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PHOTOFACT<sup>®</sup> with

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TRADE NAME : Fanon Model FCB-9  
Masco Model MCB-9

SUPPLIER : Fanon Electronic Sales Corp.,  
A Div. of Fanon Electronic Industries, Inc.  
439 Frelinghuysen Ave., Newark, N. J.

TYPE SET : 9 Transistor Transceiver

POWER SUPPLY : 9 Volts DC

RATING : 10MA @ 9VDC (Receive, No Signal)  
26MA @ 9VDC (Transmit, No Modulation)

TUNING RANGE : Any one CB Channels 1 thru 22



## ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:  
A1 thru A7... GENERAL CEMENT #9089, 5066, 8276... WALSCO #2512, 2525, 2528

### RECEIVER ALIGNMENT

Connect DC VTVM across volume control.

	SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
1.	High side thru .01mfd to emitter of X1, common to ground. Tune to 455KC (Unmod.)		A1, A2, A3	Adjust for maximum deflection.
2.	High side to external rod antenna, common to ground. Tune to channel frequency.	9 27.065MC	A4, A5	Adjust for maximum deflection.

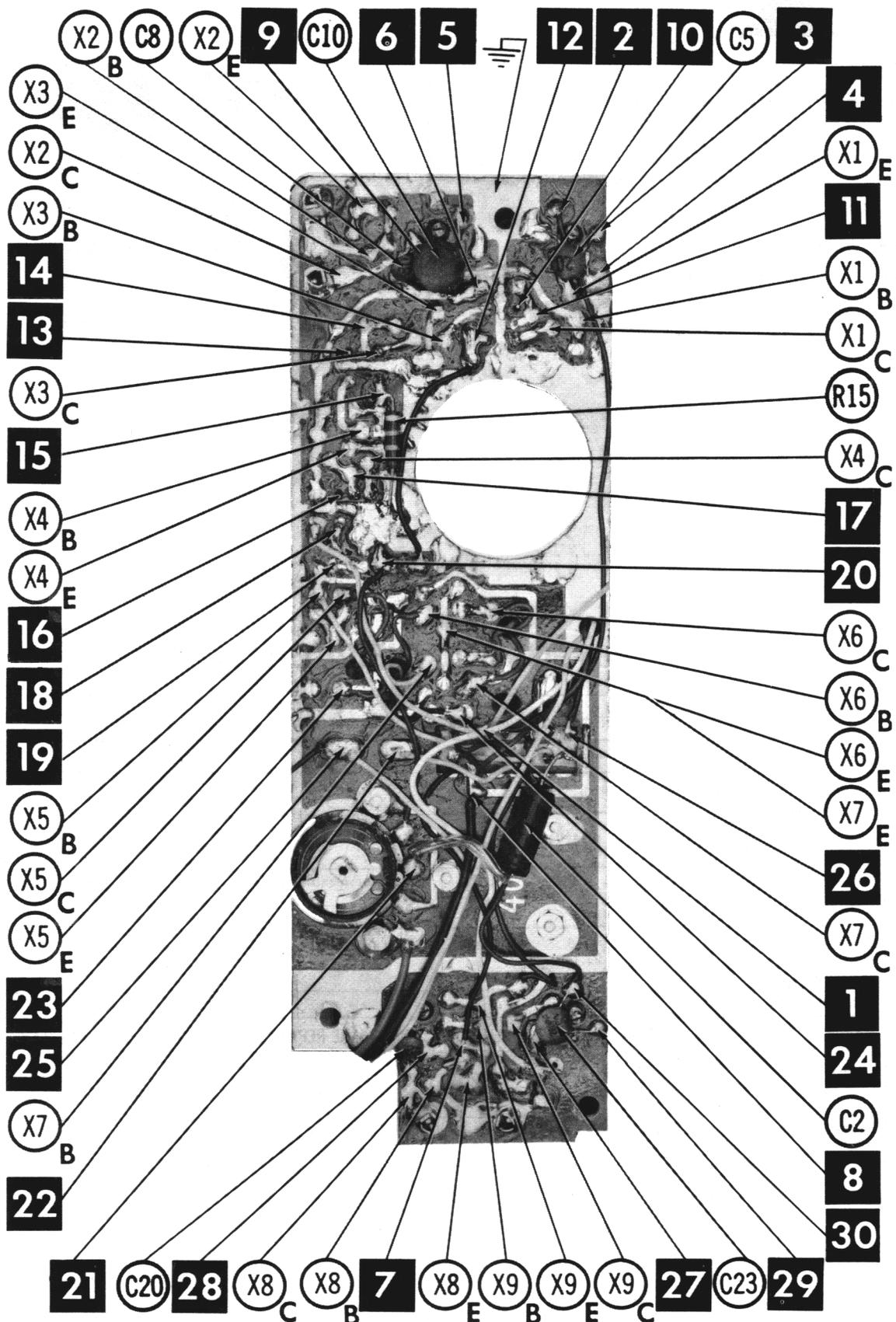
### TRANSMITTER ALIGNMENT

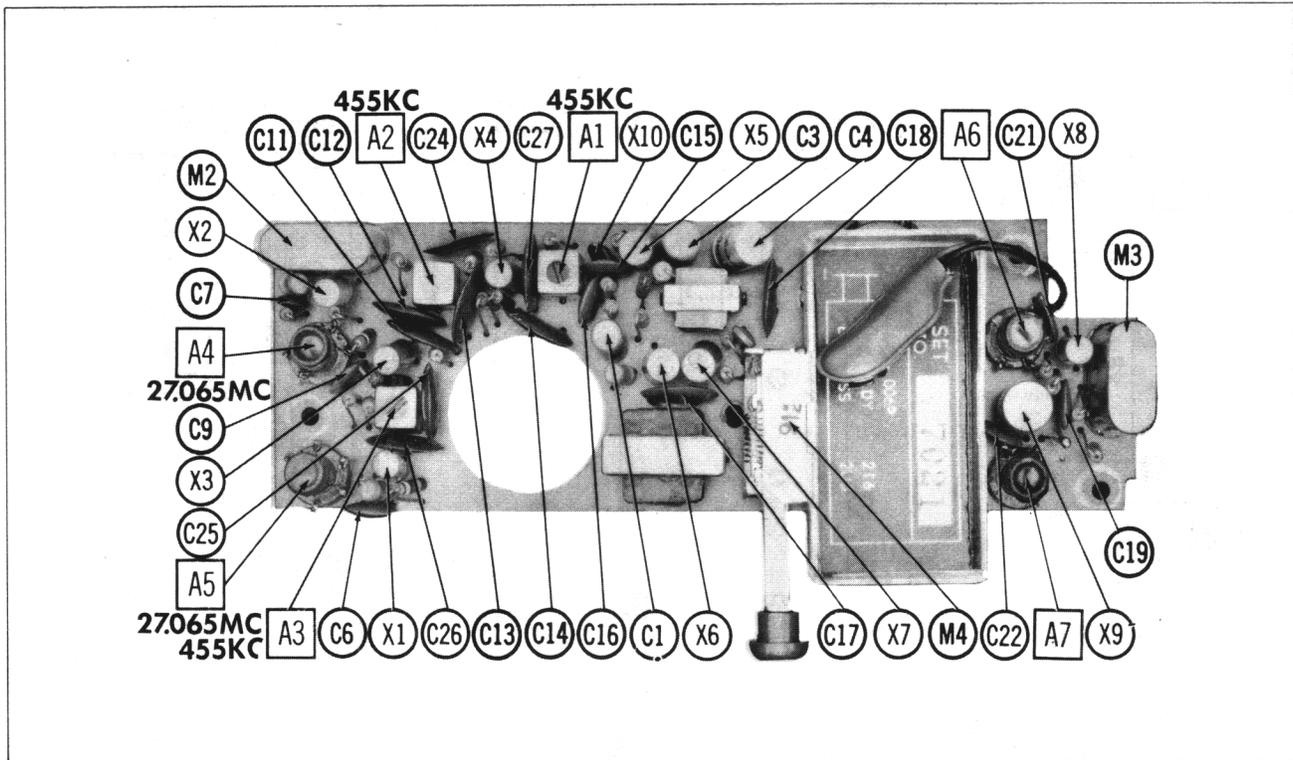
ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71)

	SPECIAL INSTRUCTIONS	INDICATOR	ADJUST	REMARKS
1	Supply voltage should be maintained at 9 volts.	RF wattmeter or field strength meter.	A6, A7	Key Transmitter. Adjust for maximum output.

