

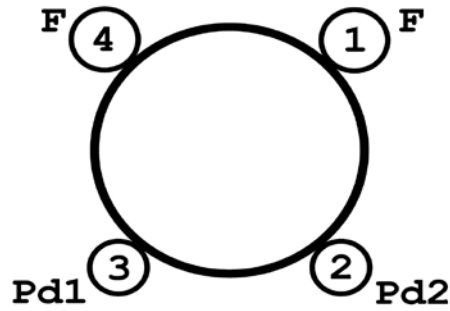


VACUUM TUBE PINOUT SHEETS

INDEX

Tube	Pg	Tube	Pg	Tube	Pg	Tube	Pg	Tube	Pg	Tube	Pg	Tube	Pg
5AQ5	12	6AQ5	12	6FQ7	33	12AQ5	12	50BM8	29	7025	23	ECC81	23
5AR4	5	6AQ5A	12	6FV8A	30	12AT7	23	50L6	10	7027A	19	ECC82	23
5AU4	6	6AQ5W	12	6GW8	35	12AU6	11	5751	23	7189	26	ECC83	23
5BR8	30	6AU6	11	6HG5	12	12AU7	23	5881	10	7189A	26	ECC832	23
5BS8	24	6BM8	29	6HR5	12	12AX7	23			7199	32	ECC88	24
5FV8	30	6BQ5	26	6J7	14	12AY7	23	6005	12	7591A	20	ECL82	29
5U4	6	6BR8A	30	6K11	39	12BH7	23	6072A	23	76	3	ECL86	35
5V3	6	6C4	8	6L6	10	12BV7	25	6095	12	7868	37	EL34	18
5Y3	6	6C6	9	6N7	16	12BY7A	25	60FX5	13			EL84	26
5Z3	2	6C10	38	6Q11	39	12DQ7	25	6201	23			EZ80	36
		6CA4	36	6SC7	22	12DW7	23	6550	15			EZ81	36
		6CA7	18	6SJ7	21	12FX5	13	6669	12			GZ34	5
		6CG7	33	6SL7	17	12SL7	17	6679	23			KT66	10
		6CX8	27	6SN7	17	12SN7	17	6680	23			KT88	18
		6CZ5	31	6V4	36	18GD6A	11	6681	23			UCL82	29
		6DJ8	24	6V6	10	35Z5	7	6922	24				
		6EU7	34			36AM3	4	6973	28				

5Z3



PIN DIAGRAM: **4C**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

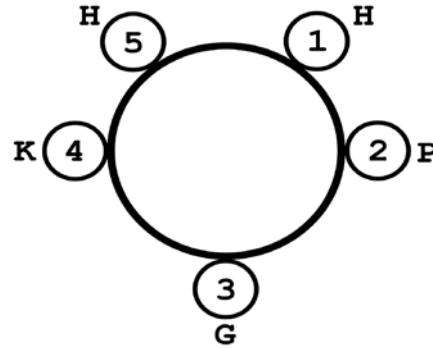
MODEL:

SERIAL NO:

FULL-WAVE RECTIFIER

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Filament						
2	d2 - Plate						
3	d1 - Plate						
4	Filament						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc



PIN DIAGRAM: **5A**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

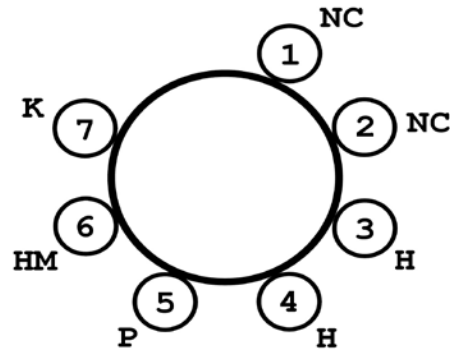
SERIAL NO:

MEDIUM-MU TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Heater						
2	Plate						
3	Grid						
4	Cathode						
5	Heater						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

36AM3



PIN DIAGRAM: **5BQ**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

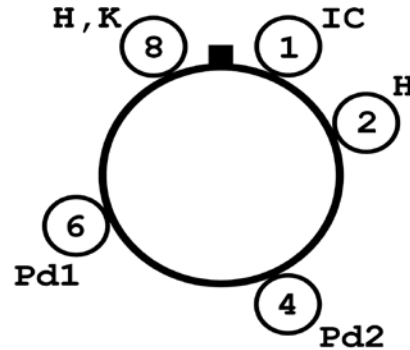
HALF-WAVE RECTIFIER

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	NC						
2	NC						
3	Heater						
4	Heater						
5	Plate						
6	Heater Tap						
7	Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

