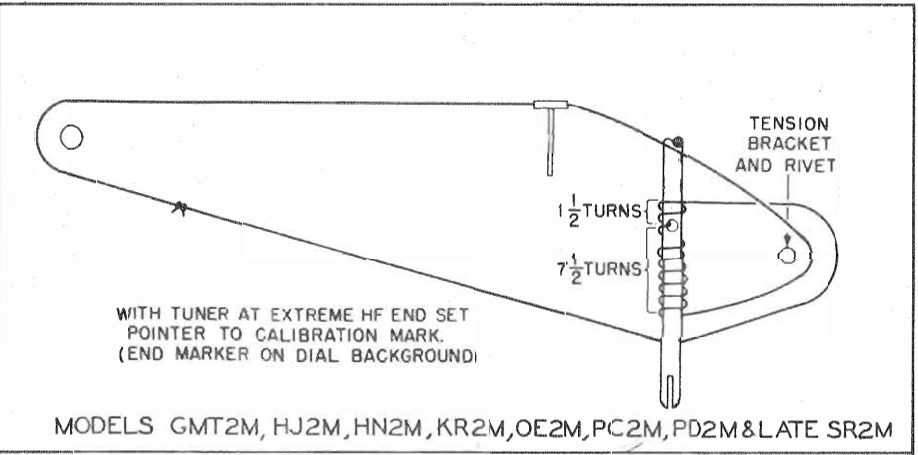
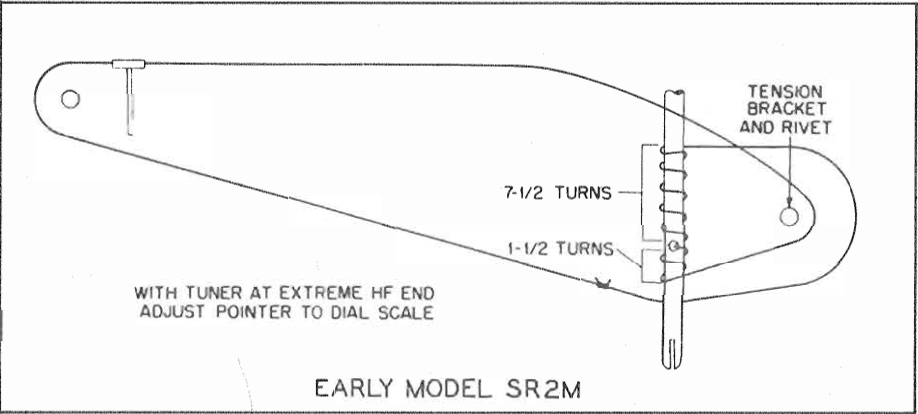
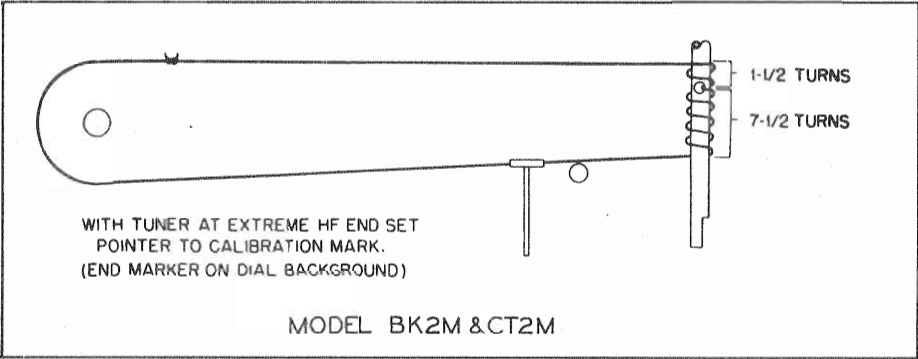


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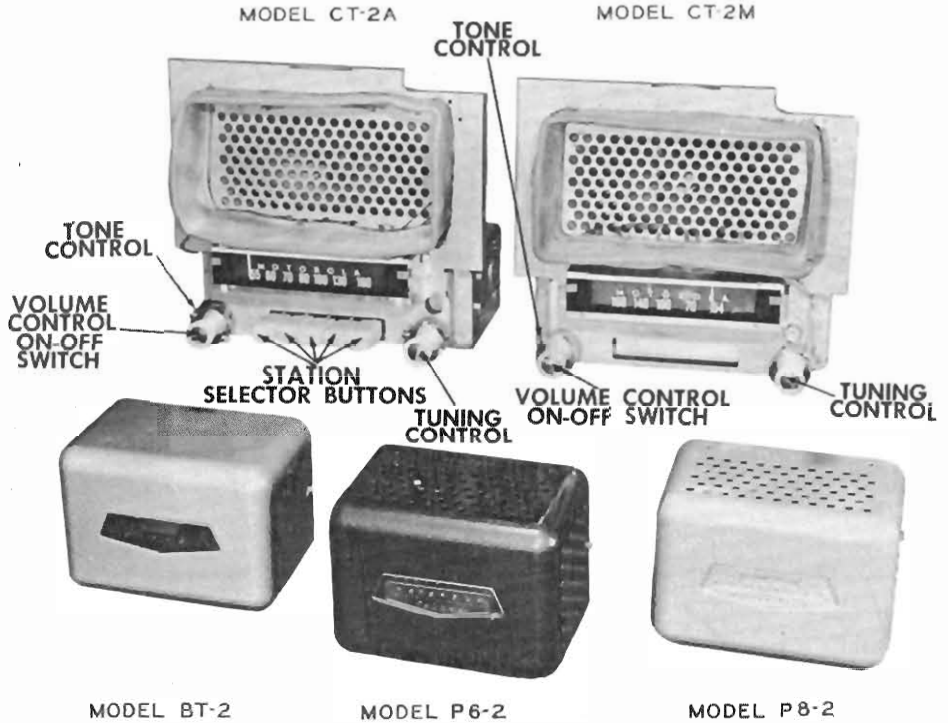


PHOTOFACT\* Folder



MOTOROLA MODELS BK2A, BK2M, CT2A, CT2M, GMT2A, GMT2M, HJ2A, HJ2M, HN2A, HN2M, KR2A, KR2M, OE2A, OE2M, PC2A, PC2M, PD2A, PD2M, SR2A, SR2M, 702, 802 (Ch. 2A, 2M, BT-2, P6-2, P8-2)

MOTOROLA MODELS BK2A, BK2M, CT2A, CT2M, GMT2A, GMT2M, HJ2A, HJ2M, HN2A, HN2M, KR2A, KR2M, OE2A, OE2M, PC2A, PC2M, PD2A, PD2M, SR2A, SR2M, 702, 802 (Ch. 2A, 2M, BT-2, P6-2, P8-2)



TRADE NAME	Motorola Chassis 2A, 2M, BT-2, P6-2, P8-2 (See Model Listings Below)		
MANUFACTURER	Motorola Inc., 4545 Augusta Blvd., Chicago 51, Ill.		
TYPE SET	Battery Operated Automobile Superheterodyne Receiver		
TUBES	See Parts List For Individual Chassis		
POWER SUPPLY	6 Volt Storage Battery	RATINGS 5.6 Amps. @ 6.3 Volts DC (Using Ch. P6-2)	
TUNING RANGE—BROADCAST	535-1605 KC	7.2 Amps. @ 6.3 Volts DC (Using Ch. P8-2)	
MODEL	AUTOMOBILE	TUNER CHASSIS	POWER CHASSIS
BK2A	1942, 1946 thru 1952 Buick (Except 1942 thru 1948 Buick Special)	2A	P6-2 or P8-2
BK2M		2M	
CT2A	1951, 1952 Chevrolet	2A	P6-2 or P8-2
CT2M		2M	
GMT2A	1948 thru 1952 GMC & Chev. Trucks	2A	P6-2 or P8-2
GMT2M		2M	
HJ2A	1951, 1952 Henry "I"	2A	P6-2 or P8-2
HJ2M		2M	
HN2A	1951, 1952 Hudson	2A	P6-2 or P8-2
HN2M		2M	
KR2A	1951, 1952 Kaiser	2A	P6-2 or P8-2
KR2M		2M	
OE2A	1951, 1952 Olds 88 "Super"	2A	P6-2 or P8-2
OE2M		2M	
PC2A	1946 thru 1952 Pontiac	2A	P6-2 or P8-2
PC2M		2M	
PD2A	1951, 1952 Packard	2A	P6-2 or P8-2
PD2M		2M	
SR2A	1950, 1951, 1952 Studebaker	2A	P6-2 or P8-2
SR2M		2M	
702	Universal *	BT-2	P6-2
802	Universal *	BT-2	P8-2