FANON-MASCO MODELS FCB-9, MCB-9

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana





FANON-MASCO MODELS FCB-9, MCB-9

## PARTS LIST AND DESCRIPTION

### TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	2SA104	Rec. Mixer	DS34	GE-1		PNP
X2	2SA103	Rec. Oscillator	DS34	GE-1		PNP
X3	2SA102	1st IF Amp.	DS25	GE-1		PNP
X4	2SA102	2nd IF Amplifier	DS25	GE-1		PNP
X5	2SB171	Driver-Speech Amp.	DS26	GE-2	2N406	PNP
X6	2SB172	Output-Modulator	DS26	GE-2	2N408	PNP
X7	2SB172	Output-Modulator	DS26	GE-2	2N408	PNP
X8	2SA104	Trans. Oscillator	DS34	GE-1		PNP
X9	2SA70	Final Amplifier	DS34	GE-2		PNP

### POWER RECTIFIERS & SIGNAL DIODES

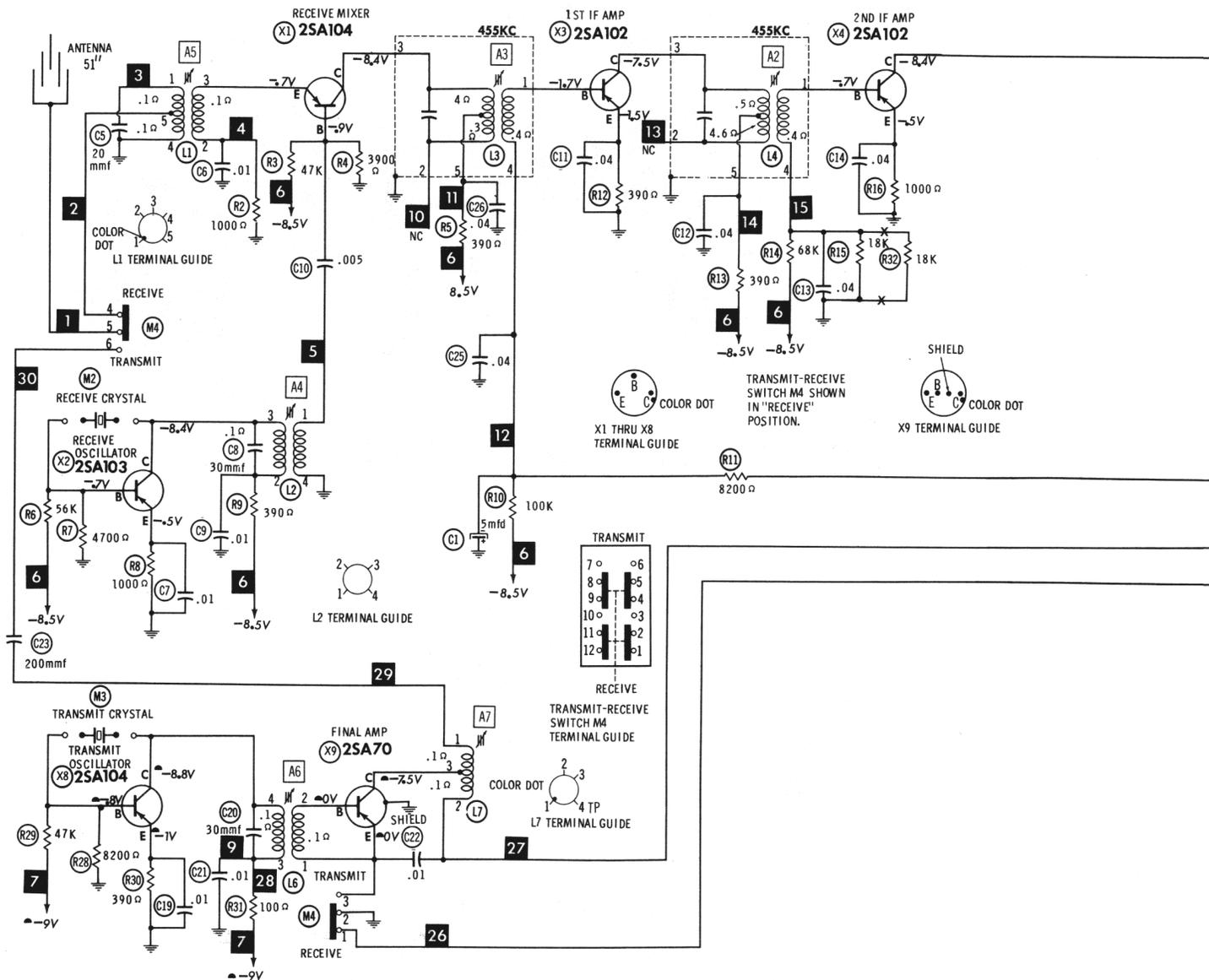
ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS			NOTES
			MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.	
X10		OA90				Detector

