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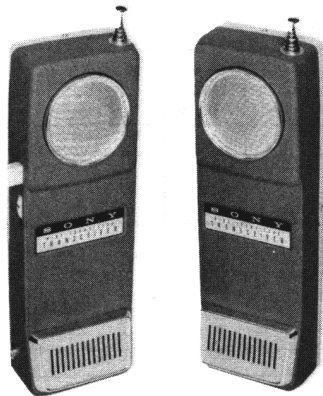
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PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Sony Model CB-901
 SUPPLIER : Sony Corp. of America
 514 Broadway, New York 12, N. Y.
 TYPE SET : 9 Transistor Transceiver
 POWER SUPPLY : 12 Volts DC
 RATING : 8MA @12VDC (Receive, No Signal)
 18MA @12VDC (Transmit, No Modulation)
 TUNING RANGE : Any one CB Channel 1 thru 23

SONY MODEL CB-901

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: A1 thru A8...GENERAL CEMENT #9089, 8728A

RECEIVER ALIGNMENT

Connect DC VTVM across Volume Control.

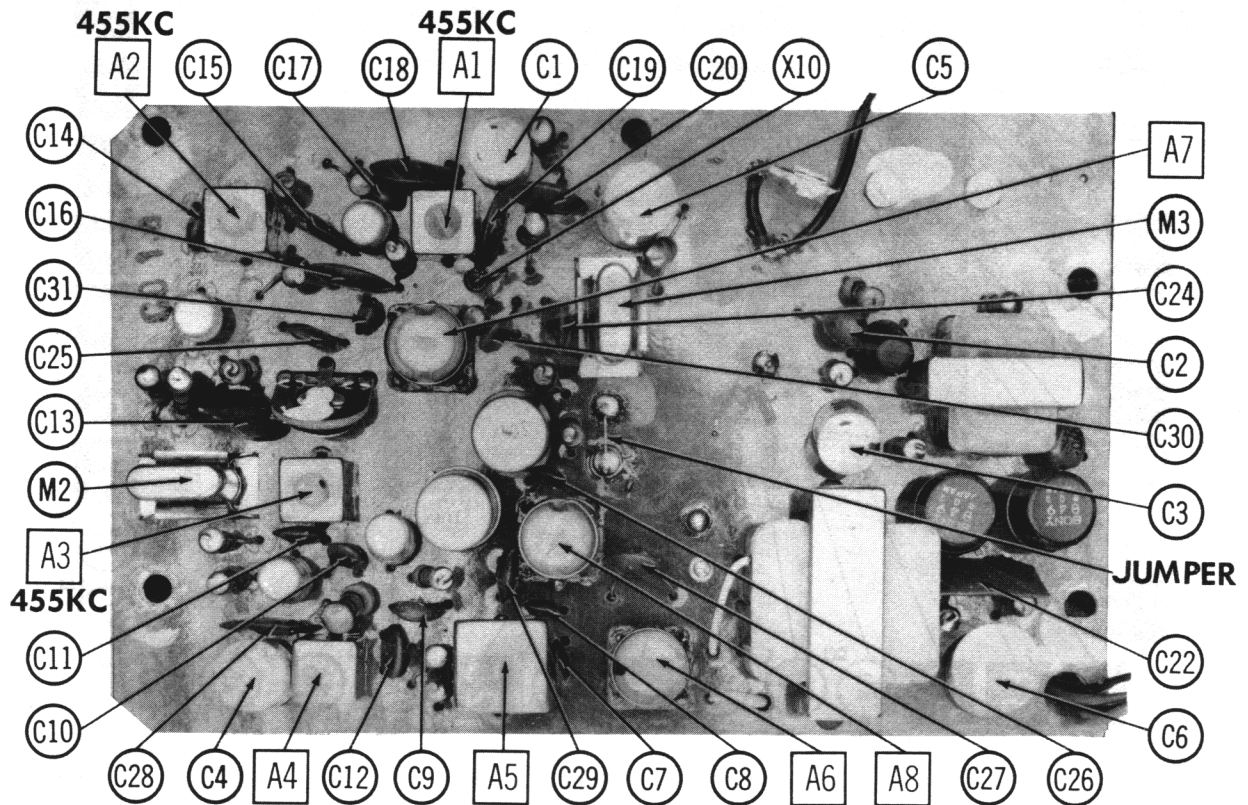
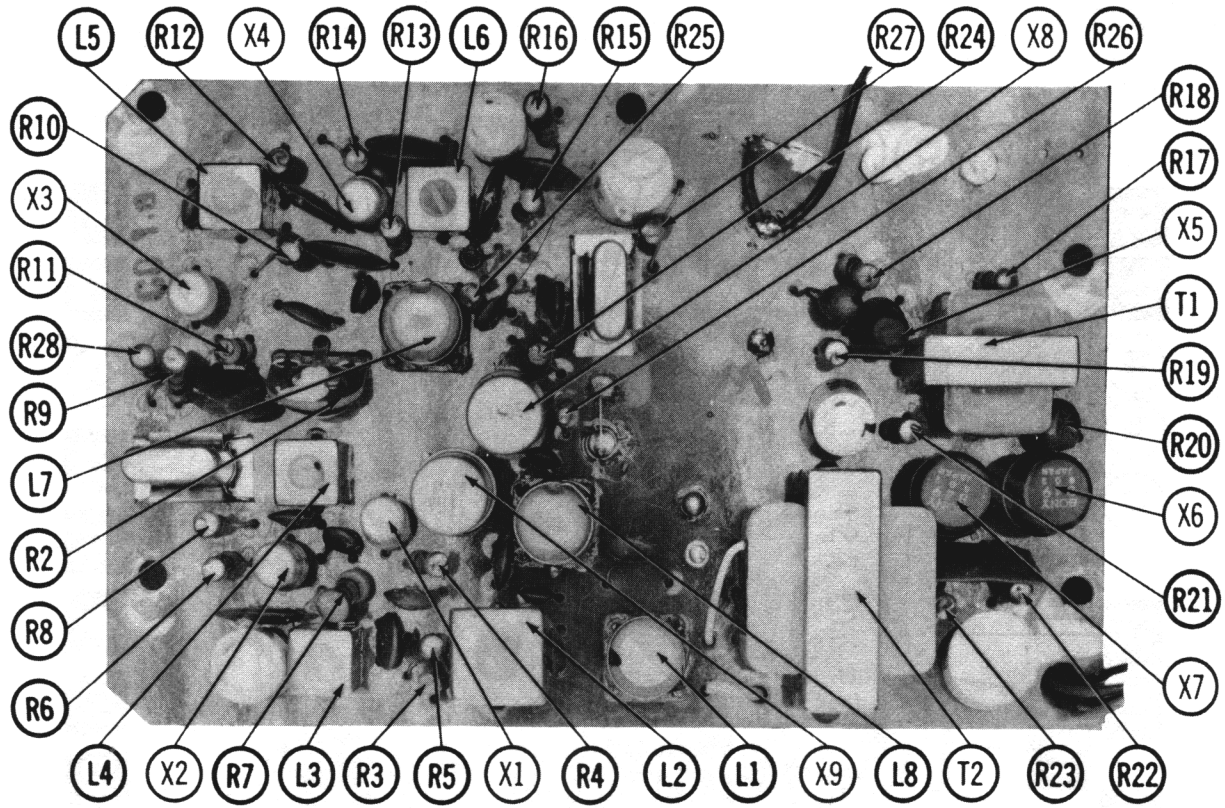
	SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
1.	High side thru .01mfd to base of X1, common to ground. Tune to 455KC (Unmod.) .		A1, A2, A3	Adjust for maximum deflection.
2.	Radiate signal into receiver of antenna. Tune to channel frequency.		A4, A5, A6	Adjust for maximum deflection.