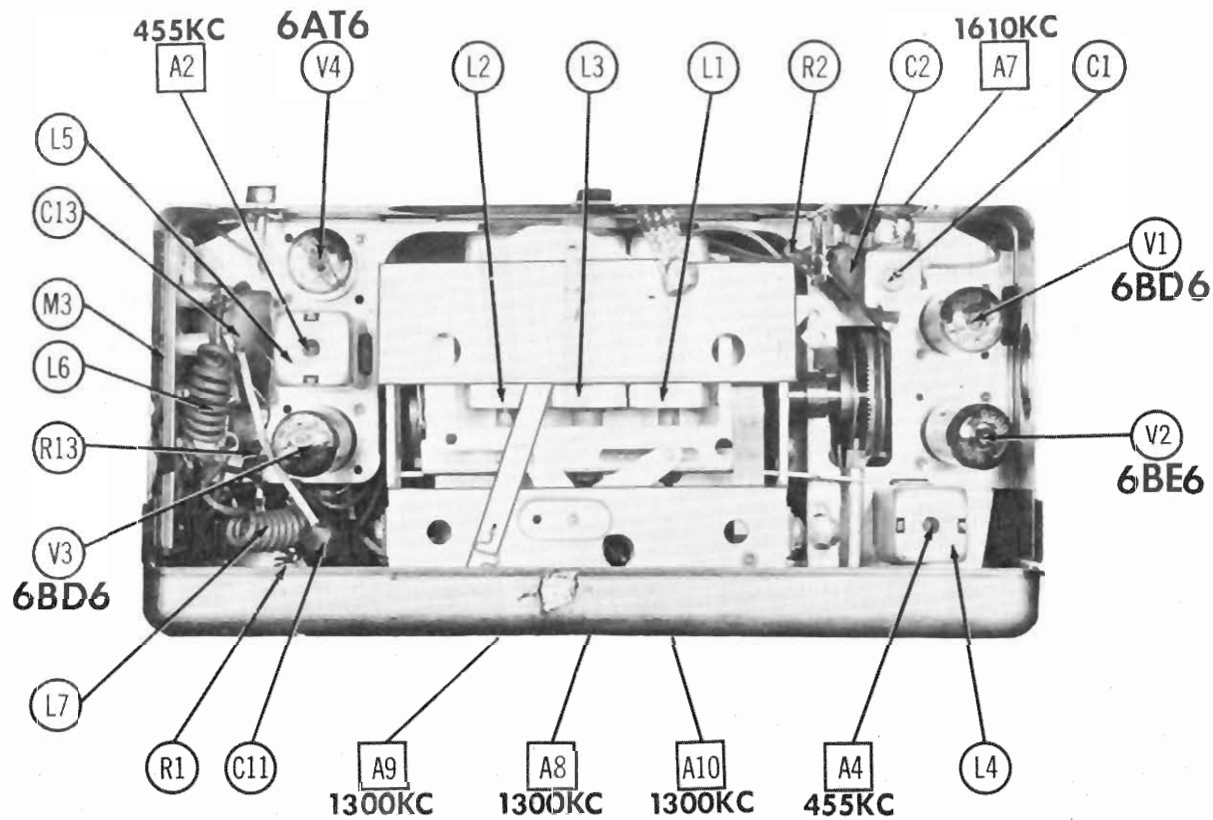
\* Requires appropriate control head and speaker kit.

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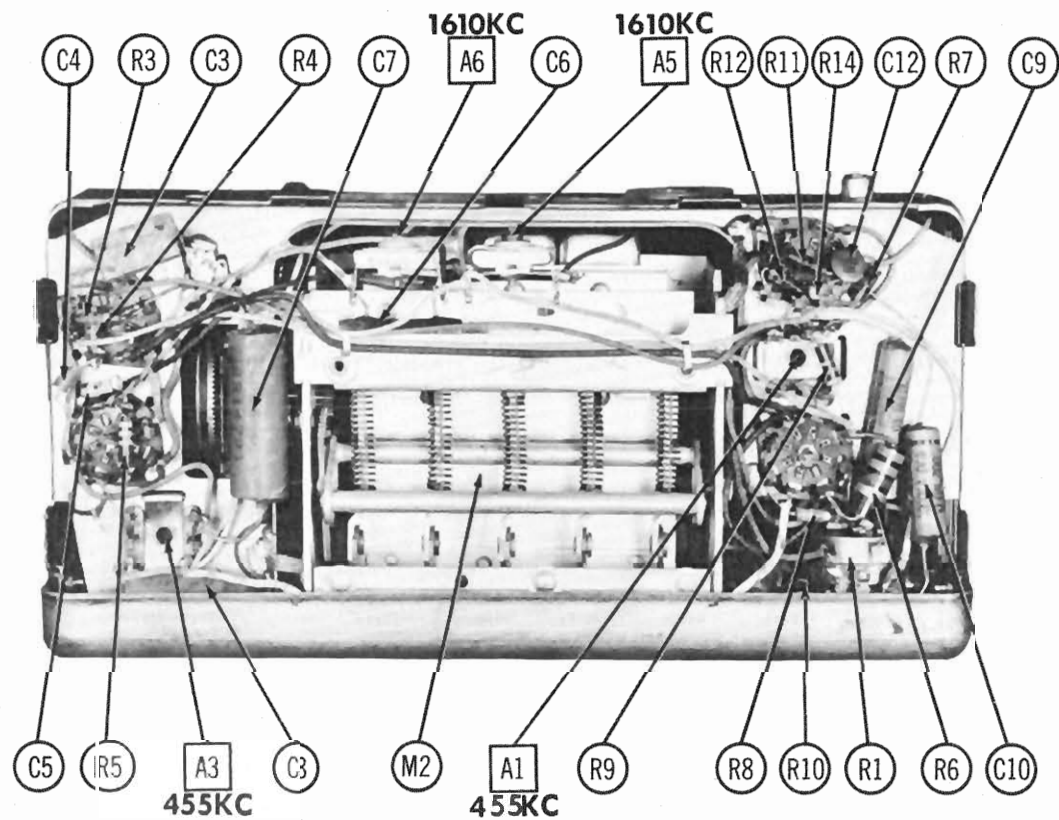
"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed."

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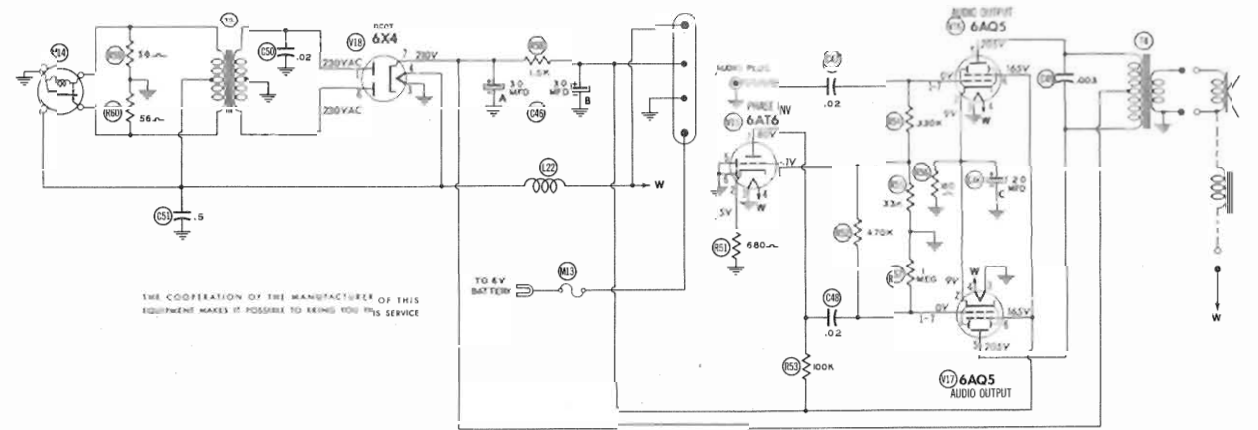
DATE 3-53 SET 197 FOLDER 7



