

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	AIRLINE PART No.	IRC PART No.	
R3	220Ω		B84221	FM RF Cathode	
R4	470KΩ		B85474	FM RF Grid	
R5	470KΩ		B85474	FM Mixer Grid	
R6	1000Ω			Parasitic Supp. - See Note	
R7	47Ω				
R8	22KΩ		B85470	Osc. Grid	
R9	1000Ω		B85223	Osc. Anode	
R10	1000Ω		B85102	Conv. Plate Decoupling	
R11	68Ω		B84680	1st IF Cathode	
R12	6800Ω		B84682	1st IF Screen	
R13	1000Ω		B85102	1st IF Plate Decoupling	
R14	100KΩ		B85104	AVC Network	
R15	1 Meg.		B85105	Diode Load	
R16	2.2 Meg.		B85225	Diode Filter	
R17	47KΩ		B85473	FM 2nd IF Cathode	
R18	68Ω		B84680	FM 2nd IF Decoupling	
R19	2200Ω		B85222	De-emphasis	
R20	27KΩ		B85273	Ratio Det. Filament-Wire Wound	
R21	3.6Ω		43X233	Ratio Det. Diode Load	
R22	6800Ω		B84682	Ratio Det. Diode Load	
R23	6800Ω		B85104	AVC Network	
R24	100KΩ		B85153	Tone Compensation	
R25	15KΩ		B85106	AF Amp. Grid	
R26	10 Meg.		B85474	AF Amp. Plate	
R27	470KΩ		B85473	AF Amp. Plate Decoupling	
R28	47KΩ		B85473	Output Grid	
R29	270Ω		B84271	Output Cathode	
R30	1000Ω			Filter-Wire Wound	
R31A	1400Ω		43X234	Filter-Wire Wound	

Note. Not used in all models.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA		
	PRI.	SEC. 1	SEC. 2	SEC. 3	AIRLINE PART No.	STANCOR PART No.	CHICAGO PART No.
T1	117VAC ① 58A	50VCT ② 087ADC	5VAC ③ 2A	6.3VAC ④ 2A	53X290		PH-70B

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA		
	IMPEDANCE	DC RES.	PRI.	SEC.	AIRLINE PART No.	STANCOR PART No.	CHICAGO PART No.
T2	5.3KΩ	3.2Ω	440Ω	.8Ω	51X134	A-3849	RO-9 ① Drill one new mounting hole.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA		INSTALLATION NOTES	
	FIELD	V. C. IMP.	AIRLINE PART No.	JENSEN PART No.	QUAM PART No.	
SP1	PM	3.2Ω	12A490	ST-120 ②	12A6A	② Replace output transformer to match 6-8Ω voice coil.
SP2	II 1/2"	V. C. DIA.		MOD. P12-S		

HOWARD W. SAMS & CO., INC. • Indianapolis 1, Indiana

"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed." "Reproduction or use, without express permission, of editorial or pictorial con-

tent, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. Copyright 1950 by Howard W. Sams & Co., Inc., Indianapolis 1, Indiana, U. S. of America. Copyright under International Copyright Union. All rights reserved under Inter-American Copyright Union (1910) by Howard W. Sams & Co., Inc." Printed in U. S. of America

PARTS LIST AND DESCRIPTIONS (Continued)

R F COILS

ITEM No.	USE	DC RES.		REPLACEMENT DATA		WEISSNER PART No.
		PRI.	SEC.	AIRLINE PART No.		
L1	FM Ant.	0Ω		35A9		
L2	FM RF	0Ω		9A2066		
L3	RF Choke	3Ω		35A8		
L4	FM Osc.	0Ω		9A2067		
L5	Para. Supp.	.1Ω		9A2068		
L6	Loop Ant.	0Ω	.8Ω	9A1972		
L7	RF Choke	1.8Ω		35A5		
L8	AM Osc.	.5Ω	5.2Ω	9A2065		14-1073
L9	1st FM IF	1Ω	1Ω	9A2060		16-3487
L10	1st AM IF	13Ω	15Ω	9A2062		16-4758
L11	2nd FM IF	1Ω	1Ω	9A2061		15-3487
L12	2nd AM IF	13Ω	14.8Ω	9A2063		16-4758
L13	Ratio Det.	1.2Ω	.1Ω	9A2064		17-3487

