

SECTION 6

PARTS LIST

20V-1 TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
B-101	Blower Motor	BLOWER: Direct connected MOTOR: AC, 1/6 hp, 230 v, 60 cps, single phase, 1140 RPM	009 1021 00 230 0112 00
C-101	Crystal frequency trimmer for Y-101	CAPACITOR: Variable, 7.5 mmf to 102.7 mmf	922 0028 00
C-102	Crystal frequency trimmer for Y-102	CAPACITOR: Variable, 7.5 mmf to 102.7 mmf	922 0028 00
C-103	Feedback capacitor for V-101	CAPACITOR: Mica, 1000 mmf p/m 20%, 3500 WVDC	914 0019 00
C-104	Cathode by-pass capacitor for V-101	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-105	Screen by-pass for V-101	CAPACITOR: Mica, 150 mmf p/m 20%, 500 WVDC	935 0114 00
C-106	Coupling capacitor V-101 to V-102	CAPACITOR: Mica, 5100 mmf p/m 5%, 500 WVDC	935 2105 00
C-107		Not Used	
C-108		Not Used	
C-109	Multimeter by-pass, Buffer grid, 2.5 ma position	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-110	Plate decoupling capacitor for V-101	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-111	Cathode by-pass capacitor for V-102	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-112	Screen by-pass capacitor for V-102	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-113	Plate tank padding capacitor for V-102	CAPACITOR: Mica, 100 mmf p/m 10%, 500 WVDC (p/o T-102)	912 0495 00
1092			6-1

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
C-114 and C-115	Plate tank trimmer capacitor for V-102	CAPACITOR: Double, Variable, 5-10 mmf min to 100-105 mmf max (p/o T-102)	922 4800
C-116	Compensating capaci- tor grid to cathode of V-103	CAPACITOR: Ceramic, 20 mmf p/m 5%, 500 WV	916 4420
C-117		Not Used	
C-118		Not Used	
C-119	Coupling capacitor V-102 to V-103	CAPACITOR: Mica, 5100 mmf p/m 5%, 500 WVDC	935 2105
C-120	Plate decoupling capacitor for V-102	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103
C-121	Multimeter by-pass capacitor for 807 Grid, 25 ma posi- tion	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103
C-122	Cathode by-pass capacitor for V-103	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103
C-123	Screen by-pass capacitor for V-103	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103
C-124	Plate tank padding capacitor for V-103	CAPACITOR: Mica, 100 mmf p/m 10%, 500 WVDC (p/o T-103)	912 0495
C-125 and C-126	Plate tank trimmer capacitor for V-103	CAPACITOR: Double, Variable, 5-10 mmf min to 100-105 mmf max (p/o T-103)	922 4800
C-127		Not Used	
C-128		Not Used	
C-129	Plate decoupling capacitor for V-103	CAPACITOR: Mica, 1000 mmf p/m 20%, 3500 WVDC	914 0019
C-130	Decoupling capacitor for low voltage stages	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103
6-2			1093

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
C-131	Neutralizing condenser, for high frequency service only	CAPACITOR: 10 mmf p/m 10%, 17,000 WV	919 0062 00
C-132	Coupling capacitor, V-103 to V-104 and V-105	CAPACITOR: Mica, 1000 mmf p/m 20%, 3500 WVDC	914 0019 00
C-133	Meter by-pass capacitor, PA Grid, 25 ma position	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-134	Filament by-pass capacitor for V-104	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-135	Filament by-pass capacitor for V-105	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-136	Filament by-pass capacitor for V-104	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-137	Filament by-pass capacitor for V-105	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-138	Screen by-pass capacitor for V-104	CAPACITOR: 67 mmf p/m 5%, 5000 WV	913 0090 00
C-139	Screen by-pass capacitor for V-105	CAPACITOR: 67 mmf p/m 5%, 5000 WV	913 0090 00
C-140	By-pass capacitor for PA plate current meter M-102	CAPACITOR: Mica, 5100 mmf p/m 5%, 500 WVDC	935 2105 00
C-141	Plate decoupling capacitor for V-104 and V-105	CAPACITOR: Ceramic, 500 mmf plus 50%, minus 20%, 20,000 WVDC	913 1101 00
C-142	Coupling capacitor V-104 and V-105 to output network	CAPACITOR: Mica, .0002 mmf p/m 5%, 5000 WVDC	906 3202 00
C-143	Screen by-pass capacitor for V-104	CAPACITOR: 67 mmf p/m 5%, 5000 WV	913 0090 00
1094			6-3

