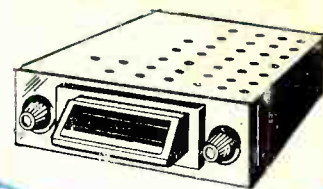


SAMS PHOTOFACT[®]



AUTO RADIO SERIES

AR-40
40
DEC. 1966



CONTENTS

REMOVAL INFORMATION PAGE 4

CHEVROLET

Chevrolet (1966) Soundex
CHP-166T
Chevrolet Truck (1966)
Soundex CTR-166T
Corvair (1966) Soundex
COP-066T

CHRYSLER

Imperial (1966) Mopar 420

FORD

Galaxie (1965/66)
Automatic F-6105P,
FA-6605P, FAP-6606P,
FP-6106P

LINCOLN

Lincoln (1966) F6TDC

OLDSMOBILE

Oldsmobile (1965/66)
Motorola OE66A

PONTIAC

Pontiac (1966) Motorola
PC66A, Soundex
POP-666T

RENAULT

Dauphine, Caravelle &
R-8 (1966) 5SMXD

UNIVERSAL

Midland 65-200, 65-210
Motorola FM106M,
TM296M, TM316M,
TM326M, TM336M

UNIVERSAL (cont.)

Ranger RR-10R, RR-11R,
RR-12R
Tenatronics SA-712, SM-711,
SM-751, VWM-751
Tenna RU-111TC, RU-112TC,
RU-113TC
Titan ETB-1600, RV-66,
TMA-1500

VOLKSWAGEN

Karmann Ghia (1966)
6FBVG
Sedan (1966) 6FBVW
Transporter (1966) 6FBVT
Type 3 Vehicles (1966)
6FBV3

HOWARD W. SAMS & CO., INC.

Indianapolis, Indiana

\$2.95

\$3.75 IN CANADA

Cat. No. AR-40



SAMS PHOTOFACT[®]

AUTO RADIO SERIES



VOLUME

40

by the *Howard W. Sams* ENGINEERING STAFF



HOWARD W. SAMS & CO., INC.

INDIANAPOLIS

INDIANA

FIRST EDITION
FIRST PRINTING—DECEMBER, 1966
SECOND PRINTING—OCTOBER, 1969

PHOTOFACT®
AUTO RADIO SERIES
VOLUME 40

Copyright © 1966 by Howard W. Sams & Co., Inc.
Indianapolis, Indiana 46206. Printed in the United States of America

All rights reserved. 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.

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 the particular type of replacement part listed.

Library of Congress Catalog Card Number: 49-11493



TABLE OF CONTENTS

Model Number	Page
Automatic Models F-6105P, FA-6605P, FAP-6606P, FP-6106P.....	5
Lincoln Model F6TDC.....	10
Midland Model 65-200.....	24
Midland Model 65-210.....	29
Mopar Model 420.....	44
Motorola Model FM106M.....	58
Motorola Models OE66A, PC66A.....	69
Motorola Model TM296M.....	75
Motorola Models TM316M, TM336M.....	81
Motorola Model TM326M.....	87
Ranger Models RR-10R, RR-11R, RR-12R...	93
Renault Model 5SMXD.....	96
Soundex Models CHP-166T, COP-066T, CTR-166T, POP-666T.....	102
Tenatronics Models SA-712, SM-711.....	108
Tenatronics Models SM-751, VWM-751.....	113
Tenna Models RU-111TC, RU-112TC, RU-113TC.....	93
Titan Model ETB-1600...	126
Titan Model RV-66.....	135
Titan Model TMA-1500.....	137
Volkswagen Models 6FBVG, 6FBVT, 6FBVW, 6FBV3.....	142

Cumulative Index to Prior Volumes	152
--	------------

REMOVAL INSTRUCTIONS

GENERAL REMOVAL INFORMATION

Most radios and speakers can be removed for service by following the steps shown in this block of information. Check the Make, Model and Year of car listed below. If more specific instructions are required, they are shown.

Step 1 Disconnect power, speaker and antenna leads.

Step 2 Remove knobs.

Step 3 Remove nuts from control bushings and cabinet braces.

Step 4 Remove radio from under dash.

Step 5 Remove nuts holding speaker and remove speaker from under dash.

CHEVROLET - 1966

See General Removal Information.

CHEVROLET TRUCK - 1966

See General Removal Information.

CORVAIR - 1966

See General Removal Information.

IMPERIAL - 1966

See General Removal Information.

GALAXIE - 1965/66

Step 1 Pull off knobs.

Step 2 Disconnect "A" Speaker and Antenna leads.

Step 3 Use 7/16" wrench to remove nut from rear brace, and 2 bolts holding radio to rear of instrument panel.

Step 4 Remove radio from under instrument panel.

SPEAKER REMOVAL:

Step 1 Use phillips screw driver and remove glove box.

Step 2 Use 5/16" wrench and remove 4 screws from speaker mounting.

Step 3 Remove speaker thru glove box opening.

LINCOLN - 1966

Step 1 Remove 8 screws from lower instrument panel cover and drop cover down.

Step 2 Follow steps 1 thru 4 of General Removal Information.

LINCOLN - 1966 (Cont'd)

SPEAKER REMOVAL:

Step 1 Remove 6 screws from air conditioner grille.

Step 2 Remove 2 screws holding word Lincoln on left side of cluster.

Step 3 Remove 3 screws between cluster hood and crash pad.

Step 4 Remove 4 screws from windshield molding and remove molding.

Step 5 Remove 2 screws and 2 nuts from forward edge of crash pad.

Step 6 Disconnect speaker leads and remove crash pad.

Step 7 Remove 4 wing nuts holding speaker to crash pad and remove speaker.

OLDSMOBILE - 1966

See General Removal Information.

PONTIAC - 1966

See General Removal Information.

RENAULT - 1966

See General Removal Information.

VOLKSWAGEN SEDAN KARMANN GHIA - 1958-1966

Step 1 Disconnect power, speaker and antenna leads.

Step 2 Remove knobs.

Step 3 Remove nuts from control bushings. From inside of luggage compartment, remove nut from rear brace.

Step 4 Remove radio thru luggage compartment opening.

Step 5 Remove nuts holding speaker and remove speaker thru luggage compartment opening.

TRANSPORTER - 1966

See General Removal Information.



PHOTOFACT[®] with

CIRCUITRACE[®]

TRADE NAME : Automatic Models:
 F-6105P (1965/66 Galaxie)
 FA-6605P (1965/66 Galaxie)
 FAP-6606P (1965/66 Galaxie)
 FP-6106P (1965/66 Galaxie)

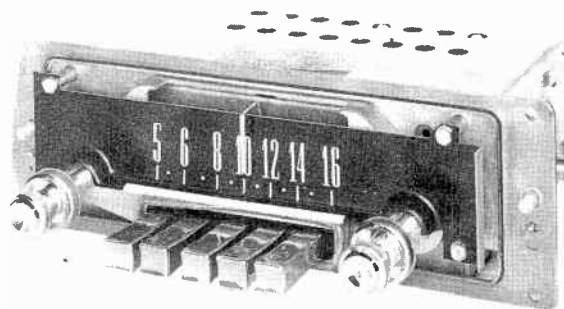
SUPPLIER : For Current Address, See Annual Index.

TYPE SET : 6 Transistor AM Receiver

POWER SUPPLY : 12 Volt Storage Battery

RATING : 650 Amp. A 12.6 Volts DC

TUNING RANGE: BROADCAST 540-1615KC



ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

A1 thru A4. GENERAL CEMENT: 9296, 9297, 9300
 WALSCO: 2510, 2546, 2547
 A5, A6, A7. GENERAL CEMENT: 8290, 8868, 9087
 WALSCO: 2525, 2528, 2587

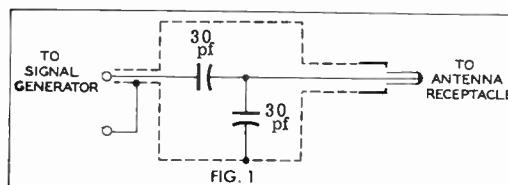
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point  , low side to ground.	262KC (400% Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7	"

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A7 for maximum output.

Antenna Adjustment (A7) located, right side.

PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.