Wound on 1KΩ resistor

PHONO CARTRIDGE and NEEDLE

ITEM No.	AIRLINE PART No.	REPLACEMENT DATA		REMARKS
		ASTATIC PART No.	SHURE PART No.	
M1		AC-AG-J	A-AG W26B A60U	

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	REPLACEMENT DATA		NOTES
				BEAD COLOR	AIRLINE PART No.	
M2	Bayonet	6-8	.15	Brown	7A103	Type #47
M3	Bayonet	6-8	.15	Brown	7A103	Type #47

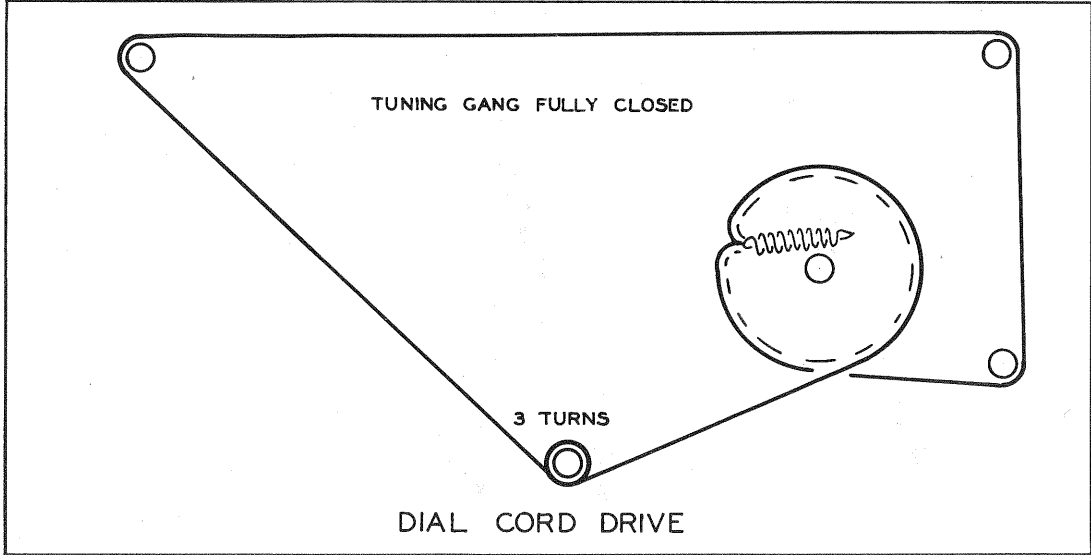
MISCELLANEOUS

ITEM No.	PART NAME	AIRLINE PART No.	NOTES
M4	Switch	2A393	
M5	FM Antenna	9A2004	FM-AM-Phono
M6	Tuning Gang	14A209	Built-In
A6	Trimmer	17A256	(17-507MMF, 14-187MMF)
A13	Dial Glass	58X729	AM Ant. Adj.
	Pointer	15X251	FM Osc. Adj.
	Knob	10A754	
	Phono Motor	Y-2727B	4 used

AIRLINE
MODEL 05WG-2752

TRADE NAME	Airline, Model 05WG-2752		
SUPPLIER	Montgomery Ward and Co., 619 Chicago Ave., Chicago, Illinois		
TYPE SET	AC Operated AM-FM-Phono Combination Superheterodyne Receiver with Loop Antenna		
TUBES (SEVEN)	Types 12AT7 FM RF Amp. & Mixer, 6BE6 FM Osc. -AM Converter, 6BA6 1st IF Amp., 6BA6 FM 2nd IF Amp., 6AL5 Ratio Det., 6AV6 DET-AVC-AF, 6V6GT Power Output, 5Y3GT Rectifier		
POWER SUPPLY	110-120 Volts AC	RATING	.56 Amp. at 117 Volts AC
TUNING RANGE-BROADCAST	540-1600KC	FREQ. MOD.	88-108MC