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUM
C-144	Screen by-pass capacitor for V-105	CAPACITOR: 67 mmf p/m 5%, 5000 WV	913 0090
*C-145	Padder capacitor for PA plate tank, 550-590 frequency	CAPACITOR: 400 mmf	924 1021
*C-145	Padder capacitor for PA plate tank, 600-790 frequency	CAPACITOR: Same as for 550-590 KC	924 1021
*C-145	Padder capacitor for PA plate tank, 800-990 frequency	CAPACITOR: Same as for 550-590 KC	924 1021
*C-145	Padder capacitor for PA plate tank, 1000-1290 frequency	CAPACITOR: Same as for 550-590 KC	924 1021
C-146	PA Plate tuning capacitor	CAPACITOR: Variable, 60 mmf min to 188 mmf max	920 0075
C-147	PA Plate loading capacitor	CAPACITOR: Variable, 465 mmf	920 3510
*C-148	Padder capacitor, PA output network, 550-590 frequency	CAPACITOR: Mica, 800 mmf, 5000 WV	906 3801
*C-148	Padder capacitor, PA output network, 600-790 frequency	CAPACITOR: Same as for 550-590 KC	906 3801
*C-148	Padder capacitor, PA output network, 800-990 frequency	CAPACITOR: Same as for 550-590 KC	906 3801
*C-148	Padder capacitor, PA output network, 1000-1290 frequency	CAPACITOR: Same as for 550-590 KC	906 3801
*C-148	Padder capacitor, PA output network, 1300-1600 frequency	CAPACITOR: Mica, 400 mmf 5000 WV	906 3401
* NOTE:	Values Depend upon Frequency of Operation.		
6-4			1095

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
*C-149	Padder capacitor, PA output network, 550-590 frequency	CAPACITOR: Mica, 2000 mmf p/m 5%, 6000 TV	906 2208 10
*C-149	Padder capacitor, PA output network, 600-790 frequency	CAPACITOR: Same as for 550-590 KC	906 2208 10
*C-149	Padder capacitor, PA output network, 800-990 frequency	CAPACITOR: Mica, 800 mmf p/m 5%, 5000 WV	906 3801 10
*C-149	Padder capacitor, PA output network, 1000-1290 frequency	CAPACITOR: Same as for 800-990 KC	906 3801 10
*C-149	Padder capacitor, PA output network, 1300-1600 frequency	CAPACITOR: Mica, 400 mmf p/m 5%, 5000 WV	906 3401 10
*C-150	Padder capacitor, PA output network, 550-590 frequency	CAPACITOR: Mica, 800 mmf p/m 5%, 5000 WV	906 3801 10
*C-150	Padder capacitor, PA output network, 600-790 frequency	CAPACITOR: Same as for 550-590 KC	906 3801 10
*C-150	Padder capacitor, PA output network, 800-990 frequency	CAPACITOR: Same as for 550-590 KC	906 3801 10
*C-150	Padder capacitor, PA output network, 1000-1290 frequency	CAPACITOR: Mica, 400 mmf p/m 5%, 5000 WV	906 3401 10
*C-150	Padder capacitor, PA output network, 1300-1600 frequency	CAPACITOR: Same as 400 mmf 1000-1290 KC	906 3401 10
*C-151	Padder capacitor, PA output network, 550-590 frequency	CAPACITOR: Mica, 800 mmf p/m 5%, 5000 WV	906 3801 10
* NOTE:	Values Depend upon Frequency of Operation.		
1096			6-5

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
*C-151	Padder capacitor, PA output network, 600-790 frequency	CAPACITOR: Mica, 400 mmf p/m 5%, 5000 WV	906 3401 10
*C-151	Padder capacitor, PA output network, 800-990 frequency	CAPACITOR: Mica, 800 mmf p/m 5%, 5000 WV	906 3801 10
*C-151	Padder capacitor, PA output network, 1000-1290 frequency	CAPACITOR: Mica, 400 mmf p/m 5%, 5000 WV	906 3401 10
C-152	Plate decoupling capacitor for V-104 and V-105	CAPACITOR: Ceramic, 500 mmf plus 50%, minus 20%, 20,000 WVDC	913 1101 00
C-153	By-pass capacitor for multimeter, M-104	CAPACITOR: Mica, 5100 mmf p/m 5%, 500 WVDC	935 2105 00
C-154	Feedback insertion, V-106	CAPACITOR: Mica, 3300 mmf p/m 20%, 1200 WVDC	936 0283 00
C-155	Feedback insertion for V-107	CAPACITOR: Mica, 3300 mmf p/m 20%, 1200 WVDC	936 0283 00
C-156	Coupling capacitor, V-106 to V-108	CAPACITOR: Paper, .05 mf p/m 10%, 600 WVDC	961 5015 00
C-157	Coupling capacitor, V-107 to V-109	CAPACITOR: Paper, .05 mf p/m 10%, 600 WVDC	961 5015 00
C-158	Coupling capacitor, V-108 to V-110	CAPACITOR: Paper, 1 mf plus 40%, minus 15%, 600 WVDC	961 5116 00
C-159	Coupling capacitor, V-109 to V-111	CAPACITOR: Paper, 1 mf plus 40%, minus 15%, 600 WVDC	961 5116 00
C-160	Filament by-pass capacitor for V-110 and V-111	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
* NOTE:	Values Depend upon Frequency of Operation		
6-6			1097

