

Recommendations for

Replacement of radio tubes

by replacing older types by newer types

drawn from the handbook "**Tubes Recepteurs Philips**" by Philips-France, 1950

European Tubes :


(old) tube to replace	replacing tube (new)	Modifications to be made on the set
AB1	AB2	Socket.
	EB4	6,3 V for heating. Socket.
AB2	EB4	6,3 V for heating. Socket.
ABC1	EBC3	6,3 V for heating. Cathode resistor.
	EBF2	6,3 V for heating. Pentode as triode. Cathode resistor.
ABL1	EBL1	6,3 V for heating.
AC2	AF7	AF7 as triode. Cathode resistor.
	EBC3	6,3 V for heating. Diodes to ground.
	EF6	6,3 V for heating. EF6 as triode. Cathode resistor.
ACH1	AK1	Screen voltage. Adjust oscillator.
	AK2	Socket. Screen voltage. Adjust oscillator.
	EK2	6,3 V for heating. Socket. Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	6,3 V for heating. Socket. Screen voltage. Voltage anode triode. Adjust oscillator
AD1	4683	
AF2	AF3	Socket. Grid 3 to cathode. Displace anode- and grid connection.
	EF5	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF9	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
AF3	EF5	Heater 6,3 V.
	EF9	Heater 6,3 V.
AF7	EF6	Heater 6,3 V.
AH1	AF3	Use the AF3, if the AH1 operates as RF or IF amplifier. Screen voltage. Cathode resistor.
	EH2	6,3 V for heating. Screen voltage. Cathode resistor.
	ECH3	Use the hexode unit of the ECH3, if the AH1 operates as mixer tube. 6,3 V for heating. Screen voltage. Cathode resistor.
	EF5	Use the EF5, if the AH1 operates as RF or IF amplifier. 6,3 V for heating. Screen voltage. Cathode resistor.
	EF9	Use the EF9, if the AH1 operates as RF or IF amplifier. 6,3 V for heating. Screen voltage. Cathode resistor.

AK1	AK2	Socket.
	EK2	6,3 V for heating. Socket. Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	6,3 V for heating. Socket. Screen voltage, Voltage Anode Triode. Adjust oscillator.
AK2	EK2	6,3 V for heating. Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	Heater 6,3 V. Screen voltage, Voltage Anode Triode. Adjust oscillator.
AL1	AL2	Cathode resistor. Displace grid connection.
	AL4	Cathode resistor.
	4682	Cathode resistor. Displace grid connection.
	EL2	6,3 V for heating. Cathode resistor. Displace grid connection.
	EL3N	6,3 V for heating. Cathode resistor.
AL2	4682	
	AL4	Cathode resistor. Displace grid connection.
	EL2	6,3 V for heating. Cathode resistor.
	EL3N	6,3 V for heating. Cathode resistor. Displace grid connection.
AL3	AL4	
	EL2	6,3 V for heating. Cathode resistor. Displace grid connection.
	EL3N	6,3 V for heating.
AL4	EL2	6,3 V for heating. Cathode resistor. Displace grid connection.
	EL3N	6,3 V for heating.
AL5	EL5	6,3 V for heating.
	EL6	6,3 V for heating. Cathode resistor.
	EL39	6,3 V for heating. Socket. Displace anode connection.
	4654	6,3 V for heating. Displace anode connection.
AM1	EM4	6,3 V for heating. Additional resistor.
AX1	4652	
B2006	EL2	EL2 as triode. Socket. Match heater. Shunt for other Filaments. Displace grid connection.
B2038	EBC3	Socket. Diodes to ground. Match heater. Shunt for other Filaments. Cathode resistor. Displace grid connection.
	EF6	EF6 as triode. Socket. Match heater. Shunt for other Filaments. Grid 3 to Cathode. Displace grid connection.
B2041	EK2	Socket. Match heater. Shunt for other Filaments. Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	Socket. Match heater. Shunt for other Filaments. Cathode resistor. Screen voltage. Voltage anode Triode. Adjust oscillator.
B2042	EF5	Socket. Match heater. Shunt for other Filaments. Displace grid 3 to Cathode. Displace anode- and grid connection.
	EF6	Socket. Match heater. Shunt for other Filaments. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
	EF9	Socket. Match heater. Shunt for other Filaments. Grid 3 to Cathode. Displace anode- and grid connection
B2043	EL2	Socket. Match heater. Shunt for other Filaments. Cathode resistor. Displace grid connection.
B2044	EBF2	Socket. Match heater. Shunt for other Filaments. →