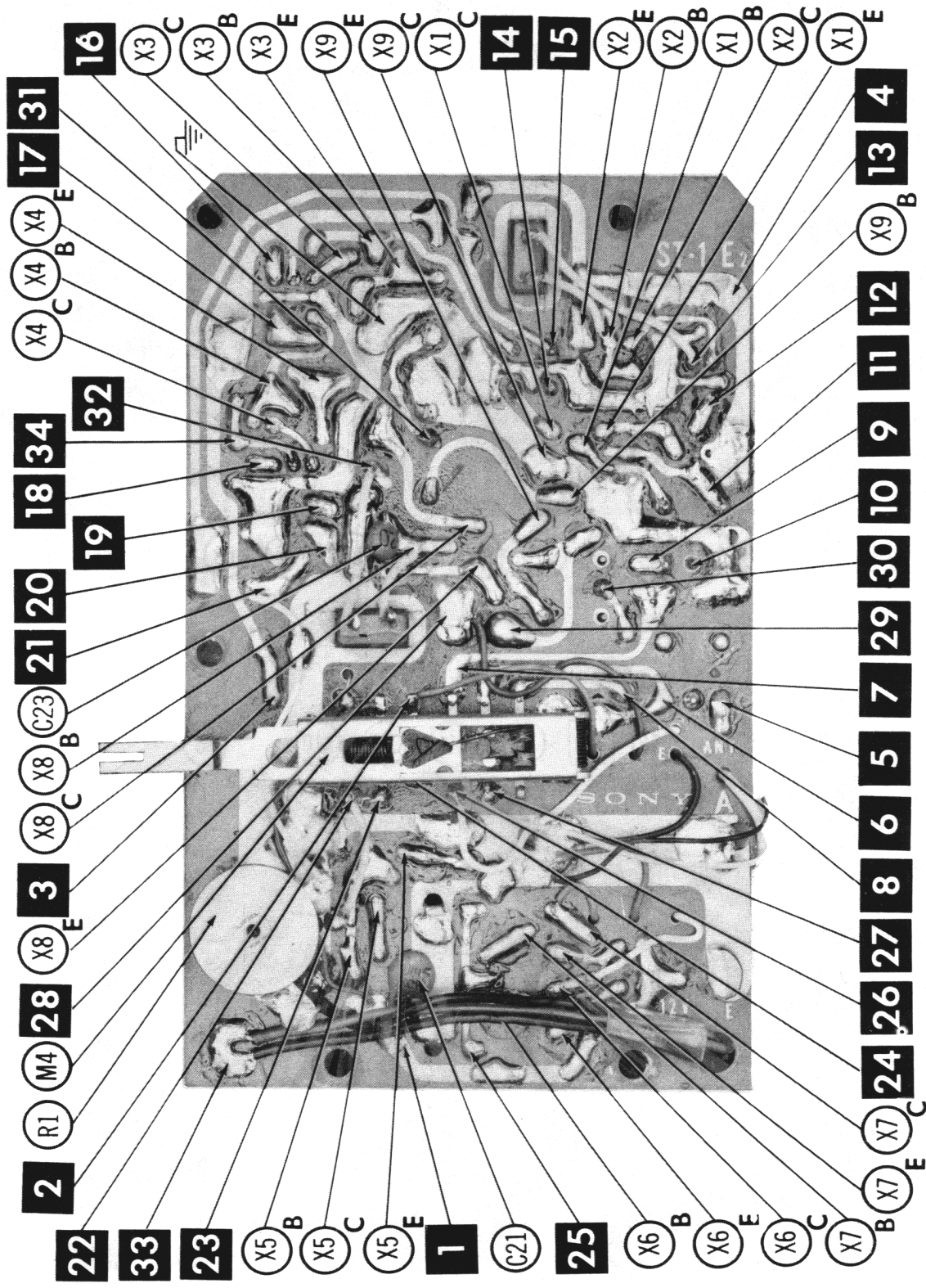
TRANSMITTER ALIGNMENT

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.	Maintain supply voltage at 12V during alignment.	RF Wattmeter (or Field Strength Meter)	A7, A8	Remove jumper. (Refer to capacitor photo). Connect DC milliammeter. Key transmitter. Adjust for maximum on RF wattmeter and MINIMUM on DC milliammeter. Retouch A6 for maximum deflection on RF wattmeter.

