



with CIRCUITRACE®

CHANNEL MASTER
MODEL 6506



CHANNEL MASTER
MODEL 6506

TRADE NAME	Channel Master Model 6506		
MANUFACTURER	Channel Master Corp., Ellenville, N. Y.		
TYPE SET	Battery Operated Portable Transistorized AM Receiver		
POWER SUPPLY	6 Volts DC	RATING	4MA@6 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	535 — 1620KC		5.5MA@6 Volts DC (Signal, Normal Volume)

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.						
Suggested alignment tools: A4, A5..... GENERAL CEMENT #9087, 9089 WALSCO #2528						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400% Mod.)	1600KC	Across voice coil	A1, A2, A3	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1400KC	1400KC Signal	"	A4, A5	Adjust for maximum output while rocking tuning gang.
3.	"	600KC	600KC	"	A6	"

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

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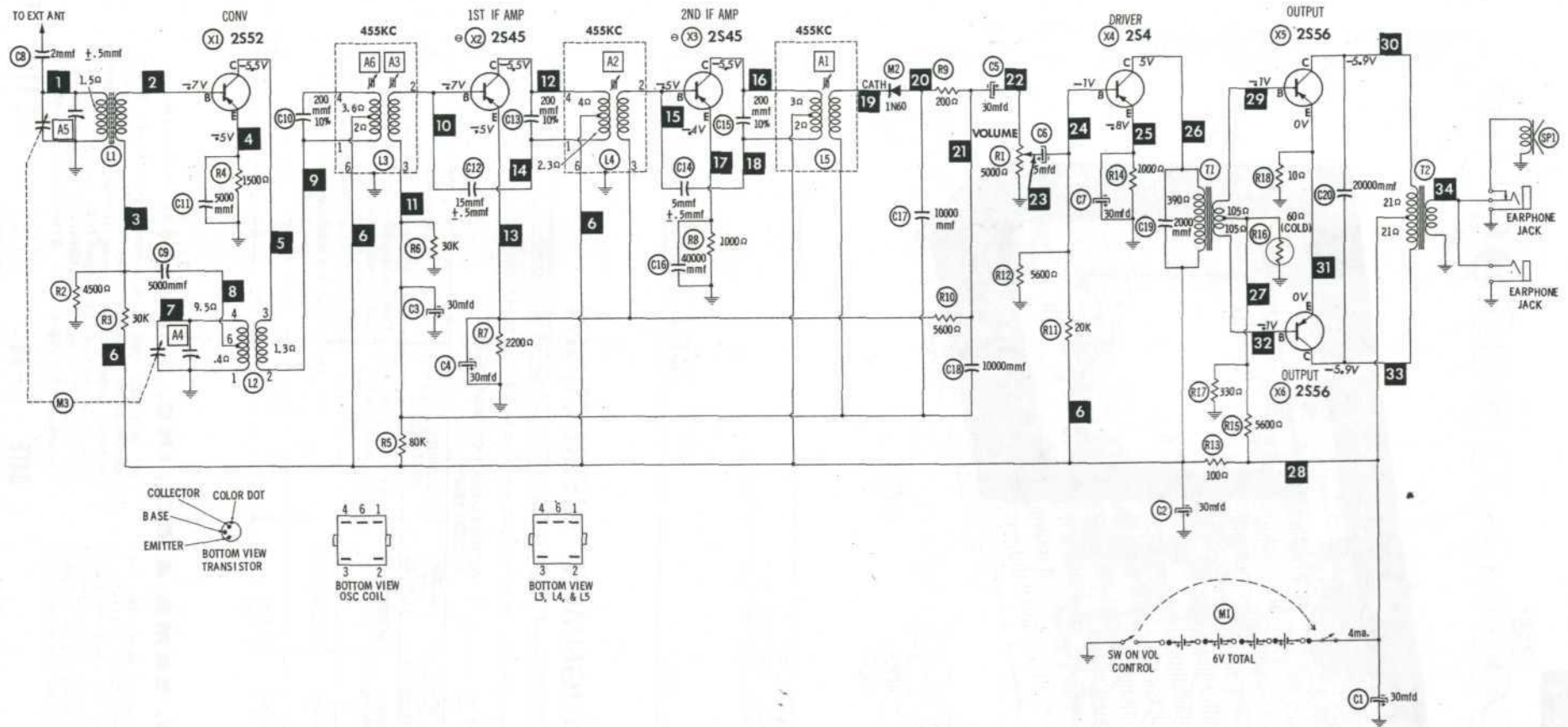
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SET 470