		↪ Cathode resistor. Displace anode- and grid connection.
B2045	EF5	Socket. Match heater, Shunt for other Filaments. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection
	EF9	Socket. Match heater, Shunt for other Filaments. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection
B2046	EF6	Socket. Match heater, Shunt for other Filaments. Grid 3 to Cathode. Displace anode- and grid connection.
B2052T	EF5	Socket. Match heater, Shunt for other Filaments. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
	EF6	Socket. Match heater, Shunt for other Filaments. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
	EF9	Socket. Match heater, Shunt for other Filaments. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
B2099	EF6	Socket. Match heater, Shunt for other Filaments. Cathode resistor. Grid 3 to Cathode. Displace grid connection.
C443	E443H	Cathode resistor. Match loudspeaker.
	AL1	Socket. Cathode resistor. Match loudspeaker.
	AL2	Socket. Cathode resistor. Displace grid connection. Match loudspeaker.
C443N	AL4	Socket. Cathode resistor. Match loudspeaker.
	EL2	6,3 V for heating. Socket. Cathode resistor. Displace grid connection. Match loudspeaker.
	EL3N	6,3 V for heating. Socket. Cathode resistor. Match loudspeaker.
CB1	CB2	Displace connections.
	EB4	Socket. Match heater.
CB2	EB4	Socket. Match heater.
CBC1	EBC3	Match heater.
CBL1	CBL6	Cathode resistor. Screen voltage.
CC2	EBC3	Match heater. Diodes to ground. Cathode resistor.
	EF6	EF6 as triode. Match heater. Cathode resistor.
CF1	EF6	Match heater.
CF2	EF5	Match heater.
	EF9	Match heater.
CF3	EF5	Match heater.
	EF9	Match heater
CF7	EF6	Match heater.
CH1	EH2	Match heater. Screen voltage. Cathode resistor.
	ECH3	Use the hexode unit of the ECH3, if the CH1 operates as mixer tube. Match heater. Screen voltage. Cathode resistor.
	EF5	Use the EF5, if the CH1 operates as RF or IF amplifier. Match heater. Screen voltage. Cathode resistor.
	EF9	Use the EF9, if the CH1 operates as RF or IF amplifier. Match heater. Screen voltage. Cathode resistor.

