hickok Right Cap = P ( Adapter
QQEO3/20	AGBF-OCDO	12.6	10.0	K	K	B	S4	3800	Tetrode No. 2 ( Code No. Left Cap = P ( 1050-107
QQEO6/40	AGFB-OCDO	12.6	12.0	L	J	C	S4	5000	Right Cap = P ( Use Hickok
QQEO6/40	AGBF-OCDO	12.6	12.0	L	J	C	S4	5000	Left Cap = P ( Adapter Code ( No. 1050-107
QQVO3/10	DECA-HGBO	12.6	10.0	J	H	B	S4	2100	Tetrode No. 1
QQVO3/10	DEAC-FGBO	12.6	10.0	J	H	B	S4	2100	Tetrode No. 2
QQVO3/20A	AGFB-OCDO	12.6	10.0	K	K	B	S4	3800	Tetrode No. 1 ( Use Hickok Right Cap = P ( Adapter
QQVO3/20A	AGBF-OCDO	12.6	10.0	K	K	B	S4	3800	Tetrode No. 2 ( Code No. Left Cap = P ( 1050-107
QS95/10	OOOO-EOAO	OFF	---	F	A	VR	S3	95V	Connect a 470K ohm resistor
STV85/10	OOOO-AOBO	OFF	---	H	A	VR	S3	85V	Regulation = 5V from 2 to 10 MA. ★125V. Press S4.
STV108/30	OOOO-EOBO	OFF	---	G	A	VR	S3	108V	Regulation = 3V from 1 to 10 MA
STV150/30	OOOO-EOBO	OFF	---	J	A	VR	S3	150V	★115V. Press S4 Regulation = 2V from 5 to 30 MA
U26	DBOO-OOOO	6.3	0.0	A	D	E	S2	22000	★155V. Press S4. Regula- tion = 2V from 5 to 30 MA
U49	DBOO-OOOO	6.3	0.0	A	D	E	S2	22000	Cap = P. Read on 60000 scale
U70	GBOO-ECHA	6.3	0.0	A	E	G	S2	2400	Cap = P. Read on 60000 scale X Dual Diode. Set load at 30. Read on 10000 scale.
U78	DCOO-FAGO	6.3	0.0	A	E	G	S2	2400	Dual diode. Set load on 30. Read on 10000 scale.
U119	DEOO-JOCO	35.0	0.0	A	D	G	S2	3700	Set load at 7. Read on 10000 scale.
U152	DEOO-JOCO	20.0	0.0	A	E	G	S2	5500	Set load on 12. Read on 10000 scale.
U153	DEOO-JOOO	20.0	0.0	A	D	G	S2	2600	Cap = K. Set load at 11. Read on 10000 scale.
U154	DEOO-JOCO	20.0	0.0	A	E	G	S2	5500	Set load on 12. Read on 10000 scale.
U192	DEOO-JOCO	20.0	0.0	A	E	G	S2	5500	Set load at 12. Read on 10000 scale.
U381	DEOO-JOCO	35.0	0.0	A	D	G	S2	3700	Set load at 11. Read on 10000 scale.
U709	DEOO-GACO	6.3	0.0	A	D	G	S2	3300	X Dual diode. Set load at 10. Read on 10000 scale.
UABC80	DEHO-JOGO	25.0	1.0	F	A	A	S4	900	Triode Sect.
UABC80	DEOO-FOGO	25.0	0.0	B	A	B	S1	5000	Diode No. 1
UABC80	DEOO-BACG	25.0	0.0	A	D	G	S2	2600	X Dual Diode. Set load on 13. Read on 10000 scale.
UAF42	AHFO-BEGD	12.6	2.0	L	E	A	S4	1250	Pent. Sect. ( Use Hickok
UAF42	AHOO-COGO	12.6	0.0	B	A	B	S1	5000	Diode Sect. ( Adapter 1050-129
UBC41	AHCO-BOGO	12.6	3.0	L	A	A	S4	750	Triode Sect. ( Use Hickok Ad-
UBC41	AHOO-FEGO	12.6	0.0	B	A	B	S1	5000	X Dual Diode ( apter 1050-129
UBC81	DEBO-AOCO	12.6	3.0	L	A	A	S4	750	Triode Sect.
UBC81	DEOO-FHCO	12.6	0.0	B	A	B	S1	5000	X Dual Diode
UBF80	DEBO-FACJ	17.0	2.0	L	E	A	S4	1400	Pent. Sect.
UBF80	DEOO-GHCO	17.0	0.0	B	A	B	S1	5000	X Dual Diode
UBF89	DEBO-FACJ	20.0	2.0	L	F	B	S4	2400	Pent. Sect.
UBF89	DEOO-GHCO	20.0	0.0	B	A	B	S1	5000	X Dual Diode
UC92	DCFO-AOGO	10.0	2.0	L	A	B	S4	3500	
UCC85	DEGB-FAHC	25.0	1.0	E	A	B	S4	2550	X Dual Triode
UCH42	AHFO-BEGD	12.6	1.0	L	E	B	S4	1500	Hexode Sect. ( Use Hickok Ad-
UCH42	AHDO-COGO	12.6	1.0	F	A	A	S4	1750	Triode Sect. ( apter 1050-129
UCH81	DEBO-FACO	20.0	2.0	L	F	A	S4	1550	Heptode Sect.
UCH81	DEJO-HOCO	20.0	1.0	F	A	B	S4	2000	Triode Sect.

