

This Manual is provided by
CBTricks.com

Someone who wanted to help you repair your equipment
scanned this manual.

If you would like to help us put more manuals online support us.

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

If your company would like to provide technical information to be featured on this site I will put up on the site as long as I can do it in a non-commercial way.

The site is supported with donation from users, friends and selling of the Galaxy Service Manual CD to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. to pay my costs. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

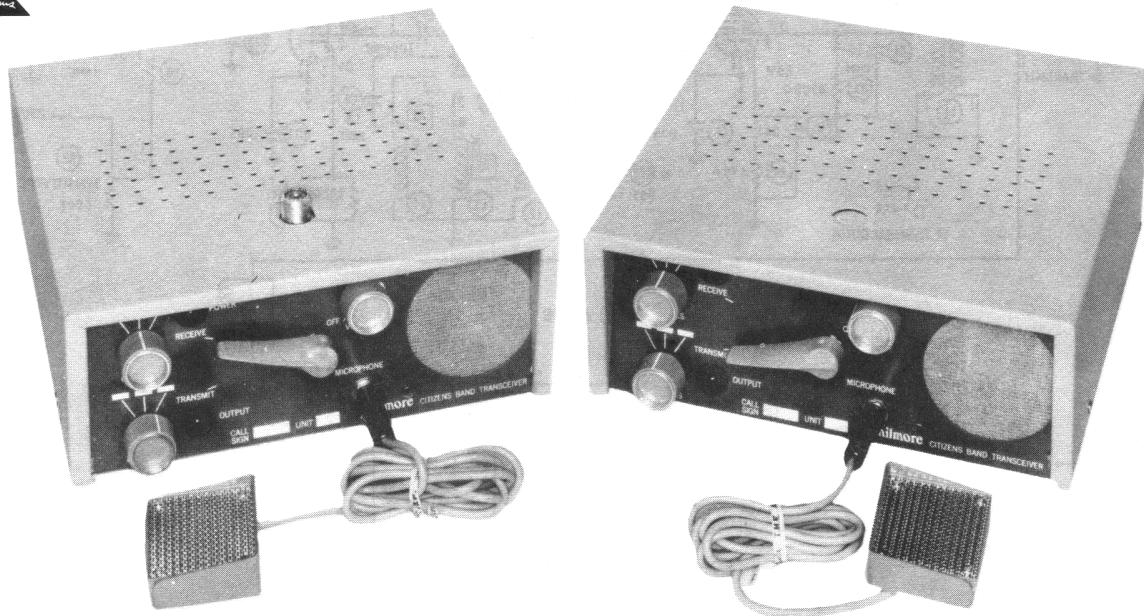
ALL the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). This work was not done for someone else to make money also, for example the ebay CD sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners.
This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.
Thank you for any support you can give.

PHOTOFACT[®] Folder



PHILMORE MODELS TC-11, TC-11W, TC-612, TC-612W



TRADE NAME	Philmore Models TC-11, TC-11W, TC-612, TC-612W		
MANUFACTURER	Philmore Manufacturing Co., Inc., 130-01 Jamaica Ave., Richmond Hill 18, N. Y.		
TYPE SET	AC (or) Battery Operated 6 Tube Citizens Band Transmitter-Receiver		
POWER SUPPLY	TC-11 (W): 110-120 Volts AC, 60 Cycles	RATING	35 Watts, .32 Amp. @117 Volts AC (Receive) 41 Watts, .38 Amp. @117 Volts AC (Transmit) 3.5 Amp. @6.3 Volts DC (Receive) 3.7 Amp. @6.3 Volts DC (Transmit) 2.8 Amp. @12.6 Volts DC (Receive) 3.2 Amp. @12.6 Volts DC (Transmit)
	TC-612 (W): 6 or 12 Volt Storage Battery		
FREQ. RANGE	Any 3 of Citizens Band Channels 1 thru 22		

**PHILMORE MODELS TC-11,
TC-11W, TC-612, TC-612W**

NOTICE

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.)

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



The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of LY747

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1962 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Best results will be obtained when adjusting A1 and A6 if the antenna normally used is connected and the unit is as nearly in the cabinet as possible.