FOLDER 6

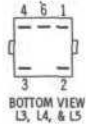
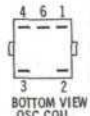
SET 470 FOLDER 6



COLLECTOR
BASE
EMITTER

COLOR DOT

BOTTOM VIEW TRANSISTOR



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.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

A PHOTOFACIT STANDARD NOTATION SCHEMATIC with CIRCUITRACE

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

1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

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PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2S52	Converter			2N486	2N411	PNP
X2	2S45*	1st IF Amplifier			2N483	2N409	PNP
X3	2S45*	2nd IF Amplifier			2N483	2N409	PNP
X4	2S44	Driver			2N362	2N407	PNP
X5	2S56	Output			2N632	2N407	PNP
X6	2S56	Output			2N632	2N407	PNP } Matched Pair

* Alternate type 2S53

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		Channel Master PART No.	REPLACEMENT DATA					NOTES
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	30	6	A009	BCD6035	ECPB112	TT6X30	ML30-6	TE-1092	
C2	30	6	A009	BCD6035	ECPB112	TT6X30	ML30-6	TE-1092	
C3	30	6	A009	BCD6035	ECPB112	TT6X30	ML30-6	TE-1092	
C4	30	6	A009	BCD6035	ECPB112	TT6X30	ML30-6	TE-1092	
C5	30	6	A009	BCD6035	ECPB112	TT6X30	ML30-6	TE-1098	
C6	5	6	A010	XPP-6005	NLW5-6	TT6X5	ML5-6	TE-1084	
C7	30	6	A009	BCD6035	ECPB112	TT6X30	ML30-6	TE-1092	

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic 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.
C8	2 ±.5mmf				C10V2C	CCTO-2R2		10TCC-V22
C9	5000		BPD-005	DD-502	BYA10D5	CCD-502	GP250	10TS-D50
C10	200 10%		NPO-SI 200	D6-201	LI0T2	CCD-201	GP320	10TS-T20
C11	5000		BPD-005	DD-502	BYA10D5	CCD-502	GP250	10TS-D50
C12	15 ±.5mmf		NPO-DI 15	DTZ-15	C10V15C	CCTO-150	CNO-15	10TCC-Q15
C13	200 10%		NPO-SI 200	D6-201	LI0T2	CCD-201	GP250	10TS-T20
C14	5 ±.5mmf		NPO-DI 5	DTZ-4R7	C10V5C	CCTO-050	CNO-550	10TCC-V50
C15	200 10%		NPO-SI 200	D6-201	LI0T2	CCD-201	GP320	10TS-T20
C16	40000		BPD-04	DD-403	BYB6S4		GP140	5HK-S40
C17	10000		BPD-01	DD-103	BYA10S1	CCD-103	GP110	5HK-S10
C18	10000		BPD-01	DD-103	BYA10S1	CCD-103	GP110	5HK-S10
C19	2000		BPD-002	DD-202	BYA10D2	CCD-202	GP220	5HK-D20
C20	20000		BPD-02	DD-203	BYB6S2	CCD-203	GP120	5HK-S20

CONTROLS

ITEM No.	RATING		Channel Master PART No.	REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS		CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.		
R1	5000Ω	1/4	E008	B16-214				Volume & Switch	