CHASSIS TOP VIEW-MODEL CT-2A



CHASSIS BOTTOM VIEW-MODEL CT-2A



Item	Value	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
V1	6AT6	6AT6	6AT6	6AT6	6AT6	6AT6	6AT6
V2	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V3	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V4	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V5	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V7	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V8	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V9	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V10	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V11	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V12	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V13	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V14	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V15	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V16	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V17	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V18	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V19	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V20	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V21	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V22	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V23	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V24	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V25	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V26	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V27	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V28	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V29	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V30	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V31	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V32	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V33	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V34	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V35	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V36	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V37	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V38	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V39	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V40	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V41	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V42	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V43	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V44	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V45	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V46	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V47	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V48	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V49	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V50	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V51	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V52	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V53	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V54	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V55	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V56	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V57	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V58	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V59	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V60	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V61	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V62	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V63	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V64	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V65	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V66	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V67	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V68	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V69	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V70	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V71	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V72	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V73	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V74	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V75	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V76	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V77	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V78	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V79	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V80	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V81	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V82	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V83	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V84	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V85	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V86	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V87	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V88	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V89	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V90	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V91	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V92	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V93	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V94	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V95	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V96	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V97	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V98	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6
V99	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6	6BE6
V100	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6	6BD6

- 1 - DC Voltage measurements are at 20,000 ohms per volt, AC Voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Battery voltage maintained at 6.3 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

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CHASSIS P8-2

197-7

## PARTS LIST AND DESCRIPTIONS CHASSIS P8-2 TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
V15	Phase Inverter	6AT6	6AT6	7BT	
V16	Audio Output	6AQ5	6AQ5	7B2	
V17	Audio Output	6AQ5	6AQ5	7B2	
V18	Rectifier	6X4	6X4	5BS	

### 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.	RATING	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
C46A	30 350 300 20 25	23A473015	23A473015	5BS	
C47	47 470 470 20 25	RR12699	RR12699	5BS	
C48	47 470 470 20 25	RR12699	RR12699	5BS	
C49	47 470 470 20 25	RR12699	RR12699	5BS	
C50	47 470 470 20 25	RR12699	RR12699	5BS	
C51	47 470 470 20 25	RR12699	RR12699	5BS	

### RESISTORS

ITEM No.	RATING	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
R51	6800 470K 470K 20 25	RR12699	RR12699	5BS	
R52	470K 470K 20 25	RR12699	RR12699	5BS	
R53	470K 470K 20 25	RR12699	RR12699	5BS	
R54	470K 470K 20 25	RR12699	RR12699	5BS	
R55	470K 470K 20 25	RR12699	RR12699	5BS	

### TRANSFORMER (VIBRATOR)

ITEM No.	RATING	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
T3	6.3V 46VCT 0.03ADC	23K512083	23K512083	5BS	

### TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
T4	6.3V 46VCT 0.03ADC	23K512083	23K512083	5BS	

### COILS (RF-IF)

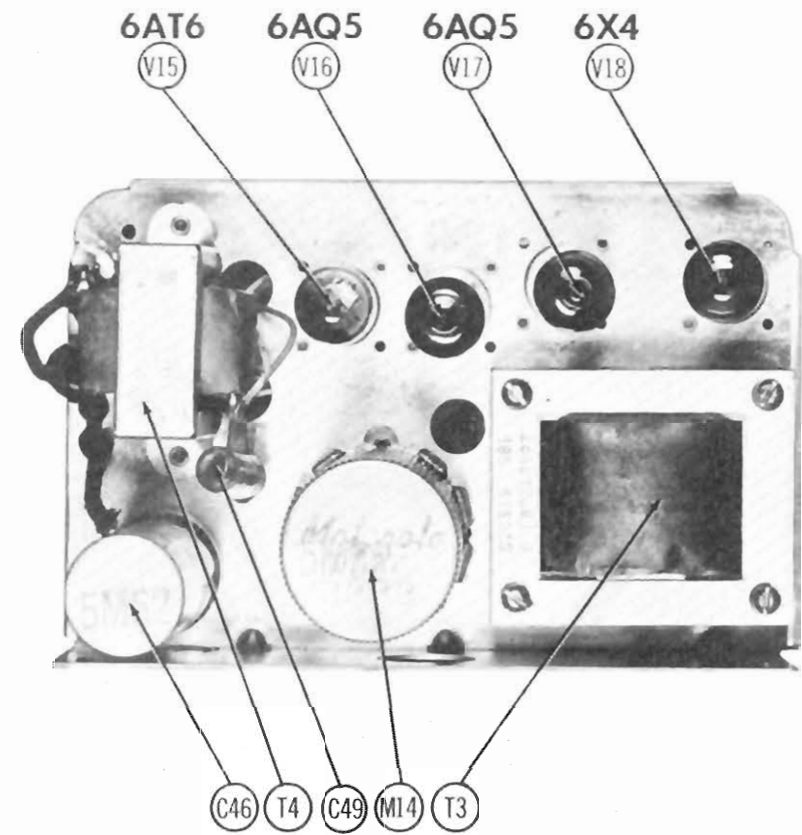
ITEM No.	RATING	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
L22	Hash Choke 0.03	24A51211	24A51211	5BS	

### FUSES

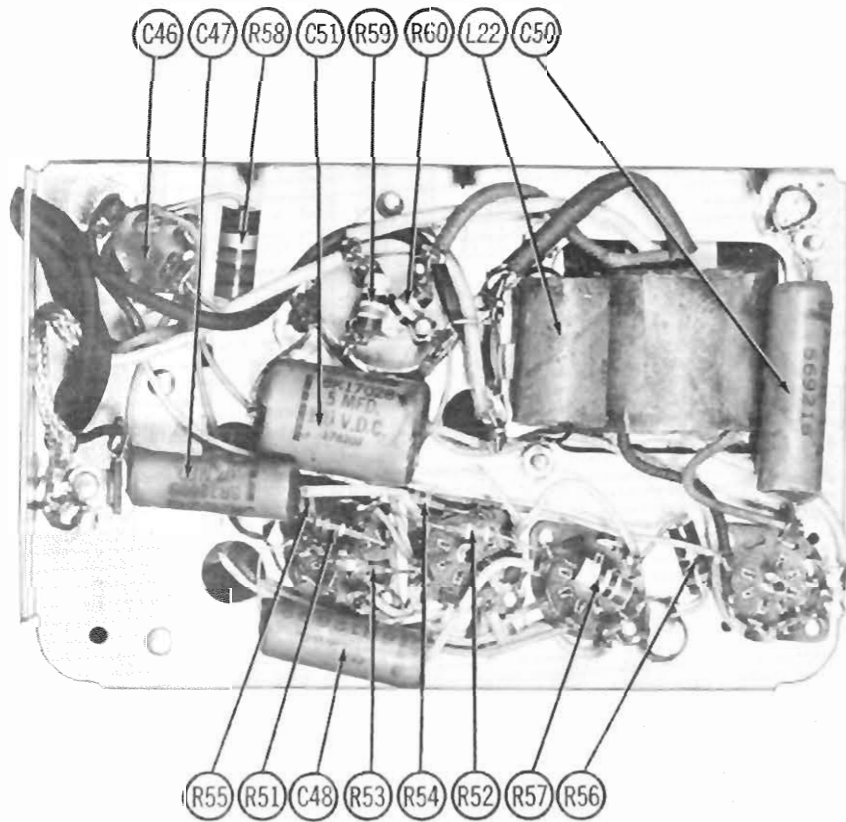
ITEM No.	RATING	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
M13	20A 0.03ADC	0.03ADC	0.03ADC	5BS	