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
C-161	Filament by-pass capacitor for V-110 and V-111	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-162	Plate decoupling capacitor for V-106 and V-107	CAPACITOR: Paper, 2 mf p/m 10%, 600 WVDC	930 0046 00
C-163	D-C blocking capacitor for T-105	CAPACITOR: Paper, 4 mf p/m 20%, 4000 WVDC	930 0045 00
C-164	By-pass capacitor PA plate voltage meter	CAPACITOR: Mica, 5100 mmf p/m 5%, 500 WVDC	935 2105 00
C-165	Filament by-pass capacitor for V-103	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-166	Filament by-pass capacitor for V-103	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
C-167	Filter capacitor, bias supply filter	CAPACITOR: Paper, 8 mf p/m 20%, 600 WVDC	956 2014 00
C-168	Filter capacitor, bias supply filter	CAPACITOR: Paper, 8 mf p/m 20%, 600 WVDC	956 2014 00
C-169	Tunes L-1114 in H.V. filter to ripple frequency	CAPACITOR: Paper, .15 mf p/m 10%, 5000 WVDC	930 0035 00
C-170	Filter capacitor, high voltage supply filter	CAPACITOR: Paper, 4 mf p/m 20%, 4000 WVDC	930 0045 00
C-171	By-pass capacitor for modulator plate current meter, M-105	CAPACITOR: Mica, 5100 mmf p/m 5%, 500 WVDC	935 2105 00
C-172	Filter capacitor, low voltage supply filter	CAPACITOR: Paper, 8 mf p/m 20%, 600 WVDC	956 2014 00
1098			6-7

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUM
C-173	Filter capacitor, low voltage supply filter	CAPACITOR: Paper, 8 mf p/m 20%, 600 WVDC	956 2014
C-174	Part of feedback network, plate of V-110 to grid of V-106	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
C-175	Part of feedback network, plate of V-110 to grid of V-106	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
C-176	Part of feedback network, plate of V-110 to grid of V-106	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
C-177	Part of feedback network, plate of V-110 to grid of V-106	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
C-178	Part of feedback network, plate of V-111 to grid of V-107	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
C-179	Part of feedback network, plate of V-111 to grid of V-107	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
C-180	Part of feedback network, plate of V-111 to grid of V-107	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
C-181	Part of feedback network, plate of V-111 to grid of V-107	CAPACITOR: Mica, 47 mmf p/m 20%, 2500 WVDC	936 0162
6-8			1099

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
C-182		Not Used	
C-183		Not Used	
C-184	Filter capacitor, high voltage supply filter	CAPACITOR: Paper, 4 mf p/m 20%, 4000 WVDC	930 0045 00
C-185	Coupling capacitor to frequency moni- tor jack, J-104	CAPACITOR: Mica, .01 mf p/m 5%, 500 WV	910 1103 10
E-100	Primary power input terminal board	BOARD: 3 terminals	306 0069 00
E-101	Terminal board con- necting modulator chassis to power supplies	BOARD: 11 terminals	367 5110 00
E-102	Terminal board con- necting r-f chassis to power supplies	BOARD: 11 terminals	367 5110 00
E-103	Audio input terminal board	BOARD: 3 terminals	367 4030 00
E-104	Audio monitoring output terminal board	BOARD: 2 terminals	367 4020 00
F-101	One Fourth amp fuse in primary of bias supply transformer T-106	FUSE: Cartridge, 1 amp 250 v	264 4050 00
F-102	One amp fuse in pri- mary of high volt- age rectifier fil- ament transformer, T-107	FUSE: Cartridge, 1 amp 250 v	264 4050 00
F-103	Three amp fuse in primary of fila- ment transformer, T-109	FUSE: Cartridge, 3 amp 250 v	264 4080 00
1100			6-9