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





A Howard W. Sams CIRCUITRACE® Photo

PARTS LIST AND DESCRIPTION

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	A122	Mixer	DS95	GE-1	PNP	
X2	A122	Rec. Osc.	DS25	GE-1	PNP	
X3	C76	1st IF Amp.		GE-7	NPN	
X4	C76	2nd IF Amp.		GE-7	NPN	
X5	D64	Driver-Speech Amp.		2N647	NPN	
X6	B49	Output-Modulator	DS26	GE-6	PNP	
X7	B49	Output-Modulator	DS26	GE-2	PNP	
X8	2SA70	Trans. Osc.	DS34	GE-1	PNP	
X9	TTL16	Final Amp.	DS84	GE-1	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		1T23				Detector

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOIT.	SONY PART No.	REPLACEMENT DATA				SPRAGUE PART No.	
				AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.		PYRAMID PART No.
C1	30	6		BCD6025	ECPB412	MTL-10	TT6X30	MLV30-6	VL-1092
C2	3	6		BCD6025	ECPB412	MTL-10	TT6X30	MLV30-6	VL-1092
C3	30	6		BCD15025	ECPB412	MTL-10	TT15X30	MLV25-15	TE-1158
C4	30	15		BCD15025	ECPB412	MTL-10	TT15X30	MLV25-15	TE-1158
C5	30	15		BCD15050	NLW50-15	MTL-16		MLV50-15	TE-1160
C6	30	15							

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.				
C7	100		DL-100	DD-101	LI0T1	CCD-101	GP310	10TS-T10				
C8	20		DL-20	DD-200	LI0Q2	CCD-200	GP420	10TS-Q20				
C9	.01		TTD-01	CK-103	H05S1	CCD-200	TA-110	TC-S10				
C10	20		TD-20	DD-200	LI0Q2	CCD-200	GP420	10TS-Q20				
C11	.01		TD-01	CK-103	H05S1	CCD-200	TA-110	TC-S10				
C12	.001		TD-01	DD-102	LI0D1	CCD-102	GP210	10TS-D10				
C13	.04		TD-05	CK-503	H05S5	CCD-102	CNO-510	10TCC-V10				
C14	1		NFO-DI 1	TCZ-1	H05S5			TC-S50				
C15	.04		TD-05	CK-503	H05S5			TC-S50				
C16	.04		TD-05	CK-503	H05S5			TC-S50				
C17	1		NFO-DI 1	TCZ-1	H05S5			10TCC-V10				
C18	.04		TD-05	CK-503	H05S5			TC-S50				
C19	.02		TD-02	CK-203	H05S2			TC-S20				
C20	.02		TD-02	CK-203	H05S2			TC-S20				
C21	.01		TD-01	CK-103	H05S1			TC-S10				
C22	1		TD-1	CK-104	H05P1			TC-P10				
C23	20		DD-200	DD-200	LI0Q2	CCD-200	GP420	10TS-Q20				
C24	.002		TD-01	DD-120	LI0Q12	CCD-202	GP220	10TS-D20				
C25	.01		TD-01	DD-120	LI0Q12	CCD-120	GP412	10TS-Q12				
C26	12		DD-120	DD-120	LI0D1	CCD-120	GP210	10TS-D10				
C27	.001		DL1000	CK-503	H05D5	CCD-502	TA-250	TC-D50				
C28	.04		TTD-05	CK-503	H05D5	CCD-200	GP420	10TS-Q20				
C29	.005		TD-20	DD-200	LI0Q2	CCD-200	GP412	10TS-Q12				
C30	20		DL-20	DD-120	LI0Q12	CCD-120	GP412	10TS-Q12				
C31	12		DL-12	DD-120	LI0Q12	CCD-120	GP412	10TS-Q12				