### VIBRATOR

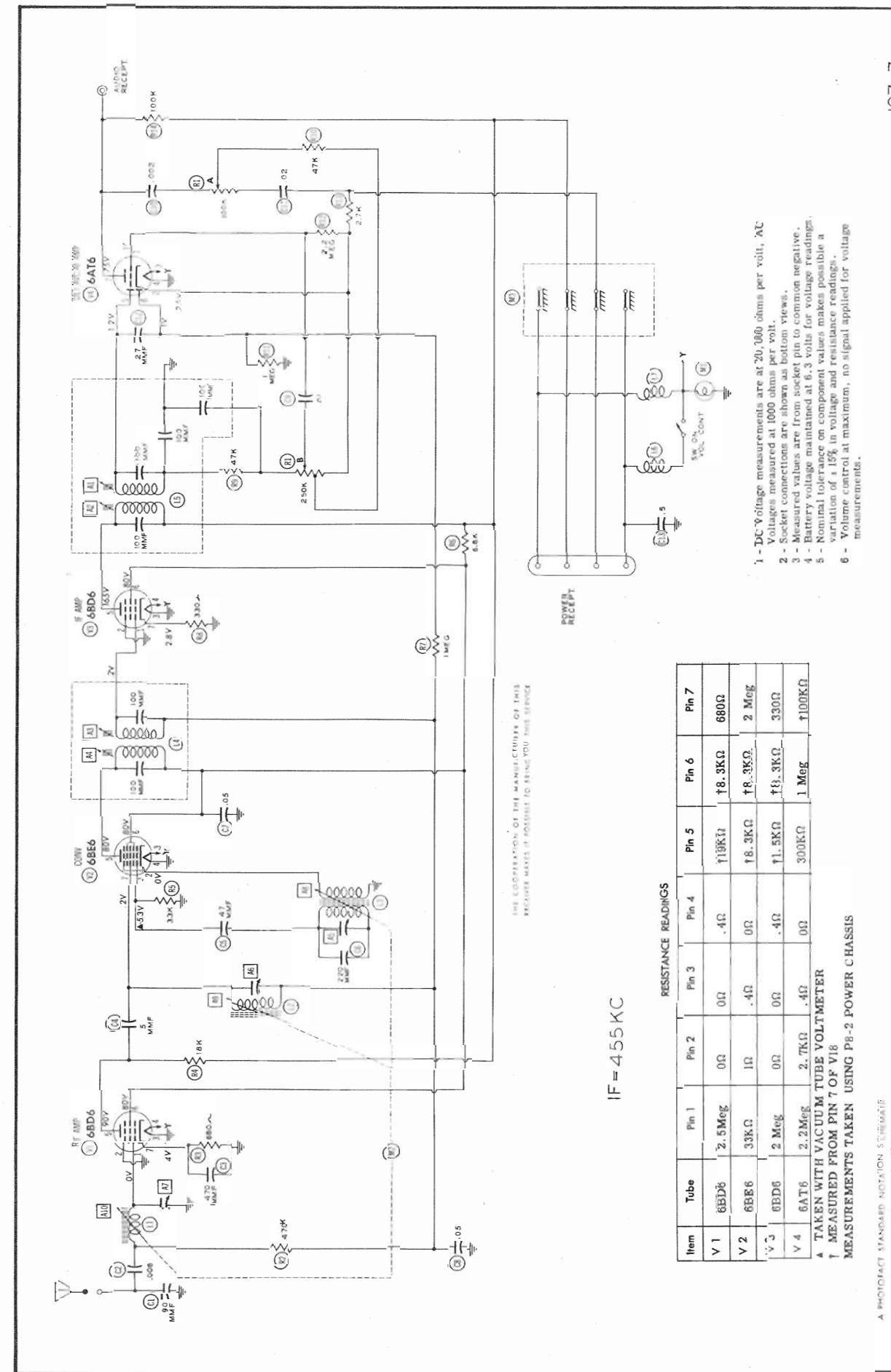
ITEM No.	RATING	MOTOROLA PART No.	STANDARD REPLACEMENT	RTMA BASE TYPE	INSTALLATION NOTES
M14	20A 0.03ADC	0.03ADC	0.03ADC	5BS	



TOP VIEW-CHASSIS-P8-2



BOTTOM VIEW-CHASSIS P8-2







- 1 - DC Voltage measurements are at 20,000 ohms per volt, AC Voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Battery voltage maintained at 6.3 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

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## PARTS LIST AND DESCRIPTIONS CHASSIS P6-2 TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RTMA BASE TYPE	INSTALLATION NOTES
		MOTOROLA PART No.	STANDARD REPLACEMENT		
V13	Audio Output Rectifier	6AQ5	6AQ5	TBZ	
V14		6X4	6X4	EDS	

## 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.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT	MOTOROLA PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNUELL-CUBIER PART No.	ERIE PART No.	MALLORY PART No.	
C41A	30	350	23A177015	AFH3-169		C131		FP331	TVL-362C
C41B	40	300							
C41C	25	25							
C42	400	400	88P13609	P488-02	DF-203	PTE452		PT412	4TM-S2
C43	400	400	8K71010	P488-006	DB-602	PTE606	GP2-333-602	PT026	6TM-D6
C44	1000	1000	8K14157	P488-02		PTE652		PT012	MB-S2

## RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	MOTOROLA PART No.	IRC PART No.	
220KΩ			6R6015	BTS-220K	
R46			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R47			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R48			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R49			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R50			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R51			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R52			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R53			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R54			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R55			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R56			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R57			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R58			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R59			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R60			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R61			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R62			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R63			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R64			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R65			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R66			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R67			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R68			6R6422	BTS-270K	
270Ω			6R6422	BTS-270K	
270KΩ			6R6422	BTS-270K	
R69			6R6422	BTS-270K	
270Ω			6R6422		

TRANSFORMER (VIBRATOR)

TRANSFORMER (VIBRATOR)									
ITEM No.	RATING				REPLACEMENT DATA				
	PRI.	SEC. 1	SEC. 2	SEC. 3	MOTOROLA PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.
T1	6.3V ① 5.4A	484VCT ① 0.43ADC			24K512083		P-3008 ①	VT-1 ①	TV-10K ①

## TRANSFORMER (AUDIO OUTPUT)

TRANSFORMER (AUDIO OUTPUT)											
ITEM No.	RATING				REPLACEMENT DATA						NOTES
	IMPEDANCE		DC RES.		MOTOROLA PART No.	STANCOR PART No.	MERT PART No.	CHICAGO PART No.	TRIAD PART No.		
	PRI.	SEC.	PRI.	SEC.							
J72	7.3KΩ	3.2Ω	632Ω	73Ω	25D02330	A-3678	A-2301	R0-13	S-7X	Drill case new	

## COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
				MOTOROLA PART No.	MERIT PART No.	
		RI.	SEC.			
21	REPLACE WITH 200K 1/2W 5% 100V					