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
F-104	One amp fuse in primary of low voltage supply transformer	FUSE: Cartridge, 1 amp 250 v	264 4050 00
I-101	Filaments at operating temperature indicator	BULB: Candelabra base, 230-250 v, 10 w	262 0169 00
I-102	Lumiline meter panel lamp, illuminates meter panel	BULB: Lumiline, disc base, 220 VAC RMS, 40 w	262 0170 00
I-103	Lumiline meter panel lamp, illuminates meter panel	BULB: Lumiline, disc base, 220 VAC RMS, 40 w	262 0170 00
I-104	Plate ON lamp, indicates when high and low voltage is on	BULB: Candelabra base, 230-250 v, 10 w	262 0169 00
J-100	Jack for modulation monitor	RECEPTACLE: Chassis mtg	357 9005 00
J-101	Modulator unit connector	CONNECTOR: Four prong socket for chassis mtg	364 2040 00
J-102	Modulator unit connector	CONNECTOR: Chassis mtg socket	366 2080 00
J-103	RF chassis connector	CONNECTOR: Chassis mtg socket	366 2080 00
J-104	Frequency monitor jack	RECEPTACLE: Chassis mtg	357 9005 00
J-105	Socket for F-101	HOLDER: Fuse	265 1002
J-106	Socket for F-102	HOLDER: Fuse	265 1002
J-107	Socket for F-103	HOLDER: Fuse	265 1002
J-108	Socket for F-104	HOLDER: Fuse	265 1002
K-101	Thermal time delay relay provides adequate filament warm-up period	RELAY: 3 amp 150 v DC, 3 amp 250 v AC contacts	402 0211
6-10			1101

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
K-102	Plate relay, shunts thermal element in K-101 with resistor, shorts K-101 relay contacts, and completes circuit from S-107 to T-108 and T-110	RELAY: 25 amp 600 v contacts, 220 v coil	401 1147 00 401 1261-0000
**L-101		Not Used	
L-102		COIL: (p/o T-102)	
L-102A	Part of plate tank coil for V-102	Section of L-102	
L-102B	Part of plate tank coil for V-102	Section of L-102	
**L-103		Not Used	
L-104		COIL: (p/o T-103)	
L-104A	Part of plate tank coil for V-103	Section of L-104	
L-104B	Part of plate tank coil for V-103	Section of L-104	
**L-105		Not Used	
L-106	RF choke in B plus lead to V-103	COIL: RF 300 ma	240 5800 00
L-107	RF choke in B plus lead to V-104 and V-105	COIL:	571 0460 00
*L-108	PA plate tuning coil, 550-590 frequency	INDUCTOR: RF fixed tank, 150 mh	980 0041 00
*L-108	PA plate tuning coil, 600-790 frequency	INDUCTOR: RF fixed tank, 150 mh	980 0041 00
* NOTE:	Values Depend on Frequency of Operation.		
** NOTE:	For high Frequency broadcast only.		
1102			6-11

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
*L-108	PA plate tuning coil, 800-990 frequency	INDUCTOR: RF fixed tank, 81 mh	980 0040 00
*L-108	PA plate tuning coil, 1000-1290 frequency	INDUCTOR: RF fixed tank, 81 mh	980 0040 00
*L-108	PA plate tuning coil, 1300-1600 frequency	INDUCTOR: RF fixed tank, 81 mh	980 0040 00
L-109	PA plate loading coil	COIL:	
L-110	Static drain choke, feeds modulation monitor	COIL: 56 turns, #22 copper wire	572 0700 30
L-111	Modulation reactor	REACTOR: 7500 TV RMS	678 0400 00
L-112	Filter choke, bias voltage supply filter	REACTOR: .080 amp DC	668 0004 00
L-113	Filter choke, bias voltage supply filter	REACTOR: .080 amp DC	668 0004 00
L-114	Filter choke, high voltage supply filter	REACTOR: 9000 TV RMS 10 MY 502	678 0386 00
L-115	Filter choke, high voltage supply filter	REACTOR: 9000 TV RMS Freed	678 0386 00
L-116	Filter choke, low voltage supply filter	REACTOR: 2500 TV RMS	678 0384 00
L-117	Filter choke, low voltage supply filter	REACTOR: 2500 TV RMS	678 0384 00
* NOTE:	Values Depend upon Frequency of Operation.		
6-12			1103

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
M-101	Meters rf line current	METER: 6 RF amp	451 0082 00
M-102	Meters PA plate current	MILLIAMMETER: DC, 0-800 ma	450 0095 00
M-103	Meters PA plate voltage	METER: 0-1 ma, 0-4000 v DC (includes R-169)	458 0196 00
M-104	Multimeter	MILLIAMMETER: 0-1 ma DC	458 0170 00
M-105	Meters modulator plate current	MILLIAMMETER: 0-800 ma DC	450 0095 00
P-100	Plug for modulation monitor	CONNECTOR: RF concentric cable	357 9014 00
P-101	Connects from J-102 to M-104 and M-105	CONNECTOR: Cable connector with cover	363 8042 00
P-102	Connects from J-103 to J-104	CONNECTOR: Cable connector with cover	365 8080 00
P-103	Connects from J-104 to J-103	CONNECTOR: Cable connector with cover	365 8080 00
P-104	Plug for frequency monitor	CONNECTOR: RF concentric cable	357 9014 00
R-101	Grid resistor for V-101	RESISTOR: .1 megohm p/m 10%, 1/2 w	745 1170 00
R-102	Cathode resistor for V-101	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-103	Plate load resistor, for V-101	RESISTOR: 10,000 ohm p/m 10%, 1 w (p/o T-101)	745 3128 00
R-104	Screen voltage dropping resistor for V-101	RESISTOR: 82,000 ohm p/m 10%, 1/2 w	745 1167 00
R-105	Voltage dropping resistor, V-101	RESISTOR: .12 megohm p/m 10%, 2 w	745 5174 00
1104			6-13