Suggested Alignment Tools:

A1 thru A6..... GENERAL CEMENT #5003, 8271, 8275, 8276, 8609, 8721, 8722, 9150, 9298
 WALSCO #2516, 2518, 2519

A7..... GENERAL CEMENT #5000, 5003, 5066, 8271, 8272, 8276, 8277, 8290, 8609, 8722, 9150, 9298
 WALSCO #2515, 2516, 2518, 2519, 2525, 2541

RECEIVER ALIGNMENT

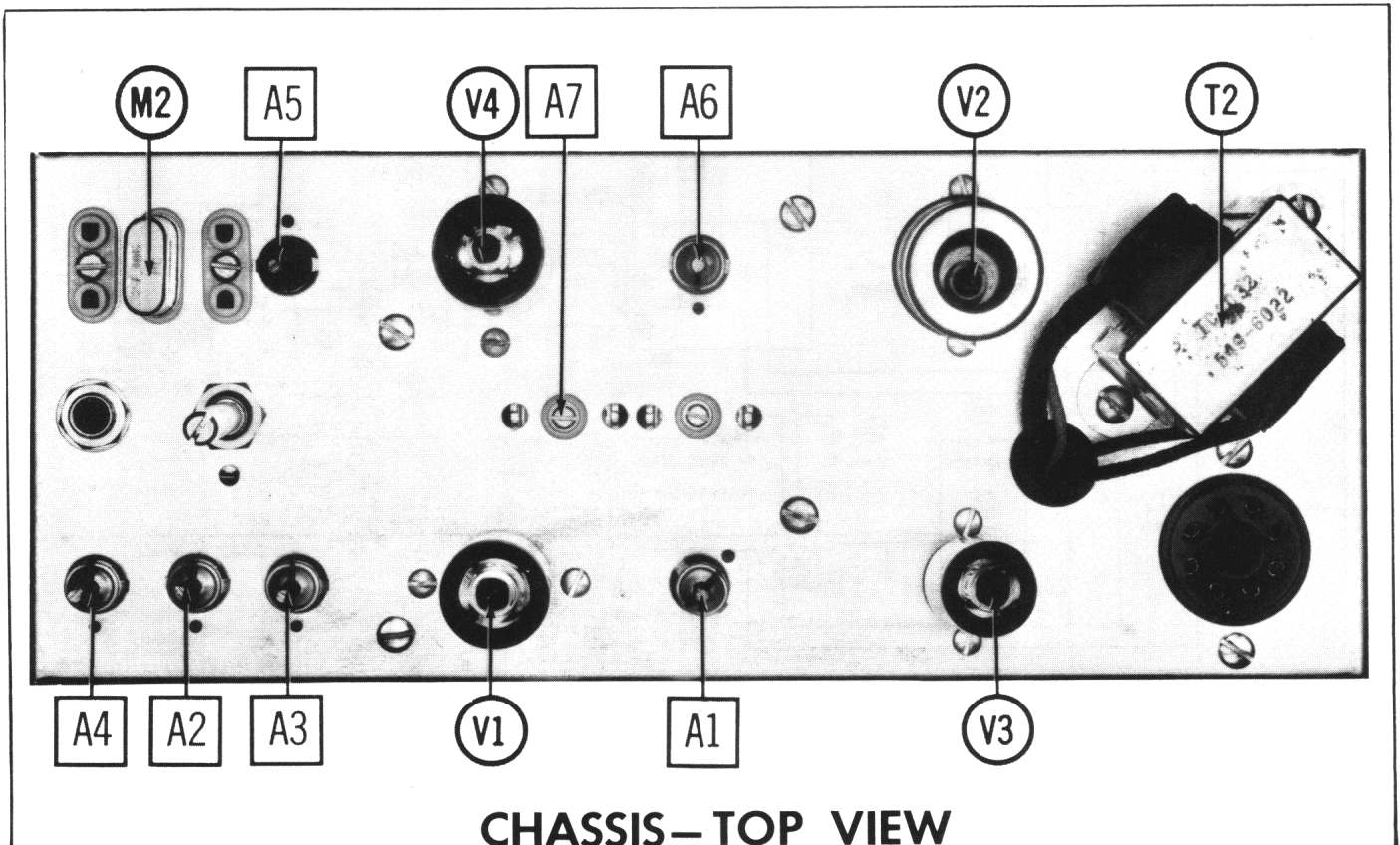
Connect output meter across voice coil.