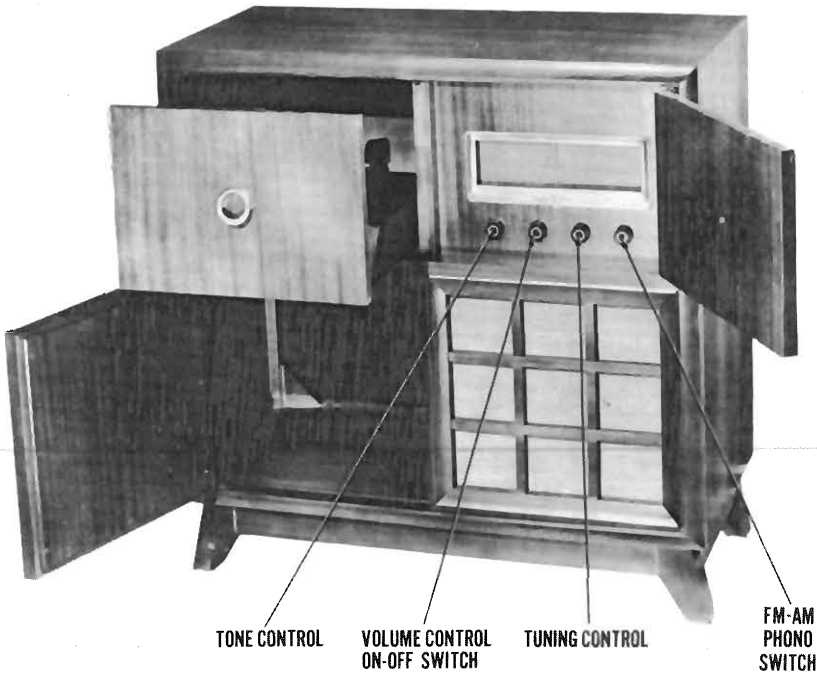
RECORD CHANGER - V-M MODEL 406



PHOTOFACT* Folder