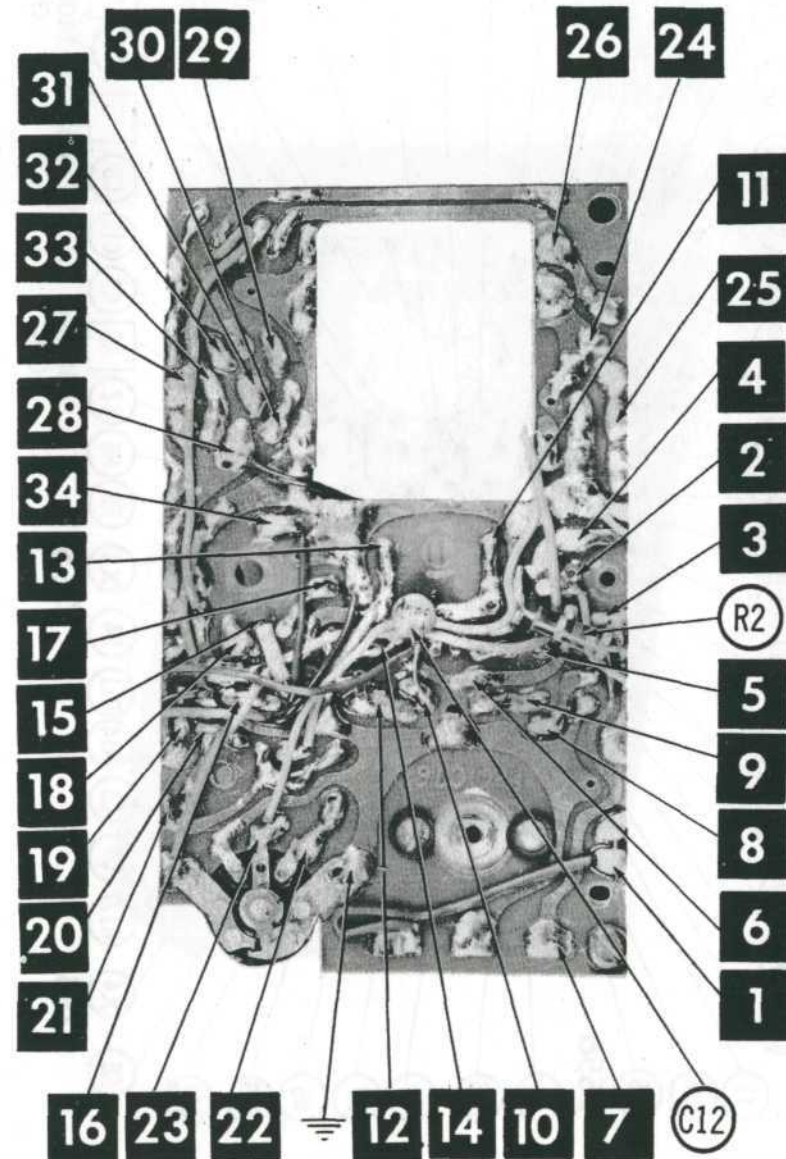
RESISTORS

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

ITEM No.	RATING		Channel Master PART No.	NOTES	ITEM No.	RATING		Channel Master PART No.	NOTES
	OHMS	WATT				OHMS	WATT		
R2	4500Ω		B014		R11	20K		B020	
R3	30K		B013		R12	5600Ω		B019	
R4	1500Ω		B015		R13	100Ω		B005	
R5	80K		B016		R14	1000Ω		B022	
R6	30K		B013		R15	5600Ω		B002	
R7	2200Ω		B017		R16	60Ω (cold)		F150	
R8	1000Ω		B005		R17	330Ω		B023	
R9	200Ω		B018		R18	10Ω		B024	
R10	5600Ω		B019						

PRINTED BOARD

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PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		Channel Master PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loopstick Osc. Coil 1st IF Trans. 2nd IF Trans. 3rd IF Trans.	E009						
L2		F135						
L3		C005						
L4		C006						
L5		C007						

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA						NOTES
		Channel Master PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1 1	C008	TR-2		TA-30	TR-2		

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA							NOTES
		Channel Master PART No.	Halldorson PART No.	Merit PART No.	Rom PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	500Ω CT 6-8Ω	C009	TR-102			TA-21	TR-102		

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	Channel Master PART No.	QUAM PART No.	
SP1	2½"	PM	6-8Ω	G092		

BATTERIES

ITEM No.	VOLTAGE	Channel Master PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	6V			930		1015		M-15R	4 Used

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		Channel Master PART No.	CB5 PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N60	F149	1N60	1N60	1N60	Detector (Pigtall)

MISCELLANEOUS

ITEM No.	PART NAME	Channel Master PART No.	NOTES
M3	Tuning Cap.	A001	2 Gang

CABINETS & CABINET PARTS

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

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
8524 (Stranded) Available in Ten Colors

CHASSIS—TOP VIEW