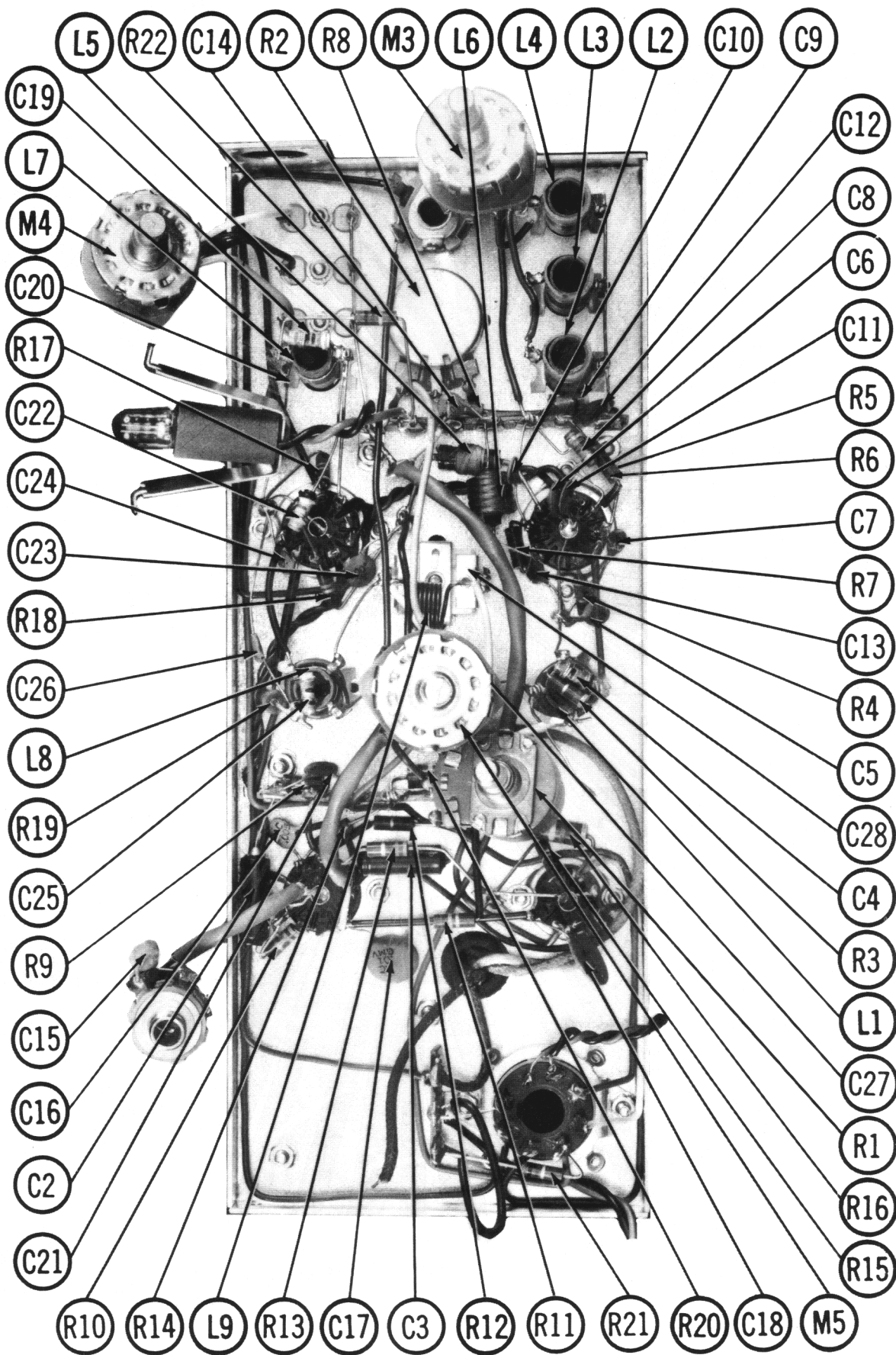
	SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
1.	High side to antenna terminal, low side to ground. Tune to center channel frequency (400% Mod.).	Center Channel Freq.	A1, A2	Rotate sensitivity control fully clockwise. Adjust for maximum deflection.
2.	Tune to channel frequency.	Channel 1	A3	Adjust for maximum deflection.
3.	"	Channel 3	A4	"