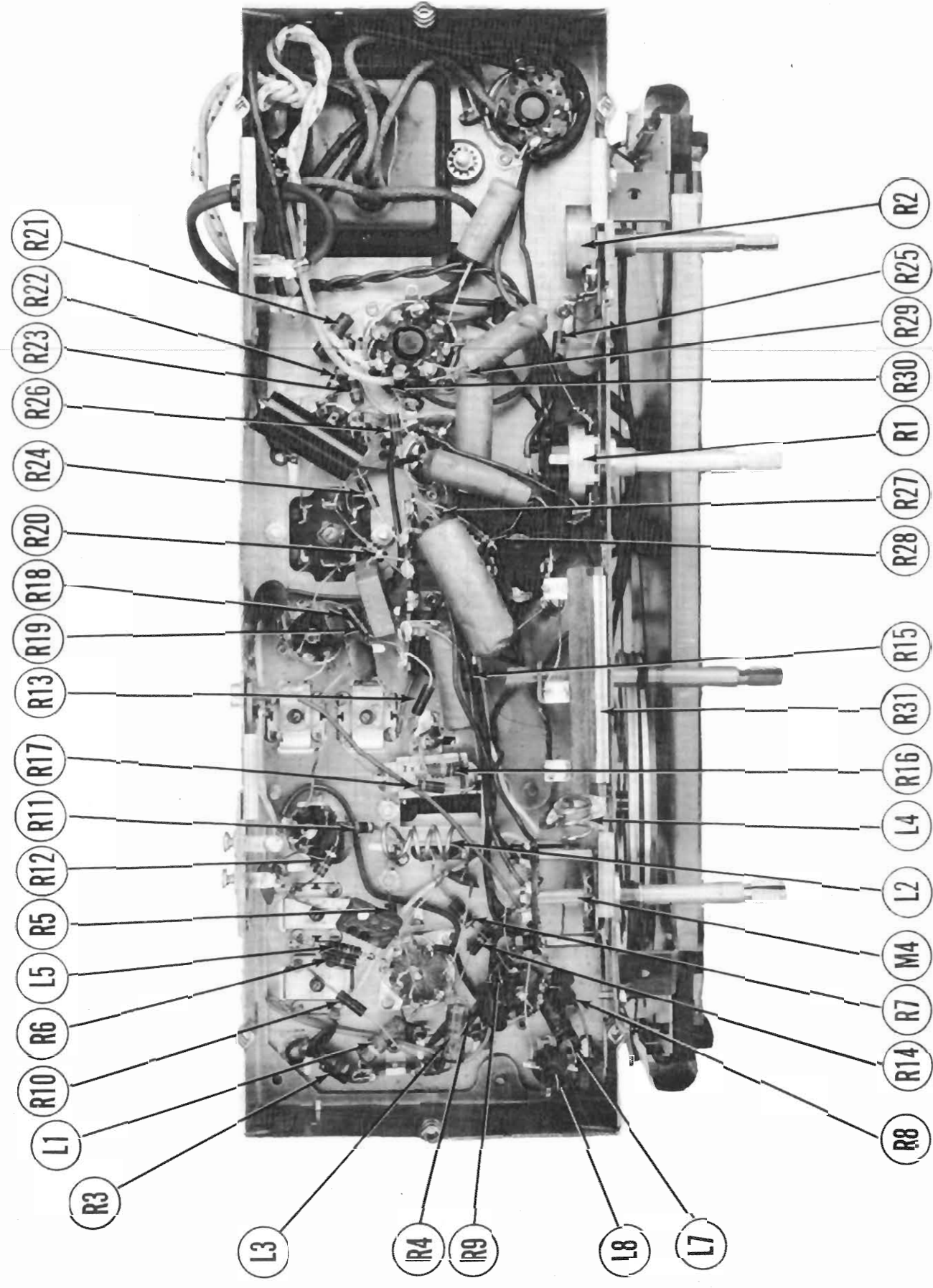
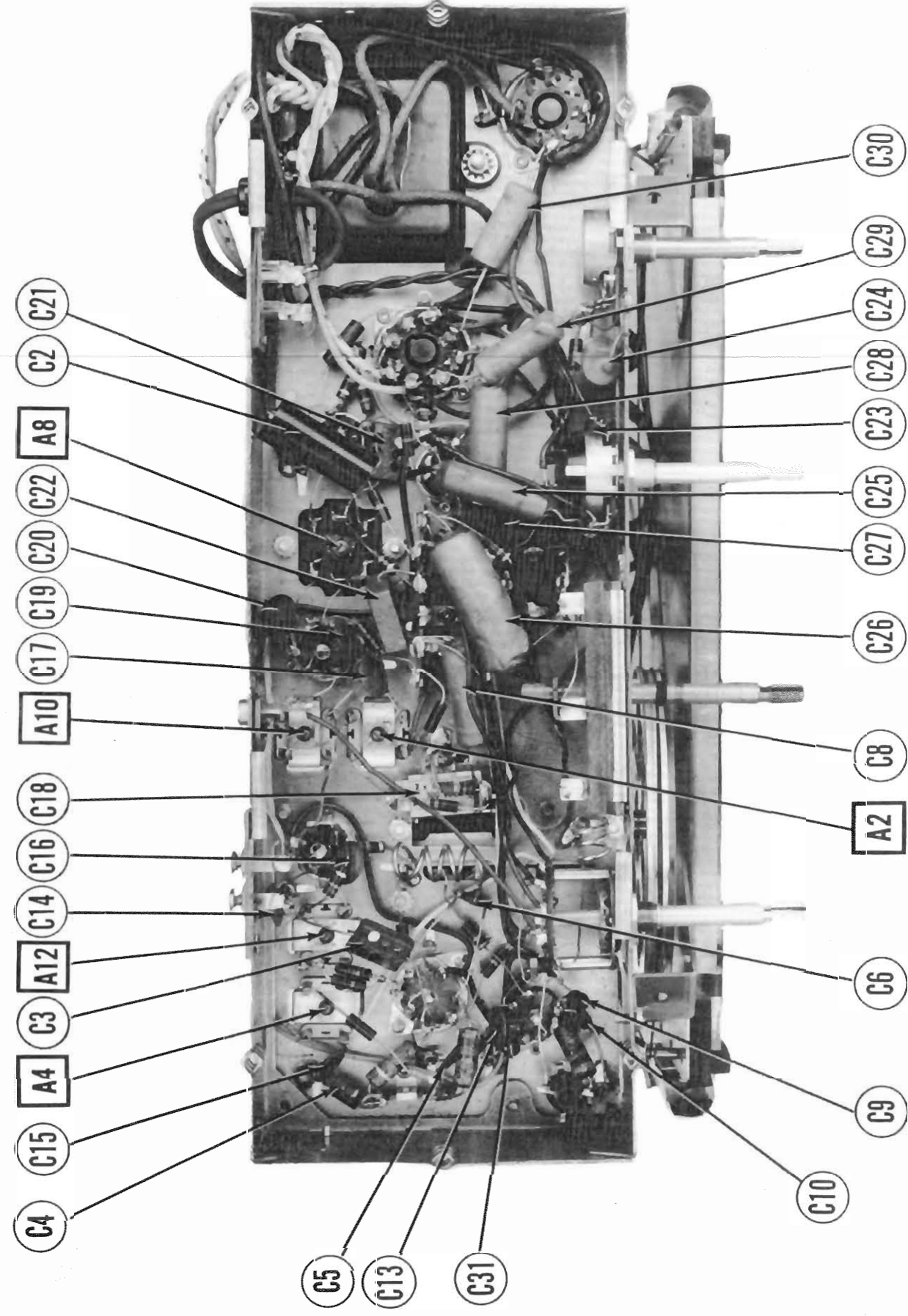


