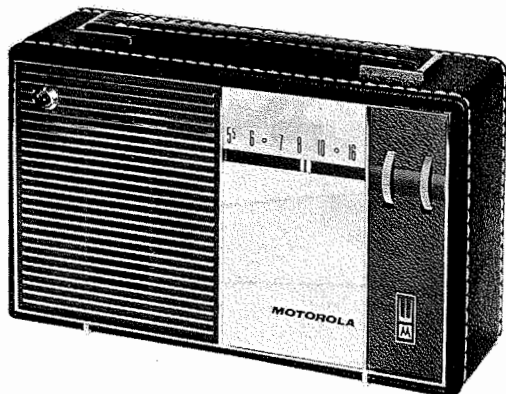




PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Motorola Models X41E, X41E-1, X41G, X41G-1, X41N, X41N-1 (CH. HS-1009)

SUPPLIER : Motorola, Inc.,
9401 W. Grande Ave., Franklin Park, Ill.

TYPE SET : 8 Transistor AM Receiver

POWER SUPPLY : 6 Volts DC

RATING : 9MA@6 VDC (No Signal, Min. Volume)
16MA@6 VDC (Signal, Normal Volume)

TUNING RANGE : BROADCAST 535 - 1620KC

ALIGNMENT INSTRUCTIONS

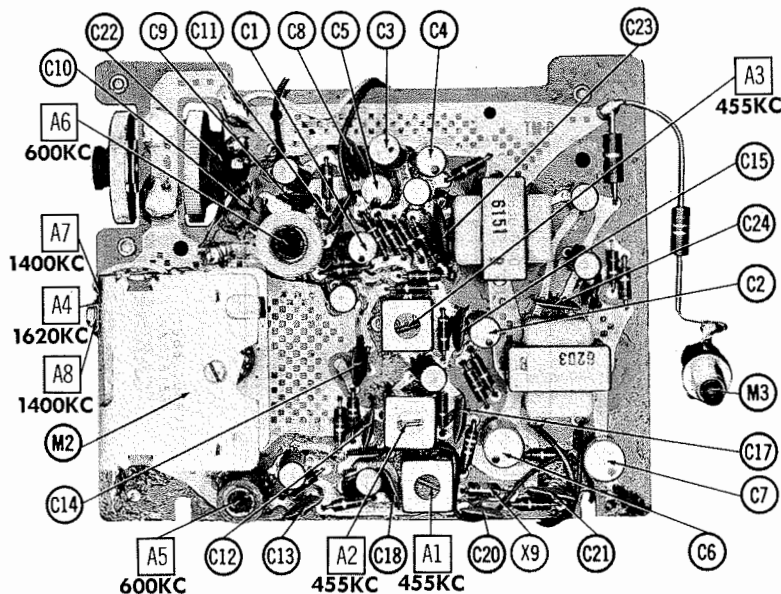
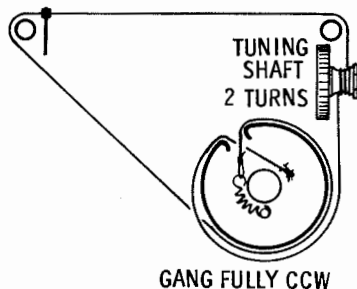
Check for specified source voltage.
Fashion loop of several turns of wire and connect generator across loop.
Adjust output of generator to radiate only enough signal into receiver to obtain a suitable indication.

Suggested Alignment Tools:

A1, A2, A3, A5..... GENERAL CEMENT #5067, 8282, 8606
WALSCO #2526, 2543
A4, A6..... GENERAL CEMENT #5000, 5066, 8290
WALSCO #2525

SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. 455KC (400v Mod.)	Tuning gang fully open.	Output Meter across voice coil.	A1, A2, A3	Adjust for maximum. Repeat as required.
2. 1620KC	"	"	A4	Adjust for maximum.
3. 600KC	Tune to Signal.	"	A5	Rock tuning gang and adjust for maximum. Repeat steps 2 and 3.
4. 1400KC	"	"	A6	Adjust for maximum.