### ELECTROLYTIC CAPACITORS

ITEM No.	RATING		FANON-MASCO PART No.	REPLACEMENT DATA					
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	5	3		BCD3005	ECPB405	MT1-3	TT6X5	MLV5-3	VL-1035
C2	5	3		PTT4	NLW5-15	MT1-3	TT6X5	MLV5-3	TE-1052.2
C3	30	3		BCD3025	ECPB412	MT1-10	PET130	MLV30-6	VL-1043
C4	30	10		BCD10025	ECPB412	MT1-10	TT10X30	MLV25-10	VL-1132

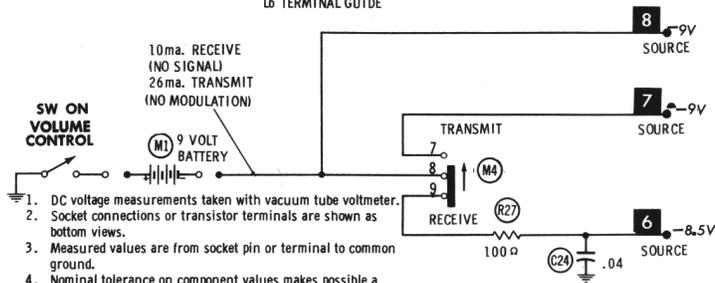
### FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C5	20		DI-20	DD-200	L10Q2	CCD-200	GP-420	10TS-Q20
C6	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C7	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C8	30		DI-30	DD-300	L10Q3	CCD-300	GP-430	10TS-Q30
C9	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C10	.005		TTD-005	CK-502	H05D5	CCD-502	TA-250	TG-D50
C11	.04		TTD-05	CK-503	H05S5			TG-S50
C12	.04		TTD-05	CK-503	H05S5			TG-S50
C13	.04		TTD-05	CK-503	H05S5			TG-S50
C14	.04		TTD-05	CK-503	H05S5			TG-S50
C15	.005		TTD-005	CK-502	H05D5	CCD-502	TA-250	TG-D50
C16	.005		TTD-005	CK-502	H05D5	CCD-502	TA-250	TG-D50
C17	.04		TTD-05	CK-503	H05S5			TG-S50
C18	.1		TTD-1	CK-104	H05P1		TA-110	TG-S10
C19	.01		TTD-01	CK-103	H05S1		GP-430	10TS-Q30
C20	30		DI-30	DD-300	L10Q3	CCD-300	GP-430	10TS-Q30
C21	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10



RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

ALL MEASUREMENTS TAKEN IN "RECEIVE" POSITION UNLESS OTHERWISE DESIGNATED.  
 ▲ TAKEN IN "TRANSMIT" POSITION.