AIRLINE
MODEL 05WG-2752

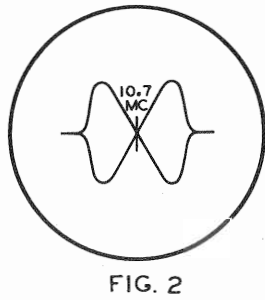
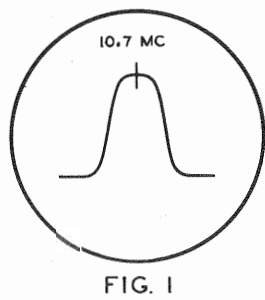


AIRLINE MODEL 05WG-2752

AIRLINE
MODEL 05WG-2752



ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
To set pointer turn tuning cap fully closed and set pointer to last reference mark at low frequency end of dial.						
AM ALIGNMENT						
Loop should be maintained in same relative position to chassis as when receiver is in cabinet. Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	REMARKS
1. .1MFD	High side to pin 1 (Grid) of 6BE6 (V2). Low side to chassis.	455KC (400 % Mod.)	AM (center)	Tuning gang fully open	Across voice coil	Adjust for maximum output.
2. .1MFD	"	1620KC	"	"	"	"
3.	Loop	1400KC	"	Tune for max. output.	"	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
FM IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	REMARKS
4. 2500MMF	High side to pin 7 (Grid) of 6BA6 (V4). Low side to chassis.	10.7MC (Unmod.)	FM (CW)	Tuning gang fully open	DC Probe to Point A Common to chassis.	Adjust for maximum deflection.
5.	"	"	"	"	DC Probe to Point B Common to chassis.	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
6.	High side to pin 1 (Grid) of 6BA6 (V3). Low side to chassis.	"	"	"	DC Probe to Point C Common to chassis.	Adjust for maximum deflection.
7.	High side to pin 7 (Grid) of 6BE6 (V2). Low side to chassis.	"	"	"	"	A11, A12
FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE						
Use frequency modulated signal with 60 % modulation and 450KC sweep. Use 120 % sawtooth voltage in scope for horizontal deflection.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT SCOPE	REMARKS
4. 2500MMF	High side to pin 1 (Grid) of 6BA6 (V3). Low side to chassis.	10.7MC (450KC Sweep)	FM (CW)	Tuning gang fully open	Vert. Amp. to Point A Low side to chassis.	Disconnect stabilizer cap. C2. Adjust for maximum amplitude and symmetry as per figure 1.
5.	High side to pin 7 (Grid) of 6BE6 (V2). Low side to chassis.	"	"	"	"	A11, A12
6.	"	"	"	"	Vert. Amp. to Point B Low side to chassis.	Reconnect capacitor C2. Adjust A8 so 10.7MC occurs at center of crossover lines as per figure 2. Slightly retouch A7 for maximum amplitude and straightness of crossover lines. Continue with step 8.
FM RF ALIGNMENT						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	REMARKS
8. 3000 carbon res.	High side thru 3000 to ungrounded FM antenna terminal.	108.5MC (Unmod.)	FM	Tuning gang fully open	DC Probe to Point A Common to chassis.	Adjust for maximum deflection.
9.	"	104.5MC	"	Tune for max. deflection.	"	A14



PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	REPLACEMENT DATA		RMA BASE TYPE	INSTALLATION NOTES
	AIRLINE PART No.	STANDARD REPLACEMENT		
V1	FM RF Amp. - FM	12AT7	9A	
V2	Mixer	6BE6	7CH	
V3	1st IF Amp. - AM Conv.	6BA6	7BK	
V4	2nd IF Amp.	6BA6	7BK	
V5	Ratio Dec.	6AL5	6BT	
V6	DET. - AVC - AF	6AV6	7AC	
V7	Power Output	6V6GT	5Y3GT	
V8	Rectifier	5Y3GT	5T	

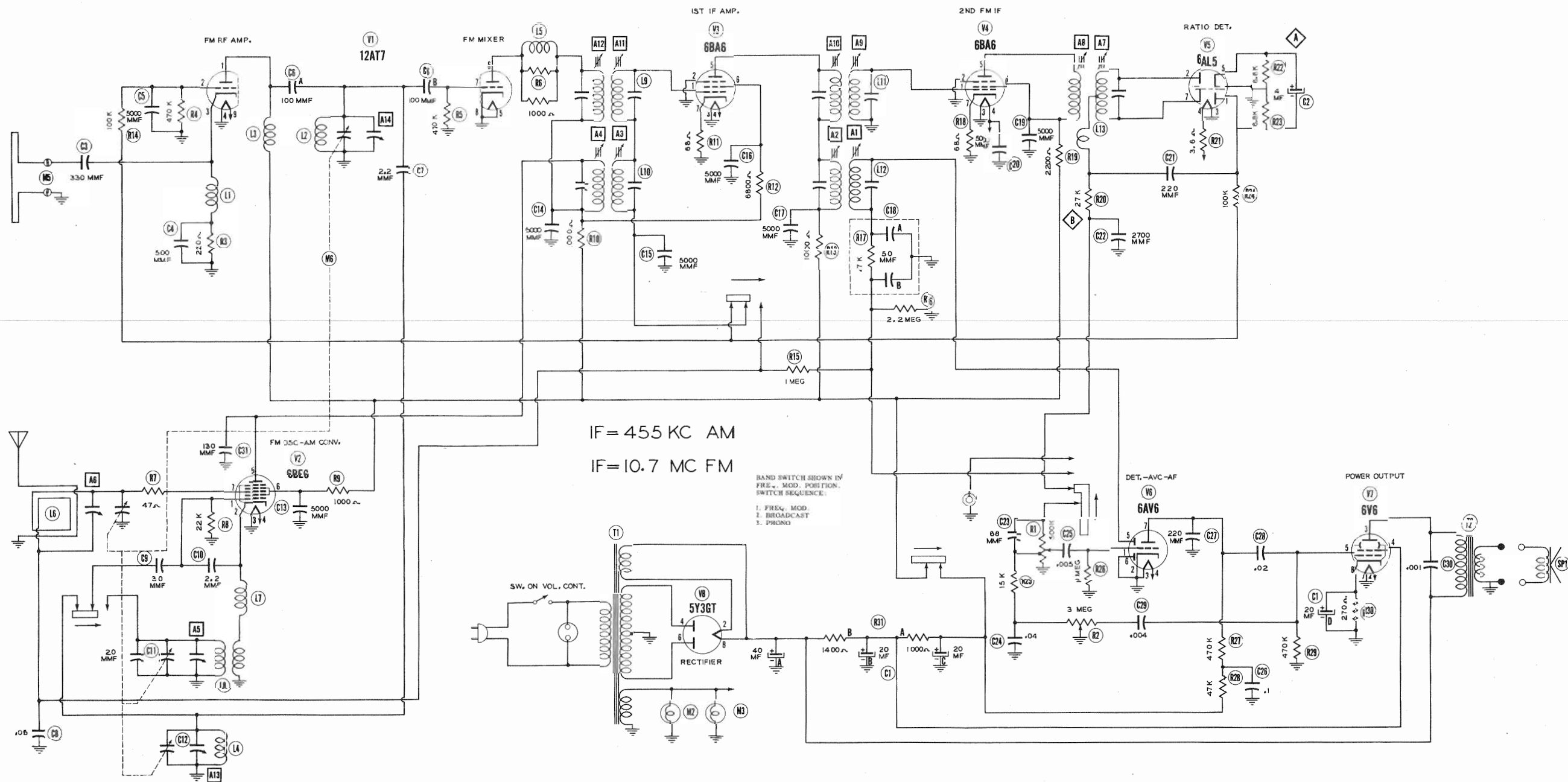
CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	REPLACEMENT DATA		RMA PART No.	INSTALLATION NOTES
	AIRLINE PART No.	STANDARD REPLACEMENT		
C1A	45X359	45X359	45X359	
C1B	45X361	45X361	45X361	
C1C	45X362	45X362	45X362	
C1D	45X363	45X363	45X363	
C2	45X364	45X364	45X364	
C3	45X365	45X365	45X365	
C4	45X366	45X366	45X366	
C5	45X367	45X367	45X367	
C6	45X368	45X368	45X368	
C7	45X369	45X369	45X369	
C8	45X370	45X370	45X370	
C9	45X371	45X371	45X371	
C10	45X372	45X372	45X372	
C11	45X373	45X373	45X373	
C12	45X374	45X374	45X374	
C13	45X375	45X375	45X375	
C14	45X376	45X376	45X376	
C15	45X377	45X377	45X377	
C16	45X378	45X378	45X378	
C17	45X379	45X379	45X379	
C18	45X380	45X380	45X380	
C19	45X381	45X381	45X381	
C20	45X382	45X382	45X382	
C21	45X383	45X383	45X383	
C22	45X384	45X384	45X384	
C23	45X385	45X385	45X385	
C24	45X386	45X386	45X386	
C25	45X387	45X387	45X387	
C26	45X388	45X388	45X388	
C27	45X389	45X389	45X389	
C28	45X390	45X390	45X390	
C29	45X391	45X391	45X391	
C30	45X392	45X392	45X392	
C31	45X393	45X393	45X393	