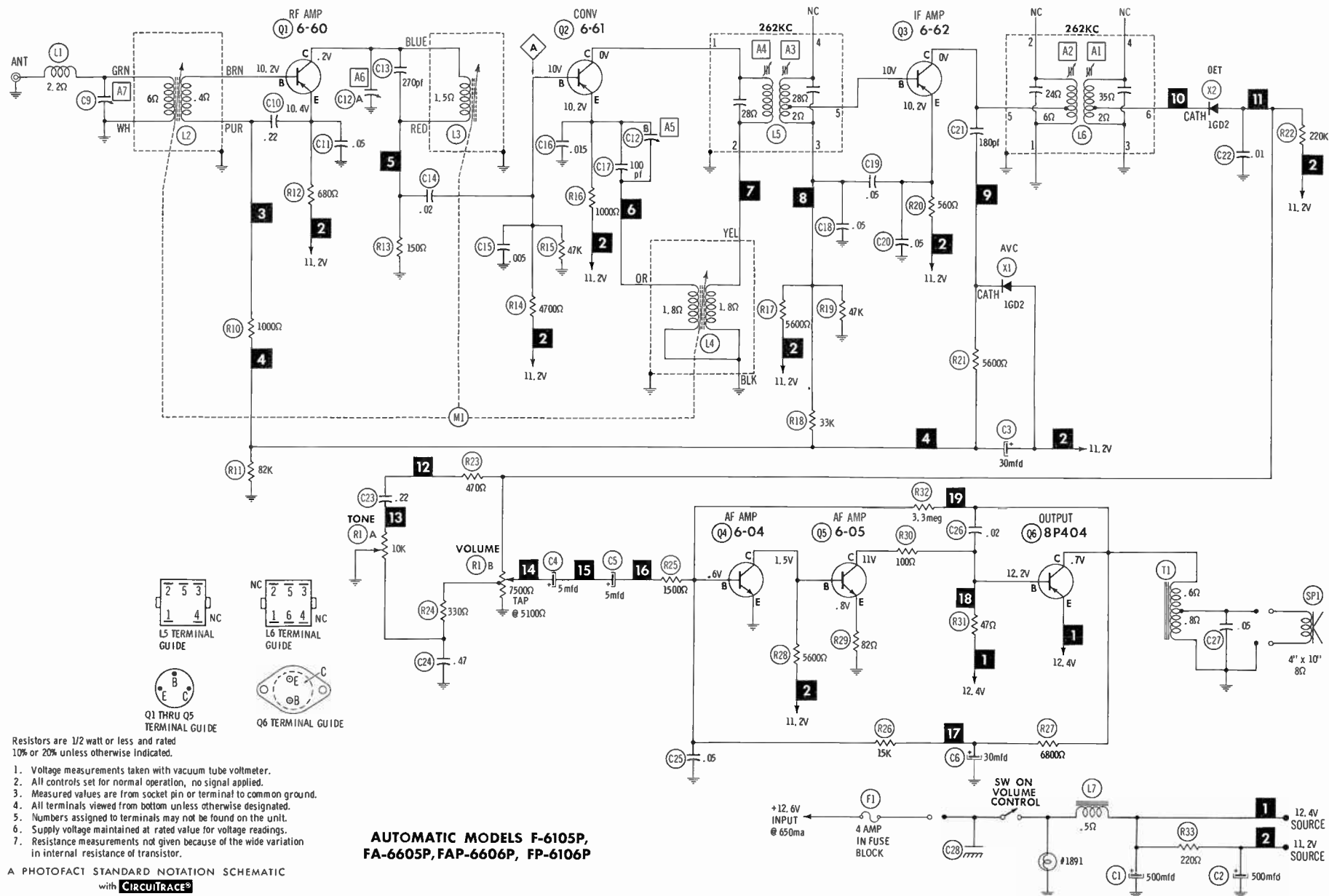


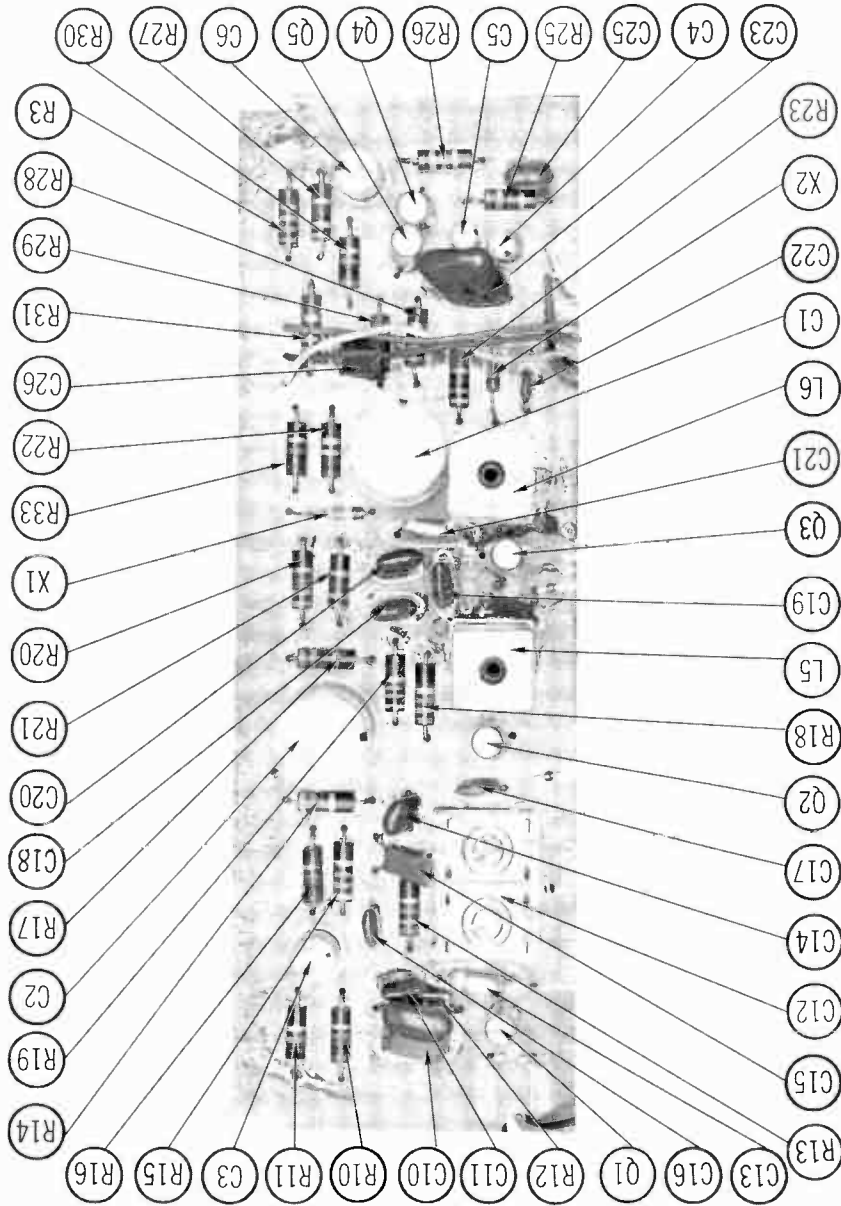
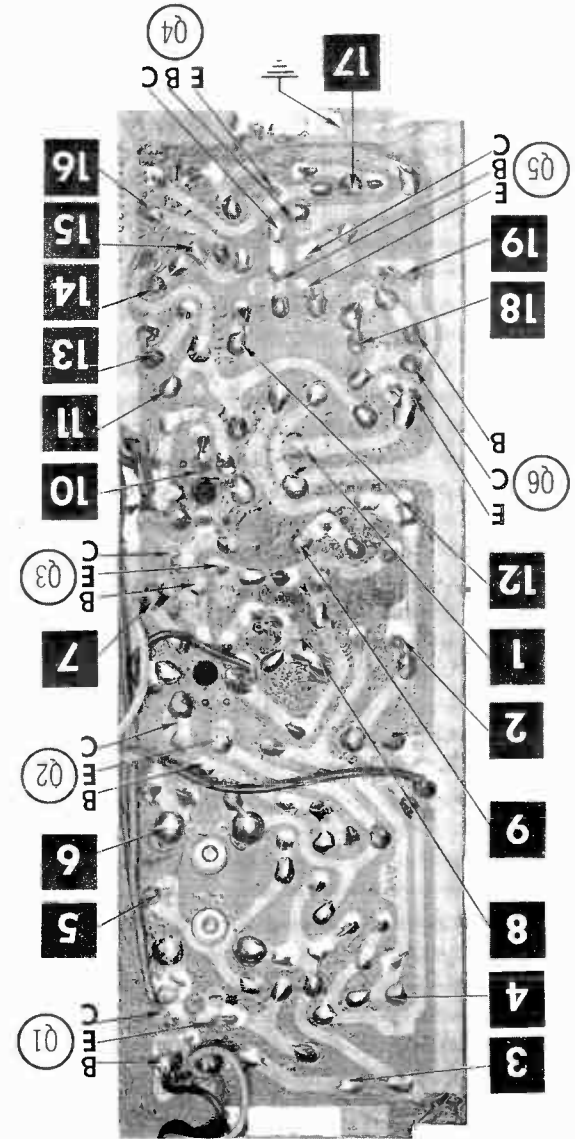
AUTOMATIC MODELS F-6105P, FA-6605P, FAP-6606P, FP-6106P

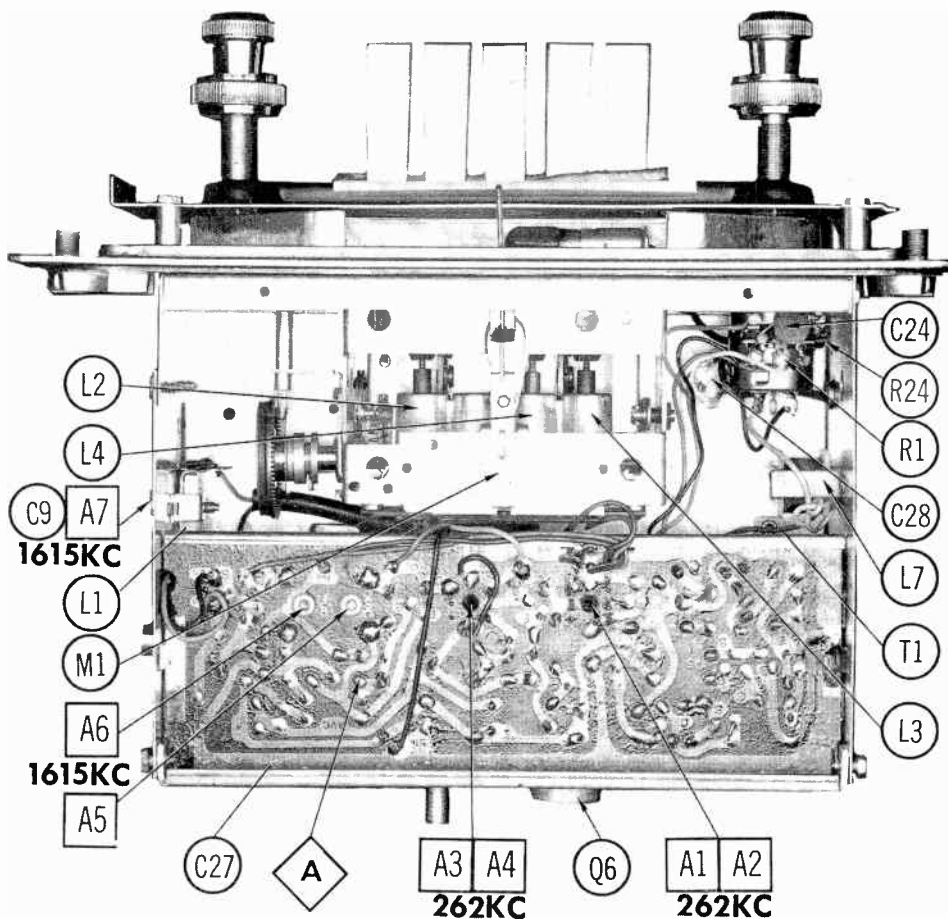
HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD760

World Radio History







PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Shielded Hook-up Wire	8524 (Stranded) Available in 12 Colors
Bonding Strap	Use BELDEN No. 8885
	Use BELDEN No. 8861 (3/8 In.) or 8870 (3/4 In.)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	6-60	RF Amp.	DS-25	GE-9	SK-3008	PNP
Q2	6-61	Converter	DS-25	GE-9	SK-3008	PNP
Q3	6-62	IF Amp.	DS-25	GE-9	SK-3008	PNP
Q4	6-04	AF Amp.	DS-66	GE-10	SK-3020	NPN
Q5	6-05	AF Amp.	DS-66	GE-10	SK-3020	NPN
Q6	8P404	Output	DS-520	GE-3	SK-3009	PNP *

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1GD2	1N34AS	1N34A			
X2		1GD2	1N34AS	1N34A			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA				
	CAP.	VOLT.	Automatic PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.
C1	500	15		PRS1220	BR500-15	QT1-30	TC1505
C2	500	15		PRS1220	BR500-15	QT1-30	TC1505
C3	30	10		BCD12035	NLW30-15	MT1-16	TT10X30
C4	5	10		BCD12005	NLW5-15	MT1-3	PET1535
C5	5	10		BCD12005	NLW5-15	MT1-3	PET1535
C6	30	10		BCD10025	NLW30-15	MT1-16	TT10X30

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

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.
C9		#28-800-2L						
C10	.22							
C11	.05							
C12A		#28A1290						
C13	270							
C14	.02							
C15	.005							
C16	.015							
C17	100							
C18	.05							
C19	.05							
C20	.05							
C21	180							
C22	.01							
C23	.22							
C24	.47							
C25	.05							
C26	.02							
C27	.05							
C28		#43-215						

Automatic Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			Automatic PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
RIA	Tone	10K	80A2658C	F1-10K, R16-10K, FFS207, RFS215, BA200①, CA005, KR-4		† QJ-2145A	■ UE-4545S
B	Volume/Switch	7500Ω Tap @ 5100Ω					

① Alter bushing to meet requirements.

† "CONCENTRIKIT" Equivalent: K8 Kit, with Base Elements and Shafts: B11-116, P22-203 (Panel)
B21-115X, R26-215 (Rear)
QCB5A① (Bushing)
76-1 (Switch)

"SNAPTROL" Equivalent: BU15A①, CF9, CR48T, SF18, SR53, GC.

■ "STA-LOC" Equivalent: FL14L, RU752T53, OS2187, IS2625, US41.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		Automatic PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	Antenna Choke(6.2uh)	14-6.2	19-1004	BC-565	4610	T859
L2	Antenna	①				
L3	RF	①				
L4	Oscillator	①				
L5	Input IF	14A4301				
L6	Output IF	14A4302				

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	Automatic PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L7	650ma	.5Ω	10MH	75A3082	C-4095	TC-2	TR-155	TY17XT	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Automatic PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	25Ω Tap	@ 8Ω	75A3636			TR-169		

SPEAKER

ITEM No.	TYPE				REPLACEMENT DATA			NOTES
					Automatic PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4" x 10"	PM	8Ω		73B3276	P4X10V8	410A2Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGW	4 Amp.	108-400	In Fuse Block	303004		AGW 4	

MISCELLANEOUS

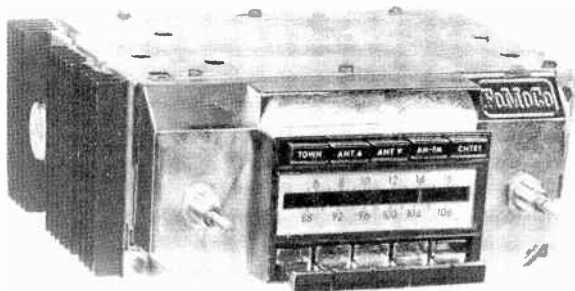
ITEM No.	PART NAME	Automatic PART No.	NOTES
M1	Tuner	78B3700	

AUTOMATIC MODELS F-6105P, FA-6605P, FAP-6606P, FP-6106P



PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Lincoln Model F6TDC (1966)

SUPPLIER : For Current Address, See Annual Index.