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-106	Voltage dropping resistor, V-101	RESISTOR: .12 megohm p/m 10%, 2 w	745 5174 00
R-107	Grid resistor, V-102	RESISTOR: .1 megohm p/m 10%, 1/2 w	745 1170 00
R-108	Multimeter shunt resistor, 1st Buffer Grid, 2.5 ma position	RESISTOR: 3900 ohm p/m 10%, 1/2 w	745 1111 00
R-109	Voltage divided feeds frequency monitor	RESISTOR: 56,000 ohm p/m 10%, 2 w	745 5034 00
R-110	Cathode resistor for V-102	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-111	Voltage dividing resistor for V-102	RESISTOR: 39,000 ohm p/m 10%, 1 w	745 3153 00
R-112	Screen voltage dropping resistor, V-102	RESISTOR: 33,000 ohm p/m 10%, 1 w	745 3149 00
R-113	Voltage dropping resistor, V-102	RESISTOR: 25 ohm p/m 10%, 10 w	710 1254 20
R-114	Grid resistor, V-103	RESISTOR: 15,000 ohm p/m 10%, 1 w	745 3135 00
R-115	Cathode resistor, V-103	RESISTOR: 22 ohm p/m 10%, 2 w	745 5016 00
R-116	Stabilizing resistor, V-103	RESISTOR: 47 ohm p/m 10%, 1/2 w	745 1030 00
R-117	Screen voltage dividing resistor, V-103	RESISTOR: 22,000 ohm p/m 10%, 2 w	745 5142 00
R-118		Not Used	
R-119	Grid resistor, V-104 and V-105	RESISTOR: 15 ohm p/m 20%, 25 w	710 3154 20
6-14			1558

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-120	Audio hum control B	RESISTOR: 50 ohm p/m 10%, 25 w	504 9561 002
R-121	Audio voltage source for audio monitor	RESISTOR: 12.6 ohm p/m 20%, 20 w	710 0044 00
R-122	Screen dropping resistor, V-104 and V-105	RESISTOR: 2000 ohm p/m 5%, 25 w	710 3241 00
R-123	Voltage dividing resistor for bias supply	RESISTOR: 15,000 ohm p/m 10%, 1 w	745 3135 00
R-124	Part of 807 Grid resistance	RESISTOR: 4700 ohm p/m 10%, 1 w	745 3114 00
R-125	Shunt resistor for Multimeter, 807 Grid, 25 ma position	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-126	Shunt resistor for Multimeter, PA Grid, 25 ma position	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-127	Multimeter series resistor	RESISTOR: 5100 ohm p/m 5%, 1/2 w	745 1116 00
R-128	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
R-129	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
R-130	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
R-131	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
1559			6-15

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-120	Audio hum control B	RESISTOR: 50 ohm p/m 10%, 25 w	504 9561 002
R-121	Audio voltage source for audio monitor	RESISTOR: 12.6 ohm p/m 20%, 20 w	710 0044 00
R-122	Screen dropping resistor, V-104 and V-105	RESISTOR: 2000 ohm p/m 5%, 25 w	710 3241 00
R-123	Voltage dividing resistor for bias supply	RESISTOR: 15,000 ohm p/m 10%, 1 w	745 3135 00
R-124	Part of 807 Grid resistance	RESISTOR: 4700 ohm p/m 10%, 1 w	745 3114 00
R-125	Shunt resistor for Multimeter, 807 Grid, 25 ma position	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-126	Shunt resistor for Multimeter, PA Grid, 25 ma position	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-127	Multimeter series resistor	RESISTOR: 5100 ohm p/m 5%, 1/2 w	745 1116 00
R-128	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
R-129	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
R-130	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
R-131	Part of T-pad for audio input to T-104	RESISTOR: 150 ohm p/m 10%, 1/2 w	745 1051 00
1559			6-15