5AR4 / GZ34



PIN DIAGRAM: **5DA**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

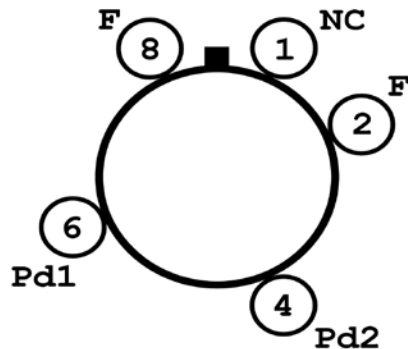
FULL-WAVE RECTIFIER

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	IC						
2	Heater						
4	d2 - Plate						
6	d1 - Plate						
8	Heater, Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

5Y3GT
5U4GB
5V3A/5AU4



PIN DIAGRAM: **5T**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

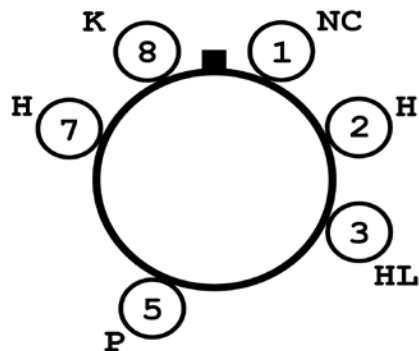
SERIAL NO:

FULL-WAVE RECTIFIER

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	NC						
2	Filament						
	NC or OMITTED						
4	d2 - Plate						
	NC or OMITTED						
6	d1 - Plate						
	NC or OMITTED						
8	Filament						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

35Z5GT



PIN DIAGRAM: **6AD**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

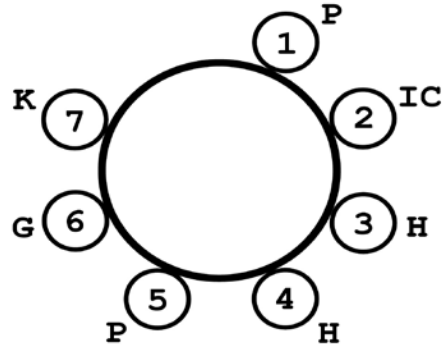
HALF-WAVE RECTIFIER

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	NC or OMITTED						
2	Heater						
3	Heater Tap - Panel Lamp						
5	Plate						
7	Heater						
8	Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6C4



PIN DIAGRAM: **6BG**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

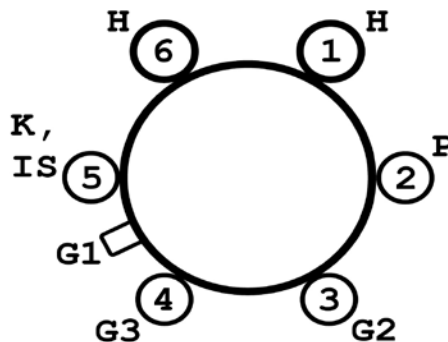
SERIAL NO:

POWER TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Plate						
2	IC						
3	Heater						
4	Heater						
5	Plate						
6	Grid						
7	Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6C6



PIN DIAGRAM: **6F**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

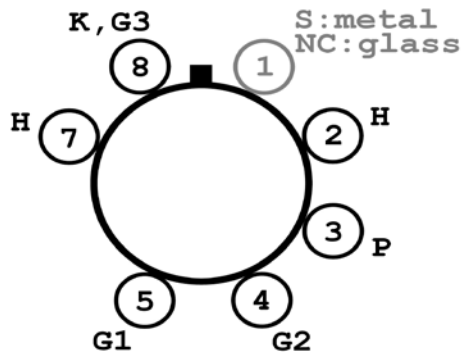
SHARP-CUTOFF PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Heater						
2	Plate						
3	Screen Grid						
4	Suppressor Grid						
5	Cathode, IS						
6	Heater						
cap	Control Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

**6L6, 6L6GC
6V6, 6V6GTA
5881, 50L6
KT66**

BEAM POWER TUBE



PIN DIAGRAM: 7AC

INDEX

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

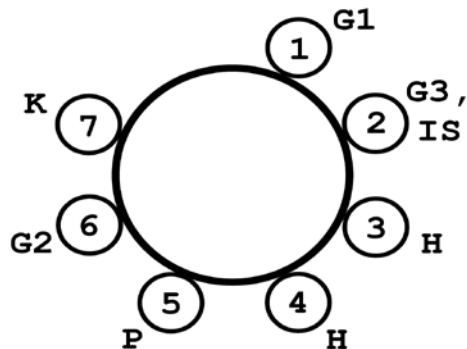
SERIAL NO:

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	S or NC or OMITTED						
2	Heater						
3	Plate						
4	Screen Grid						
5	Control Grid						
7	Heater						
8	Cathode, Suppressor Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

**18GD6A
12AU6
6AU6**



PIN DIAGRAM: **7BK**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

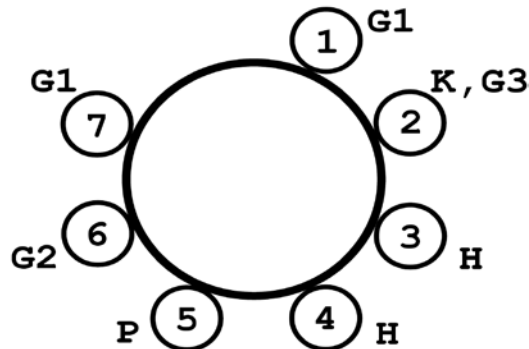
SHARP-CUTOFF PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Control Grid						
2	Suppressor Grid, IS						
3	Heater						
4	Heater						
5	Plate						
6	Screen Grid						
7	Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

**6AQ5, 6HG5, 6HR5
6005/6AQ5W
6669/6AQ5A, 6095
5AQ5, 12AQ5**

BEAM POWER TUBE



PIN DIAGRAM: **7BZ**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

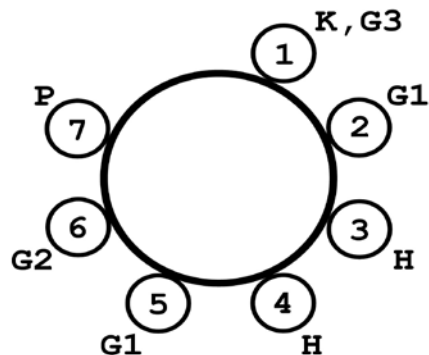
MODEL:

SERIAL NO:

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Control Grid						
2	Cathode, Suppressor Grid						
3	Heater						
4	Heater						
5	Plate						
6	Screen Grid						
7	Control Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

**60FX5
12FX5**



PIN DIAGRAM: **7CV**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

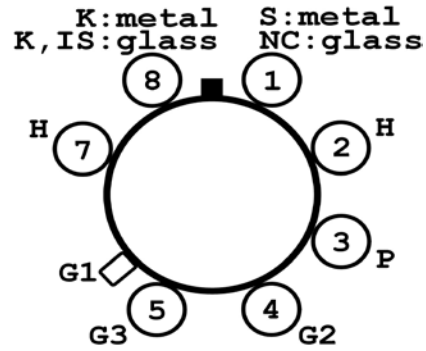
SERIAL NO:

POWER PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Cathode, Suppressor Grid						
2	Control Grid						
3	Heater						
4	Heater						
5	Control Grid						
6	Screen Grid						
7	Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6J7



PIN DIAGRAM: **7R**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

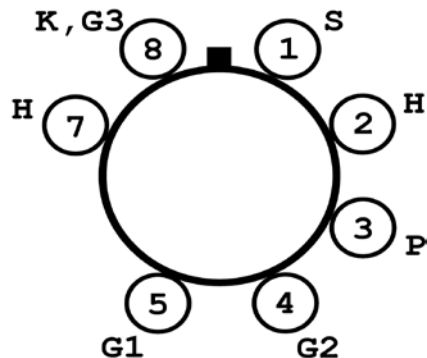
SERIAL NO:

SHARP-CUTOFF PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	S or NC						
2	Heater						
3	Plate						
4	Screen Grid						
5	Suppressor Grid						
7	Heater						
8	Cathode						
cap	Control Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6550



PIN DIAGRAM: **7S**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

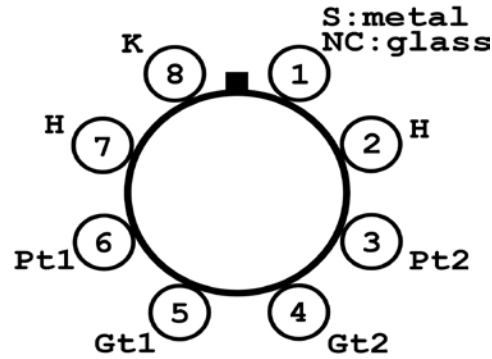
SERIAL NO:

BEAM POWER TUBE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Metal Shell						
2	Heater						
3	Plate						
4	Screen Grid						
5	Control Grid						
7	Heater						
8	Cathode, Suppressor Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6N7