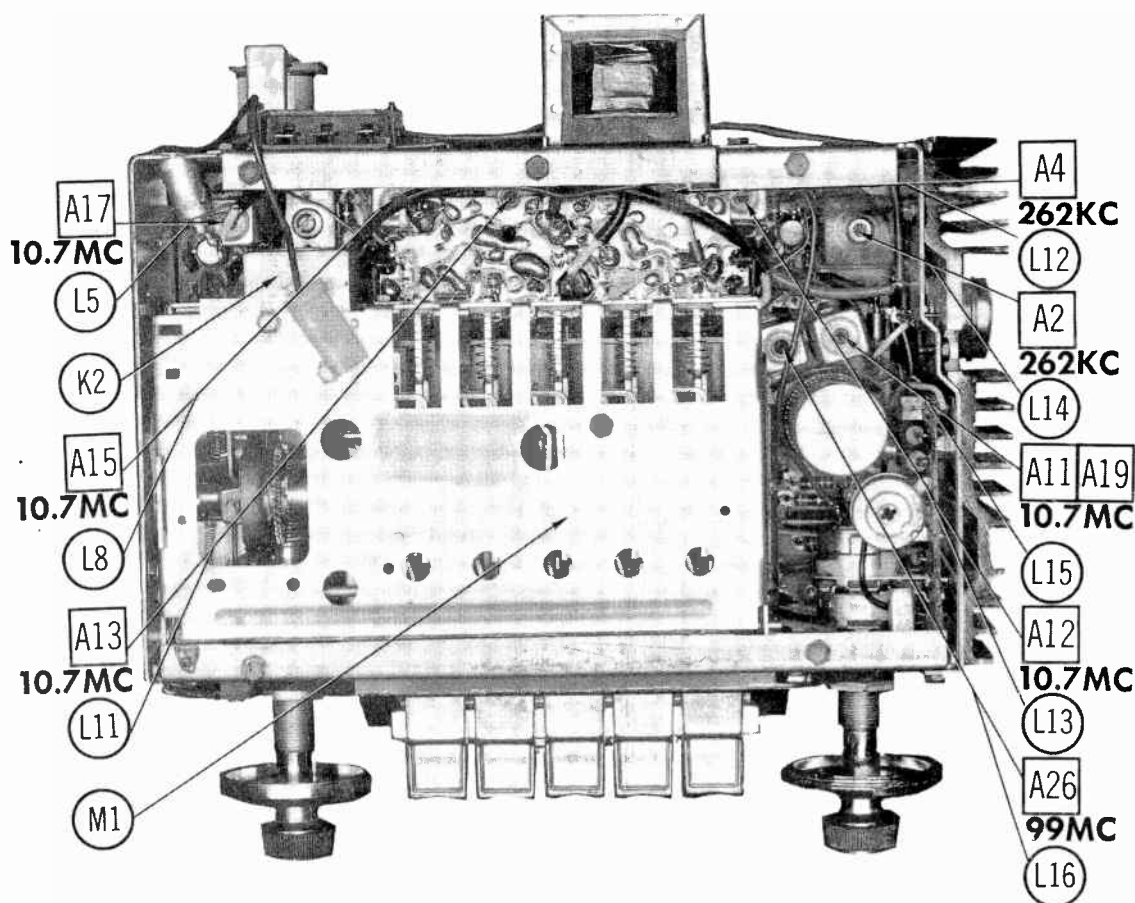
TYPE SET : 14 Transistor AM-FM Receiver

POWER SUPPLY : 12 Volt Storage Battery

RATING : 1.5 Amp. @ 12.6 Volts DC

TUNING RANGE: BROADCAST 540-1615KC
FREQ. MOD: 88-108MC

LINCOLN MODEL F6TDC



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD604R

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

A1 thru A4, A11 thru A18.

A5 thru A10, A19 thru A26.

GENERAL CEMENT: 5009, 8782A, 8987

WALSCO: 2531-X, 2538

GENERAL CEMENT: 8290, 8868, 9087

WALSCO: 2525, 2528, 2587

PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. High side thru .1mfd to point Δ , low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coll.	A1, A2, A3, A4	Adjust for maximum.
Check setting of AM Oscillator coil core (A5). Rear of core should be 1 3/8" from mounting end of coil form.					
2. High side thru 82mmf to antenna receptacle, low side to ground.	1615KC	High Freq. End Stop.	Output Meter across voice coll.	A6, A7, A8	Adjust for maximum.
3. "	600KC	600KC Signal	"	A9, A10	Adjust for maximum. Repeat step 2.
With radio installed in car and antenna extended 31", tune in a weak station near 1400KC and adjust A8 for maximum output.					

FM ALIGNMENT USING AM SIGNAL GENERATOR — SELECTOR IN FM POSITION

High side thru .1mfd to point Δ , low side to ground.					
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
4. 10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point Δ ; common to ground.	A11, A12, A13, A14, A15, A16, A17, A18.	Adjust for maximum.	
5. "	"	DC probe to point Δ ; common to	A19.	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.	

FM IF ALIGNMENT USING FM SIGNAL GENERATOR — SELECTOR IN FM POSITION

High side thru .1mfd to point Δ , low side to ground. Use only enough marker signal to obtain indication. Use 80v frequency modulated signal with 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.					
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
4. 10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point Δ ; low side to ground.	A11, A12, A13, A14, A15, A16, A17, A18.	Disconnect stabilizing capacitor C6. Adjust for maximum gain and symmetry of response similar to Fig. 1 with marker as shown. Reconnect C6.	
5. "	"	Vert. amp. to point Δ ; low side to ground.	A19.	Adjust A19 (Secondary) to place marker at center of crossover lines similar to Fig. 2. Adjust A11 (Primary) for maximum amplitude and straightness of crossover lines.	

FM RF ALIGNMENT Check setting of FM Oscillator coil core(A23). Rear of core should be 1 3/8" from mounting end of coil form.

Connect generator across antenna terminals with 120Ω carbon resistors in series with each lead.					
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
6. 108MC	Set at high end.	DC probe of VTVM to point Δ ; common to ground.	A20, A21, A22.	Adjust for maximum. Ground Point Δ .	
7. 99MC	Tune to signal.	"	A24, A25.	Rock tuning and adjust for maximum. Repeat steps 6 and 7 until no further improvement can be made.	
8. 99MC	Tune to signal.	"	A26.	Adjust for MINIMUM.	

FIG. 1

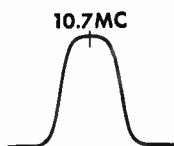
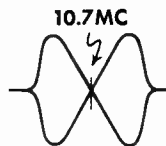
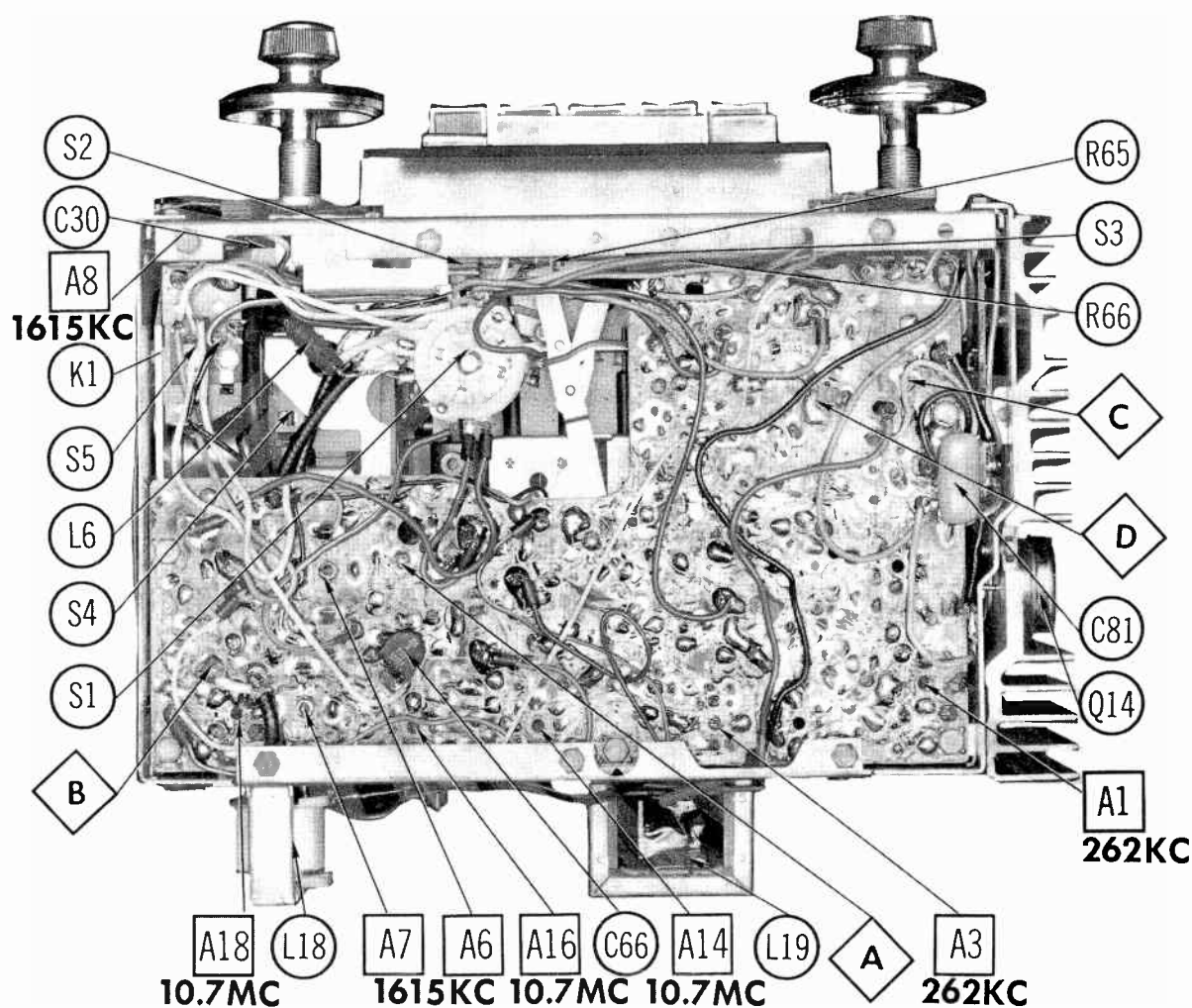
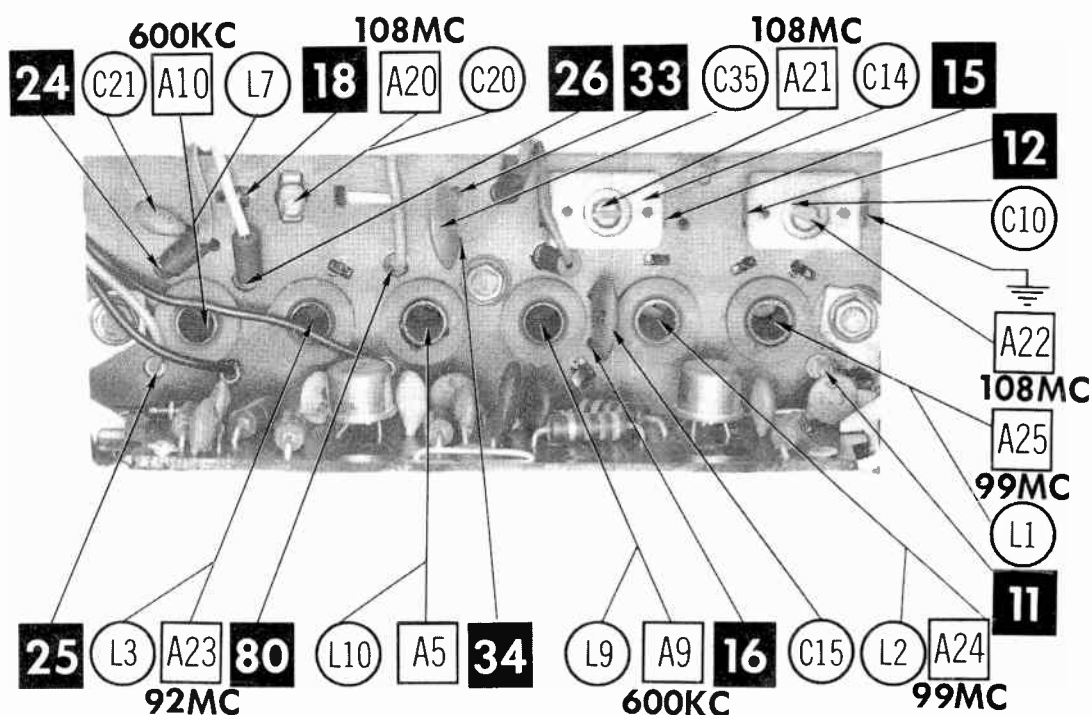
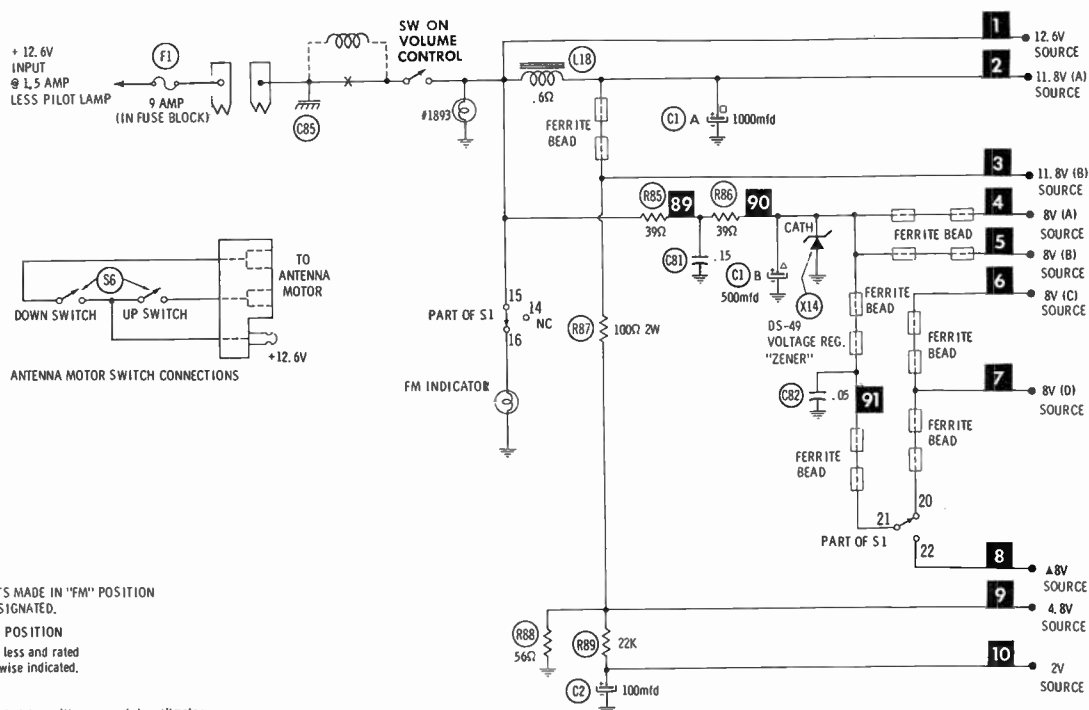
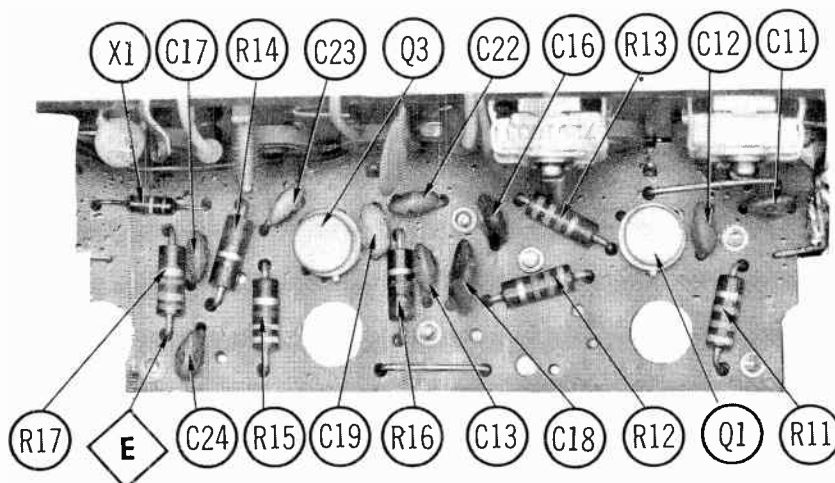