TRANSMITTER ALIGNMENT

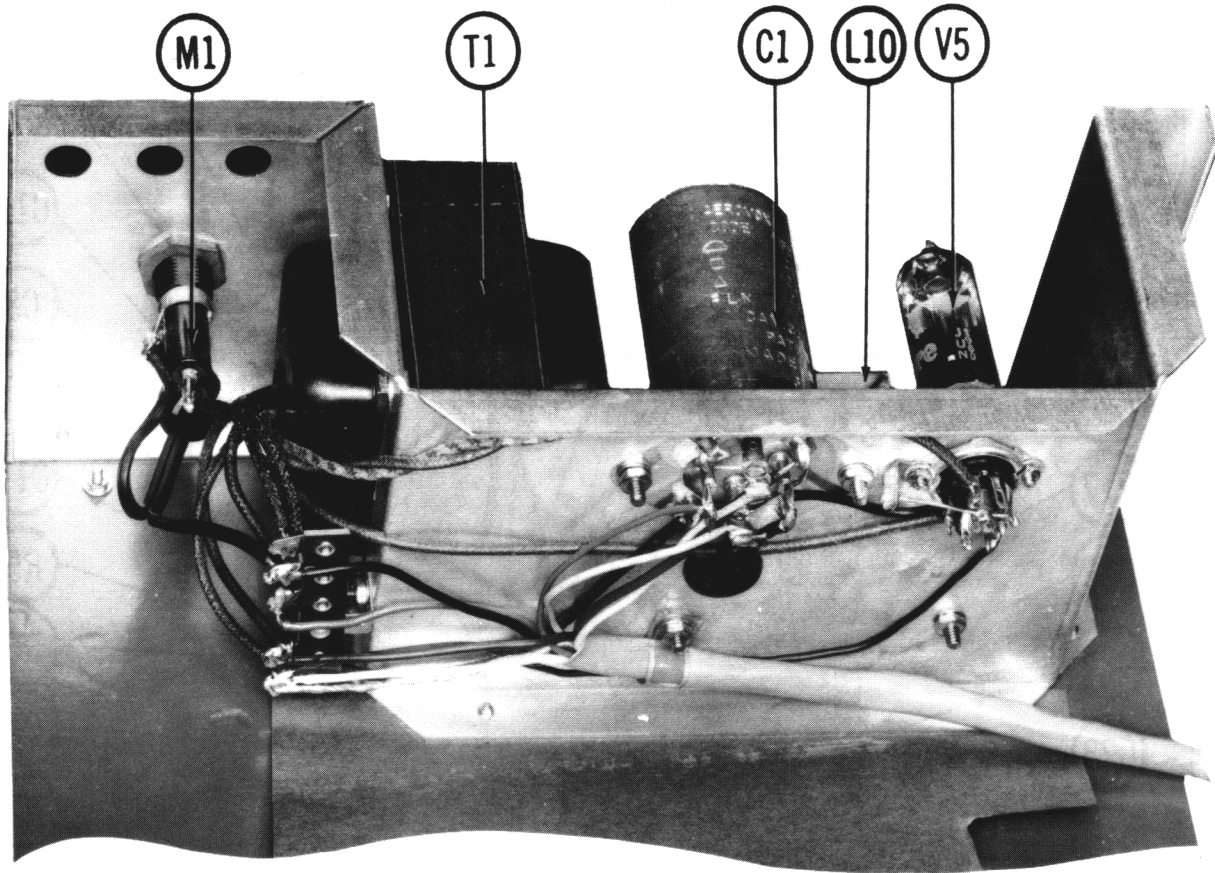
ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71)

	SPECIAL INSTRUCTIONS	INDICATOR	ADJUST	REMARKS
1.	Place transmit channel selector in the center channel position.	Connect dummy load or antenna and RF wattmeter to antenna terminal. Connect DC VTVM between pin 7 (grid) of V4 and ground.	A5	Adjust A5 for maximum VTVM deflection. Rock A5 to each side of peak, noting rate of dropoff. Set just below peak on side of gradual dropoff. Disconnect VTVM.
2.	"	"	A6, A7	Adjust for maximum output.