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-132	Part of T-pad for audio input to T-104	RESISTOR: 430 ohm p/m 5%, 1/2 w	745 1070 00
R-133	Grid resistor for V-106	RESISTOR: 68,000 ohm p/m 10%, 1/2 w	745 1163 00
R-134	Grid resistor for V-107	RESISTOR: 68,000 ohm p/m 10%, 1/2 w	745 1163 00
R-135	Voltage divider for feedback network to V-106	RESISTOR: 10,000 ohm p/m 10%, 2 w	745 5128 00
R-136	Voltage divider for feedback network to V-107	RESISTOR: 10,000 ohm p/m 10%, 2 w	745 5128 00
R-137	Cathode resistor, V-106 and V-107	RESISTOR: 5600 ohm p/m 10%, 1/2 w	745 1118 00
R-138	Multimeter shunt resistor, Audio Cathode.	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-139	Voltage dropping resistor, V-106 and V-107	RESISTOR: 10,000 ohm p/m 10%, 2 w	745 5128 00
R-140	Plate load resistor, V-106	RESISTOR: 47,000 ohm p/m 10%, 2 w	745 5156 00
R-141	Plate load resistor, V-107	RESISTOR: 47,000 ohm p/m 10%, 2 w	745 5156 00
R-142	Grid resistor, V-108	RESISTOR: 82,000 ohm p/m 10%, 1/2 w	745 1167 00
R-143	Grid resistor, V-109	RESISTOR: 82,000 ohm p/m 10%, 1/2 w	745 1167 00
R-144	Cathode resistor, V-108	RESISTOR: 820 ohm p/m 10%, 1/2 w	745 1083 00
R-145	Cathode resistor, V-109	RESISTOR: 820 ohm p/m 10%, 1/2 w	745 1083 00
6-16			1560

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-146	Cathode resistor and audio balance control, V-108 and V-109	RESISTOR: 400 ohm p/m 10%, 4 w	377 0006 00
R-147	Multimeter shunt resistor, 2nd Audio Cathode, 25 ma position	RESISTOR: 220 ohm p/m 10%, 1/2 w	745 1058 00
R-148	Voltage dropping resistor, V-108 and V-109	RESISTOR: 4,700 ohm p/m 10%, 2 w	745 5114 00
R-149	Plate load resistor, V-108 and V-109	RESISTOR: 22,000 ohm p/m 10%, 2 w	745 5142 00
R-150	Plate load resistor, V-108 and V-109	RESISTOR: 22,000 ohm p/m 10%, 2 w	745 5142 00
R-151	Part of feedback network, from plate of V-110 to grid of V-106	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
R-152	Part of feedback network, from plate of V-110 to grid of V-106	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
R-153	Part of feedback network, from plate of V-110 to grid of V-106	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
R-154	Part of feedback network, from plate of V-110 to grid of V-106	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
R-155	Part of feedback network, from plate of V-111 to grid of V-107	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
1561			6-17

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-156	Part of feedback network, from plate of V-111 to grid of V-107	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
R-157	Part of feedback network, from plate of V-111 to grid of V-107	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
R-158	Part of feedback network, from plate of V-111 to grid of V-107	RESISTOR: 1 megohm p/m 10%, 2 w	745 5212 00
R-159	Part of grid resistance of V-110 and V-111	RESISTOR: 47,000 ohm p/m 10%, 2 w	745 5156 00
R-160	Part of grid resistance of V-110 and V-111	RESISTOR: 82,000 ohm p/m 10%, 1 w	745 3167 00
R-161	Part of grid resistance of V-110 and V-111	RESISTOR: 82,000 ohm p/m 10%, 1 w	745 3167 00
R-162	Modulator bias adjustment	RESISTOR: 25,000 ohm p/m 10%, 4 w	377 0011 00
R-163	Modulator bias adjustment	RESISTOR: 25,000 ohm p/m 10%, 4 w	377 0011 00
R-164	Stabilizing resistor, V-110	RESISTOR: 10,000 ohm p/m 10%, 1/2 w	745 1128 00
R-165	Stabilizing resistor, V-111	RESISTOR: 10,000 ohm p/m 10%, 1/2 w	745 1128 00
R-166	Voltage dropping resistor for Power Change Switch	RESISTOR: 5000 ohm p/m 10%, 160 w	710 6542 00
R-167	Voltage dropping resistor for Power Change switch	RESISTOR: 5000 ohm p/m 10%, 160 w	710 6542 00
6-18			1562