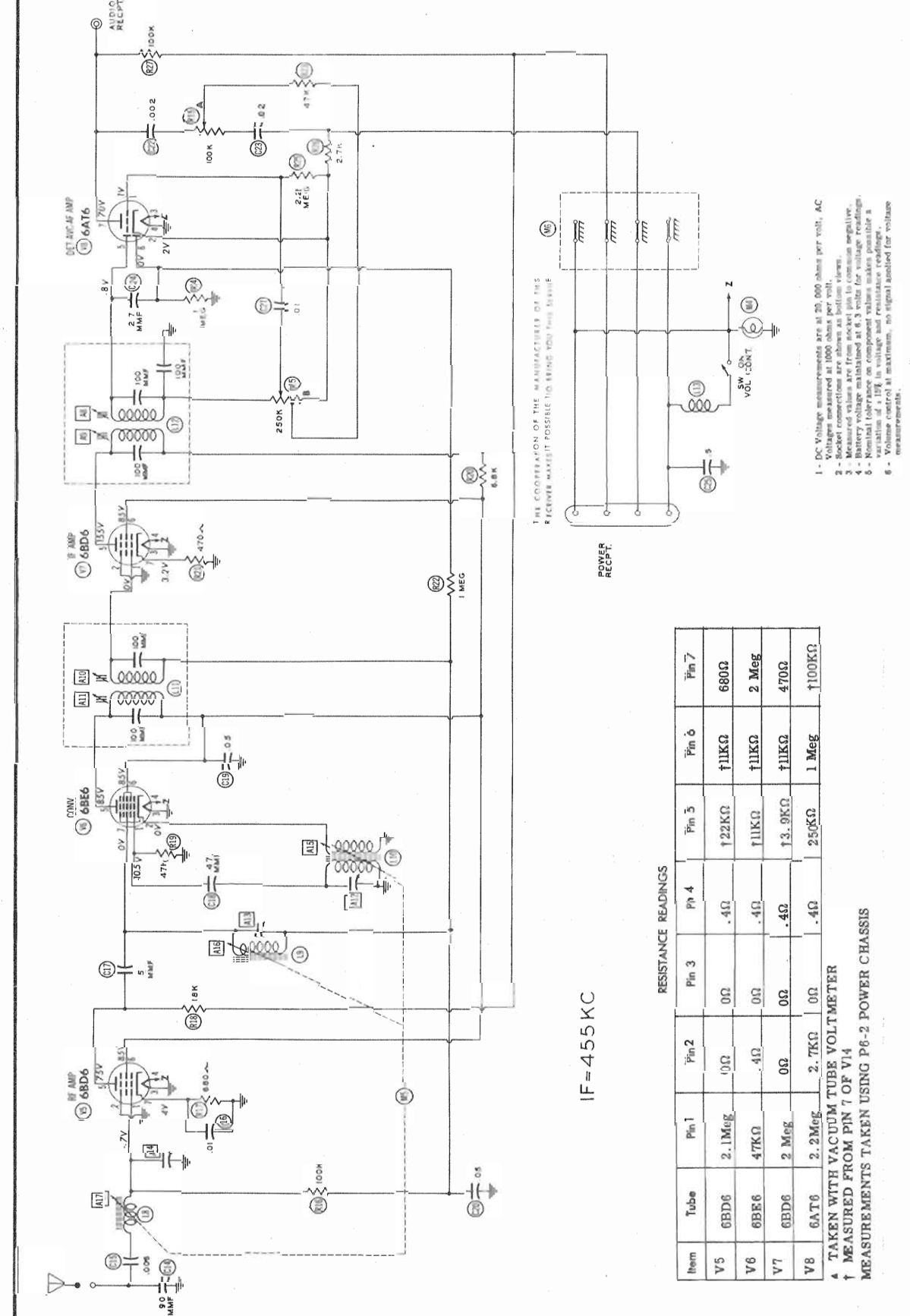
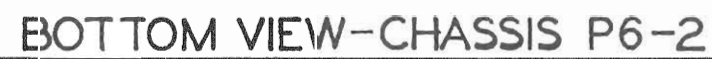
FUSES

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## VIBRATOR

ITEM No.	TYPE	INPUT VOLTS	FRE. QUENCY	REPLACEMENT DATA				NOTES
				MOTOROLA PART No.	CORNELL-DUBIER PART No.	MALLORY PART No.	RADIART PART No.	
M12	INT	6.3 VDC	115	48B3333	5342	850	5342	

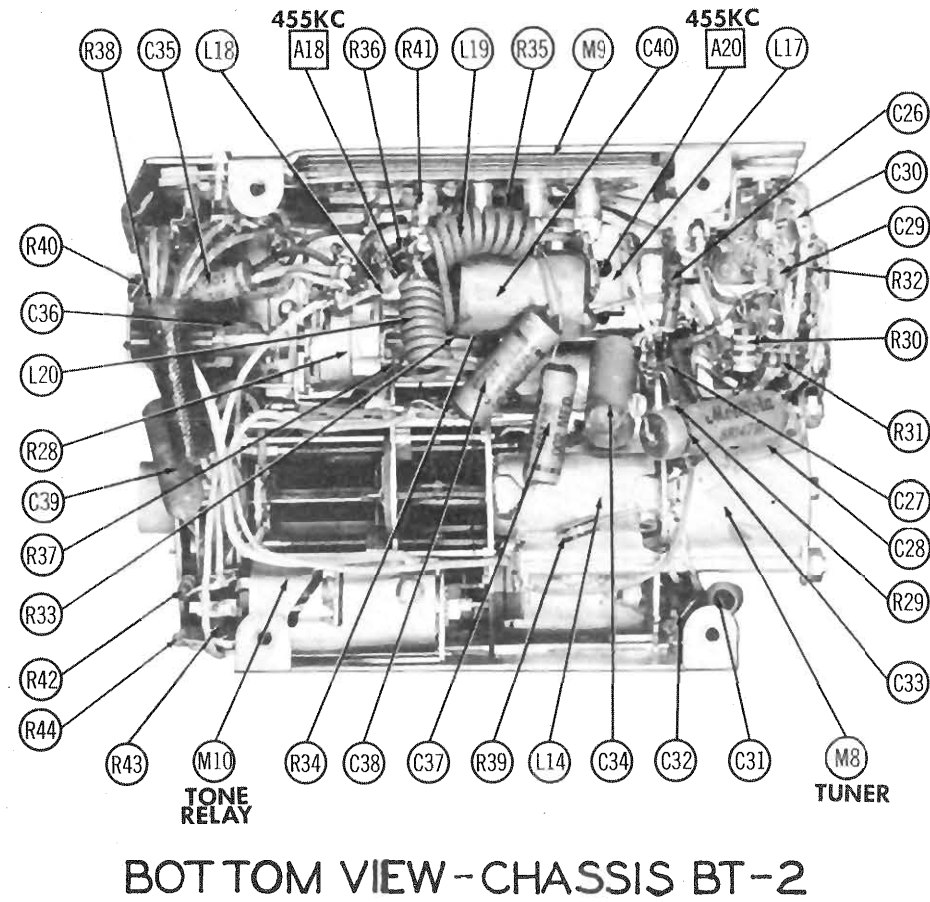
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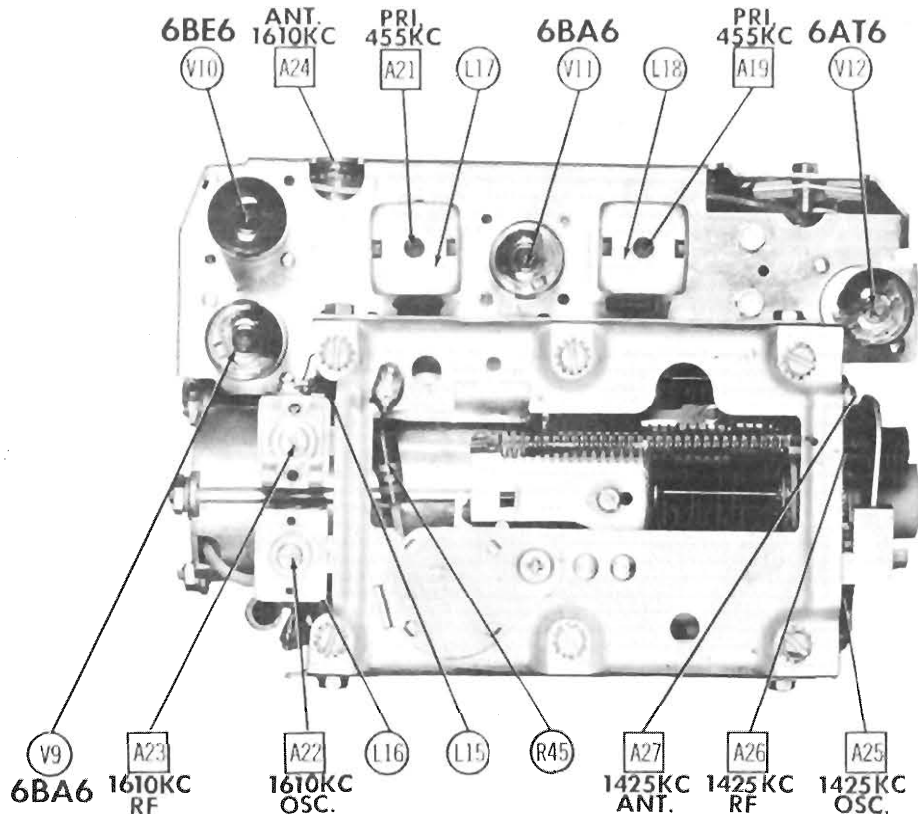
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197-7