DIAL CORD STRINGING



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

PARTS LIST AND DESCRIPTION

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	2SA72	RF Amplifier	DS-25	GE-1	2N408	PNP
X2	2SA72	Mixer	DS-25	GE-1	2N408	PNP
X3	2SA72	Osc.	DS-25	GE-1	2N408	PNP
X4	2SA72	1st IF Amp.	DS-25	GE-1	2N408	PNP
X5	2SA72	2nd IF Amp.	DS-25	GE-1	2N408	PNP
X6	2SB54	Driver	DS-26	GE-2	2N408	PNP
X7	2SB56	Output	DS-26	GE-2	2N408	PNP
X8	2SB56	Output	DS-26	GE-2	2N408	PNP

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS			NOTES
			MALLORY PART No.	RCA PART No.	SARKIS TARZIAN PART No.	
X9		48K644681				Detector (JN60)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP. VOLT.	REPLACEMENT DATA				
		MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	SPRAGUE PART No.
C1	30	23C60496A02	BCD3025	ECBP412	MTI-10	MLV30-6
C2	30	23C60496A02	BCD3025	ECBP412	MTI-10	MLV30-6
C3	5	23C60496A03	BCD3005	ECBP405	MTI-3	MLV5-6
C4	30	23C60496A02	BCD3025	ECBP412	MTI-10	MLV30-6
C5	30	23C60496A02	BCD3025	ECBP412	MTI-10	MLV30-6
C6	50	23C60496A04	BCD10050	ECBP415	MTI-16	MLV50-10
C7	50	23C60496A04	BCD10050	ECBP415	MTI-16	MLV50-10

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CORNELL-DUBILIER PART No.	ELWENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C8	.02		TTD-02	H05S2	CCD-101	TA-120	TG-820
C9	100		DD-100	LI071	CCD-2R2	GP310	10TS-T10
C10	2.4	NPO	NPO-DI 2.2	CKZ-2R2	CCTO-2R2	CNO-522	10TCC-V22
C11	.05		TTD-05	H05S5		TA-110	TG-850
C12	.01		TTD-01	H05S1		TA-110	TG-810
C13	.01		TTD-01	H05S1		TA-110	TG-810
C14	.01		TTD-01	H05S1		TA-110	TG-810
C15	.02		TTD-02	H05S2		TA-120	TG-820
C16	3		DI-3, 3	DD-3R3	CCTO-3R3	CNO-533	10TCC-V33
C17	.05		TTD-05	H05S5		TA-120	TG-850
C18	.02		TTD-02	H05S2		TA-110	TG-810
C19	3		DI-3, 3	DD-3R3	CCTO-3R3	CNO-533	10TS-V33
C20	.01		TTD-01	H05S1		TA-110	TG-810
C21	.05		TTD-05	H05S5		TA-120	TG-850
C22	.02		TTD-02	H05S2		TA-110	TG-810
C23	.002		DI-2000	LI002	CCD-202	GP220	10TS-D20
C24	.05		TTD-05	H05S5		TA-120	TG-850

† Alternate Value.

CONTROLS

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

ITEM No.	USE	REPLACEMENT DATA		
		MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.
RL	Volume & Switch	18B60512A01 (Note 1)	B16-214 (Note 2)	

Note 1. Replace with Part #18B60812A01.

Note 2. Use Original Knob.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			REPLACEMENT DATA
		IRC PART No.	WORKMAN PART No.	REMARKS	ITEM No.
R25	1500 Cold			#6B60519A01	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	WORKMAN PART No.
L1	Loopstick	24B60712A04			
L2	RF	24B61302H01			
L3	Osc.	24C80741A04			
L4	1st IF	24K646566	BC-574		
L5	2nd IF	24K646137	BC-575		
L6	3rd IF	24K646138	BC-576		

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORNDORSON PART No.
T1	1.2 1	25B60492A01			

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORNDORSON PART No.
T2	1000 C.T. 6-80	25B60493A01			

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		MOTOROLA PART No.	QUAM PART No.		
SP1	3" PM 6-80	50B61163A01			

BATTERIES

ITEM No.	VOLTAGE	MOTOROLA PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	1.5V		930	1015	M-15R	4 Used

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	REPLACEMENT DATA			NOTES
M2	Tuning Cap.	19B6106A01				
M3	Switch	40K647229				
	Printed Board	IV60050A09				