CONTROLS

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

ITEM No.	USE	REPLACEMENT DATA				MALLORY PART No.
		RESIST-ANCE	SONY PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	
R1	Volume & Switch	5000Ω	36.09			
R2	Transmit Osc. Bias	2000Ω				

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		SONY PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	
L1	Ant. Load					
L2	Ant. Coil					
L3	Rec. Osc.					
L4	1st IF					
L5	2nd IF					
L6	3rd IF					
L7	Transmit Osc.					
L8	Final					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA			NOTES
		SONY PART No.	MERIT PART No.	STANCOR PART No.	
T1	1.3 1	423-045			

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES
		SONY PART No.	MERIT PART No.	THORDARSON PART No.	
T2	1000Ω CT 6-8Ω	427-026			

BATTERIES

ITEM No.	VOLTAGE	REPLACEMENT DATA			NOTES
		SONY PART No.	BURGESS	EVEREADY	
M1	1.5V	930	1015		M-15R (Zinc-Carbon) MN-1800 (Mercury) ZM-9 (Mercury)

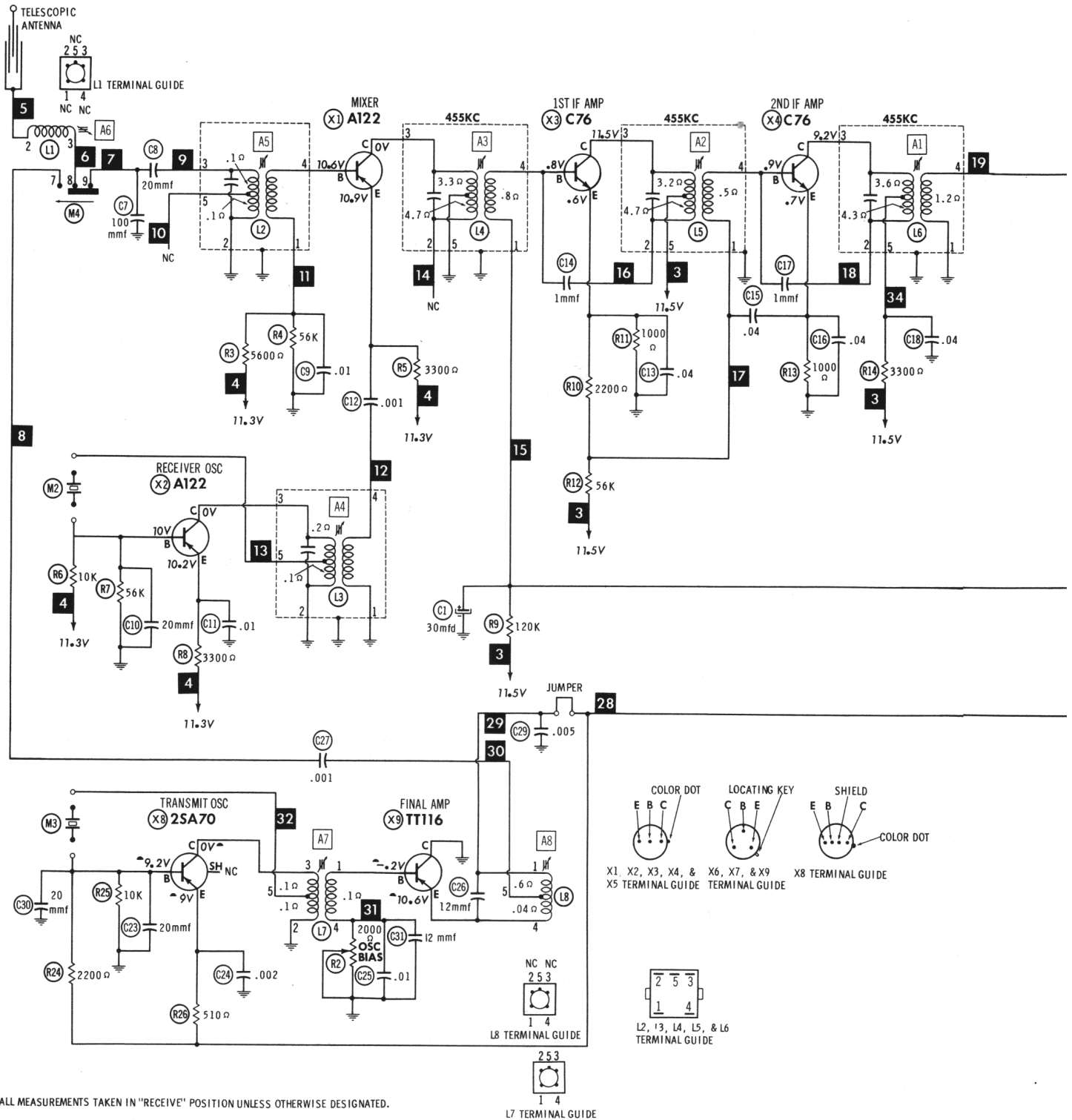
MISCELLANEOUS

ITEM No.	PART NAME	SONY PART No.	NOTES	REPLACEMENT DATA	
				ITEM No.	TYPE
M2	Crystal		Receive		
M3	Crystal		Transmit		
M4	Switch		Receive-Transmit	SP1	2" PM 6-8Ω

WIRING DATA

General-use Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
Shielded Antenna Lead Use BELDEN No. 8224 (Stranded) Available in 12 Colors
8237 Low Loss (RG-8/U Type)
8240 (Solid) Miniature (RG-58/U)
8259 (Stranded) Miniature (RG-58A/U)
8498 Single Conductor Shielded (Neoprene)
Ignition Noise Suppression Use BELDEN No. 7300-Series Spark-Plug Sets
Bonding Strap Use BELDEN No. 8661 (3/8 In.)

SONY MODEL CB-901



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

▲ TAKEN IN "TRANSMIT" POSITION.