CK1	EK2	Match heater. Screen voltage. Cathode resistor. Adjust oscillator.
	ECH3	Match heater. Screen voltage, Voltage Anode Triode. Adjust oscillator.
CK3	EK2	Match heater. Screen voltage. Cathode resistor. Adjust oscillator.
	ECH3	Match heater. Screen voltage, Voltage Anode Triode. Adjust oscillator.
CL1	EL2	Match heater.
CL2	CL6	Match heater. Cathode resistor.
	CBL6	Match heater. Diodes to ground. Cathode resistor.
CL4	CL6	Match heater. Screen voltage.
	CBL6	Match heater. Diodes to ground. Screen voltage.
CL6	CBL6	Match heater. Diodes to ground.
CY1	CY2	Match heater. Diodes in parallel.
D404	E406N	Cathode resistor. Match loudspeaker.
	4613	Cathode resistor. Match loudspeaker.
	AD1	Socket. Cathode resistor. Match loudspeaker.
	4683	Socket. Cathode resistor. Match loudspeaker.
DB7-1	DB7-2	Displace connection of 2nd anode.
DG7-1	DG7-2	Displace connection of 2nd anode.
DN7-1	DN7-2	Displace connection of 2nd anode.
E406N	4613	
	AD1	Socket. Cathode resistor. Match loudspeaker.
	4683	Socket. Cathode resistor. Match loudspeaker.
E408N	F410	Match grid bias.
	E406N	Match grid bias. Match loudspeaker.
	4613	Match grid bias. Match loudspeaker.
E409N	4614	
	E415/0	
	E424/0	Cathode resistor.
	E438/0	Cathode resistor.
	AC2	Socket. Cathode resistor. Displace grid connection.
	AF7	Connect AF7 as triode. Socket. Cathode resistor. Displace grid connection.
	EBC3	6,3 V for heating. Socket. Diodes to ground. Displace grid connection.
EF6	6,3 V for heating. Connect EF6 as triode. Socket. Cathode resistor. Displace grid connection.	
E415	E424N	Cathode resistor.
	E438	Cathode resistor.
	AC2	Socket. Cathode resistor. Displace grid connection.
	AF7	Connect AF7 as triode. Socket. Cathode resistor. Displace grid connection.
	EBC3	6,3 V for heating. Socket. Diodes to ground. Displace grid connection.
	EF6	6,3 V for heating. Connect EF6 as triode. Socket. Cathode resistor. Displace grid connection.
E443H	AL1	Socket.
	AL2	Socket. Cathode resistor. Displace grid connection. →

	AL4	Socket. Cathode resistor.
	EL2	6,3 V for heating. Cathode resistor. Displace grid connection.
	EL3N	6,3 V for heating. Cathode resistor.
E443N	F443N	Cathode resistor.
	4650	Cathode resistor.
	EL39	6,3 V for heating. Socket. Cathode resistor. Match loudspeaker. Displace anode connection.
	4654	6,3 V for heating. Socket. Cathode resistor. Match loudspeaker. Displace anode connection.
E444	EBF2	6,3 V for heating. Socket. Cathode resistor. Connect one Diode to cathode. Displace anode- and grid connection
E444S	ABC1	Socket. Cathode resistor. Connect one Diode to cathode. Displace diode- and grid connection.
	EBC3	6,3 V for heating. Socket. Cathode resistor. Connect one Diode to cathode. Displace diode- and grid connection.
E445	E455	Cathode resistor.
	E447	
	AF2	
	AF3	Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF5	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF9	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
E446	4636	
	AF7	Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF6	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
E447	AF2	
	AF3	Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF5	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF9	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
E448	AK1	Screen voltage. Adjust oscillator.
	AK2	Socket. Screen voltage. Adjust oscillator.
	EK2	6,3 V for heating. Socket. Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	6,3 V for heating. Socket. Screen voltage. Voltage Anode Triode. Adjust oscillator.
E449	AF3	Socket. Screen voltage. Cathode resistor.
	EH2	6,3 V for heating. Screen voltage. Cathode resistor.
	EF5	6,3 V for heating. Socket. Screen voltage. Cathode resistor.
	EF9	6,3 V for heating. Socket. Screen voltage. Cathode resistor.
E424N	E438	Cathode resistor.
	AC2	Socket. Cathode resistor. Displace grid connection.
	AF7	Connect AF7 as triode. Socket. Displace grid connection. →