MOTOROLA  
CHASSIS 21M



BOT TOM VIEW-CHASSIS BT-2



TOP VIEW-CHASSIS BT-2

ALIGNMENT INSTRUCTIONS

CHASSIS 2A

ALIGNMENT INSTRUCTIONS-READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
When adjusting tuner cores use special alignment tool (Motorola part #66A70278 or equivalent). Set volume control at maximum. Turn tone control to "high" position. Use insulated alignment tool.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. IMFD	High side to pin 7 (grid) of 6BE6 (V2). Low side to chassis.	455KC (400-MHz)	Extreme high frequency end.	Across voice coil	A1, A2, A3, A4	Adjust for maximum output. Attenuate generator to maintain 1.79 volts on output meter (1 watt).
2. Fig. 1	Thru dummy to antenna receptacle	1610KC	"	"	A5, A6 A7	Back tuner cores out to project 1-5/16 inch from ends of coil form. (Remove escutcheon and dial scale bracket to gain access to cores). Adjust A5, A6 and A7 for maximum output.
3. "	"	1300 KC	With tuning knob move carriage in 5/16 inch from position in step 2.	"	A8, A9 A10	Adjust for maximum output in order given.
4. "	"	1610KC	Extreme high frequency end.	"	A5, A6 A7	Adjust for maximum output in order given. Cement tuner core adjustments to prevent accidental movement.
Tune receiver to 1300KC signal and if necessary bend pointer to the 1300KC calibration mark on dial.						
PUSHBUTTON ADJUSTMENTS						
With receiver installed in car, fully extend antenna and adjust A7 for maximum volume on weak signal near 1400KC.						
1. Pull out button to unlock tuner.						
2. Tune manually to desired station signal.						
3. Push in button to lock tuner.						
4. Repeat above procedure for remaining buttons.						

CHASSIS 2M

ALIGNMENT INSTRUCTIONS-READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
Set volume control at maximum. Use insulated alignment tool.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
5. IMFD	High side to pin 7 (grid) of 6BE6 (V2). Low side to chassis.	455KC (400-MHz)	Extreme high frequency end of dial.	Across voice coil.	A8, A9, A10, A11	Adjust for maximum output. Attenuate generator to maintain 1.79 volts on output meter.
6. Fig. 1	Thru dummy to antenna receptacle	1605KC	"	"	A12, A13, A14	Preset tuner cores so that 3/8 inch of core projects from coil form. Adjust A12, A13, & A14 for maximum output in order given.
7. "	"	1300KC	With tuning knob move carriage 5/32 inch from position in step 2.	"	A15, A16, A17	Adjust for maximum output in order given.
8. "	"	1605KC	Extreme high frequency end of dial.	"	A12, A13, A14	Adjust for maximum output in order given. Cement tuner core adjustments to prevent accidental movement.
With receiver installed in car, fully extend antenna and adjust A14 for maximum volume on weak signal near 1400KC.						

CHASSIS BT-2

ALIGNMENT INSTRUCTIONS-READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
Set tuner to "Manual" position either by moving carriage plate manually or by connecting control head to receiver and pressing "M" button. If tuner cores are adjusted use alignment tool Motorola part #66A70278 or equivalent. Set volume control at maximum. Use insulated alignment tool.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. IMFD	High side to pin 7 (grid) of 6BE6 (V10). Low side to chassis.	455KC (400-MHz)	Extreme high frequency end (cores out).	Across voice coil	A18, A19, A20, A21	Adjust for maximum output. Attenuate generator to maintain 1.79 volts on output meter.
2. Fig. 1	Thru dummy to antenna receptacle.	1610KC	Extreme high frequency end. Set cores to project 1-1/8 inch from cans.	"	A22, A23, A24	Adjust for maximum output in order given.
3. "	"	1425KC	Tune manually to frequency of 1425 KC. Turn tuner core between tuner coil shield plate and tuner carriage plate.	"	A25, A26, A27	"
With receiver installed in car, fully extend antenna and adjust A24 for maximum volume on weak signal near 1400KC.						
PUSHBUTTON ADJUSTMENTS						
Turn receiver on and allow to warm up for a few minutes. Collapse antenna until signal is weak.						
Set buttons as follows:						
1. Press Manual "M" button on control head.						
2. Tune manually to desired station. (Note type of program, so station can be relocated).						
3. Press desired button and wait until tuning mechanism completes operation.						
4. Press automatic tuner reset button until "click" indicates button is locked.						
5. Turn automatic tuner set-up knob until previously selected station (step 2) is heard. Check setting by tuning manually to same station.						
6. Repeat steps 1 thru 5 for remaining push buttons.						

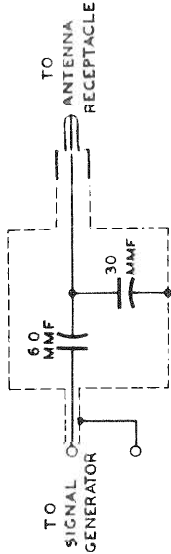


FIG. 1



PARTS LIST AND DESCRIPTIONS CHASSIS BT-2

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		INSTALLATION NOTES
		MOTOROLA PART No.	STANDARD REPLACEMENT	
V9	RF Amplifier	6BA6	6BA6	
V10	Converter	6BE6	6BE6	
V11	IF Amplifier	6BA6	6BA6	
V12	DET.-AFC AT Amp.	6AT6	6AT6	

SPEAKER

ITEM No.	RATINGS	REPLACEMENT DATA		NOTES
		MOTOROLA PART No.	JENSEN PART No.	
SP3	6" PM 3.2Ω	50B53083	ST-108	1 Alternate PM Speakers used in Ch. BT-2
		50B53074	Mod. P6-8	2 Alternate EM Speakers used in Ch. BT-2
SP3	6" FM 3.2Ω	50B53075		
		50B530207		

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.	RATING CAP.	VOLT	REPLACEMENT DATA		NOTES
			MOTOROLA PART No.	STANDARD REPLACEMENT	
C36	100	100V	21B7286	21B7286	
C37	100	100V	21B7286	21B7286	
C38	470	500	21B7286	21B7286	
C39	5	500	21B7286	21B7286	
C40	47	500	21B7286	21B7286	
C41	400	400	21B7286	21B7286	
C42	100	400	21B7286	21B7286	
C43	5	100	21B7286	21B7286	
C44	5	100	21B7286	21B7286	
C45	5	100	21B7286	21B7286	
C46	5	100	21B7286	21B7286	
C47	5	100	21B7286	21B7286	
C48	5	100	21B7286	21B7286	
C49	5	100	21B7286	21B7286	
C50	5	100	21B7286	21B7286	
C51	5	100	21B7286	21B7286	
C52	5	100	21B7286	21B7286	
C53	5	100	21B7286	21B7286	
C54	5	100	21B7286	21B7286	
C55	5	100	21B7286	21B7286	
C56	5	100	21B7286	21B7286	
C57	5	100	21B7286	21B7286	
C58	5	100	21B7286	21B7286	
C59	5	100	21B7286	21B7286	
C60	5	100	21B7286	21B7286	
C61	5	100	21B7286	21B7286	
C62	5	100	21B7286	21B7286	
C63	5	100	21B7286	21B7286	
C64	5	100	21B7286	21B7286	
C65	5	100	21B7286	21B7286	
C66	5	100	21B7286	21B7286	
C67	5	100	21B7286	21B7286	
C68	5	100	21B7286	21B7286	
C69	5	100	21B7286	21B7286	
C70	5	100	21B7286	21B7286	
C71	5	100	21B7286	21B7286	
C72	5	100	21B7286	21B7286	
C73	5	100	21B7286	21B7286	
C74	5	100	21B7286	21B7286	
C75	5	100	21B7286	21B7286	
C76	5	100	21B7286	21B7286	
C77	5	100	21B7286	21B7286	
C78	5	100	21B7286	21B7286	
C79	5	100	21B7286	21B7286	
C80	5	100	21B7286	21B7286	
C81	5	100	21B7286	21B7286	
C82	5	100	21B7286	21B7286	
C83	5	100	21B7286	21B7286	
C84	5	100	21B7286	21B7286	
C85	5	100	21B7286	21B7286	
C86	5	100	21B7286	21B7286	
C87	5	100	21B7286	21B7286	
C88	5	100	21B7286	21B7286	
C89	5	100	21B7286	21B7286	
C90	5	100	21B7286	21B7286	
C91	5	100	21B7286	21B7286	
C92	5	100	21B7286	21B7286	
C93	5	100	21B7286	21B7286	
C94	5	100	21B7286	21B7286	
C95	5	100	21B7286	21B7286	
C96	5	100	21B7286	21B7286	
C97	5	100	21B7286	21B7286	
C98	5	100	21B7286	21B7286	
C99	5	100	21B7286	21B7286	
C100	5	100	21B7286	21B7286	

Note 1. When C31 is 500MMF (Part #21K52227), C32 is not used.