FIG. 2

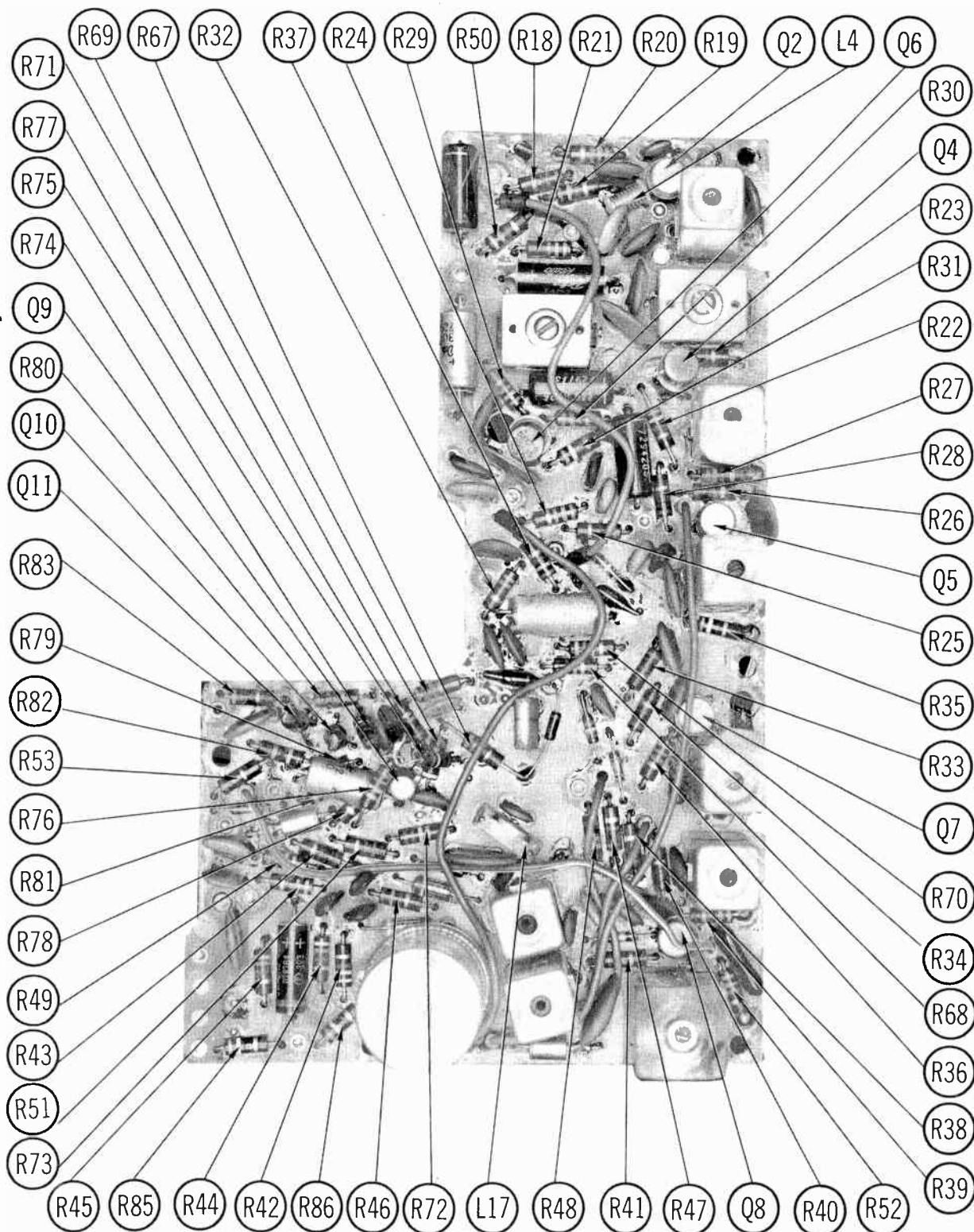




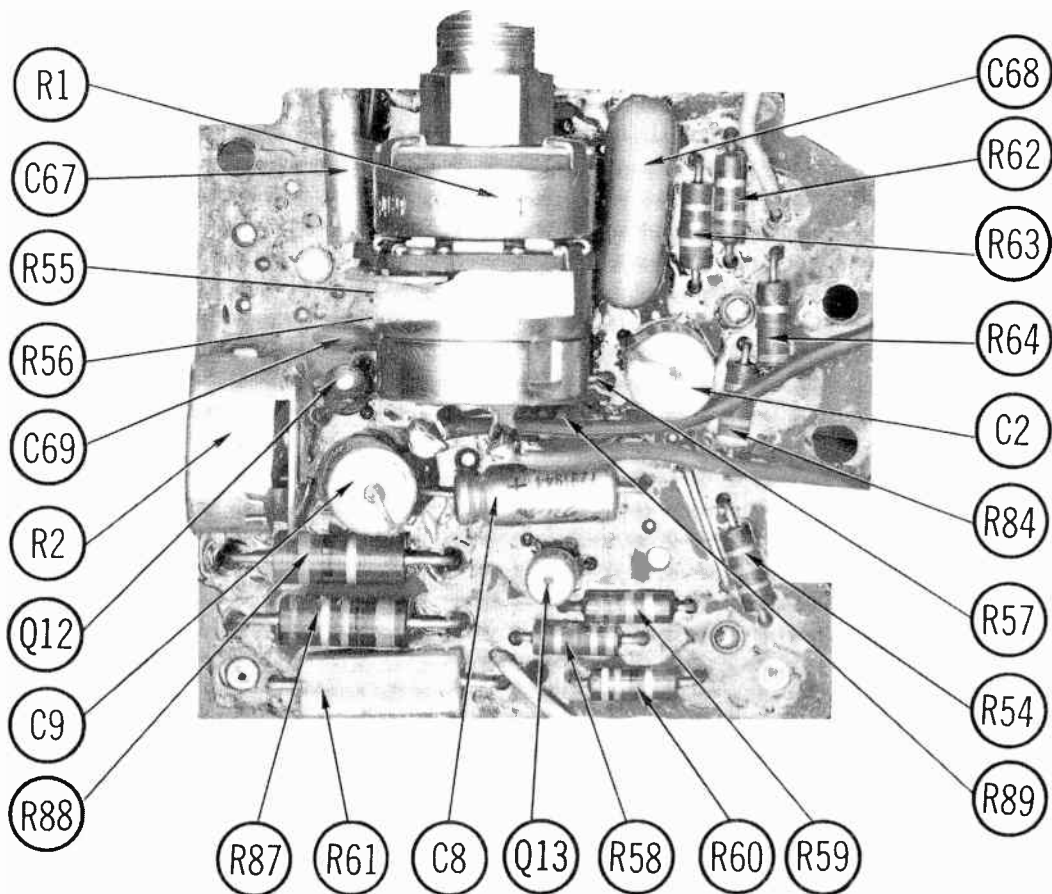
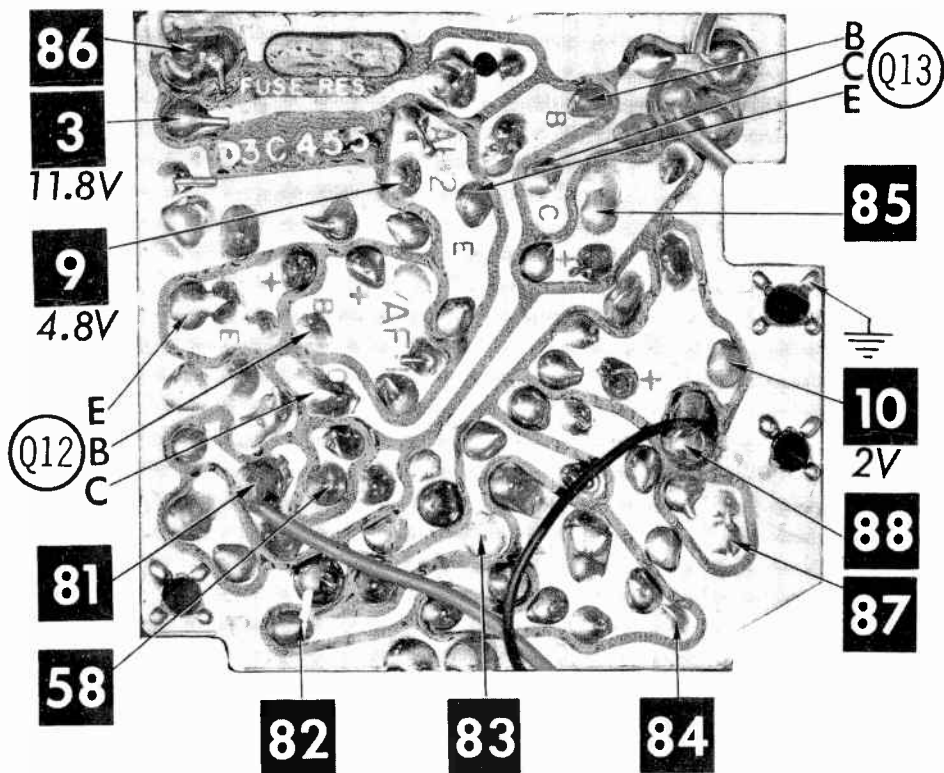