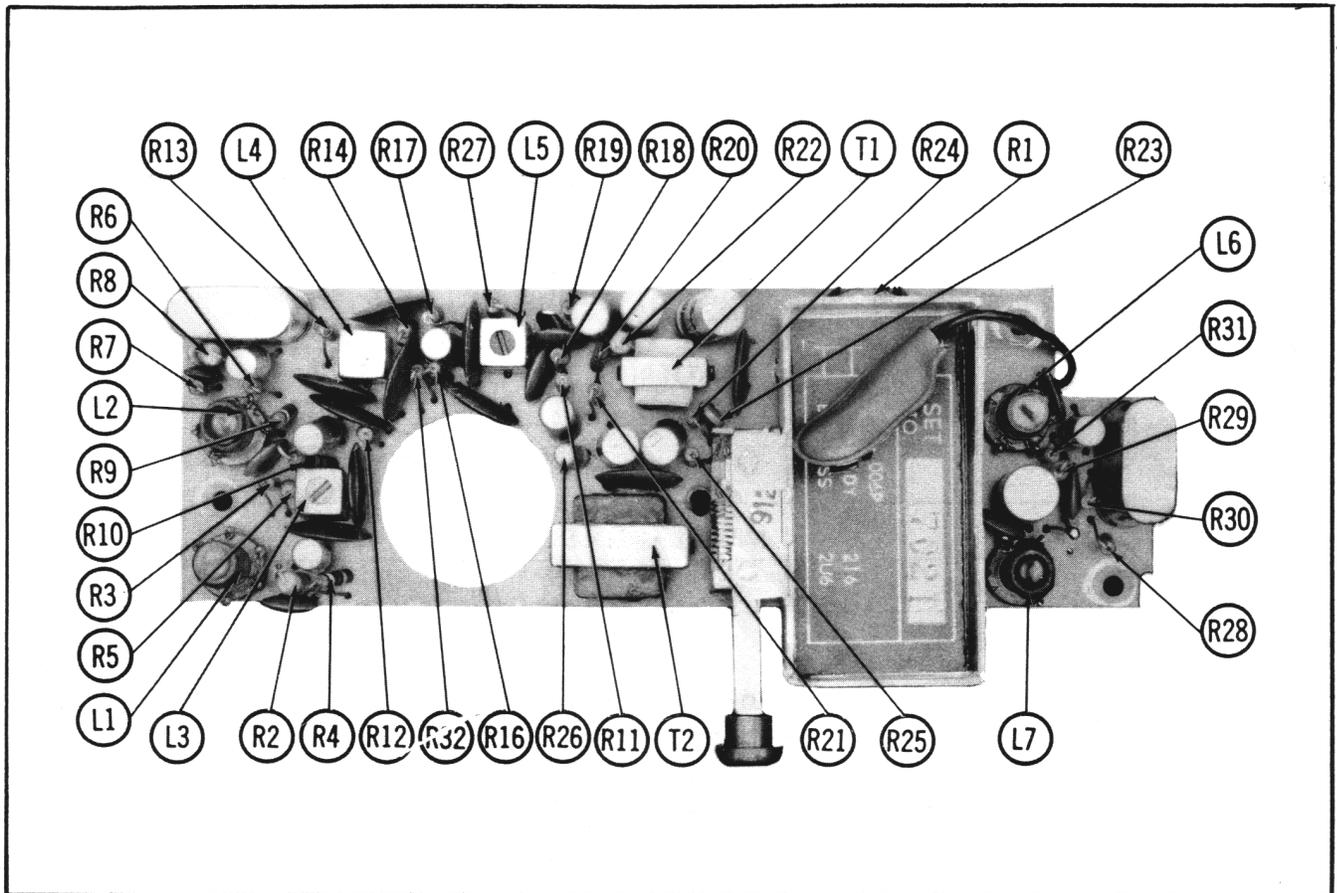
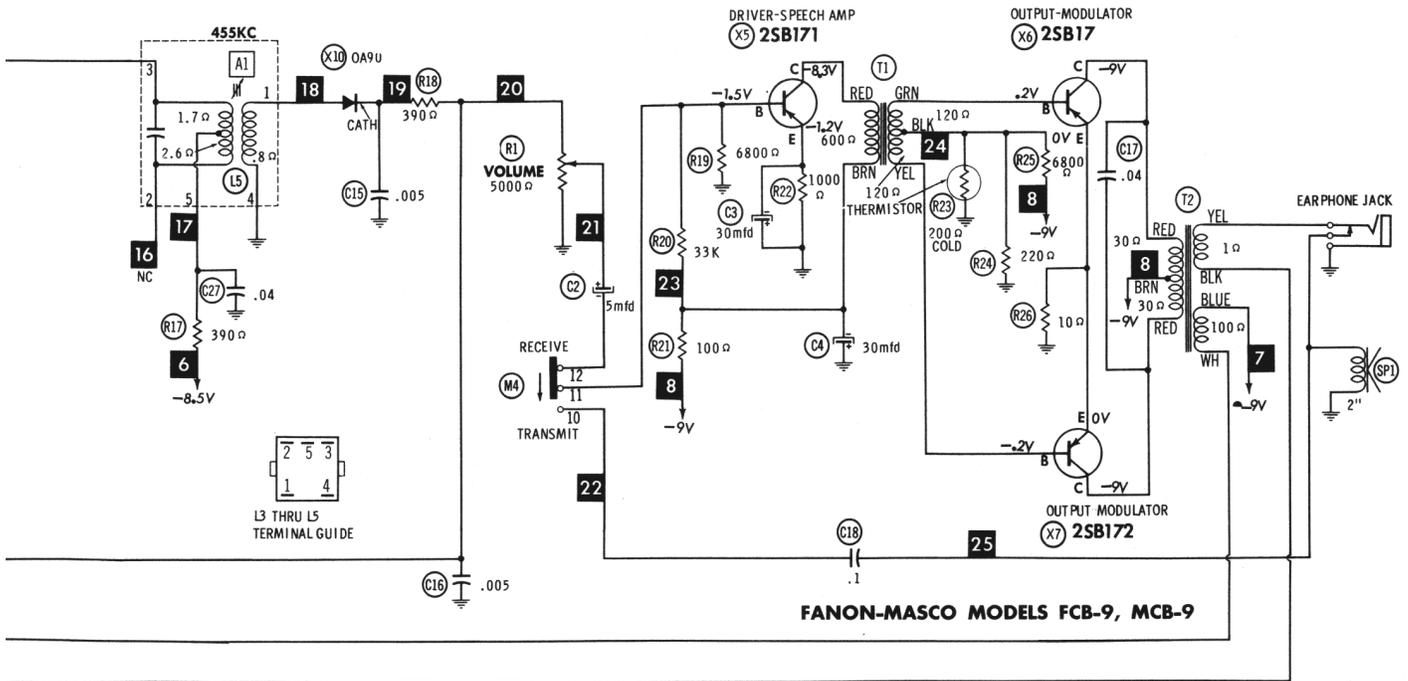