CONTROLS

ITEM No.	RATING RESISTANCE	WATTS	REPLACEMENT DATA		INSTALLATION NOTES
			MOTOROLA PART No.	STANDARD REPLACEMENT	
R28	250KΩ	1	18K512869	18K512869	Volume-Tap 75KΩ - Note

Note: Used in models 702 & 802-Alternate Part No. 1K513550.

RESISTORS

ITEM No.	RATING OHMS	WATT	REPLACEMENT DATA		NOTES
			MOTOROLA PART No.	STANDARD REPLACEMENT	
R29	470KΩ	1/2	6R6032	6R6032	
R30	500Ω	1/2	6R6032	6R6032	
R31	18KΩ	1/2	6R6032	6R6032	
R32	47KΩ	1/2	6R6032	6R6032	
R33	600Ω	1/2	6R6032	6R6032	
R34	270Ω	1/2	6R6032	6R6032	
R35	1.5MΩ	1/2	6R6032	6R6032	
R36	47KΩ	1/2	6R6032	6R6032	
R37	22KΩ	1/2	6R6032	6R6032	

MISCELLANEOUS

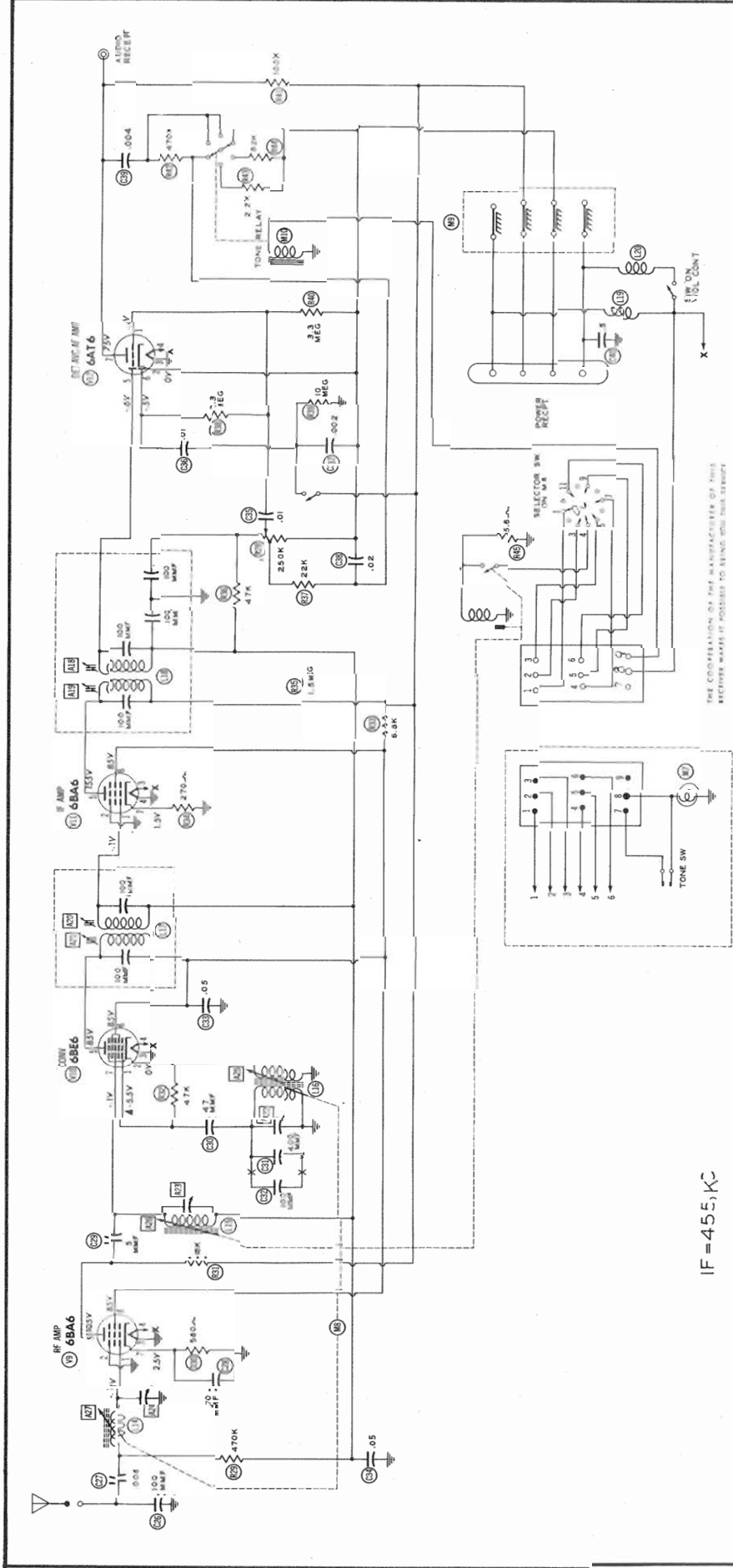
ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M8	Tuning Unit	1X512894	ST-101
M9	Spark Plate	1B572133	
M10	Relay	1X512923	Tone MR-8
A24	Trimmer	20A592135	Ant. (50-280MMF)
A23	Trimmer	20K481527	RF (20-180MMF)
A22	Trimmer	20K472612	On. (30-60MMF)

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS	BEAD COLOR	NOTES
M7	Bayonet	7.5	.2	White	Type No. 51

COILS (RF-IF)

ITEM No.	USE	DC RES.	MOTOROLA PART No.	MERIT PART No.	NOTES
L14	Ant. Coil	11Ω	24B71881		
L15	RF Coil	11Ω	24B71881		
L16	Osc. Coil	.6Ω	24B592153	BC-352	
L17	Input IF	17Ω	24B485553	BC-355	
L18	Output IF	18Ω	24K485553		
L19	Hash Choke	0Ω	24K592269		
L20	Hash Choke	0Ω	24K592269		



IF = 455, KC

- 1 - DC Voltage measurements are at 20,000 ohms per volt, AC Voltages measured at 1000 ohms per volt.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative.
- 4 - Battery voltage maintained at 6.3 volts for voltage readings.
- 5 - Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.
- 6 - Volume control at maximum, no signal applied for voltage measurements.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7
V9	6BA6	2.3MΩ	0Ω	0Ω	4Ω	22KΩ	11KΩ	580Ω
V10	6BE6	47KΩ	.8Ω	0Ω	4Ω	11KΩ	1.8MΩ	270Ω
V11	6BA6	1.8MΩ	0Ω	.4Ω	0Ω	11KΩ	11KΩ	270Ω
V12	6AT6	3.3MΩ	0Ω	0Ω	.4Ω	300KΩ	6.6MΩ	1100KΩ