	 EBC3	6,3 V for heating. Socket. Cathode resistor. Diodes to ground. Displace grid connection.
	EF6	6,3 V for heating. Connect EF6 as triode. Socket. Displace grid connection.
E424R	AC2	Socket. Displace grid connection.
	AF7	Connect AF7 as triode. Socket. Cathode resistor. Displace grid connection.
	EBC3	6,3 V for heating. Socket. Cathode resistor. Diodes to ground. Displace grid connection.
	EF6	6,3 V for heating. Connect EF6 as triode. Socket. Cathode resistor. Displace grid connection.
E425	AC2	Socket. Cathode resistor. Displace grid connection.
	AF7	Connect AF7 as triode. Socket. Cathode resistor. Displace grid connection.
	EBC3	6,3 V for heating. Socket. Cathode resistor. Diodes to ground. Displace grid connection.
	EF6	6,3 V for heating. Connect EF6 as triode. Socket. Cathode resistor. Displace grid connection.
E438	AC2	Socket. Displace grid connection.
	AF7	Connect AF7 as triode. Socket. Cathode resistor. Displace grid connection.
	EBC3	6,3 V for heating. Socket. Diodes to ground. Displace grid connection.
	EF6	6,3 V for heating. Connect EF6 as triode. Socket. Cathode resistor. Displace grid connection.
E441	AK1	Socket. Cathode resistor. Screen voltage. Adjust oscillator.
	AK2	Socket. Cathode resistor. Screen voltage. Adjust oscillator.
	EK2	6,3 V for heating. Socket. Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	6,3 V for heating. Socket. Cathode resistor. Screen voltage,, Voltage Anode Triode. Adjust oscillator.
E442	4610	
	E452T	
	E446	Cathode resistor.
	AF7	Socket. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
	EF6	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
E442S	E452T	Cathode resistor.
	E446	
	AF7	Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF6	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
E452T	E446	
	AF7	Socket. Grid 3 to Cathode. Displace anode- and grid connection.
	EF6	6,3 V for heating. Socket. Grid 3 to Cathode. Displace anode- and grid connection.
E453	AL1	Socket. Cathode resistor. Match loudspeaker. →

	↪AL2	Socket. Cathode resistor. Match loudspeaker. Displace grid connection.
	AL4	Socket. Cathode resistor. Match loudspeaker.
	EL2	6,3 V for heating. Socket. Match loudspeaker. Displace grid connection.
	EL3N	6,3 V for heating. Socket. Cathode resistor. Match loudspeaker.
E455	E447	Cathode resistor.
	AF2	Cathode resistor.
	AF3	Socket. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
	EF5	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
	EF9	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode. Displace anode- and grid connection.
E463	AL1	Socket. Cathode resistor.
	AL2	Socket. Displace grid connection.
	AL4	Socket. Cathode resistor.
	EL2	6,3 V for heating. Socket. Cathode resistor. Displace grid connection.
	EL3N	6,3 V for heating. Socket. Cathode resistor.
E499	4657	
	AF7	Socket. Cathode resistor. Provide screen voltage. Displace grid connection.
	EF6	6,3 V for heating. Socket. Cathode resistor. Provide screen voltage. Grid 3 to Cathode. Displace grid connection.
E707	4624	
EAB1	EBC3	Use both diodes as normal, grid as 3rd diode, anode to cathode.
	EBF2	Use both diodes as normal, grid as 3rd diode, anode und g2 to cathode.
EB1	EB4	Socket.
EBC3	EBF2	Connect EBF2 as triode.
EBF1	EBF2	
EE1	EEP1	
EE50	EF50	Cathode resistor. Screen voltage.
	EF51	Socket. Cathode resistor. Screen voltage.
EF1	EF6	
EF2	EF5	
	EF9	
EF5	EF9	
EF8	EF5	
	EF9	
EF50	EF51	Socket. Cathode resistor.
EFF50	EFF51	Socket.
EFM1	EM4 + EF9	Additional socket. Additional resistor for EM4.
EH2	ECH3	Use the hexode unit of the ECH3, if the EH2 operates as mixer tube. Screen voltage. Cathode resistor.
	EF5	Use the EF5, if the EH2 operates as RF or IF amplifier Screen voltage. Cathode resistor. →

