



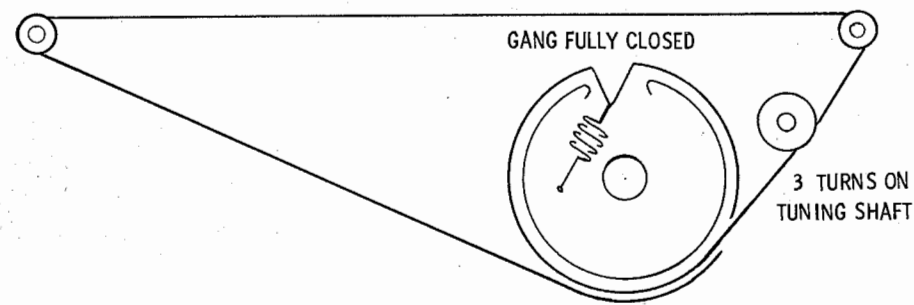
DEWALD MODEL  
M-804



TRADE NAME	DeWald Model M-804		
MANUFACTURER	DeWald Radio Mfg. Corp., 35-15 37th Ave., Long Island City 1, N. Y.		
TYPE SET	AC Operated FM Tuner		
TUBES (Seven)	Types 6U8A RF Amp. - Mixer, 12AT7 Osc. - AFC, 6BA6 1st IF Amplifier, 6AU6 2nd IF Amplifier, 6AU6 Limiter, 6AL5 Discriminator, EM80/6BR5 Tuning Indicator		
POWER SUPPLY	105-125 Volts AC-60 Cycles	RATING	.285 Amp. @ 117 Volts AC (26 Watts)
TUNING RANGE - FREQ. MOD.	88 - 108MC		

DEWALD MODEL  
M-804

### DIAL CORD STRINGING



HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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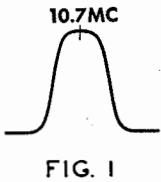
ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

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.

IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

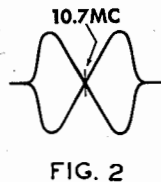
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1. 200mmf	High side to RF stator lug of tuning gang. Low side to chassis.	10.7MC (Unmod.)	FM	Point of non-interference	DC probe to point A, Common to chassis.	A1, A2, A3, A4, A5, A6, A7	Adjust for maximum deflection.
2. "	"	"	"	"	DC probe to point B, Common to chassis.	A8	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.



IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.

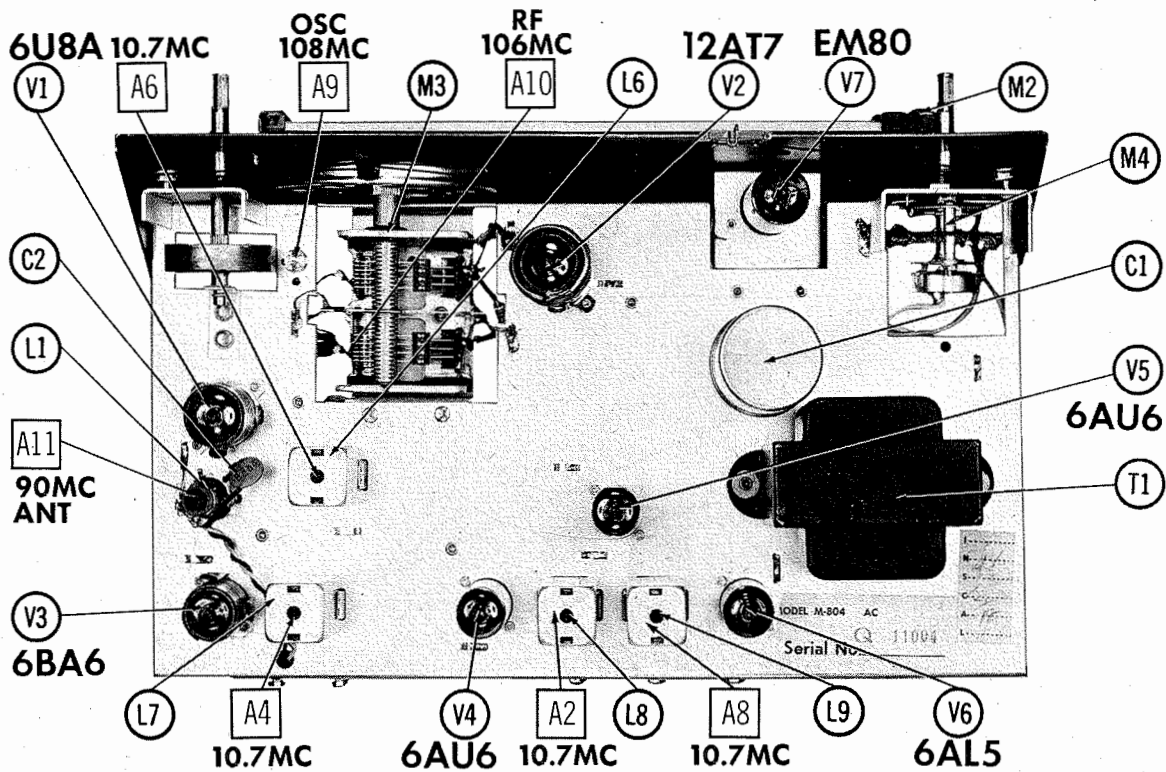
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
1. 200mmf	High side to RF stator lug of tuning gang. Low side to chassis.	10.7MC (450KC Swp)	FM	Point of non-interference	Vert. Amp. thru 1meg res. to point A, Low side to chassis.	A1, A2, A3, A4, A5, A6, A7	Adjust for curve of maximum amplitude and symmetry similar to Fig. 1.
2. "	"	"	"	"	Vert. Amp. thru 1meg res. to point B, Low side to chassis.	A8	Adjust so that 10.7MC occurs at center of crossover lines similar to Fig. 2. SLIGHTLY retouch A1 for maximum amplitude and straightness of crossover lines.