▲ TAKEN WITH VACUUM TUBE VOLTMETER  
† MEASURED FROM PIN 7 OF V14  
MEASUREMENTS TAKEN USING P6-2 POWER CHASSIS

PARTS LISTS AND DESCRIPTIONS CHASSIS 2A

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		INSTALLATION NOTES
		MOTOROLA PART No.	RTMA BASE TYPE	
V1	RF Amplifier	6BD6	7BK	
V2	Converter	6BE6	7CH	
V3	IF Amplifier	6BD6	7BK	
V4	Det.-AVC-AF Amp.	6AT6	7BT	

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.	RATING CAP. VOLT	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	AEROVOX PART No.	CENTRALAB PART No.	
C1	90	21A591682			
C2	100	P688-008	P688-008	D6-602	PT6506
C3	470	1498-0005	SIS	D6-471	MC245
C4	5	21K70720		TC2-4.7	UC-555
C5	47	21R05313	5147	D6-470	GPIK-470
C6	220	21R115096		TM5Q5	UC-5447
C7	220	21R115096		DF-503	PT415
C8	400	8R14701	P488-05	DF-503	PT415
C9	200	8R13514	P488-05	DF-503	PT415
C10	200	8R23053	P488-01	D6-103	PT415
C11	400	8R17336	P688-002	D6-202	PT6502
C12	400	8R12609	P488-02	DF-203	PT415
C13	27	21R110089			
C14	100	8K17028	P185-5	MP2P5	RF480

CONTROLS

ITEM No.	RATING RESIST. ANCE	REPLACEMENT DATA			INSTALLATION NOTES
		MOTOROLA PART No.	IRC PART No.	CENTRALAB PART No.	
R1A	100KΩ	18B512084*	QJ-399A**		
R1B	250KΩ	18K512740†	QJ-406A††		
R1C	Switch				
* Used in models HJ2A, PC2A, & SR2A.					
†† CONCENTRIK KIT EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-206 (Panel)					
R2A	100KΩ	18K512739‡	QJ-407A§§		
R2B	250KΩ				
R2C	Switch				
‡ Used in model HN2A.					
§§ CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-112 (Panel)					
R3A	100KΩ				
R3B	250KΩ				
R3C	Switch				

RESISTORS

ITEM No.	RATING OHMS	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	IRC PART No.	CENTRALAB PART No.	
R2	470KΩ	8R6032	BTS-470K		
R3	680Ω	8R6040	BTS-680		
R4	18KΩ	8R5591	BTS-18K		
R5	33KΩ	8R6012	BTS-33K		
R6	6800Ω	8R5690	BTS-6800		
R7	1 Meg	8R6004	BTS-1 Meg		
R8	330Ω	8R6022	BTS-330		

ITEM No.	USE	RATINGS			REPLACEMENT DATA		NOTES
		SIZE	FIELD	V. C. IMP.	MOTOROLA PART No.	JENSEN PART No.	
SP1	6" x 9" PM			3.2Ω	30C513193	ST-810 Mod. P69-V	① Alternate PM Speakers - All Models using Ch. 2A except Model HN2A
					30C513195		② 6" x 9" PM Speakers used in Model HN2A
					30C513197		
					30C513200		
					30K513194		
					30K513196		
					30K51345		
					30K513198		
					30K513201		
SP1	6" x 9" EM (4 Volt)			3.2Ω	30C513159		① Alternate EM Speakers - All Models using Ch. 2A except Model HN2A
					30C513202		② 6" x 9" EM Speakers used in Model HN2A
					30C513204		
					30C513206		
					30C513542		
					30K513199		
					30K513203		
					30K513205		
					30K513207		
					30K513543		

COILS (RF-IF)

ITEM No.	USE	DC RES.		MOTOROLA PART No.	MERIT PART No.	NOTES
		PRI.	SEC.			
L1	Ant. Coil	12Ω		24B520864		
L2	RF Coil	11.5Ω		24K520865		
L3	Osc. Coil	4.4Ω		24B520866		
L4	Output IF	18.5Ω		24C485553	BC-352	
L5	Harsh Choke	18Ω		24K485554	BC-355	
L6	Harsh Choke	18Ω		24K522609		
L7	Harsh Choke	18Ω		24K522609		

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	READ COLOR	REPLACEMENT DATA		NOTES
					MOTOROLA PART No.	JENSEN PART No.	
M1	Bayonet	6-8	.25	Blue		65X10887	Type No. 44.

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M2	Tuning Unit	510512128	
M3	Spark Plate	1B512202	
A7	Trimmer	20A513232	AT-94
A6	Trimmer	20A77537	RF
A5	Trimmer	20A77537	Osc.
	Knob	IX520078	Off/On Volume, Tuning (Models BK2A, HJ2A, PC2A)
	Knob	IX513351	Off/On Volume, Tuning (Models CT2A)
	Knob	IX513438	Off/On Volume, Tuning (Models GMT2A)
	Knob	IX513035	Off/On Volume, Tuning (Models HN2A, PD2A, SR2A)
	Knob	IX520975	Off/On Volume, Tuning (Models KR2A)
	Knob	IX512214	Off/On Volume, Tuning (Models OE2A)
	Knob	36A512163	Tone (Models BK2A, CT2A, GMT2A, HJ2A, OE2A, SR2A)
	Knob	36B513220	Tone (Models HN2A, KR2A)
	Knob	36K513169	Tone (Models PC2A, PD2A)
	Knob	36K473550	Lever (Models BK2A, CT2A, GMT2A, HJ2A, OE2A, SR2A)
	Knob	36K513223	Lever (Models PC2A, PD2A)
	Knob	36B472865	Lever (Models PC2A, PD2A)

PARTS LIST AND DESCRIPTIONS CHASSIS 2M

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		INSTALLATION NOTES
		MOTOROLA PART No.	STANDARD REPLACEMENT	
V5	RF Amplifier	6BD6	6BD6	
V6	Converter	6BE6	6BE6	
V7	IF Amplifier	6BD6	6BD6	
V8	Det.-AVC-AF Amp.	6AT6	6AT6	

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.	RATING CAP. VOLT	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	AEROVOX PART No.	CENTRALAB PART No.	
C14	90	21A591682			
C15	100	8A1439	P488-006	D6-602	PT6506
C16	100	8R472754	P488-01	D6-103	PT415
C17	5	21K70720	SIS	TC2-4.7	UC-555
C18	47	21K77373	S147N750	TCN-47	5TCU-Q47
C19	400	8R14701	P488-05	DF-503	PT415
C20	400	8R13514	P488-05	DF-503	PT415
C21	100	8R172754	P488-01	D6-103	PT415
C22	400	8R4726	P488-002	D6-202	PT6502
C23	400	8R12609	P488-02	DF-203	PT415
C24	27	21R110089			
C25	100	8K17028	P185-5	MP2P5	RF480

CONTROLS

ITEM No.	RATING RESIST. ANCE	REPLACEMENT DATA			INSTALLATION NOTES
		MOTOROLA PART No.	IRC PART No.	CENTRALAB PART No.	
R15A	100KΩ	18B512084*	QJ-399A**		
R15B	250KΩ	18K512740†	QJ-406A††		
R15C	Switch				
* Used in models CT2M, KR2M, OE2M, & PD2M.					
†† CONCENTRIK KIT EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-302 (Panel)					
R16A	100KΩ	18K512739‡	QJ-407A§§		
R16B	250KΩ				
R16C	Switch				
‡ Used in model BK2M.					
§§ CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-206 (Panel)					
R17A	100KΩ				
R17B	250KΩ				
R17C	Switch				

\* Used in models HJ2M, PC2M & SR2M.

†† CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-302 (Panel)

‡ Used in model BK2M.

§§ CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-206 (Panel)

CONTROLS

ITEM No.	RATING OHMS	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	IRC PART No.	CENTRALAB PART No.	
R18	100KΩ	8R6075	BTS-100K		
R19	680Ω	8R6040	BTS-680		
R20	18KΩ	8R5591	BTS-18K		
R21	33KΩ	8R6056	BTS-33K		
R22	6800Ω	8R5690	BTS-6800		
R23	1 Meg	8R6004	BTS-1 Meg		
R24	330Ω	8R6022	BTS-330		

\* Used in model HN2M.

†† CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-112 (Panel)

‡ Used in model BK2M.

§§ CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B11-128 & P1-206 (Panel)