TUBE TYPE	SELECTORS	FIL	BIAS	PLT	SCRN	RANGE	PRESS	MIN. MUT. COND.	NOTATIONS
UCL82	DECO-FGBO	50.0	6.0	E	E	B	S4	4300	Pent. Sect. Triode Sect. Use Hickok Adapter Code No. 1050-129
UCL82	DEAO-JOHO	50.0	1.2	H	A	B	S4	1500	
UF41	AHFO-BEGO	12.6	5.0	L	F	A	S4	630	
UF80	DEBO-GHAJ	20.0	2.0	J	J	B	S4	4500	Use Hickok Adapter Code No. 1050-129
UF85	DEBO-GHAJ	20.0	2.0	L	F	B	S4	3800	
UF89	DEBO-GHAJ	12.6	2.0	L	F	B	S4	2300	
UL41	AHFO-BEHO	50.0	7.0	L	L	C	S4	6300	
UL84	DEBO-GJCO	50.0	12.5	J	J	C	S4	6300	
UM80	DEAO-OJBO	20.0	Vary	L	L	D	S4	----	Connect a 500K ohm resistor between "P" and pin 7 of any socket. Vary Bias to vary beam angle.
UY41	AHOO-BOGO	35.0	0.0	A	D	G	S2	3700	Set load at 10. Read on 10000 scale. Use Hickok Adapter Code No. 1050-129.
UY85	DEOO-JOCO	35.0	0.0	A	D	G	S2	3700	Set load at 10. Read on 10000 scale.
W17	AGFO-BCOO	◆1.4	1.0	E	E	A	S4	550	X Dual Triode Pent. Sect. Note 3 Osc. Sect. Note 3 Hexode Sect. Triode Sect. Heptode Sect. Triode Sect. Ampl. Sect. Osc. Sect.  Cap = P  Cap = K. Set load at 11. Read on 10000 scale.  X Dual Triode  Cap = G  Use Hickok Adapter Code No. 1050-129
W77	DCAO-EGBF	6.3	2.5	K	K	A	S4	1600	
X17	GAFO-BCOD	+1.4	0.0	E	C	A	S4	300	
X17	GADO-CBOF	+1.4	0.0	D	D	A	S4	500	
X78	DCBO-EAOG	3.0	3.0	L	E	A	S4	500	
X78	DCGO-FOOO	1.0	-1.0	F	A	B	S4	1750	
X719	DEBO-FACO	6.3	2.0	L	F	A	S4	1550	
X719	DEJO-HOCO	6.3	1.0	F	A	B	S4	2000	
X727	CDGO-EFBA	6.3	2.0	L	C	A	S4	300	
X727	CDAO-FEBG	6.3	0.0	F	F	B	S4	4500	
XC95	DCBO-EOGF	2.5	1.2	K	A	C	S4	6500	
XC97	DCBO-EOAO	2.5	1.0	G	A	C	S4	8200	
XC900	DCAO-EOBF	2.0	1.5	H	A	C	S4	9400	
XCC189	DEGB-FAHC	4.3	1.3	F	A	C	S4	8400	
XCF80	DEBO-FCGO	4.3	3.2	L	K	B	S4	3450	
XCF80	DEJO-AOHO	4.3	2.0	F	A	B	S4	3150	
XCH81	DEBO-FACO	3.0	2.0	L	F	A	S4	1550	
XCH81	DEJO-HOCO	3.0	1.0	F	A	B	S4	2000	
XCL82	DECO-FGBO	7.5	6.0	E	E	B	S4	4300	
XCL82	DEAO-JOHO	7.5	1.2	H	A	B	S4	1500	
XCL84	DEHO-FJGO	7.5	2.1	J	J	C	S4	6950	
XCL84	DEAO-BOCO	7.5	1.7	K	A	B	S4	2500	
XCL85	DEJO-FGHO	10.0	15.0	J	J	B	S4	4700	
XCL85	DEBO-AOCO	10.0	1.0	F	A	B	S4	3450	
XF80	DEBO-GHAJ	3.0	2.0	J	J	B	S4	4500	
XF85	DEBO-GHAJ	3.0	2.0	L	F	B	S4	3800	
XF183	DEBO-GHCJ	3.0	2.0	K	F	C	S4	7850	
XF184	DEBO-GHCJ	3.0	2.5	K	K	C	S4	9500	
XL36	BGEO-ODHO	12.6	8.2	F	F	C	S4	8800	
XL84	DEBO-GJCO	7.5	7.3	L	L	C	S4	7200	
XL86	DEBO-GJCO	7.5	12.5	J	J	C	S4	6300	
XY88	DEOO-JOOO	17.0	0.0	A	D	G	S2	3700	
YC95	DCBO-EOGF	3.0	1.2	K	A	C	S4	6500	
YC97	DCBO-EOAO	3.0	1.0	G	A	C	S4	8200	
YCC189	DEGB-FAHC	5.0	1.3	F	A	C	S4	8400	
YF183	DEBO-GHCJ	4.3	2.0	K	F	C	S4	7850	
YF184	DEBO-GHCJ	4.3	2.5	K	K	C	S4	9500	
Z63	GBOO-CDHE	6.3	3.0	L	F	A	S4	750	
Z77	DCAO-EGBF	6.3	2.0	L	L	B	S4	4800	
Z150	AHFO-BEGO	6.3	2.0	L	L	B	S4	5700	
Z152	DEBO-GHAJ	6.3	2.0	J	J	B	S4	4500	
Z719	DEBO-GHAJ	6.3	2.0	J	J	B	S4	4500	
Z729	DEJO-FACH	6.3	2.0	L	H	A	S4	1260	
ZD17	AGFO-EDOO	◆1.4	1.0	E	E	A	S4	400	
ZD17	AGOO-COOO	1.4	0.0	B	A	B	S1	5000	
ZD152	DEBO-FACJ	6.3	2.0	L	E	A	S4	1400	
ZD152	DEOO-GHCO	6.3	0.0	B	A	B	S1	5000	