1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.

NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

A PHOTOFACIT STANDARD NOTATION SCHEMATIC with CIRCUITRACE

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# PARTS LIST AND DESCRIPTION (CONTINUED)

## FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C22	.01		TTD-01	CK-103	H05S1			TG-S10
C23	200		DI-200	DD-201	L10T2	CCD-201	TA-110	10TS-T20
C24	.04		TTD-05	CK-503	H05S5		GP-320	TG-S50
C25	.04		TTD-05	CK-503	H05S5			TG-S50
C26	.04		TTD-05	CK-503	H05S5			TG-S50
C27	.04		TTD-05	CK-503	H05S5			TG-S50

## CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			FANON-MASCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω		B16-214①			

①Use Original Knob.

## RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R23	200Ω Cold			#MT-25					

# Fanon-Masco Part Number.

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		FANON-MASCO PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	Rec. RF						
L2	Rec. Osc.						
L3	1st IF						
L4	2nd IF						
L5	3rd IF						
L6	Transmit Osc.						
L7	Final						

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	FANON-MASCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	1.7	1						

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	FANON-MASCO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	500Ω CT	6-8Ω						
		SEC. 2						
		500Ω						

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	FANON-MASCO PART No.	QUAM PART No.	
SP1	2"	PM	6-8Ω			

## BATTERIES

ITEM No.	VOLTAGE	FANON-MASCO PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	9V		2U6① HI46③	216① 528② E146③	M1604① MN1604② TR146③	① Zinc Carbon ② Manganese ③ Mercury

## MISCELLANEOUS

ITEM No.	PART NAME	FANON-MASCO PART No.	NOTES
M2	Crystal		Receiver
M3	Crystal		Transmit
M4	Switch		Receive-Transmit

## WIRING DATA

General-use Hook-up Wire . . . . .	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Antenna Lead . . . . .	Use BELDEN No. 8214 Lowest Loss (RG-8/U Type) 8237 Low Loss (RG-8/U) 8240 (Solid) Miniature (RG-58/U) 8259 (Stranded) Miniature (RG-58A/U)
Coiled Microphone Cable . . . . .	Use BELDEN No. 8499 Single Conductor Shielded (Neoprene) 8498 Single Conductor Shielded (Vinyl)
Ignition Noise Suppression . . . . .	Use BELDEN No. 7300-Series Spark-Plug Sets
Bonding Strap . . . . .	Use BELDEN No. 8661 (3/8 In.)