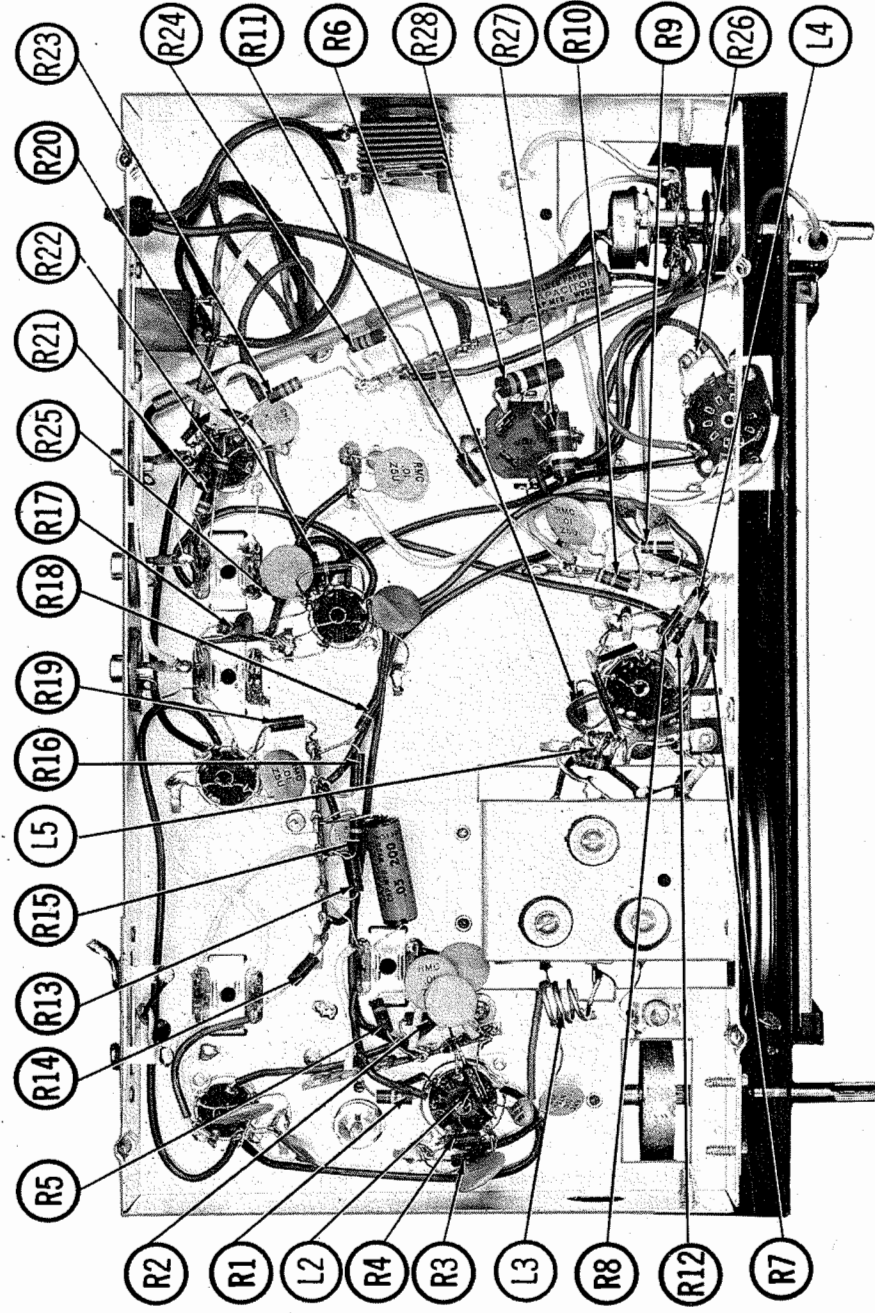
RF ALIGNMENT

Disconnect line cord antenna.

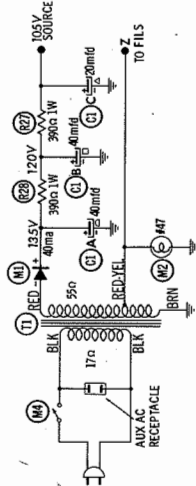
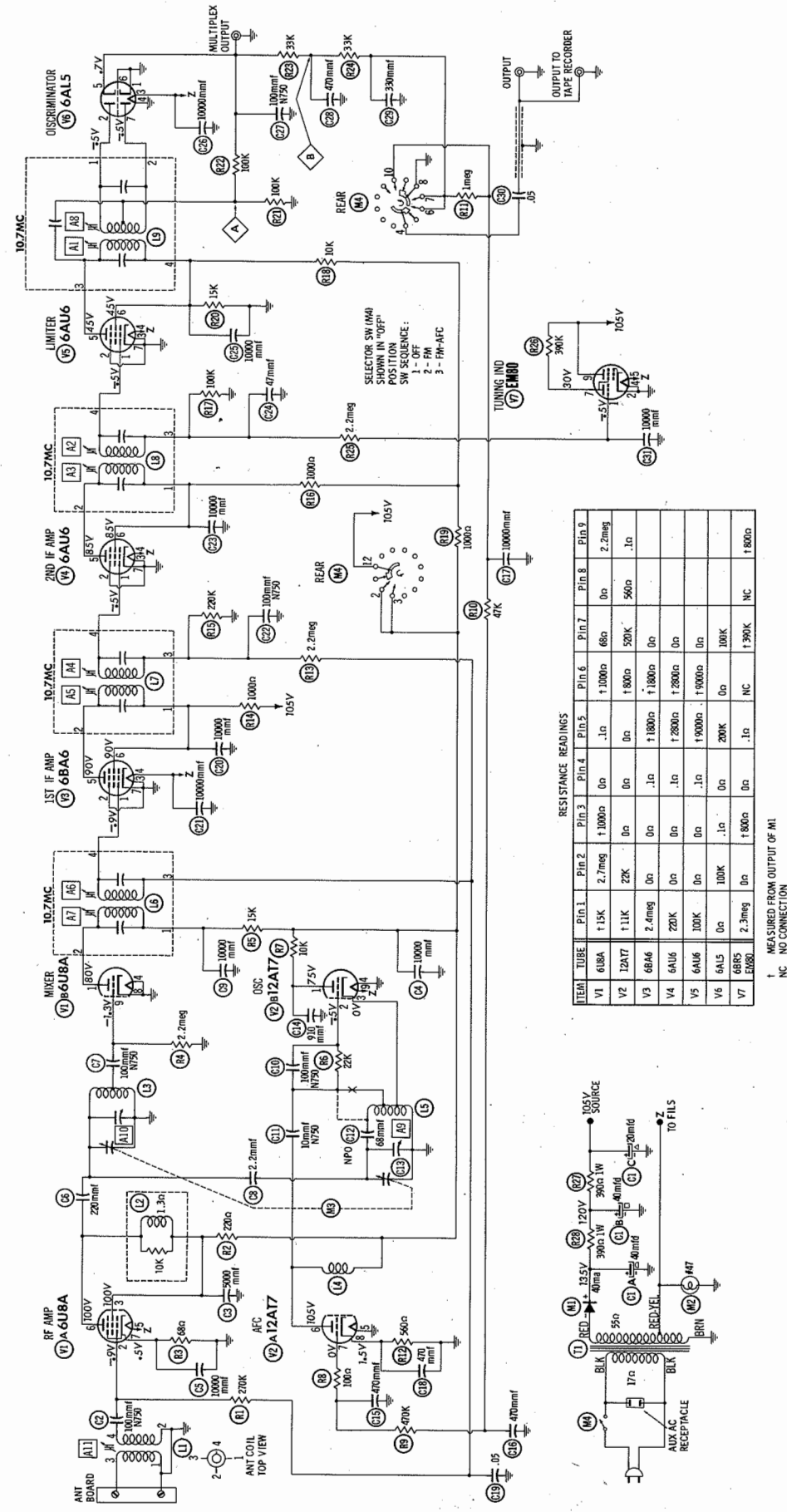
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
3. 270Ω Carbon Resistor	High side thru 270Ω antenna terminal. Low side to chassis.	108MC (Unmod.)	FM	108MC	DC probe thru 1meg res. to point A, Common to chassis.	A9	Adjust for maximum deflection.
4. "	"	106MC	"	Tune to 106MC signal	"	A10	"
5. "	"	90MC	"	Tune to 90MC signal	"	A11	"