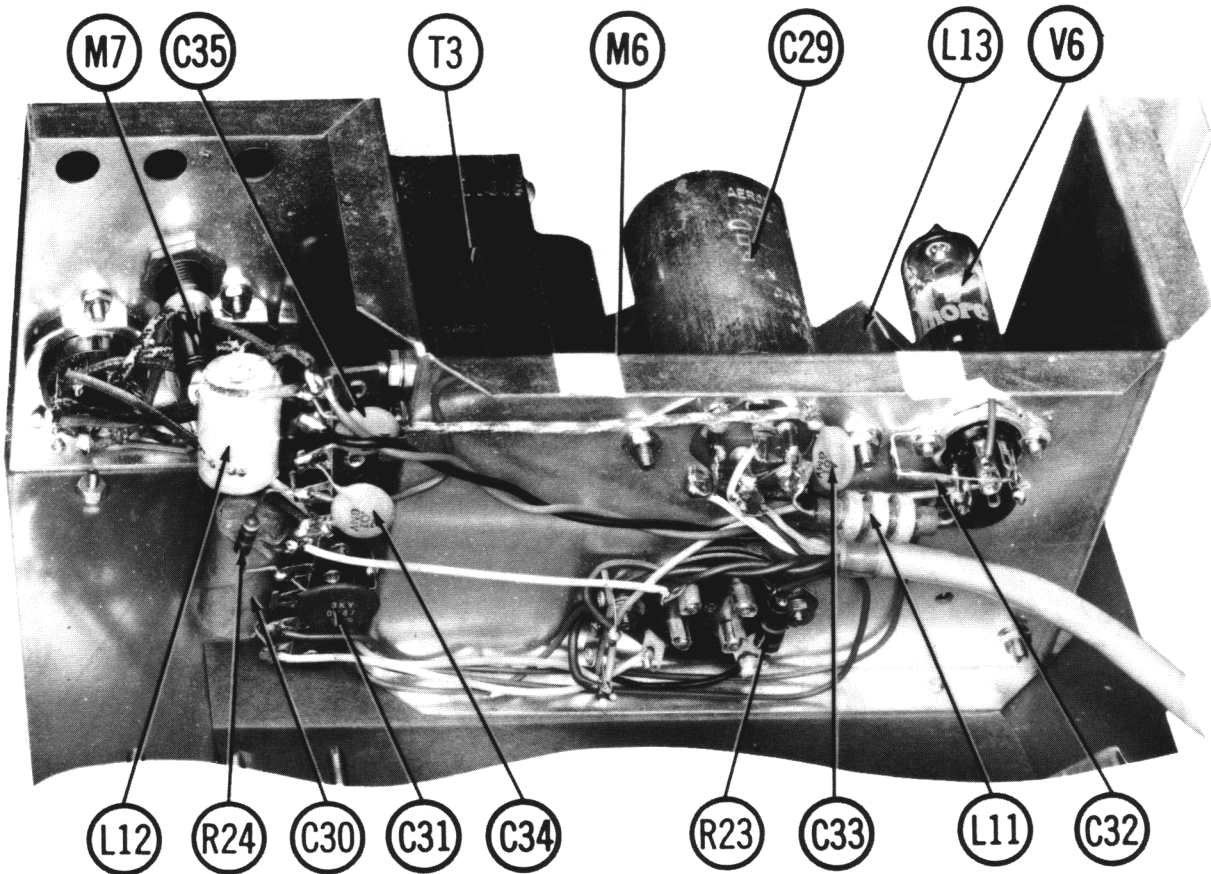




CHASSIS - BOTTOM VIEW



POWER SUPPLY - MODEL TC-11W



POWER SUPPLY - MODEL TC-612W

PARTS LIST AND DESCRIPTIONS

WIRING DATA

General-use Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
 Shielded Antenna Lead Use BELDEN No. 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)
 8498 Single Conductor Shielded (Neoprene)
 8498 Single Conductor Shielded (Vinyl)
 Ignition Noise Suppression Use BELDEN No. 7300-Series Spart-Plug Sets
 Bonding Strap Use BELDEN No. 8661 (3/8 In.)

TUBES

ITEM No.	AMPEREX	GENERAL ELECTRIC	RCA	RAYTHEON	SYLVANIA	TYPE
V1	R.F. Amp. - Super-Regenerative Det.	6AN8A				6AQ5A 6AU6 6X4
V2	A.F. Amp. -Speech Amp.	12AX7 (ECC83)*				

* Alternate

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP. VOLT.	REPLACEMENT DATA						
		PHILMORE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1A	20	TC1100	A.FH4-67	D0520	XC4-48	FP430.97	TMQ-4514	TVL-4724.2
C1B	450					TT25X10	MLV10-25	TE-1204
C1C	20	TC1027	FTT79	NLW10-25	MTI-5	TT25X10	MLV10-25	TE-1204
C1D	25	TC1027	FTT79	NLW10-25	MTI-5	TT25X10	MLV10-25	TE-1204