CONTROLS

ITEM No.	REPLACEMENT DATA		RMA PART No.	INSTALLATION NOTES
	AIRLINE PART No.	STANDARD REPLACEMENT		
K1A	300K10	300K10	300K10	
K1B	300K11	300K11	300K11	
K1C	300K12	300K12	300K12	
K1D	300K13	300K13	300K13	
K1E	300K14	300K14	300K14	
K1F	300K15	300K15	300K15	
K1G	300K16	300K16	300K16	
K1H	300K17	300K17	300K17	
K1I	300K18	300K18	300K18	
K1J	300K19	300K19	300K19	
K1K	300K20	300K20	300K20	
K1L	300K21	300K21	300K21	
K1M	300K22	300K22	300K22	
K1N	300K23	300K23	300K23	
K1O	300K24	300K24	300K24	
K1P	300K25	300K25	300K25	
K1Q	300K26	300K26	300K26	
K1R	300K27	300K27	300K27	
K1S	300K28	300K28	300K28	
K1T	300K29	300K29	300K29	
K1U	300K30	300K30	300K30	
K1V	300K31	300K31	300K31	
K1W	300K32	300K32	300K32	
K1X	300K33	300K33	300K33	
K1Y	300K34	300K34	300K34	
K1Z	300K35	300K35	300K35	
K2A	300K36	300K36	300K36	
K2B	300K37	300K37	300K37	
K2C	300K38	300K38	300K38	
K2D	300K39	300K39	300K39	
K2E	300K40	300K40	300K40	
K2F	300K41	300K41	300K41	
K2G	300K42	300K42	300K42	
K2H	300K43	300K43	300K43	
K2I	300K44	300K44	300K44	
K2J	300K45	300K45	300K45	
K2K	300K46	300K46	300K46	
K2L	300K47	300K47	300K47	
K2M	300K48	300K48	300K48	
K2N	300K49	300K49	300K49	
K2O	300K50	300K50	300K50	
K2P	300K51	300K51	300K51	
K2Q	300K52	300K52	300K52	
K2R	300K53	300K53	300K53	
K2S	300K54	300K54	300K54	
K2T	300K55	300K55	300K55	
K2U	300K56	300K56	300K56	
K2V	300K57	300K57	300K57	
K2W	300K58	300K58	300K58	
K2X	300K59	300K59	300K59	
K2Y	300K60	300K60	300K60	
K2Z	300K61	300K61	300K61	
K3A	300K62	300K62	300K62	
K3B	300K63	300K63	300K63	
K3C	300K64	300K64	300K64	
K3D	300K65	300K65	300K65	
K3E	300K66	300K66	300K66	
K3F	300K67	300K67	300K67	
K3G	300K68	300K68	300K68	
K3H	300K69	300K69	300K69	
K3I	300K70	300K70	300K70	
K3J	300K71	300K71	300K71	
K3K	300K72	300K72	300K72	
K3L	300K73	300K73	300K73	
K3M	300K74	300K74	300K74	
K3N	300K75	300K75	300K75	
K3O	300K76	300K76	300K76	
K3P	300K77	300K77	300K77	
K3Q	300K78	300K78	300K78	
K3R	300K79	300K79	300K79	
K3S	300K80	300K80	300K80	
K3T	300K81	300K81	300K81	
K3U	300K82	300K82	300K82	
K3V	300K83	300K83	300K83	
K3W	300K84	300K84	300K84	
K3X	300K85	300K85	300K85	
K3Y	300K86	300K86	300K86	
K3Z	300K87	300K87	300K87	
K4A	300K88	300K88	300K88	
K4B	300K89	300K89	300K89	
K4C	300K90	300K90	300K90	
K4D	300K91	300K91	300K91	
K4E	300K92	300K92	300K92	
K4F	300K93	300K93	300K93	
K4G	300K94	300K94	300K94	
K4H	300K95	300K95	300K95	
K4I	300K96	300K96	300K96	
K4J	300K97	300K97	300K97	
K4K	300K98	300K98	300K98	
K4L	300K99	300K99	300K99	
K4M	300K100	300K100	300K100	