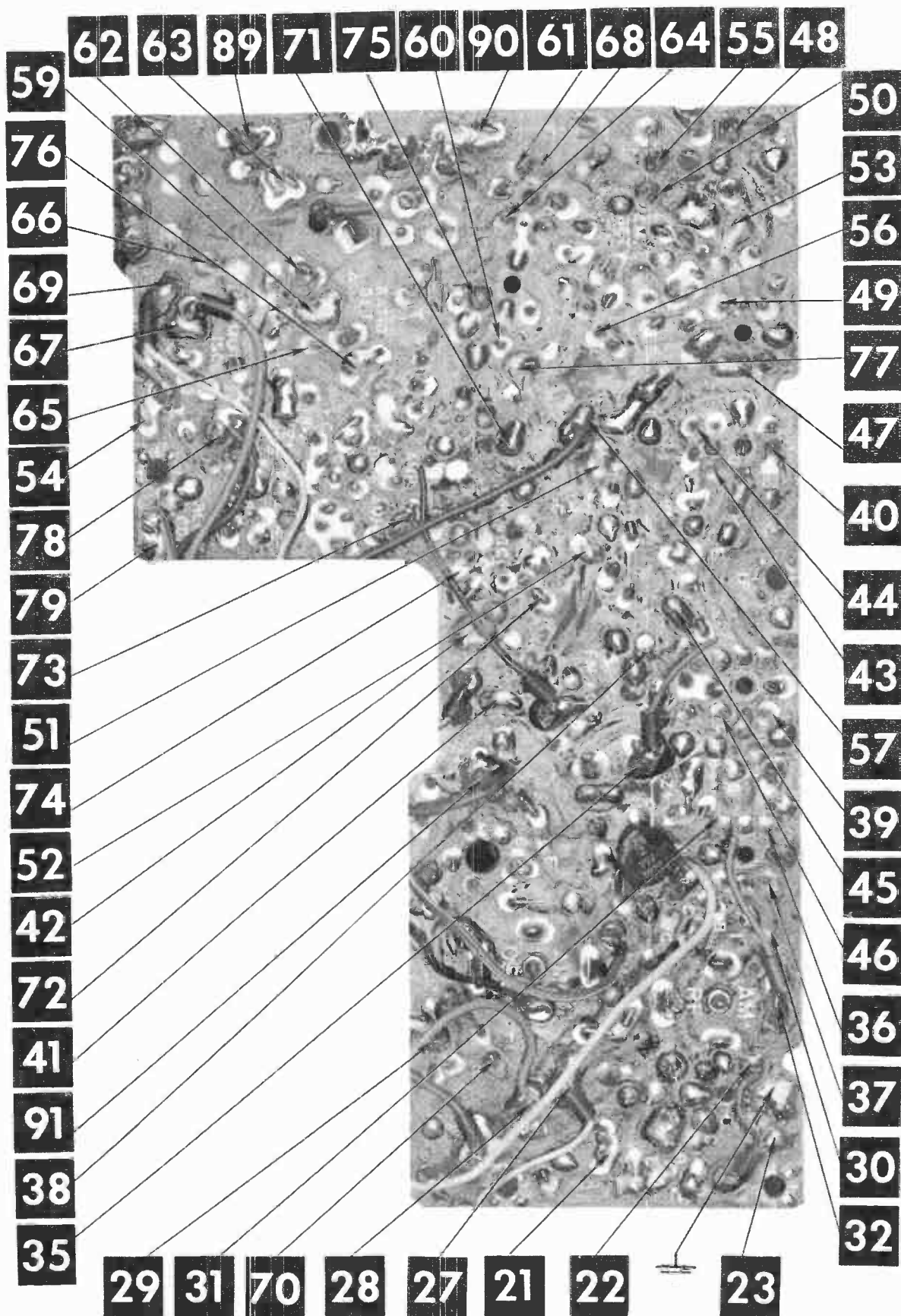
© Howard W. Sams & Co., Inc. 1966

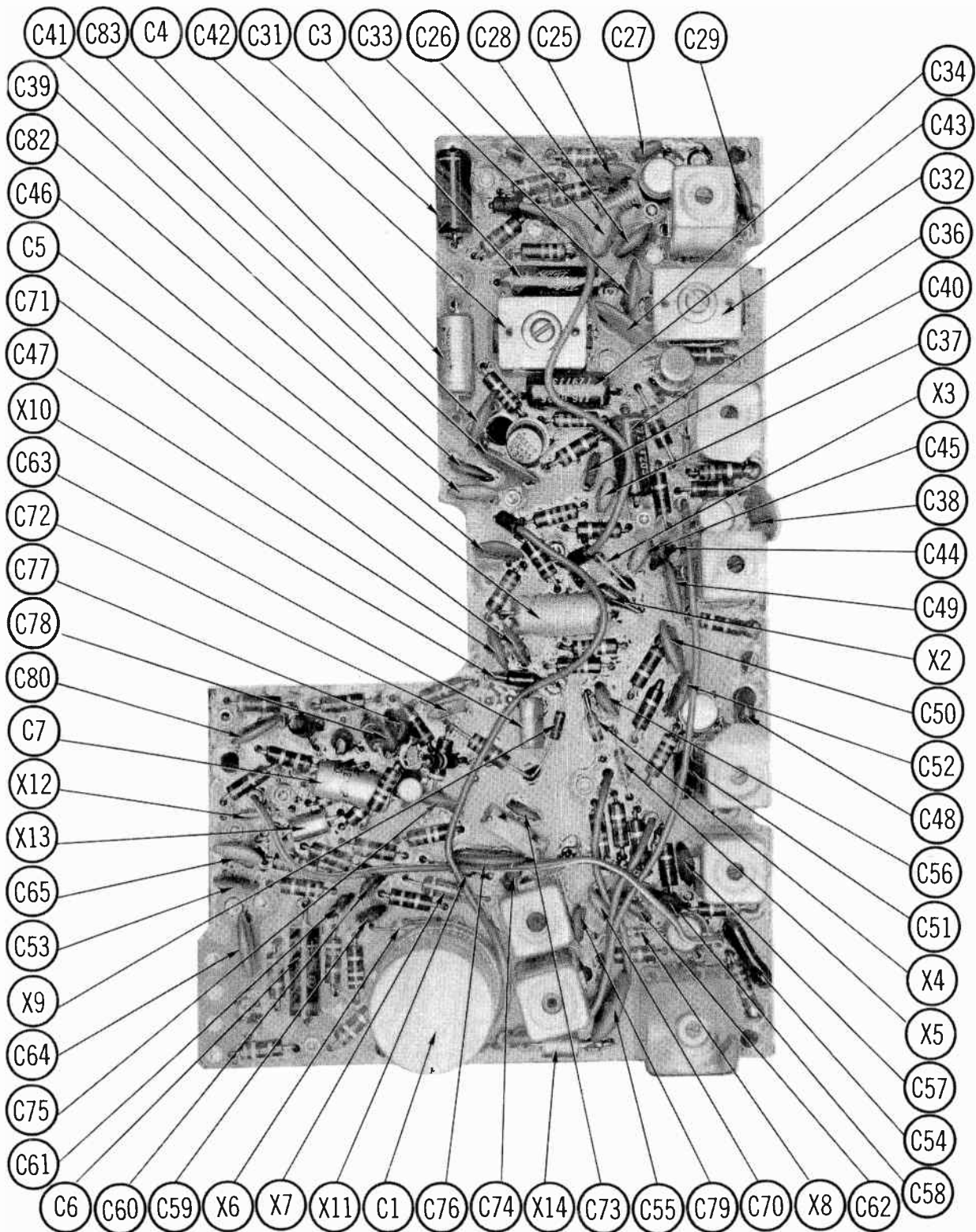












PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	DS-28	FM RF Amp.	DS-41		SK-3008	PNP
Q2	DS-36	FM Mixer	DS-41		SK-3008	PNP
Q3	DS-64	FM Oscillator	DS-41		SK-3008	PNP
Q4	DS-58	AM RF -1st FM IF	DS-58		SK-3008	PNP
Q5	DS-63	AM Mixer-2nd FM IF	DS-58		SK-3007	PNP
Q6	DS-36	AM Oscillator	DS-25	GE-2	SK-3006	PNP
Q7	DS-63	AM IF-3rd FM IF	DS-58		SK-3006	PNP
Q8	DS-63	4th FM IF	DS-58		SK-3007	PNP
Q9	DS-77	Trigger Amp.	DS-77		SK-3020	NPN
Q10	DS-46	Relay Amp.	DS-68	GE-10	SK-3020	NPN
Q11	DS-46	Relay Control	DS-68	GE-10	SK-3020	NPN
Q12	DS-68	AF Amp.	DS-68	GE-10	SK-3020	NPN
Q13	DS-68	AF Amp.	DS-68	GE-10	SK-3020	NPN
Q14	DS-501	Output	DS-501	GE-4	SK-3012	PNP *

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.
Check bias adjustment.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		DS-55	1N34AS	1N34A			
X2		DS-27	1N34AS	1N34A			
X3		DS-27	1N34AS	1N34A			
X4		DS-27	1N34AS	1N34A			
X5		DS-27	1N34AS	1N34A			
X6		DS-39	1N34AS	1N34A			
X7		DS-39	1N34AS	1N34A			
X8		DS-27	1N34AS	1N34A			
X9		DS-31	1N34AS	1N34A			
X10		DS-31	1N34AS	1N34A			
X11		DS-55	1N34AS	1N34A			
X12		DS-27	1N34AS	1N34A			
X13		DS-49					
X14		DS-49					

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	DELCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
CLA	1000	16	7291356	PWH3-54-45			FPS300.93	PCL-3021.9
B	500	16						
C	15	115rms						
C2	100	4	7291810	PTT30	NLW125-6	MT1-21	TT6X100	TE-1102
C3	3	12	7292359	PTT50	NLW3-15	MT1-3	TT12X3	TE-1122
C4	30	6	7296313	PTT27	NLW30-6	MT1-13	TT6X30	TE-1092
C5	10	20	7295247	PTT114	NLW10-25	MT1-5	TT25X10	TE-1204
C6	3	12	7292359	PTT50	NLW3-15	MT1-3	TT12X3	TE-1122
C7	3	12	7291860	PTT50	NLW3-15	MT1-3	TT12X3	TE-1122
C8	10	12	7291944	PTT53	NLW10-15	MT1-5	TT12X10	TL-1128
C9	100	4	7291810	PTT30	NLW125-6	MT1-21	TT6X100	TE-1102

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.
C10	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C11	2	NPO	NPO-DI.2	DTZ-2R2	CZ801CJ2R2D	CCTO-2R2	CN0522	10TCC-V22
C12	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C13		#7291003						
C14				TCZ-56		CCTO-560	CN0456	10TCC-Q56
C15	58	NPO	NPO-DI10	DTZ-19	CZ801CG100J	CCTO-100	CN0410	10TCC-Q10
C16	10	NPO	DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C17	270		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C18	.05	25V	NPO-DI 4.7	DTZ-4R7		CCTO-4R7	CN0547	10TCC-V47
C19	4.7	NPO		820B		461	ST554-N	
C20	12-15			DTZ-4R7	CZ801CH5R0D	CCTO-050	CN0547	10TCC-V50
C21	5	NPO	NPO-DI5.0	DTZ-4R7	CZ801CJ2R2D	CCTO-2R2	CN0522	10TCC-V22
C22	2	NPO	NPO-DI2.2	DTZ-2R2		*	*	10TCC-V47
C23	4.7	N330						
C24	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C25	.0022		DI-2200	DD-222	JBX801YP222K	CCD-222	GP222	10TS-D22
C26	.05	16V	TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C27	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C28	.0022		DI-2200	DD-222	JBX801YP222K	CCD-222	GP222	10TS-D22
C29	.0022		DI-2200	DD-222	JBX801YP222K	CCD-222	GP222	10TS-D22
C30		#7294451						
C31	.0047	75V	DBE6D47		DMF6D47	6DP-427	PVC6247	6PS-D47
C32		#7298201						
C33	.05	16V	TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

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.
C34	.1 16V	#7282165	TTD-1	CK-104	HCZ3R0XR104P		TA010	TG-P10
C35	200 N750		N750-DI 200	DTN-200		CCTN-201	CN7320	10TCU-T20
C36	.0033 75V		DBE6D33		DMF6D33	6DP-1-332	PVC6233	6PS-D33
C37	.02 16V		TTD-02	CK-203	HCZ3R0XR203P	CCD-203	TA120	TG-S20
C38	.07 16V		BPD-.05	DD-503			GP150	5GA-S50
C39	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C40	560		DI-560	DD-561	JBX601YP561K	CCD-561	GP356	5GA-T56
C41	220 N180							
C42								
C43	.0047 75V		DBE6D47		DMF6D47	6DP-472	PVC6247	6PS-D47
C44	10 NPO		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CN0410	10TCC-Q10
C45	.02 16V		TTD-02	CK-203	HCZ3R0XR203P	CCD-203	TA120	TG-S20
C46	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C47	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C48	330 5%		ADM-15-331	CPR-330J	CD15F331J500	DM-15-331	SX333	MS-333
C49	.05 16V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C50	.05 16V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C51	150 5%		ADM-15-151	CPR-150J	CD15F151J500	DM-15-151	SX315	MS-315
C52	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C53	.033		TTD-03	CK-303		CCD-303	GP130	TG-S30
C54	1200 5%		ADM-20-122	CPR-1200J	CD19F122J500	DM-19-122	SX212	MS-212
C55	120 N080							
C56	.001		DI-1000	DM-102	JBX601YP102K	CCD-102	SM210	10TCN-T12
C57	.05		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	5GAB-D10
C58	.05		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C59	330		DI-330	DD-331	JBX601YP331K	CCD-331	GP331	10TS-T33
C60	330		DI-330	DD-331	JBX601YP331K	CCD-331	GP331	10TS-T33
C61	330		DI-330	DD-331	JBX601YP331K	CCD-331	GP331	10TS-T33
C62	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C63	.012		DBE6S12		DPMS6S12	6DP-2-123	PVC6112	6PS-S12
C64	1 3V			UK-105	HCX3R0XR105P		MAG31	HY-135
C65	.05 18V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C66	.01 100V		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C67	.047		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C68	.1		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C69	470		DI-470	DD-471	JBX601YP471K	CCD-471	GP347	10TS-T47
C70	.001		DI-1000	DM-102	JBX601YP102K	CCD-102	SM210	5GAB-D10
C71	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C72	.001		DI-1000	DM-102	JBX601YP102K	CCD-102	SM210	5GAB-D10
C73	.001		DI-1000	DM-102	JBX601YP102K	CCD-102	SM210	5GAB-D10
C74	1.5 NPO		NPO-DI 1.5	DTZ-1R5			CN0515	10TCC-V15
C75	56 NPO 100V			TCZ-56			CN0456	10TCC-Q56
C76	.0047		DI-4700	DD-472	JBT601YP472K	CCD-472	GP247	10TS-D47
C77	.05 25V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C78	.001		DI-1000	DM-102	JBX601YP102K	CCD-102	SM210	5GAB-D10
C79	.001		DI-1000	DM-102	JBX601YP102K	CCD-102	SM210	5GAB-D10
C80	.05 15V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C81	.15 75V		DBE4P15		DMF4P15	4DP-4-154	PVC6015	4PS-P15
C82	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C83	10 N180							
C84		#7271564						
C85		#7271564						

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

Delco Part Numbers.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA			
			DELCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.
R1A	Tone	100K	7294429	F2-100K, R14-25K		†QJ-2283A
B	Volume/Switch	20K Tap		FFS206, RFS300, BB202, SB006, KR4		
R2	Bias	8500Ω	7286601	V-600	U39-600	110-600
R3	Fader	600Ω	7294458			MR600P
		100Ω				

† "SNAPTROL" Equivalent: BU9①, CF52, CR50T, SF20, SR22, N4, GC.