	EF9	Use the EF9, if the EH2 operates as RF or IF amplifier Screen voltage. Cathode resistor.
EK1	EK2	Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	Screen voltage, Voltage Anode Triode. Adjust oscillator.
EK2	ECH3	Cathode resistor. Screen voltage, Voltage Anode Triode. Adjust oscillator.
EK3	EK2	Cathode resistor. Screen voltage. Adjust oscillator.
	ECH3	Cathode resistor. Screen voltage, Voltage Anode Triode. Adjust oscillator.
EL1	EL2	Cathode resistor. Match loudspeaker.
	EL3N	Cathode resistor. Match loudspeaker. Displace grid connection.
EL2	EL3N	Cathode resistor. Displace grid connection.
EL5	EL6	Cathode resistor.
	4699	Cathode resistor.
	EL39	Socket. Cathode resistor. Displace anode connection.
	4654	Cathode resistor. Displace anode connection.
EL6	4699	
	EL39	Socket. Cathode resistor. Displace anode connection.
	4654	Match grid bias. Displace anode connection.
EM1	EM4	Additional resistor.
EZ1	EZ2	
EZ3N	EZ4N	
F215	E415	4 V for heating. Socket. Match grid bias.
	E424N	4 V for heating. Socket. Match grid bias.
	E438	4 V for heating. Socket.
F410	E408N	Match grid bias.
	E406N	Match grid bias. Match loudspeaker.
	4613	Match grid bias. Match loudspeaker.
F443N	4650	
	EL39	6,3 V for heating. Socket. Cathode resistor. Displace anode connection.
	4654	6,3 V for heating. Socket. Cathode resistor. Displace anode connection.
F460	AC2	Socket. Cathode resistor. Displace grid connection
	ABC1	Socket. Cathode resistor. Diodes to ground. Displace grid connection.
	AF7	Socket. AF7 as triode. Cathode resistor. Displace grid connection.
	EBC3	6,3 V for heating. Socket. Cathode resistor. Diodes to ground. Displace grid connection.
	EF6	6,3 V for heating. Socket. EF6 as triode. Cathode resistor. Displace grid connection.
F704	50	Socket.
MW22-1	MW22-5	6,3 V for heating.
	MW22-7	6,3 V for heating. Socket.
MW22-5	MW22-7	Socket.
MW31-3	MW31-6	
	MW31-7	Socket.
MW31-6	MW31-7	Socket.

R80	E406N	Cathode resistor. Match loudspeaker.
	4613	Cathode resistor. Match loudspeaker.
	AD1	Socket. Cathode resistor. Match loudspeaker.
	4683	Socket. Cathode resistor. Match loudspeaker.
373	506	Socket.
	AZ1	Socket.
505	AZ1	Socket.
506	AZ1	Socket.
506K	AZ1	Socket.
1561	AZ1	2 Tubes AZ1 parallel. Additional socket.
1801	506	
	AZ1	Socket.
1802	506	Socket.
	AZ1	Socket.
1805	506	
	AZ1	Socket.
1815	1561	2 Tubes 1561 parallel. Additional sockets.
	AZ1	3 Tubes AZ1 parallel. Additional sockets.
1817	1561	2 Tubes 1561 parallel. Additional sockets.
	AZ1	3 Tubes AZ1 parallel. Additional sockets.
1831	1832	1 or 2 Tubes 1832.
1875	1877	Socket.
1882	1883	
3539	3530	Socket.
	3533	Socket.
	3534	Socket.
4357	4687	Socket.
4376	4687	Socket.
4673	EF50	Socket. Cathode resistor. Displace grid connection.
	EF51	Socket. Cathode resistor. Displace grid connection.
4688	EL39	6,3 V for heating. Socket. Displace anode connection.
	4654	6,3 V for heating. Displace anode connection.
4689	EL39	Socket. Displace anode connection.
	4654	Displace anode connection.