PIN DIAGRAM: **8B**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

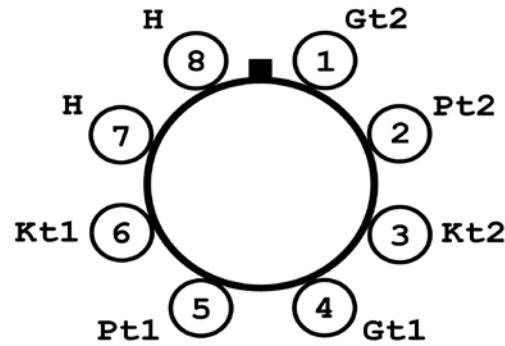
TWIN POWER TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	S or NC						
2	Heater						
3	t2 - Plate						
4	t2 - Grid						
5	t1 - Grid						
6	t1 - Plate						
7	Heater						
8	Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

**6SL7, 12SL7
6SN7, 12SN7**



PIN DIAGRAM: **8BD**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

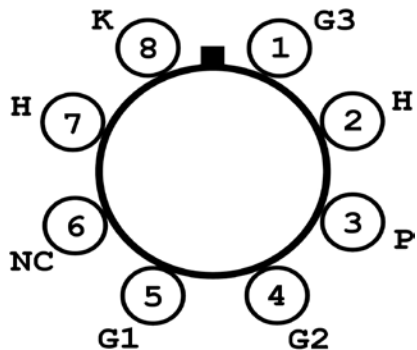
SERIAL NO:

TWIN TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t2 - Grid						
2	t2 - Plate						
3	t2 - Cathode						
4	t1 - Grid						
5	t1 - Plate						
6	t1 - Cathode						
7	Heater						
8	Heater						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6CA7 / EL34 KT88



PIN DIAGRAM: **8ET**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

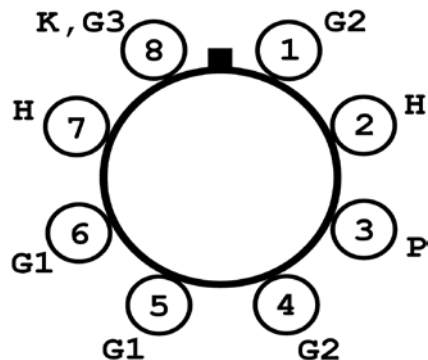
POWER PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Suppressor Grid						
2	Heater						
3	Plate						
4	Screen Grid						
5	Control Grid						
6	NC						
7	Heater						
8	Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

7027A



PIN DIAGRAM: **8HY**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

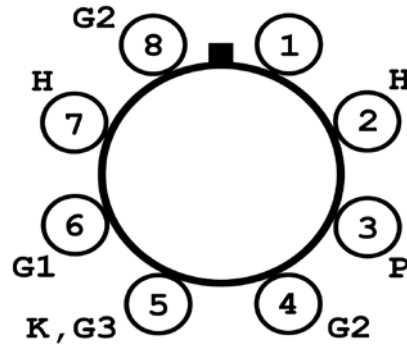
BEAM POWER PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Screen Grid						
2	Heater						
3	Plate						
4	Screen Grid						
5	Control Grid						
6	Control Grid						
7	Heater						
8	Cathode, Suppressor Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

7591A



PIN DIAGRAM: **8KQ**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

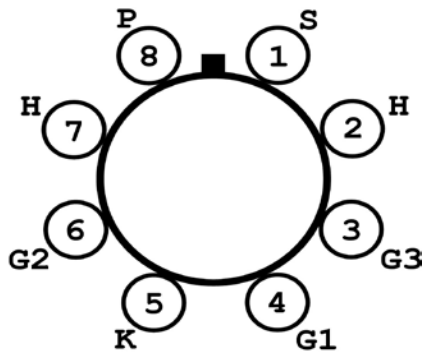
POWER PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1							
2	Heater						
3	Plate						
4	Screen Grid						
5	Cathode, Suppressor Grid						
6	Control Grid						
7	Heater						
8	Screen Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6SJ7



PIN DIAGRAM: **8N**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

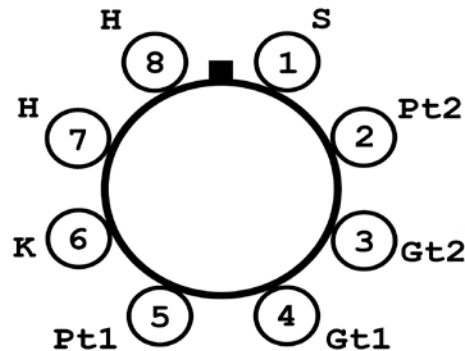
SERIAL NO:

SHARP-CUTOFF PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Metal Shell						
2	Heater						
3	Suppressor Grid						
4	Control Grid						
5	Cathode						
6	Screen Grid						
7	Heater						
8	Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6SC7



PIN DIAGRAM: **8S**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

HIGH-MU TWIN TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Metal Shell						
2	t2 - Plate						
3	t2 - Grid						
4	t1 - Grid						
5	t1 - Plate						
6	Common Cathode						
7	Heater						
8	Heater						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

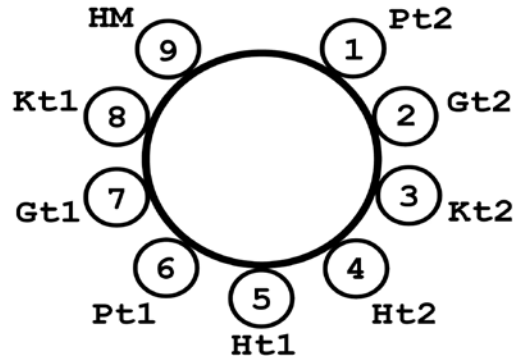
12AT7/ECC81/6679/6201, 5751

12AU7/ECC82/6680, 12BH7

12AX7/ECC83/6681/7025

12AY7/6072A, 12DW7/ECC832

TWIN TRIODE



PIN DIAGRAM: **9A**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

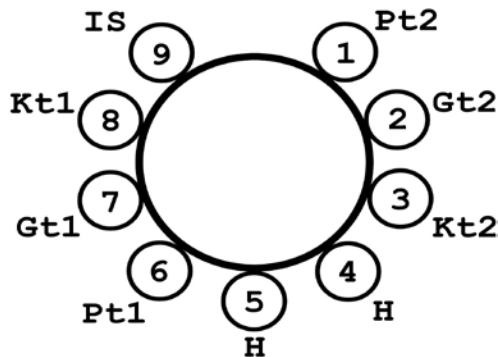
MODEL:

SERIAL NO:

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t2 - Plate						
2	t2 - Grid						
3	t2 - Cathode						
4	t2 - Heater						
5	t1 - Heater						
6	t1 - Plate						
7	t1 - Grid						
8	t1 - Cathode						
9	Heater common						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6DJ8/ECC88/6922 5BS8



PIN DIAGRAM: **9AJ**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

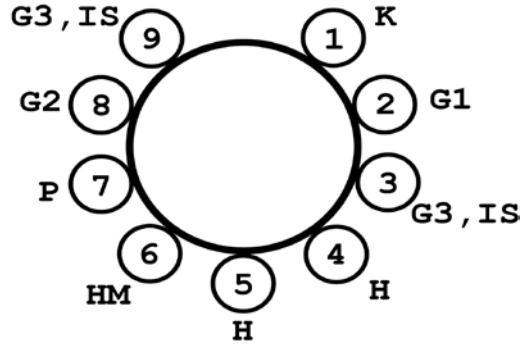
SERIAL NO:

MEDIUM-MU TWIN TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t2 - Plate						
2	t2 - Grid						
3	t2 - Cathode						
4	t2 - Heater						
5	t1 - Heater						
6	t1 - Plate						
7	t1 - Grid						
8	t1 - Cathode						
9	IS						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

12BY7A/12BV7/12DQ7



PIN DIAGRAM: **9BF**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

SHARP-CUTOFF PENTODE

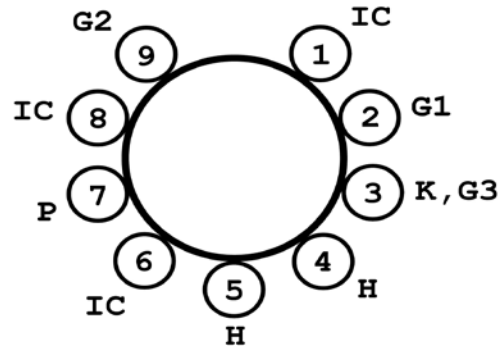
PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Cathode						
2	Control Grid						
3	Suppressor Grid, IS						
4	Heater						
5	Heater						
6	Heater common						
7	Plate						
8	Screen Grid						
9	Suppressor Grid, IS						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6BQ5 / EL84