CABINETS & CABINET PARTS

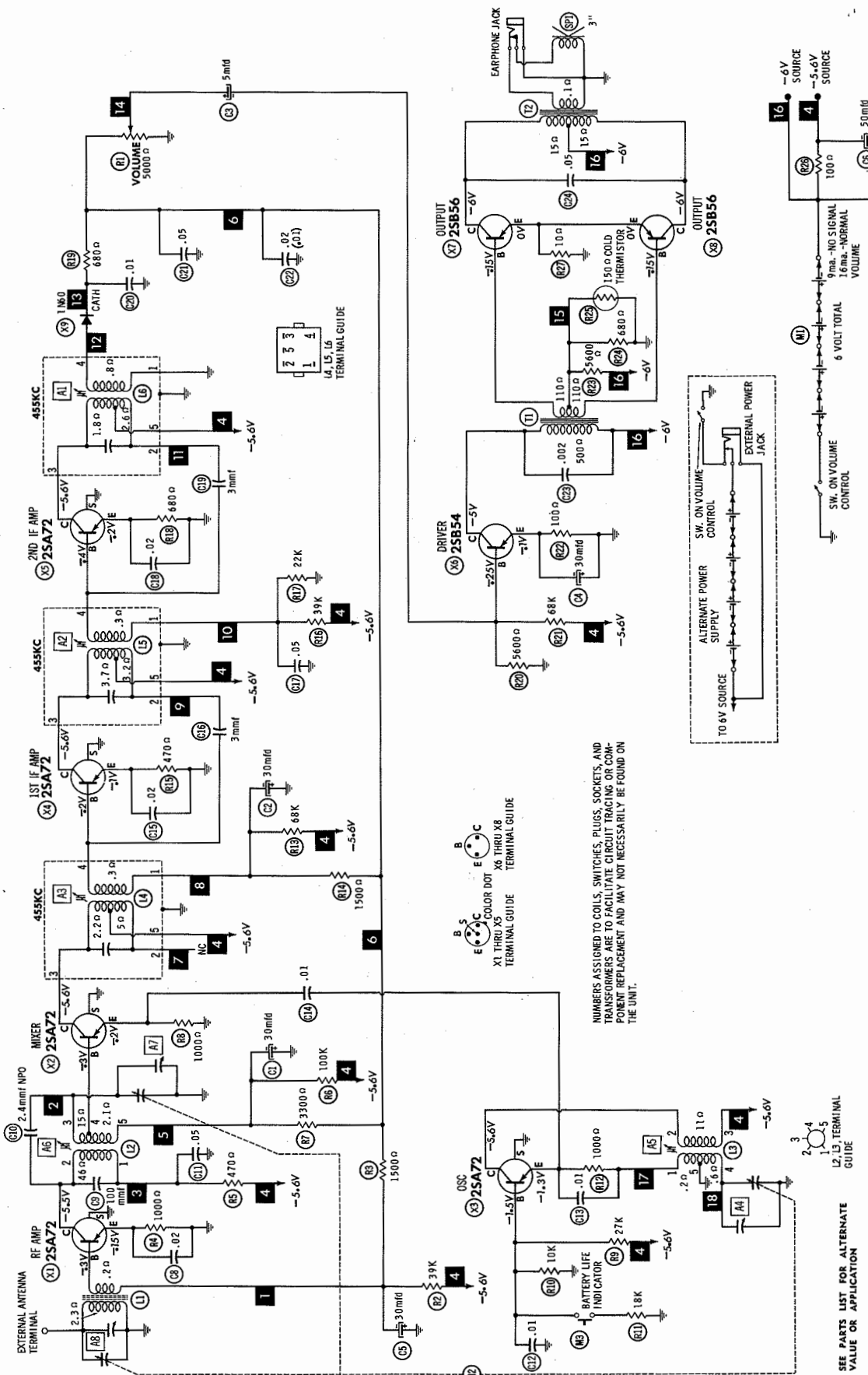
(When Ordering Specify Model, Chassis & Color)

ITEM No.	ITEM	PART No.	ITEM	PART No.
	Dial Pointer	32B60808A01	Cabinet	Black, Model X41E-1
	Dial Crystal	61A61188A01	Cabinet	Green, Model X41G
	Knob	36B60578A02	Cabinet	Green, Model X41G-1
	Escutcheon	36B60583A02	Cabinet	Brown, Model X41N
	Cabinet	IV60050A11	Cabinet	Brown, Model X41N-1
	Cabinet	IV60050A12		

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid 22AWG) in 12 Colors
8524 (Stranded 22AWG)
8570 (Stranded 26AWG)

MOTOROLA MODELS X41E/E-1/G/G-1/N/N-1 (Ch.HS-1009)