CHASSIS —TOP VIEW



CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION



SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION  
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

A PHOTOFAC STANDARD NOTATION SCHEMATIC  
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- DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
- Resistor values are in ohms, kilohms, or megohms.
- Measured values are from socket pin to common negative.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.
- Volume control at maximum, no signal applied for voltage measurements.

PARTS LIST AND DESCRIPTIONS

TUBES ( GENERAL ELECTRIC, SYLVANIA )

RESISTORS (cont)

ITEM No.	USE	TYPE	NOTES
V1	RF Amp. - Mixer	6U6A	
V2	Osc. - AFC	12AT7	
V3	1st IF Amplifier	6BA6	
V4	2nd IF Amplifier	6AU6	

ITEM No.	RATING	DEWALD PART No.	NOTES
R19	1000Ω		
R20	15K		
R21	100K		
R22	100K		
R23	33K		

ITEM No.	RATING	DEWALD PART No.	NOTES
R24	33K		
R25	2.2meg		
R26	300K		
R27	300Ω		
R28	300Ω		

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	DEWALD PART No.	USE	TYPE	NOTES
C1A	40	E-212-4	AFH4-02	TC55	
C1B	40				
C1C	40				

\* Non Catalog Item

COILS (RF-IF)

ITEM No.	USE	DEWALD PART No.	Meissner PART No.	Miller PART No.	Rem PART No.	NOTES
L1	FM Ant. Trana.	1102B-4				
L2	RF Choke	1104-4		SW-631 *		4.7 Microhenries; wound on a 10K Resistor
L3	FM RF Coll	1100-3				
L4	RF Choke	1104-3				
L5	FM Osc. Coll	0-156-5				
L6	1st FM IF	1038B-5				
L7	2nd FM IF	1038B-5				
L8	3rd FM IF	1038B-5				
L9	Discriminator	1038B-2				

\* Parallel with 10K Resistor.

TRANSFORMER (POWER)

ITEM No.	RATING	DEWALD PART No.	Halldorson PART No.	Merit PART No.	Stanco PART No.	Triod PART No.
T1	117V ② 28A ③ .040A Tap ④ 6.3V ⑤ 2.3A	P7157A	P9102	P3045	PA8421	R-30X

SELENIUM RECTIFIER

ITEM No.	RATING CURRENT (Measured)	REPLACEMENT DATA			NOTES
		DEWALD PART No.	FEDERAL PART No.	SARKES TARZIAN PART No.	
M1	.04A	8018B-3	1234AH	T085 65A K200 ①	① Silicon

MISCELLANEOUS

ITEM No.	PART NAME	DEWALD PART No.	NOTES
M2	Dial Lamp	V222B-3	#47
M3	Tuning Cap.	8089-6	2 Gang
M4	Switch		Selector, 3 pole, 3 Position Single Water, Rotary

CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

ITEM No.	RATING	DEWALD PART No.	NOTES
R1	270K		
R2	220Ω		
R3	68Ω		
R4	2.2meg		
R5	15K		
R6	22K		
R7	10K		
R8	100Ω		
R9	470K		