7189

7189A - pins 1 & 2 connect; pins 6 & 9 connect



PIN DIAGRAM: **9CV**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

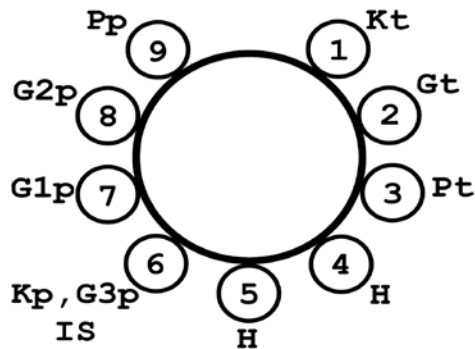
POWER PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	IC						
2	Control Grid						
3	Cathode, Suppressor Grid						
4	Heater						
5	Heater						
6	IC						
7	Plate						
8	IC						
9	Screen Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6CX8

MEDIUM-MU TRIODE, SHARP-CUTOFF PENTODE



PIN DIAGRAM: **9DX**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

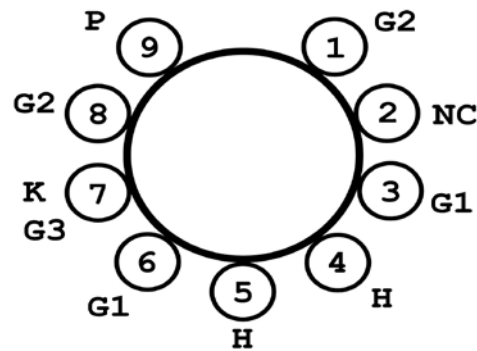
MODEL:

SERIAL NO:

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t - Cathode						
2	t - Control Grid						
3	t - Plate						
4	Heater						
5	Heater						
6	p - Cathode, Supp Grid, IS						
7	p - Control Grid						
8	p - Screen Grid						
9	p - Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6973



PIN DIAGRAM: **9EU**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

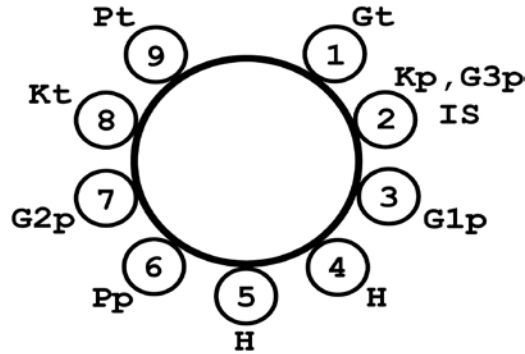
BEAM POWER TUBE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Screen Grid						
2	NC						
3	Control Grid						
4	Heater						
5	Heater						
6	Control Grid						
7	Cathode, Suppressor Grid						
8	Screen Grid						
9	Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6BM8/ECL82 50BM8/UCL82

HIGH-MU TRIODE, POWER PENTODE



PIN DIAGRAM: **9EX**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

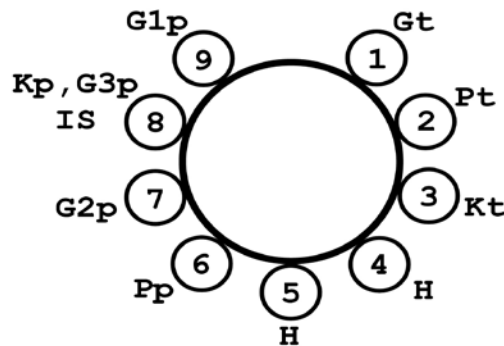
SERIAL NO:

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t - Grid						
2	p - Cathode, Supp Grid, IS						
3	p - Control Grid						
4	Heater						
5	Heater						
6	p - Plate						
7	p - Screen Grid						
8	t - Cathode						
9	t - Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

**6BR8A
6FV8A
5BR8/5FV8**

**MEDIUM-MU TRIODE,
SHARP-CUTOFF PENTODE**



PIN DIAGRAM: **9FA**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

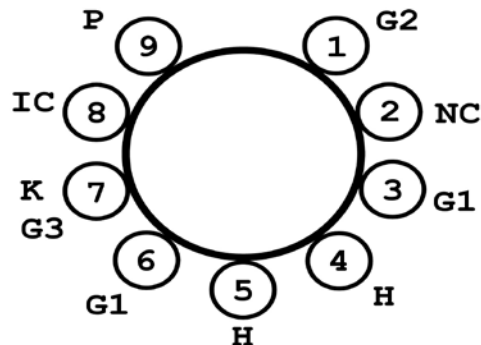
MODEL:

SERIAL NO:

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t - Grid						
2	t - Plate						
3	t - Cathode						
4	Heater						
5	Heater						
6	p - Plate						
7	p - Screen Grid						
8	p - Cathode, Supp Grid, IS						
9	p - Control Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6CZ5



PIN DIAGRAM: **9HN**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

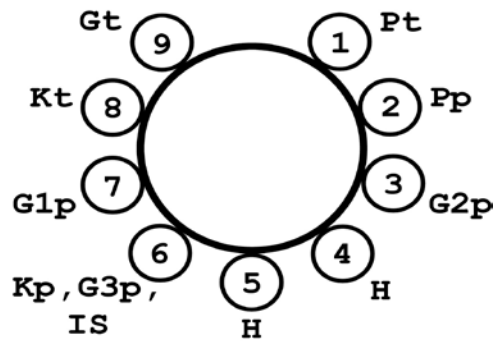
SERIAL NO:

BEAM POWER TUBE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Screen Grid						
2	NC						
3	Control Grid						
4	Heater						
5	Heater						
6	Control Grid						
7	Cathode, Suppressor Grid						
8	IC						
9	Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

7199



PIN DIAGRAM: **9JT**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

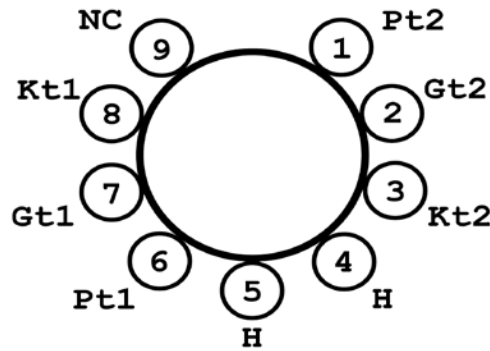
SERIAL NO:

**MEDIUM-MU TRIODE,
SHARP-CUTOFF PENTODE**

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t - Plate						
2	p - Plate						
3	p - Screen Grid						
4	Heater						
5	Heater						
6	p - Cathode, Supp Grid, IS						
7	p - Control Grid						
8	t - Cathode						
9	t - Grid						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6FQ7
6CG7



PIN DIAGRAM: **9LP**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

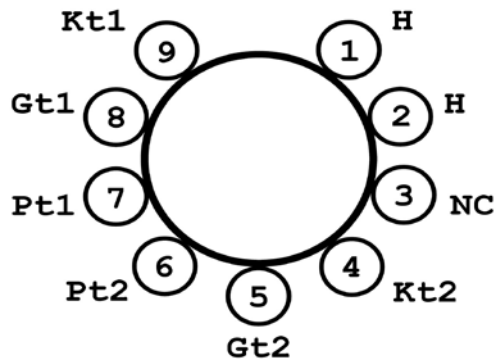
SERIAL NO:

MEDIUM-MU TWIN TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t2 - Plate						
2	t2 - Grid						
3	t2 - Cathode						
4	Heater						
5	Heater						
6	t1 - Plate						
7	t1 - Grid						
8	t1 - Cathode						
9	NC						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6EU7



PIN DIAGRAM: **9LS**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

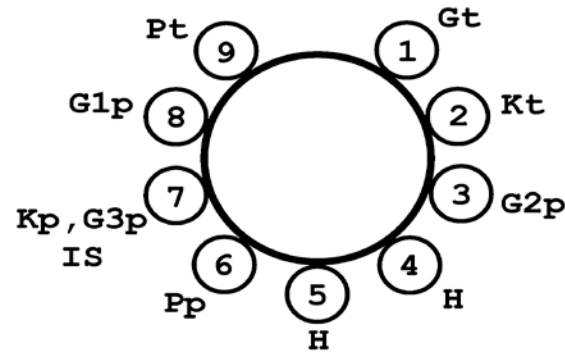
TWIN TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Heater						
2	Heater						
3	NC						
4	t2 - Cathode						
5	t2 - Grid						
6	t2 - Plate						
7	t1 - Plate						
8	t1 - Grid						
9	t1 - Cathode						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6GW8/ECL86

**HIGH-MU TRIODE,
SHARP-CUTOFF PENTODE**



PIN DIAGRAM: **9LZ**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

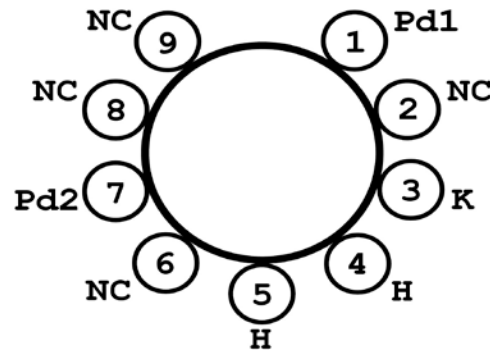
SERIAL NO:

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	t - Grid						
2	t - Cathode						
3	p - Screen Grid						
4	Heater						
5	Heater						
6	p - Plate						
7	p - Cathode, Supp Grid, IS						
8	p - Control Grid						
9	t - Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6CA4 / EZ81
6V4 / EZ80



PIN DIAGRAM: **9M**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

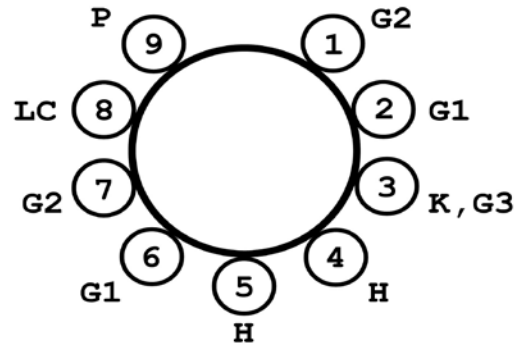
SERIAL NO:

FULL-WAVE RECTIFIER

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	d1 - Plate						
2	NC						
3	Cathode						
4	Heater						
5	Heater						
6	NC						
7	d2 - Plate						
8	NC						
9	NC						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

7868



PIN DIAGRAM: **9RW**

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WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

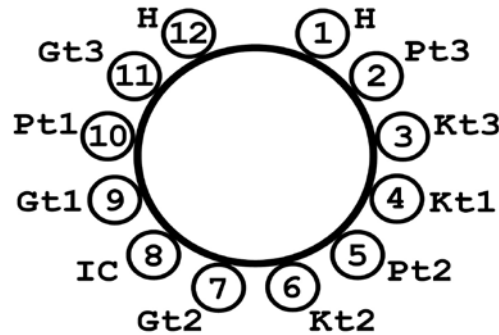
SERIAL NO:

POWER PENTODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Screen Grid						
2	Control Grid						
3	Cathode, Suppressor Grid						
4	Heater						
5	Heater						
6	Control Grid						
7	Screen Grid						
8	Limited Connection						
9	Plate						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.
 SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6C10



PIN DIAGRAM: **12BQ**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

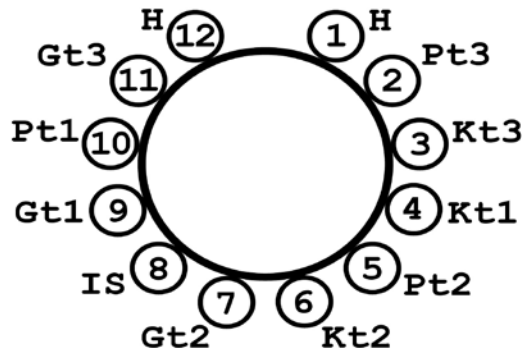
HIGH-MU TRIPLE TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Heater						
2	t3 - Plate						
3	t3 - Cathode						
4	t1 - Cathode						
5	t2 - Plate						
6	t2 - Cathode						
7	t2 - Grid						
8	IC						
9	t1 - Grid						
10	t1 - Plate						
11	t3 - Grid						
12	Heater						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc

6K11/6Q11



PIN DIAGRAM: **12BY**

[INDEX](#)

WIRING SIDE OF SOCKET IS SHOWN

AMPLIFIER MAKE:

MODEL:

SERIAL NO:

THREE-UNIT TRIODE

PIN	ELECTRODE	VOLTAGE READINGS					
		a:	b:	c:	d:	e:	f:
1	Heater						
2	t3 - Plate						
3	t3 - Cathode						
4	t1 - Cathode						
5	t2 - Plate						
6	t2 - Cathode						
7	t2 - Grid						
8	IS						
9	t1 - Grid						
10	t1 - Plate						
11	t3 - Grid						
12	Heater						

TERMINAL ABBREVIATIONS: H = Heater End (Unpolarized). HM = Heater Tap. IC = Do Not Use (Internal Connection). IS = Internal Shield (Electrostatic). K = Cathode. NC = No Internal Connection. S = Metal Shell.

SUBSCRIPTS FOR MULTI-UNIT TUBES: b = Beam Power Unit. d = Diode Unit. hp = Heptode Unit. hx = Hexode Unit. p = Pentode Unit. t = Triode Unit. tr = Tetrode Unit. 1, 2, 3, etc. = No. 1, No. 2, No. 3, etc