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-168	DC Plate Voltmeter, M-103, shunt resistor	RESISTOR: 10,000 ohm p/m 10%, 2 w	745 5128 00
R-169	Series resistor for DC Plate Voltmeter	RESISTOR: 4 megohm (p/o M-103)	
R-170		Not Used	
R-171	Varies length of filament time delay	RESISTOR: 2000 ohm p/m 10%, 4 w	377 0008 00
R-172	Voltage dropping resistor for K-101	RESISTOR: 5000 ohm p/m 10%, 10 w	710 1542 00
R-173	Voltage dropping resistor for K-101	RESISTOR: 2500 ohm p/m 10%, 10 w	710 0030 00
R-174	Bleeder resistor for bias supply	RESISTOR: 2000 ohm p/m 10%, 25 w	710 3242 00
R-175	Part of bleeder resistance for high voltage supply	RESISTOR: 20,000 ohm p/m 5%, 100 w	710 2134 00
R-176	Part of bleeder resistance for high voltage supply	RESISTOR: 20,000 ohm p/m 5%, 100 w	710 2134 00
R-177	Part of bleeder resistance for high voltage supply	RESISTOR: 40,000 ohm p/m 10%, 100 w	710 5404 20
R-178	Bleeder resistor for low voltage supply	RESISTOR: 7500 ohm p/m 10%, 50 w	710 0099 00
R-179		Not Used	
R-180	Screen voltage dropping resistor, V-103	RESISTOR: 56,000 ohm p/m 10%, 2 w	745 5160 00
1563			6-19

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
R-181	Screen voltage dropping resistor, V-103	RESISTOR: 56,000 ohm p/m 10%, 2 w	745 5160 00
R-182	Audio hum control A	RESISTOR: 25,000 ohm	377 0011 00
S-101	Selects desired crystal, Crystal Selector switch	SWITCH: Rotary, 2 pole, 2 position	259 0362 00
S-102	Multimeter switch, selects circuit to be metered	SWITCH: Rotary, 2 pole, 8 position	259 0441 00
S-102A		(p/o S-102)	
S-102B		(p/o S-102)	
S-103	Power change switch, shorts out dropping resistors R-166 and R-167	SWITCH: High voltage rotary, SPST, special	
S-104	Mechanical door interlock, discharges high voltage filter capacitors	SHORTING BAR: Gravity operated	
S-105	Mechanical door interlock, discharges high voltage filter capacitors	SHORTING BAR: Gravity operated	
S-106	Filament ON-OFF switch and breaker, applies voltage to filaments, blower and bias supply	CIRCUIT BREAKER: Magnetic, 230 v AC/250 v DC	260 0238 00
S-107	Plate ON-OFF switch and breaker, applies to T-108 and T-110	CIRCUIT BREAKER: Magnetic, 230 v AC/250 v DC <i>Hamamatsu Cat. No. 2263-5</i> <i>Replace w/ 2163</i> <i>w/ trip defeated. 3-31-66 B.</i>	260 0265 00
6-20			1564

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
S-108	Electrical door interlock, removes the high and low voltage	CONTACT ASSEM: Male section of door interlock switch CONTACT ASSEM: Female section of door interlock switch	260 4040 00 260 4050 00
S-109	Electrical door interlock, removes the high and low voltage	CONTACT ASSEM: Male section of door interlock switch CONTACT ASSEM: Female section of door interlock switch	260 4040 00 260 4050 00
S-110	Blower interlock, removes high and low voltage if not closed	SWITCH: Micro, SPDT, 5 amp 250 v AC	260 0700 00
T-101	Plate tank rf can, V-101	OSCILLATOR PLATE TUNING ASSEM: (incl R-103)	504 9594 002
T-102	Plate tank rf can, V-102	INTERMEDIATE PLATE TUNING ASSEM: (incl C-113, C-114, C-115, L-102A, L-102B)	504 9632 003
T-103	Plate tank rf can, V-103	INTERMEDIATE PLATE TUNING ASSEM: (incl C-124, C-125, C-126, L-104A, L-104B)	504 9632 003
T-104	Audio input transformer feeds V-106 and V-107	TRANSFORMER: HF input audio, Pri: 600 ohm CT, Sec: 50,000 ohm CT	677 0114 00 w. 46-4100 2-2-6147
T-105	Modulation transformer	TRANSFORMER: Modulation, Pri: 8200 ohm CT, Sec: 3840 ohm	677 0128 00
T-106	Bias supply transformer	TRANSFORMER: Power, Pri: 230 v, Sec #1: 360, 320, 280, 240 v CT, Sec #2: 5 v	672 0392 00
T-107	Filament transformer for high voltage rectifier tubes	TRANSFORMER: Filament, Pri: 230, 208 v, Sec: 5 v CT	672 0382 00
T-108	High voltage transformer	TRANSFORMER: Plate, Pri: 220, 230, 240, 250, 198, 208, 217, 226, Sec: 3200 v CT	672 0385 00
T-109	Filament transformer 866A rectifier tubes and all RF and audio tubes	TRANSFORMER: Filament, Pri: 230, 208 v, Sec #1: 5.3 v CT, Sec #2: 5.3 v CT, Sec #3: 6.3 v CT, Sec #4: 2.5 CT	672 0381 00
1565			6-21