"American" Tubes :

(old) tube to replace	replacing tube (new)	Modifications to be made on the set
2A3	AD1	4 V for heating. Socket. Cathode resistor.
	4683	4 V for heating. Socket. Cathode resistor.
2A5	47	Socket.
	6F6	6,3 V for heating. Socket.
	6V6	6,3 V for heating. Socket. Cathode resistor. Match loudspeaker.
	EL3N	6,3 V for heating. Socket. Cathode resistor.
2A6	75	6,3 V for heating.
	6Q7	6,3 V for heating. Socket.
2A7	6A7	6,3 V for heating.
	6A8	6,3 V for heating. Socket
	6E8	6,3 V for heating. Socket, Cathode resistor. Screen voltage, Voltage Anode Triode. Adjust oscillator.
	ECH3	6,3 V for heating. Socket. Cathode resistor. Screen voltage, Voltage Anode Triode. Adjust oscillator.
2B7	6B7	6,3 V for heating.
	6B8	6,3 V for heating. Socket.
	6H8	6,3 V for heating. Socket.
	EBF2	6,3 V for heating. Socket.
5Y3G	1882	Socket.
	5Y3GB	
	1883	Socket.
5Y4S	5Y3GB	
	1883	Socket.
5Z4	5Y3GB	
	1883	Socket.
6A3	6A5	Socket.
6A6	6N7	Socket.
6A7	6A8	Socket.
	6E8	Socket. Cathode resistor. Screen voltage. Voltage Anode Triode. Adjust oscillator
	ECH3	Socket. Cathode resistor. Screen voltage. Voltage Anode Triode. Adjust oscillator
6A8	6E8	Cathode resistor. Screen voltage. Voltage Anode Triode. Adjust oscillator
	ECH3	Socket. Cathode resistor. Screen voltage. Voltage Anode Triode. Adjust oscillator.
6AF7	EM4	Socket.
6B6	6Q7	
6B7	6B8	Socket.
	6H8	Socket.
	EBF2	Socket. Screen voltage.
6B8	6H8	Socket.
	EBF2	Socket. Screen voltage.
6C5	6J5	
	EF6	Socket. Connect EF6 as triode. Cathode resistor. Displace grid connection.

6C6	6J7	Socket.
	EF6	Socket. Cathode resistor.
6D6	6K7	Socket.
	6M7	Socket. Cathode resistor.
	EF9	Socket.
6E5	6G5	
	6AF7	Socket. Additional resistor.
	EM4	Socket. Additional resistor.
6E8	ECH3	Socket.
6F5	6Q7	Cathode resistor. Diodes to ground. Displace anode connection.
6F6	6V6	Cathode resistor.
	6M6	Cathode resistor.
	EL3N	Socket. Cathode resistor.
6F7	ECF1	Socket.
6G5	6AF7	Socket. Additional resistor.
	EM4	Socket. Additional resistor.
6H6	EB4	Socket.
6H8	EBF2	Socket. Cathode resistor.
6J5	EF6	Socket. Connect EF6 as triode. Cathode resistor. Displace grid connection.
6J7	EF6	Socket. Cathode resistor.
6J8	6E8	Cathode resistor. Screen voltage, Voltage Anode Triode. Adjust oscillator
	ECH3	Socket. Cathode resistor. Screen voltage, Voltage Anode Triode. Adjust oscillator
6K7	6M7	
	EF9	Socket. Cathode resistor.
6L7	6K7	Use the 6K7, if the 6L7 operates as RF or IF amplifier. Screen voltage.
	6M7	Use the 6M7, if the 6L7 operates as RF or IF amplifier. Screen voltage.
	EF9	Use the EF9, if the 6L7 operates as RF or IF amplifier. Socket. Cathode resistor. Screen voltage.
	6E8	Use the hexode unit of the 6E8, if the 6L7 operates as mixer tube. Cathode resistor. Screen voltage.
	ECH3	Use the hexode unit of the ECH3, if the 6L7 operates as mixer tube. Cathode resistor. Screen voltage. Socket.
6M6	6V6	Cathode resistor.
	EL3N	Socket.
6TH8	6E8	Cathode resistor. Screen voltage. Voltage Anode Triode. Adjust oscillator.
	ECH3	Socket. Cathode resistor. Screen voltage. Voltage Anode Triode. Adjust oscillator
24	77	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode.
	6C6	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode.
	6J7	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode
	EF6	6,3 V for heating. Socket. Grid 3 to Cathode.
25A6	25L6	Cathode resistor. Match loudspeaker.
	CBL6	Socket. Cathode resistor. Match loudspeaker. Diodes to ground. Shunt for heating. Displace grid connection.