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELEMCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C4	15		CC20UP150G	DD-150	L10Q15	CCD-150	GP415	5GA-Q15
C5	.001		BFD-001	DD-102	L10D1	CCD-102	GP210	5GA-D10
C6	.005		BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C7	.001		BFD-001	DD-102	L10D1	CCD-102	GP210	5GA-D10
C8	1.5	#TC1018	CC20UK1R5C	DD-100	L10Q1	CCD-100	GP410	5GA-Q10
C9	10		BFD-10	DD-101	L10T1	CCD-101	GP310	5GA-T10
C10	100		BFD-100	DD-502	L10D5	CCD-502	GP250	5GA-D50
C11	.005	Note 1	BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C12	.005		BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C13	.001		BFD-001	DD-102	L10D1	CCD-102	GP210	5GA-D10
C14	.001		BFD-001	DD-102	L10D1	CCD-102	GP210	5GA-D10
C15	.005		BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C16	.005		BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C17	.01		BFD-01	DD-103	BYA10S1	CCD-103	GP110	5GA-S10
C18	.01		BFD-01	DD-103	BYA10S1	CCD-103	GP110	5GA-S10
C19	10		BFD-10	DD-100	L10Q1	CCD-100	GP410	5GA-Q10
C20	.001		BFD-001	DD-102	L10D1	CCD-102	GP210	5GA-D10
C21	.005		BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C22	4.7	#TC1019	BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C23	.005		BFD-005	DD-502	L10D5	CCD-502	GP250	5GA-D50
C24	.001		BFD-001	DD-102	L10D1	CCD-102	GP210	5GA-D10
C25	10		CC20UJ100C	DD-100	L10Q1	CCD-100	GP410	5GA-Q10
C26	.001		BFD-001	DD-102	L10D1	CCD-102	GP210	5GA-D10
C27		#TC1028						
C28		#TC1028						

Philmore Part Number.

Note 1. Not used in some versions.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			PHILMORE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume, Switch	Imeg	TC1016	B-70-S, or (F2-Imeg, KR-1, SU204)	A47-Imeg-Z, RS-2, SWE-12	QJ3-137, 76-1, or (BUI, C.F26, SS5, GC)*	U53, U596, or (UA16A, UA4, SL3500)
R2	Sensitivity	500K	TC1017	B-60, or (F2-500K, SU204)	A47-500K-Z, RS-2	QJ3-133, or (BUI, C.F25, SS5, DC)*	U48, or (UA55A, SL3500)

* 'SNAPTROL'

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA			REPLACEMENT DATA			
		IRC PART No.	WORKMAN PART No.	REMARKS	ITEM No.	RATING	IRC PART No.	WORKMAN PART No.
R3	4700Ω				R13	3300Ω		
R4	470Ω				R14	220K		
R5	220K				R15	270K		
R6	4700Ω				R16	470Ω 1W		
R7	10meg				R17	47K		
R8	150K				R18	56K		
R9	Imeg				R19	22K 1W		
R10	3300Ω				R20	10K 1W		
R11	220K				R21	Imeg		
R12	Imeg				R22	Imeg		

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			Stancor PART No.	Workman PART No.	NOTES
		PHILMORE PART No.	Meritt PART No.	Miller PART No.			
L1	R.F. Coil	TC1033					
L2	Rec. Tuning (1.5uh)	TC1034					
L3	Rec. Tuning (1.5uh)	TC1034					
L4	Rec. Tuning (1.5uh)	TC1034					
L5	Cath. Choke (37uh)	TC1030*					
L6	R.F. Choke (75uh)	TC1031					
L7	Transmit Osc. (2.5uh)	TC1035					
L8	Final	TC1033					
L9	Ant. Load (1.3uh)	TC1036					

FILTER CHOKE

ITEM No.	CURRENT (Measured)	RATINGS DC RES. (Ω CURRENT 1000-)	REPLACEMENT DATA			NOTES
			INDUCTANCE (1000-)	PHILMORE PART No.	STANCOR PART No.	
L10	.055A	235Ω	8HY	TC1102		

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA			NOTES	
		PHILMORE PART No.	Meritt PART No.	STANCOR PART No.		THORADSON PART No.
T1	117V @ .38A	480VCT 2.3A	6.3V @ 2.3A	TC1101		