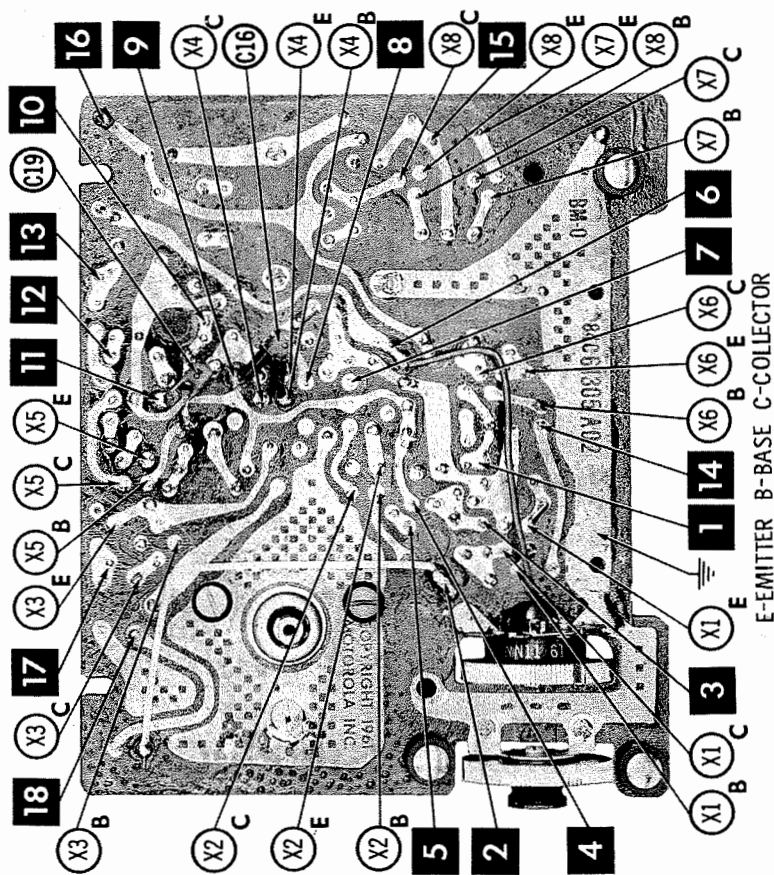
MOTOROLA MODELS X41E/E-1/ G/G-1/N/N-1 (Ch. H5-1009)

SEE PARTS LIST FOR ALTERNATE
VALUE OR APPLICATION

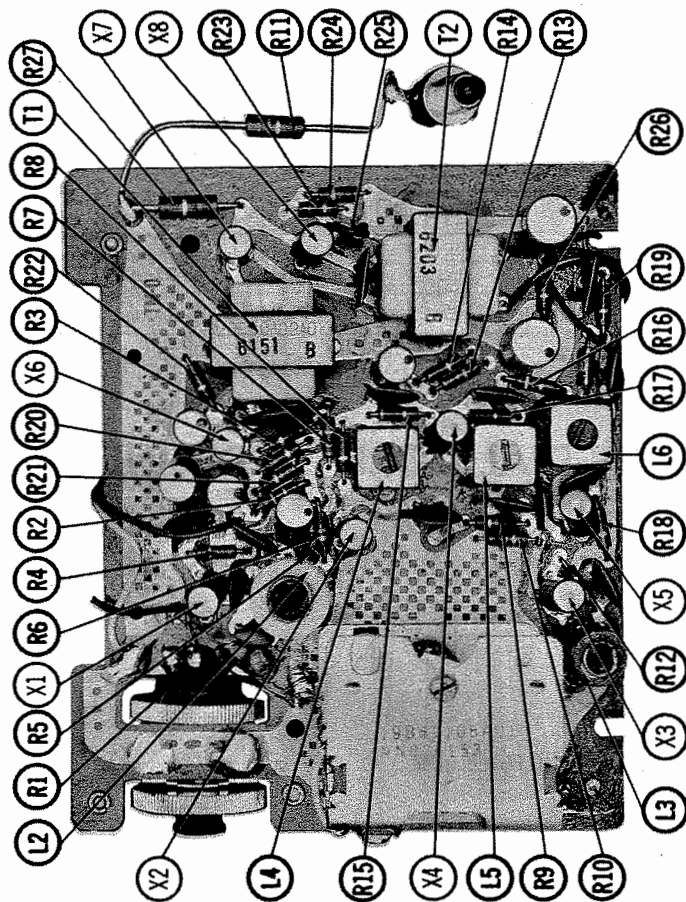
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE
WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
with CIRCUTRACE

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E-EMITTER B-BASE C-COLLECTOR



PRINTED BOARD

MOTOROLA MODELS X41E/E-1/G/G-1/N/N-1 (Ch. HS-1009)