25Z5	25Z6	Socket.
	CY2	Socket. Match heater (Shunt).
27	6C5	6,3 V for heating. Socket. Cathode resistor.
	6J5	6.3 V for heating. Socket. Cathode resistor.
	EF6	6,3 V for heating. EF6 as triode. Socket. Cathode resistor. Displace grid connection.
35	6K7	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode.
	6M7	6,3 V for heating. Socket. Cathode resistor. Grid 3 to Cathode.
	EF9	6,3 V for heating. Socket. Grid 3 to Cathode.
37	6C5	Socket. Cathode resistor.
	6J5	Socket. Cathode resistor.
	EF6	Socket. EF6 as triode. Cathode resistor. Displace grid connection.
42	6F6	Socket.
	6V6	Socket. Cathode resistor.
	6M6	Socket. Cathode resistor.
	EL3N	Socket. Cathode resistor.
43	25A6	Socket. Cathode resistor.
	25L6	Socket. Cathode resistor. Match loudspeaker.
	CBL6	Socket. Cathode resistor. Match loudspeaker. Diodes to ground. Match heater (Shunt). Displace grid connection.
45	E406N	4 V for heating. Socket. Match grid bias. Match loudspeaker.
	4613	4 V for heating. Socket. Match grid bias. Match loudspeaker.
	AD1	4 V for heating. Socket. Match grid bias. Match loudspeaker.
	4683	4 V for heating. Socket. Match grid bias. Match loudspeaker.
47	6F6	6,3 V for heating. Socket.
	6V6	6,3 V for heating. Socket. Match grid bias.
	6M6	6,3 V for heating. Socket. Match grid bias.
	EL3N	6,3 V for heating. Socket. Match grid bias.
55	85	6,3 V for heating.
	EBC3	6,3 V for heating. Socket. Cathode resistor.
56	6C5	6,3 V for heating. Socket. Cathode resistor.
	6J5	6,3 V for heating. Socket. Cathode resistor.
	EF6	6,3 V for heating. Connect EF6 as triode. Socket. Cathode resistor. Displace grid connection.
57	77	6,3 V for heating.
	6C6	6,3 V for heating.
	6J7	6,3 V for heating. Socket.
	EF6	6,3 V for heating. Socket. Cathode resistor.
58	78	6,3 V for heating.
	6D6	6,3 V for heating.
	6K7	6,3 V for heating. Socket.
	6M7	6,3 V for heating. Socket. Cathode resistor.
	EF9	6,3 V for heating. Socket.
75	6Q7	Socket.
76	6C5	Socket. Cathode resistor.
	6J5	Socket. Cathode resistor.
	EF6	Connect EF6 as triode. Socket. Cathode resistor. Displace grid connection.
77	6C6	→ → →

	↩ 6J7	Socket.
	EF6	Socket. Cathode resistor.
78	6D6	
	6K7	Socket.
	6M7	Socket.
	EF9	Socket. Cathode resistor.
80	5Y3G	Socket.
	5Y3GB	Socket.
	1882	Socket.
	1883	Socket.
83	AX50	4 V for heating. Socket.
85	EBC3	Socket. Cathode resistor.

OCR processing - **Konstantin Chachin** for portal Radiomuseum.org
Translated by **Jacob Roschy**