① Alter bushing and adjust spacer nut to meet requirements.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	DELCO PART No.			IRC PART No.	WORKMAN PART No.	DELCO PART No.
	1000Ω (Cold Thermistor)			7291750					
					R61	.47Ω (Fusible)			7281890

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[†] for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		DELCO PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna	①				
L2	FM RF	①				
L3	FM Oscillator	①				
L4	RF Choke (.18uh)	7291800				
L5	1st FM IF	7292791				
L6	RF Choke (8uh)	7255738	19-10GB	BC-565	4611	T822
L7	AM Antenna	①				
L8	2nd FM IF	7291358				
L9	AM RF	①				
L10	AM Oscillator	①				
L11	3rd FM IF	7291359				
L12	1st AM IF	7288144			8005	
L13	4th FM IF	7291360				
L14	2nd AM IF	7293318				
L15	Ratio Detector	7294335				
L16	FM Trigger IF	7287612	19-3100	BC-669	6112	T341
L17	RF Choke (100uh)	7294748				

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	DELCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
L18	1.5 Amp.	.6Ω	8MH	1221623	C-4095	TC-2	TR-154	TY17XT

CHOKE (AUDIO OUTPUT)

ITEM No.	INDUCTANCE	REPLACEMENT DATA					NOTES
		DELCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L19	30MH	①					① Part of SP1.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		DELCO PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4" x 10" PM 10Ω	7293908	P4X10W8	410A2Z10	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	SFE	9 Amp.		In Fuse Block	307009		SFE9	

MISCELLANEOUS

ITEM No.	PART NAME	DELCO PART No.	NOTES
K1	Relay	7295713	
K2	Solenoid	1221409	
M1	Tuner Coil Assembly	7290996	
S1	AM-FM Selector Sw.	1222455	
S2	Start Switch	7294618	
S3	Sensitivity Switch	1222454	
S4	Solenoid Switch	7268030	
S5	Relay Switch	7293447	
S6	Antenna Motor Sw.	1222453	

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	1222456	Pushbutton #5	7294419
Dial Glass	7294455	Pushbutton "Town"	7294626
Dial Pointer	7294436	Pushbutton "Ant. Up"	7294627
Pushbutton #1	7294413	Pushbutton "Ant. Down"	7294628
Pushbutton #2, #3, #4	7294416	Pushbutton "AM/FM"	7294629
		Pushbutton "Country"	7294630

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



PHOTOFACT[®] with

CIRCUITRACE[®]



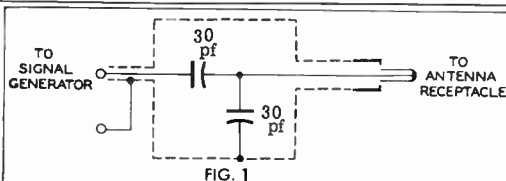
TRADE NAME : Midland Model 65-200
 SUPPLIER : For Current Address, See Master Index.
 TYPE SET : 7 Transistor AM Receiver
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .135 Amp. @ 12.6 Volts DC
 TUNING RANGE : BROADCAST 540-1615KC

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

A1 thru A8.

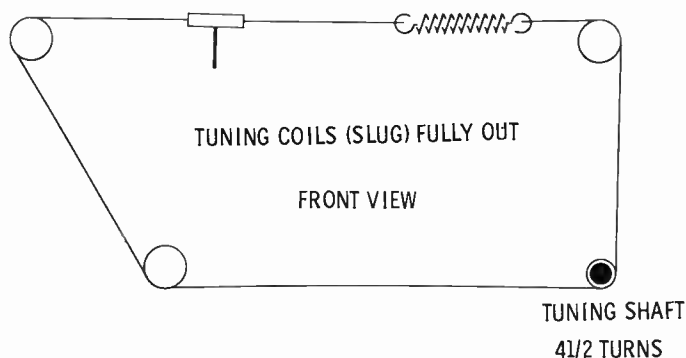
GENERAL CEMENT: 9440
 WALSCO: 2501



	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point A, low side to ground.	455KC (400% Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	600KC	600KC	"	A5.	"
3.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	High Freq. End Stop	Output Meter across voice coil.	A6, A7, A8	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.

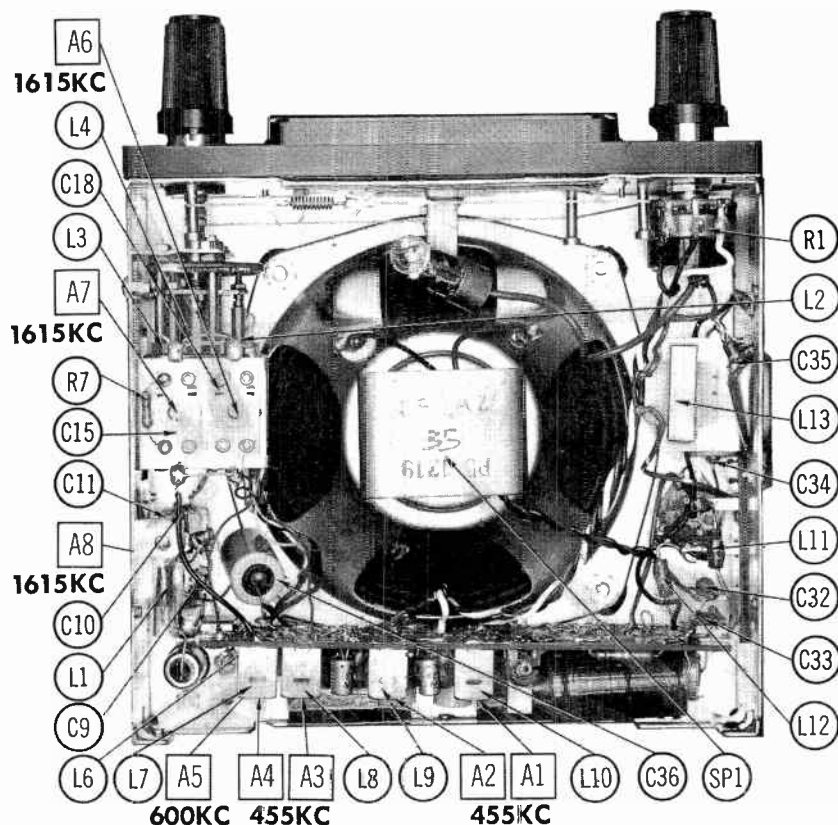
With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A8 for maximum output.

DIAL CORD STRINGING



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD761
 World Radio History



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)

TRANSISTORS

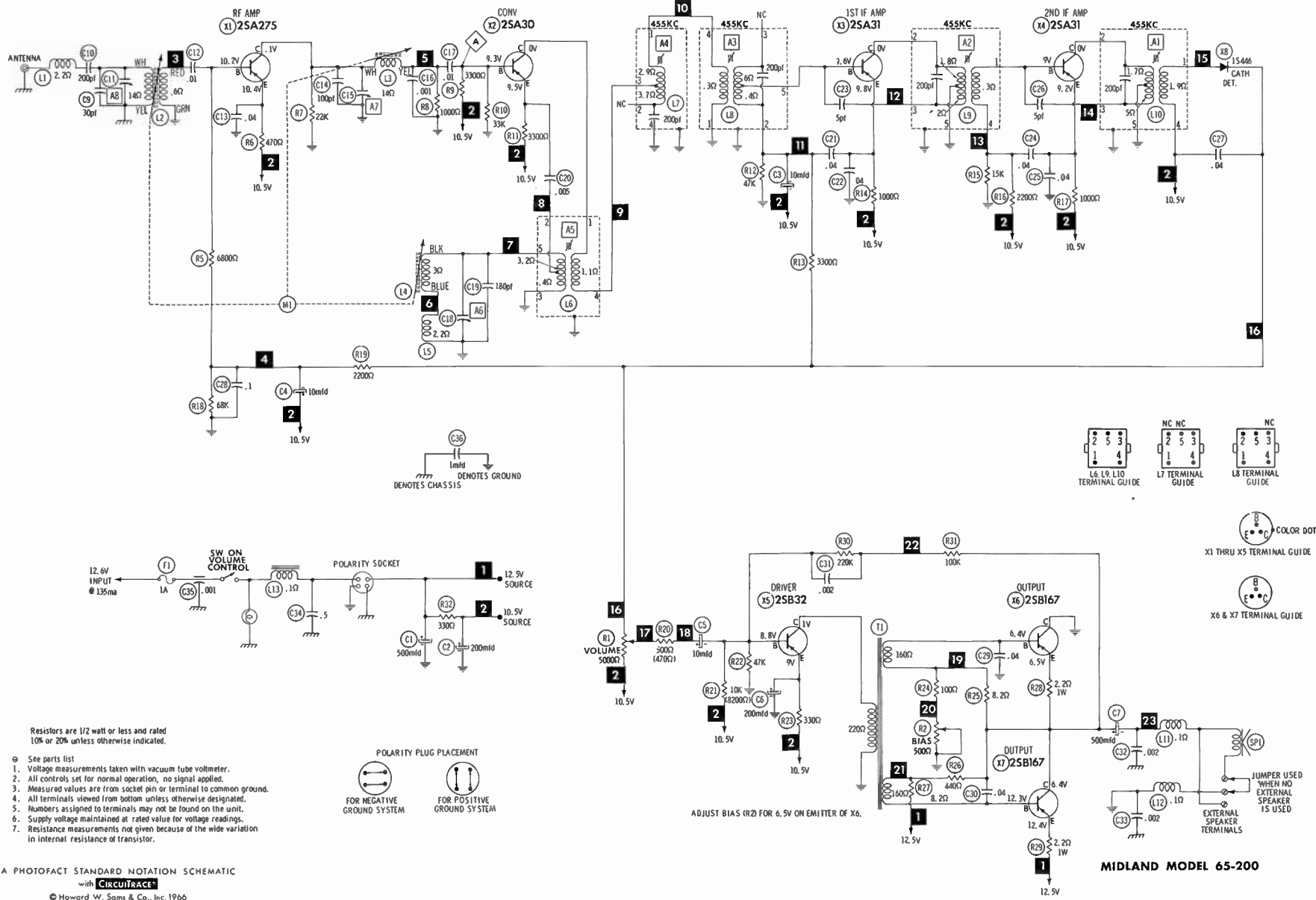
ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	2SA275	RF Amp	DS-25	GE-1	SK-3088	PNP
X2	2SA30	Conv.	DS-25	GE-1	SK-3005	PNP
X3	2SA31	1st. IF Amp.	DS-25	GE-1	SK-3005	PNP
X4	2SA31	2nd. IF Amp.	DS-25	GE-1	SK-3005	PNP
X5	2SB32	Driver	DS-26	GE-2	SK-3083	PNP
X6	2SB167	Output	DS-26	GE-2	SK-3004	PNP
X7	2SB167	Output	DS-26	GE-2	SK-3004	PNP