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES	
		PHILMORE PART No.	Meritt PART No.	Stancor PART No.		Thordarson PART No.
T2	500Ω			TC1032		

PARTS LIST AND DESCRIPTIONS (Continued)

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		PHILMORE PART No.	QUAM PART No.	
SP1	3 1/2" PM	TC1038	3A07	

MISCELLANEOUS

ITEM No.	PART NAME	PHILMORE PART No.	NOTES
M2	Crystal	TC1037	Transmit Receive Channel Selector (4-Pole, 3-Position) Transmit Channel Selector (4-Pole, 3-Position) Receive-Transmit (#1882-J 4-Pole, 2-Position)
M3	Switch	TC1041	
M4	Switch	TC1040	
M5	Switch	TC1039	
	Microphone	TC1038	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				
			PHILMORE PART No.	LITTELFUSE PART No.	BUSS PART No.	HOLDER	
M1	3AG	2A 250V	TC1104	312002 (3AG 2A 250V)	155020	AGC 2	HKP

CABINETS & CABINET PARTS

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

NAME	PART No.	DESCRIPTION
Knob	TC1063	With Line Receiver-Transmit With Cabinet Bottom
Knob	TC1064	
Panel	TC1068	
Cabinet Cover	TC1062	

MODEL TC-612W

POWER SUPPLY

MODEL TC-612W

TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V8	Rectifier	6X4			

◆ AMPEREX ◆ GENERAL ELECTRIC ◆ RCA ◆ RAYTHEON ◆ SYLVANIA ◆

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	CAP. VOLT.	REPLACEMENT DATA		
			PHILMORE PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.
C29A	.20	450			
B	.20	450			
C	.20	450			
D	.20	25	TC1100	AFPH4-67	D0820
				XC4-48	FP430, 97
					TMQ-4514
					TVL-4724, 2

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.
C30	.47 100V		BF2P47	DD30-472	CUB2P47	2C P-6-474
C31	.0047 3KV		BPD-01	DD-103	BYA10S1	3HV-247
C32	.01		BPD-01	DD-103	BYA10S1	30GA-D47
C33	.01		BPD-01	DD-103	BYA10S1	5GA-S10
C34	.01		BPD-01	DD-103	BYA10S1	5GA-S10
C35	.01		BPD-01	DD-103	BYA10S1	5GA-S10

RESISTORS

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

ITEM No.	RATING	WORKMAN PART No.	REPLACEMENT DATA		
			IRC PART No.	ITEM No.	
R23	47Ω 1W			R24	4700Ω

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		PHILMORE PART No.	Merit PART No.	Miller PART No.	
L11	R.F. Choke (1.1MH)	TC6107		Stancor PART No.	
L12	Flash Choke (3uh)	TC6106		Workman PART No.	

ITEM No.	LI3	CURRENT (Measured)	DC RES.	INDUCTANCE (1000--)	PHILMORE PART No.	REPLACEMENT DATA			NOTES
						STANCOR PART No.	THORPARSON PART No.	TRIAD PART No.	
		.040A	235Ω	8HY	TC1102				

TRANSFORMER (POWER)

ITEM No.	T3	PRI.	SEC. 1	SEC. 2	RATING	REPLACEMENT DATA			NOTES
						PHILMORE PART No.	STANCOR PART No.	THORPARSON PART No.	
		12.6VDC	660VAC		TC6105				
		3.2A (OT)	.040A						
		6.3VDC							
		3.7A							

VIBRATOR

ITEM No.	M6	TYPE	INPUT VOLTS	FREQUENCY	PHILMORE PART No.	REPLACEMENT DATA			NOTES
						CORNELL-DUBILIER PART No.	MALLORY PART No.	BUSS PART No.	
		Interruption	6.0V	115V	TC6112	1501			

FUSES

ITEM No.	M7	TYPE	RATING	REPLACEMENT DATA					
				PHILMORE PART No.	HOLDER	FUSE	BUSS PART No.		
		3AG	8A 32V	TC1104	TC1104	312008 (3AG 8A 32V)	155020	AGC 8	HKP

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)

Coiled Microphone Cable Use BELDEN No. 8499 (Stranded) Miniature (RG-58/U)
8498 (Stranded) Miniature (RG-58/U)
8499 Single Conductor Shielded (Neoprene)
Ignition Noise Suppression Use BELDEN No. 7300-Series Spark-Plug Sets
Bonding Strap Use BELDEN No. 8661 (3/8 In.)