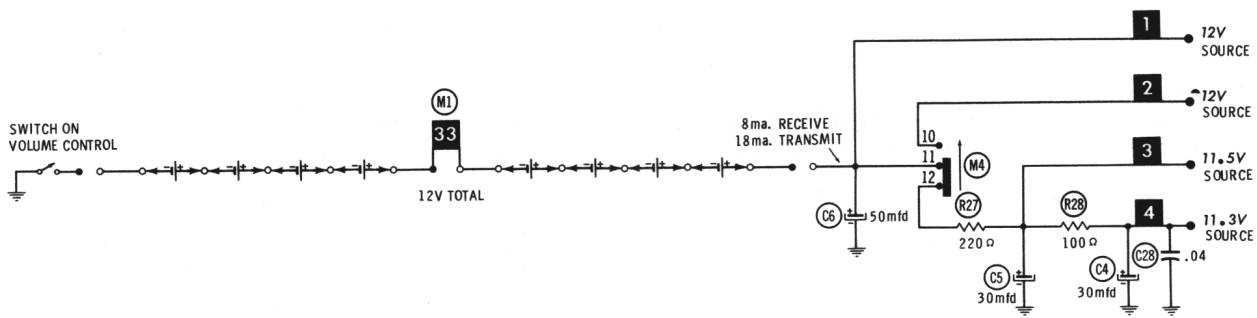
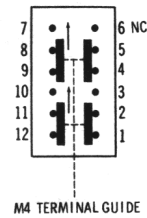
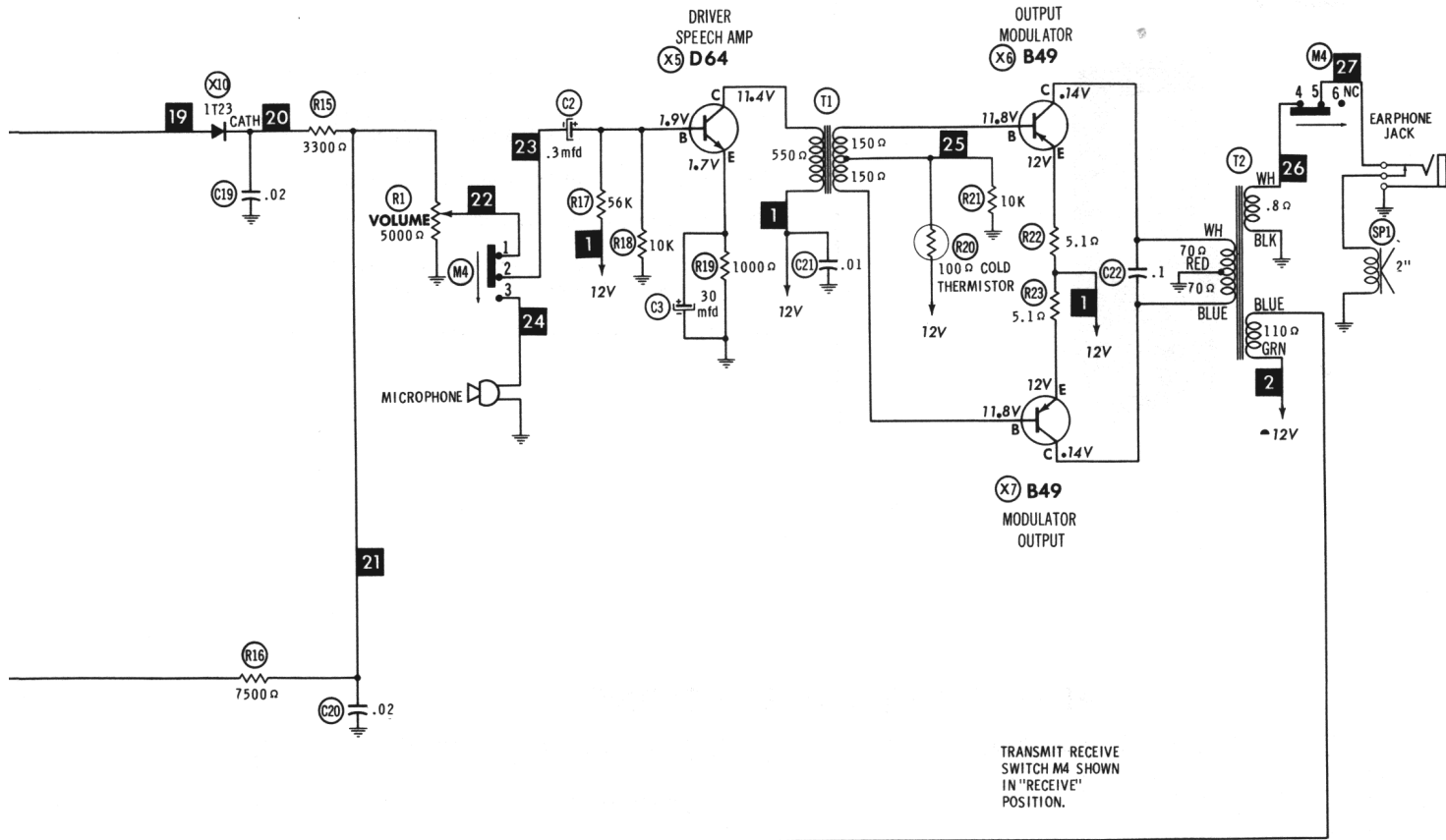
NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

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.

A PHOTOFACIT STANDARD NOTATION SCHEMATIC with **CIRCUITRACE**

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



SONY MODEL CB-901