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
T-110	Low voltage supply transformer	TRANSFORMER: Plate, Pri: 230, 208 v, Sec: 550 v DC	672 0383 00
V-101	Oscillator	TUBE: Pentode 6AU6	255 0202 00
V-102	Buffer Amplifier	TUBE: Pentode 6SJ7	255 0030 00
V-103	RF Driver	TUBE: Beam 807	256 0033 00
V-104	Power Amplifier	TUBE: Tetrode 4-400A	256 0091 00
V-105	Power Amplifier	TUBE: Tetrode 4-400A	256 0091 00
V-106	1st Audio Amplifier	TUBE: Pentode 6SJ7	255 0030 00
V-107	1st Audio Amplifier	TUBE: Pentode 6SJ7	255 0030 00
V-108	Audio Driver Amplifier	TUBE: Pentode 6SJ7	255 0030 00
V-109	Audio Driver Amplifier	TUBE: Pentode 6SJ7	255 0030 00
V-110	Modulator	TUBE: Tetrode 4-250A	256 0089 00
V-111	Modulator	TUBE: Tetrode 4-250A	256 0089 00
V-112	Bias supply rectifier	TUBE: Rectifier 5U4G	255 0032 00
V-113	High voltage supply rectifier	TUBE: Rectifier 872A	256 0037 00
V-114	High voltage supply rectifier	TUBE: Rectifier 872A	256 0037 00
V-115	Low voltage supply rectifier	TUBE: Rectifier 866A	256 0049 00
V-116	Low voltage supply rectifier	TUBE: Rectifier 866A	256 0049 00
X-100	Socket for I-101	MTG: Pilot light, for candelabra base bulbs DISC: Green	262 0033 00 262 2370 00
6-22			1566

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
X-101	Socket for I-104	MTG: Pilot light, for candelabra base bulbs DISC: Red	262 0033 00 262 2360 00
X-102	Socket for I-102	MTG: Pilot light, for lumiline lamp bulb	262 0177 00
X-103	Socket for I-102	MTG: Pilot light, for lumiline lamp bulb	262 0177 00
X-104	Socket for I-103	MTG: Pilot light, for lumiline lamp bulb	262 0177 00
X-105	Socket for I-103	MTG: Pilot light, for lumiline lamp bulb	262 0177 00
X-106		Adapter, for lumiline bulb	262 0175 00
X-107		Adapter, for lumiline bulb	262 0175 00
X-108		Adapter, for lumiline bulb	262 0175 00
X-109		Adapter, for lumiline bulb	262 0175 00
X-110	Socket for V-104	SOCKET: Tube, 5 prong	220 1016 00
X-111	Socket for V-105	SOCKET: Tube, 5 prong	220 1016 00
X-112	Socket for T-101	SOCKET: Tube, chassis mtg, 7 prong	220 1790 00
X-113	Socket for V-103	SOCKET: Tube, 5 contacts	220 5520 00
X-114	Socket for T-102	SOCKET: Tube, chassis mtg, 7 prong	220 1790 00
X-115	Socket for V-102	SOCKET: Tube, octal, 8 prong	220 1005 00
X-116	Socket for T-103	SOCKET: Tube, chassis mtg, 7 prong	220 1790 00
X-117	Socket for V-101	SOCKET: Tube, miniature, 7 pins	220 1034 00
X-118	Socket for Y-101	SOCKET: Tube, octal, 8 prong	220 1005 00
X-119	Socket for Y-102	SOCKET: Tube, octal, 8 prong	220 1005 00
X-120	Socket for V-110	SOCKET: Tube, 5 prong	220 1016 00
1567			6-23

PARTS LIST

20V TRANSMITTER

ITEM	CIRCUIT FUNCTION	DESCRIPTION	PART NUMBER
X-121	Socket for V-111	SOCKET: Tube, 5 prong	220 1016 00
X-122	Socket for V-106	SOCKET: Tube, octal, 8 prong	220 1005 00
X-123	Socket for V-107	SOCKET: Tube, octal, 8 prong	220 1005 00
X-124	Socket for V-108	SOCKET: Tube, octal, 8 prong	220 1005 00
X-125	Socket for V-109	SOCKET: Tube, octal, 8 prong	220 1005 00
X-126	Socket for K-101	SOCKET: Tube, octal, 8 prong	220 1005 00
X-127	Socket for V-112	SOCKET: Tube, octal, 8 prong	220 1005 00
X-128	Socket for V-115	SOCKET: Tube, 4 prong	220 5410 00
X-129	Socket for V-116	SOCKET: Tube, 4 prong	220 5410 00
X-130	Socket for V-113	SOCKET: Tube, 4 prong	220 5420 00
X-131	Socket for V-114	SOCKET: Tube, 4 prong	220 5420 00
Y-101	Quartz crystal	CRYSTAL:	
Y-102	Quartz crystal	CRYSTAL:	