RESISTORS

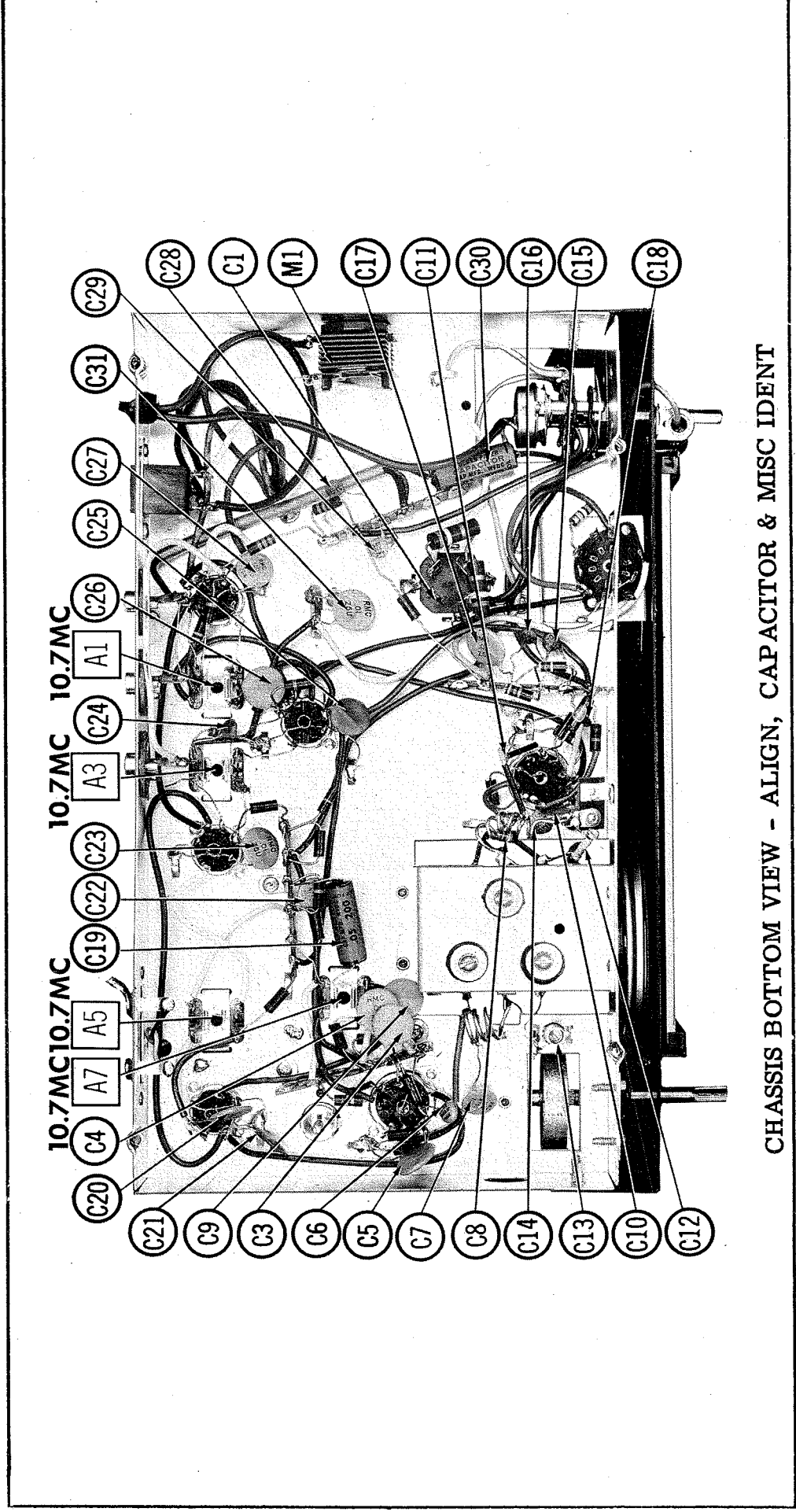
All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	DEWALD PART No.	NOTES
R10	47K		
R11	1meg		
R12	560Ω		
R13	2.2meg		
R14	500Ω		
R15	220K		
R16	100Ω		
R17	10K		
R18	10K		

WIRING DATA

NAME	PART No.	DESCRIPTION
Knob	K472-7	Tuning Selector
Knob	K472-6	
Dial Scale	DG-607	

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors  
Power Cord ..... Use BELDEN No. 1765-B (6 Ft. Length)  
1725-K (1½ Ft. Length)



CHASSIS BOTTOM VIEW - ALIGN, CAPACITOR & MISC IDENT