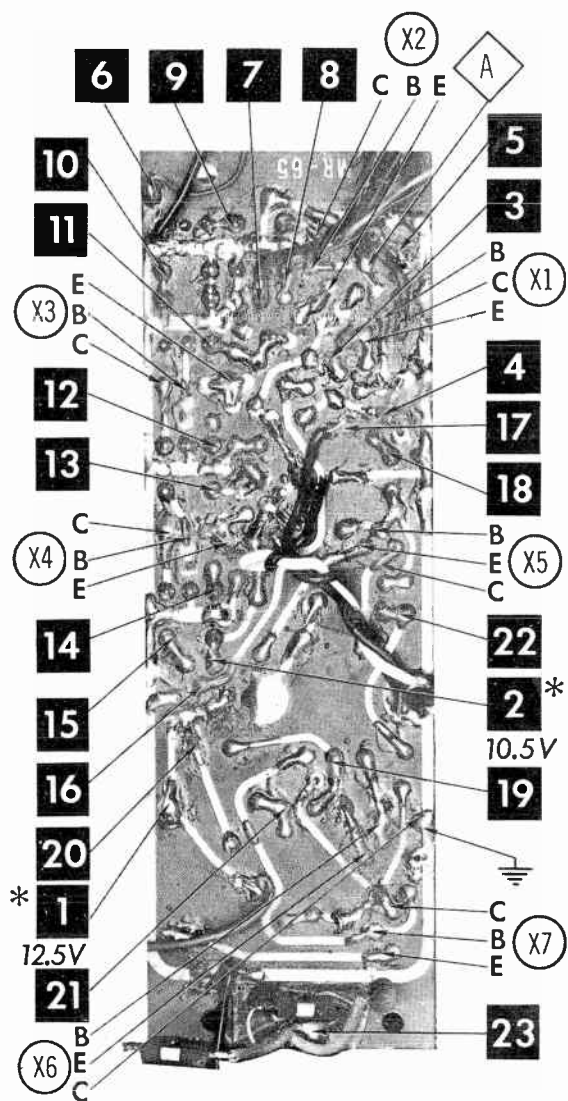
POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X8		1S446	1N34AS	1N34			

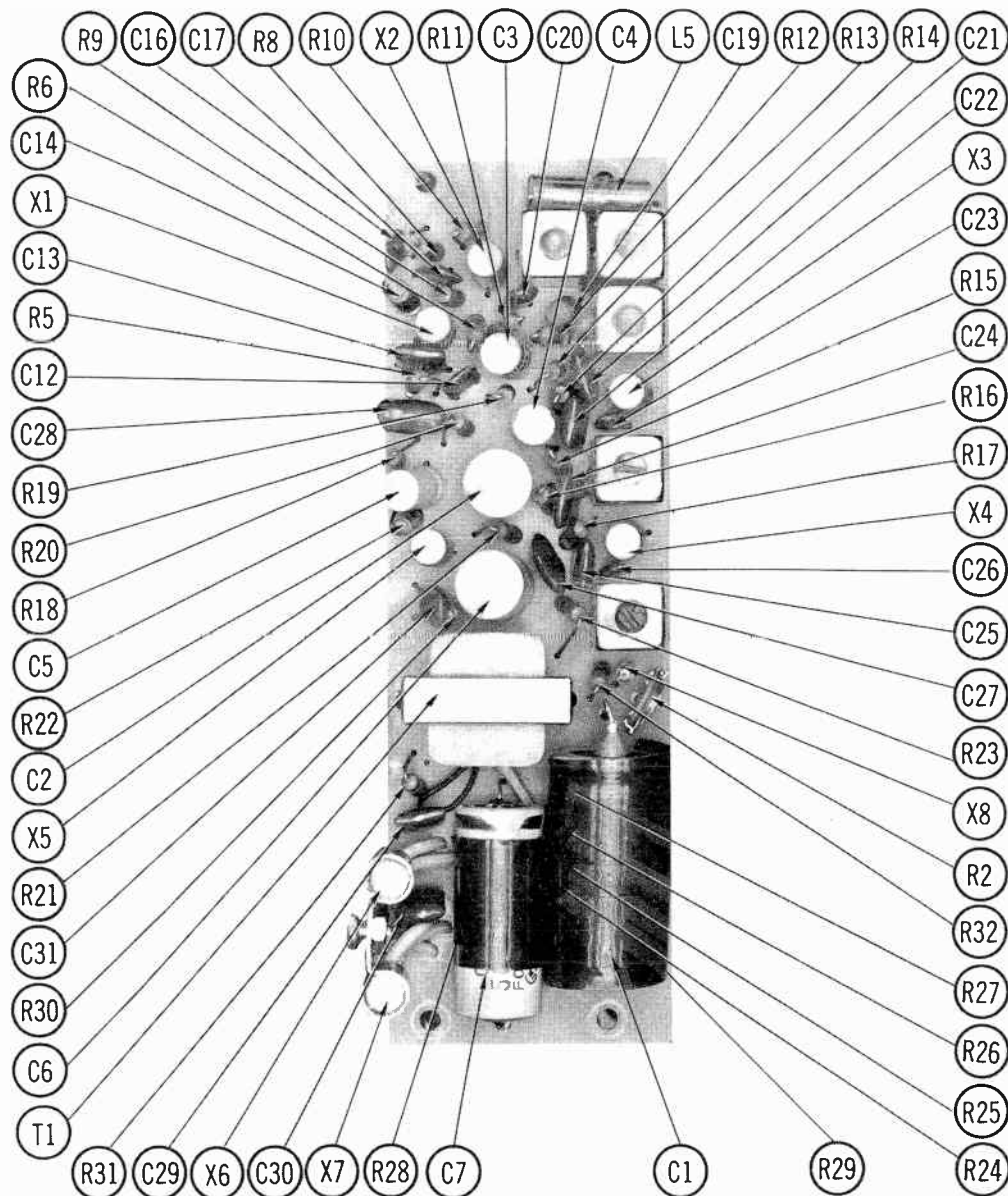
ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MIDLAND PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	500	15		PRS1220	BR500-15	QT1-30	TC1505	TVA-1162
C2	200	6		BCD6200	NLW200-12	MT1-23	TT6X200	TE-1104
C3	10	6		BCD6010	NLW10-6	MT1-5	TT6X10	TL-1087
C4	10	6		BCD6010	NLW10-6	MT1-5	TT6X10	TL-1087
C5	10	6		BCD6010	NLW10-6	MT1-5	TT6X10	TL-1087
C6	200	6		BCD6200	NLW200-12	MT1-23	TT6X200	TE-1104
C7	500	6		PRS1120	BR500-6	QT1-30	TC605	TVA-1103





*VOLTAGE SOURCE



PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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.
C9	30		NPO-DI33	DTZ-33	CS801CG330K	CCTO-330	CN0433	10TCC-Q33
C10	200			DM-201			GP320	
C11								
C12	.01		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C13	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C14	100			DM-101	JBZ601YP101K			
C15								
C16	.001			DM-102	BYZ801ZU102M		SM210	
C17	.01		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C18								
C19	150			CRP-150J	RR05CW151K	CCD-151	SX315	10TS-T15
C20	.005		TTD-005	CK-502	HOY101ZV502P		TA250	TG-D50
C21	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C22	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C23	5		NPO-DI 5.0	DTZ-4R7	CZ801CH5R0D	CCTO-050	CN0547	10TCC-V50
C24	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C25	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C26	5		NPO-DI 5.0	DTZ-4R7	CZ801CH5R0D	CCTO-050	CN0547	10TCC-V50
C27	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C28	.1		TTD-1	CK-104	HOH101ZV104Z		TA010	TG-P10
C29	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C30	.04		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C31	.002			DM-202	BYY801ZU202P			
C32	.002			DM-202	BYY801ZU202P			
C33	.002			DM-202	BYY801ZU202P			
C34	.5	150V	BE2P5	DD-503	PM2P5	2DP-5-504	PVC205	155P-5-200
C35	.001			DM-102	BYZ801ZU102M		SM210	
C36	1	150V			PM2W1		PVC21	155P-1, 0-200

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			MIDLAND PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω					
R2	Bias Adjustment	500Ω					

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					
		MIDLAND PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.
L1	RF Choke (8.5uh)		90-2014	BC-585	4810	RTC-8520	T859
L2	Antenna	①					
L3	RF	①					
L4	Oscillator Tuning	①					
L5	RF Choke (8.5uh)		90-2014	BC-565	4810	RTC-8520	T859
L6	Oscillator		14-9018	BC-577	2085	RTC-9285	
L7	1st. IF Primary						
L8	1st. IF Secondary		18-9028	BC-574	2088	RTC-9288	
L9	2nd. IF		18-9027	BC-575	2087	RTC-9287	
L10	3rd. IF		18-9028	BC-578	2088	RTC-9288	
L11	RF Choke (1uh)		19-2009	BC-581	4602	RTC-8515	T805
L12	RF Choke (1uh)		19-2009	BC-581	4802	RTC-8515	T805

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MIDLAND PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L13	.120A	.1Ω	3MH		C-4095	TC-1	TR-159	TY18XT	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	Sec. 1	MIDLAND PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	3	1						
		Sec. 2						
		1						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MIDLAND PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5"	PM	8Ω		P5W3	5A05Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1		1A			381001	155014	AGX 1	HDI

MISCELLANEOUS

ITEM No.	PART NAME	MIDLAND PART No.	NOTES
M1	Tuner		



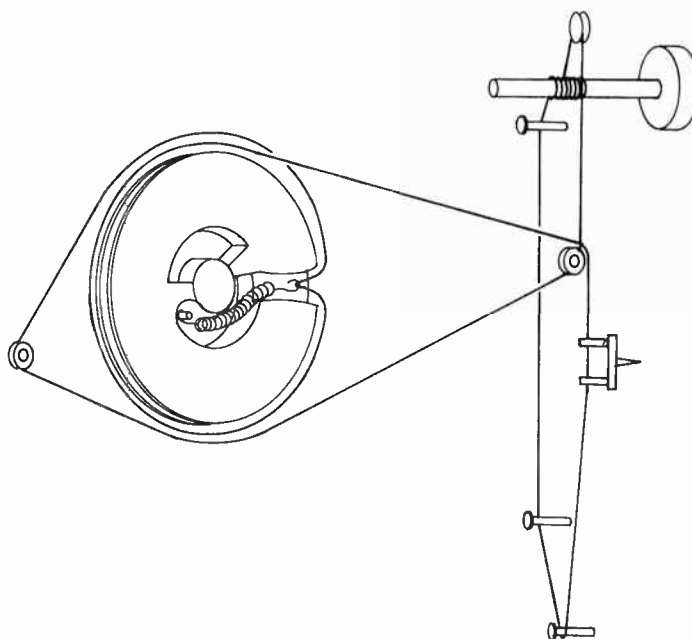
PHOTOFACT[®] with

CIRCUITRACE[®]

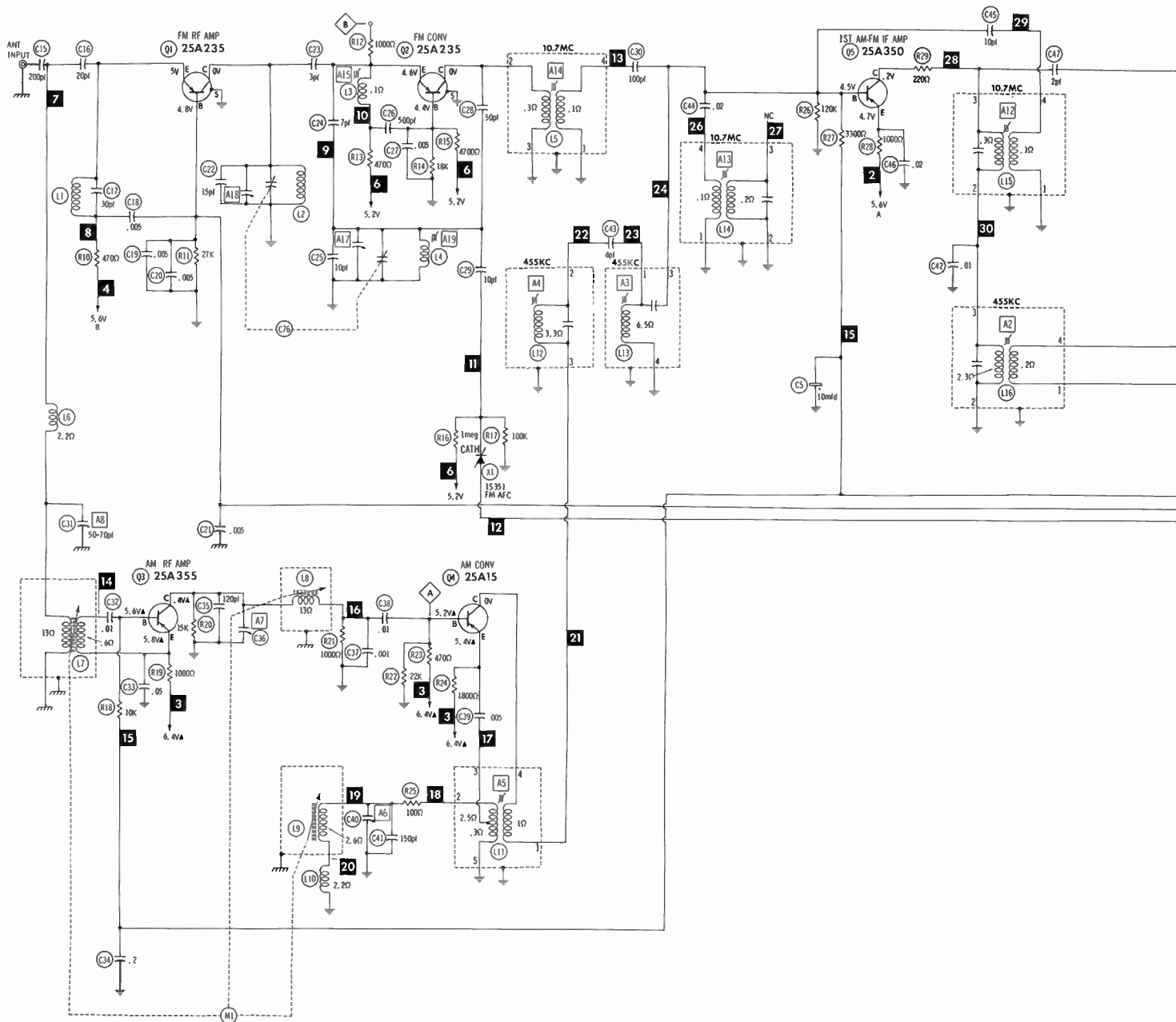
TRADE NAME: Midland Model 65-210
(12 Transistor Version)
SUPPLIER: For Current Address, See Annual Index.
TYPE SET: 12 Transistor AM-FM Receiver
POWER SUPPLY: 12 Volt Storage Battery
RATING: .22 Amp. @ 12.6 Volts DC
TUNING RANGE: BROADCAST 540-1615KC
FREQ. MOD: 87.5-108.5MC