VOLTAGE READINGS									
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V1	12AT7	130VDC	-1VDC	1.2VDC	0V	0V	125VDC	-1.7VDC	0V
V2A	6BE6	1-5.5VDC	0V	0V	6.3VAC	125VDC	125VDC	-1.2VDC	0V
V2B	6BE6	1-7VDC	0V	0V	6.3VAC	125VDC	125VDC	-1.7VDC	0V
V3A	6BA6	-1VDC	0V	0V	6.3VAC	125VDC	125VDC	-1.7VDC	0V
V3B	6BA6	-1VDC	0V	0V	6.3VAC	125VDC	125VDC	-1.7VDC	0V
V4	6BA6	0V	0V	0V	6.3VAC	125VDC	125VDC	-1.7VDC	0V
V5	6AL5	-2.8VDC	6VDC	0V	5.0VAC	1.5VDC	0V	-3.2VDC	0V
V6	6AV6	-1.7VDC	0V	0V	6.3VAC	0V	-1.7VDC	65VDC	0V
V7	6V6GT	0V	6.3VAC	250VDC	185VDC	0V	0V	0V	0V
V8	5Y3GT	0V	260VDC	0V	260VAC	0V	260VAC	0V	260VDC

† TAKEN IN FM POSITION
 ‡ TAKEN IN BROADCAST POSITION
 § TAKEN WITH VACUUM TUBE VOLTMETER

RESISTANCE READINGS									
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V1	12AT7	12.4KΩ	150KΩ	220Ω	0Ω	0Ω	13.4KΩ	470KΩ	0Ω
V2A	6BE6	22KΩ	2.2Ω	0Ω	1Ω	13.6KΩ	13.6KΩ	3.2KΩ	1Ω
V2B	6BE6	22KΩ	2.2Ω	0Ω	1Ω	13.6KΩ	13.6KΩ	1.5KΩ	1Ω
V3A	6BA6	90KΩ	0Ω	0Ω	1Ω	13.4KΩ	110KΩ	68Ω	0Ω
V3B	6BA6	1.5 Meg	0Ω	0Ω	1Ω	13.4KΩ	110KΩ	68Ω	0Ω
V4	6BA6	1Ω	0Ω	0Ω	1Ω	14.6KΩ	14.6KΩ	68Ω	0Ω
V5	6AL5	500KΩ	500KΩ	0Ω	1.8Ω	6.8KΩ	0Ω	6.8KΩ	0Ω
V6	6AV6	10 Meg	0Ω	0Ω	1Ω	140KΩ	150KΩ	0Ω	0Ω
V7	6V6GT	Inf.	1Ω	144Ω	1.6KΩ	470KΩ	50Ω	0Ω	270Ω
V8	5Y3GT	Inf.	50Ω	1Ω	1Ω	100Ω	Inf.	50KΩ	0Ω

† MEASURED FROM PIN 8 OF V8

THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1,000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of + 10% in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.