DIAL CORD STRINGING



MIDLAND MODEL 65-210



1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

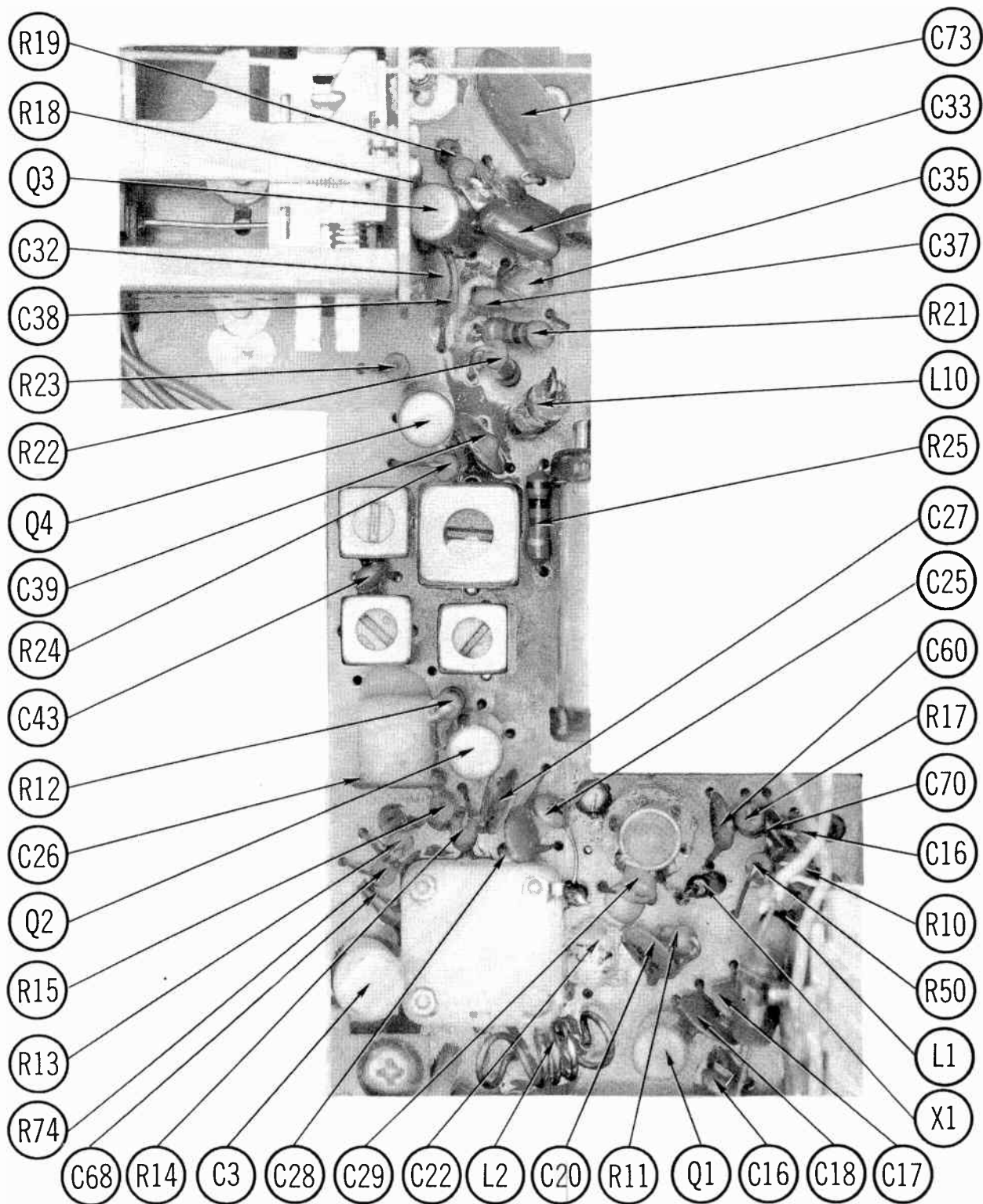
All measurements taken in "FM" position unless otherwise designated.

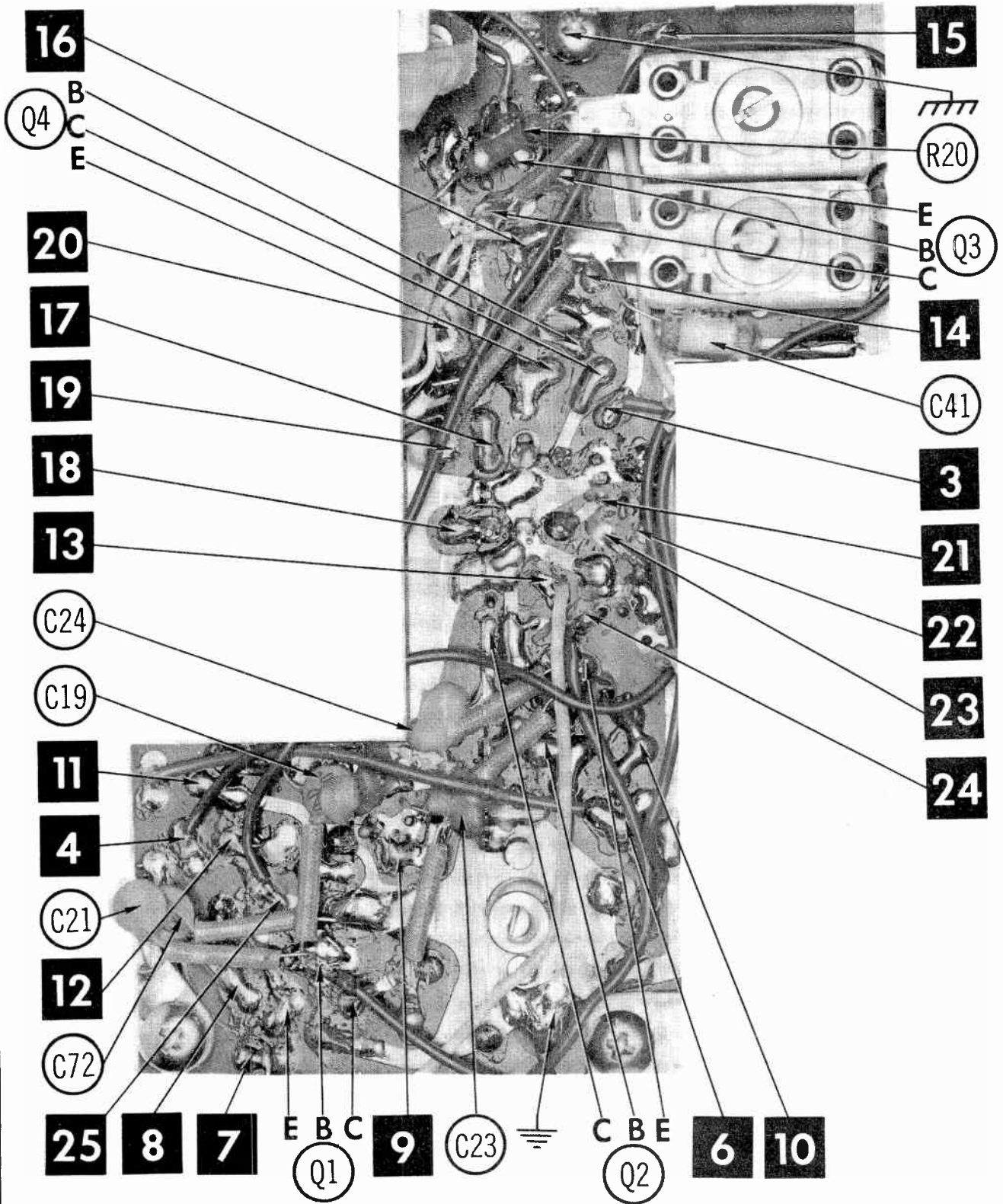
▲ Measured in "AM" position.

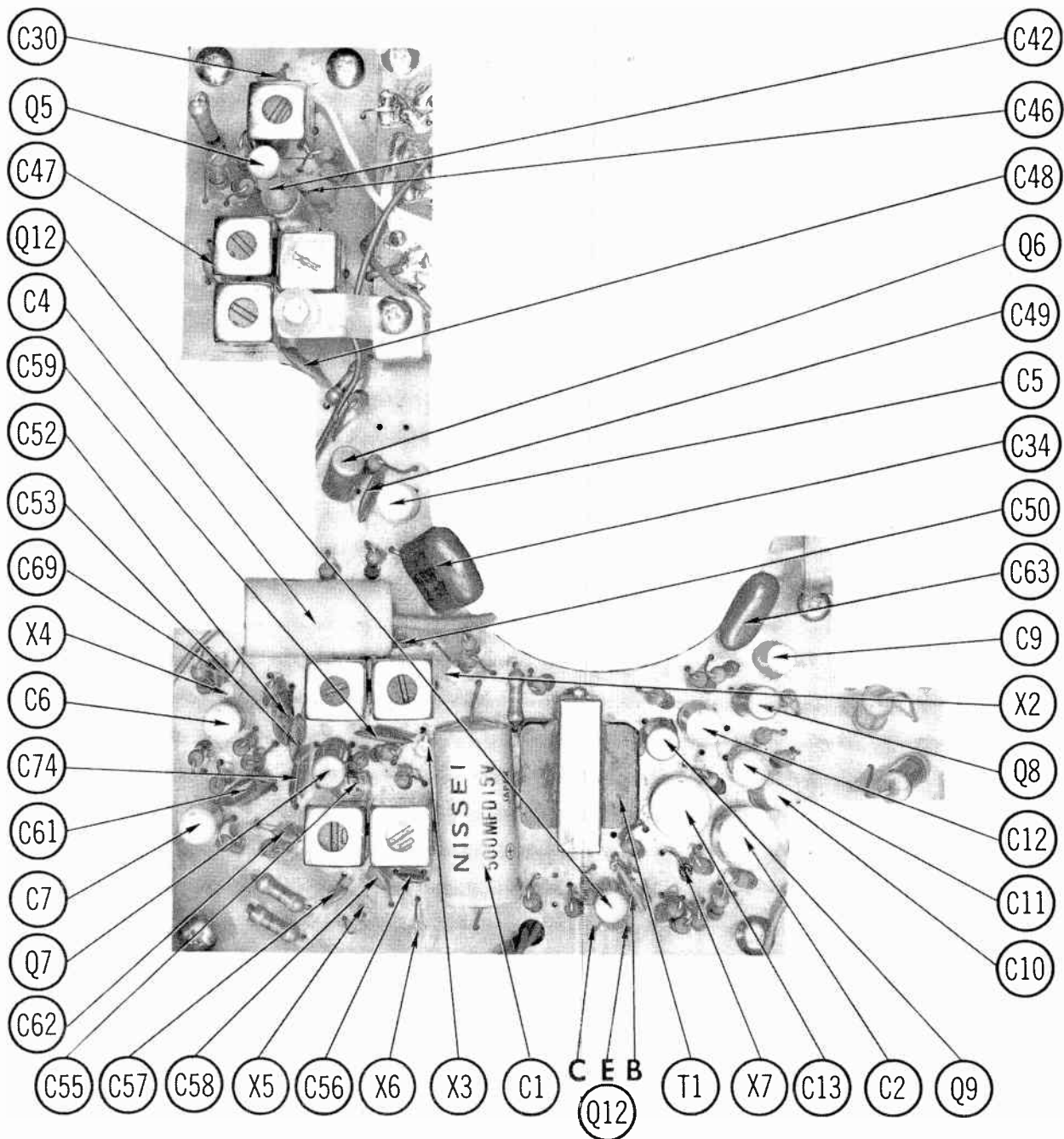
A PHOTOFACIT STANDARD NOTATION SCHEMATIC
with **CIRCUITACE**

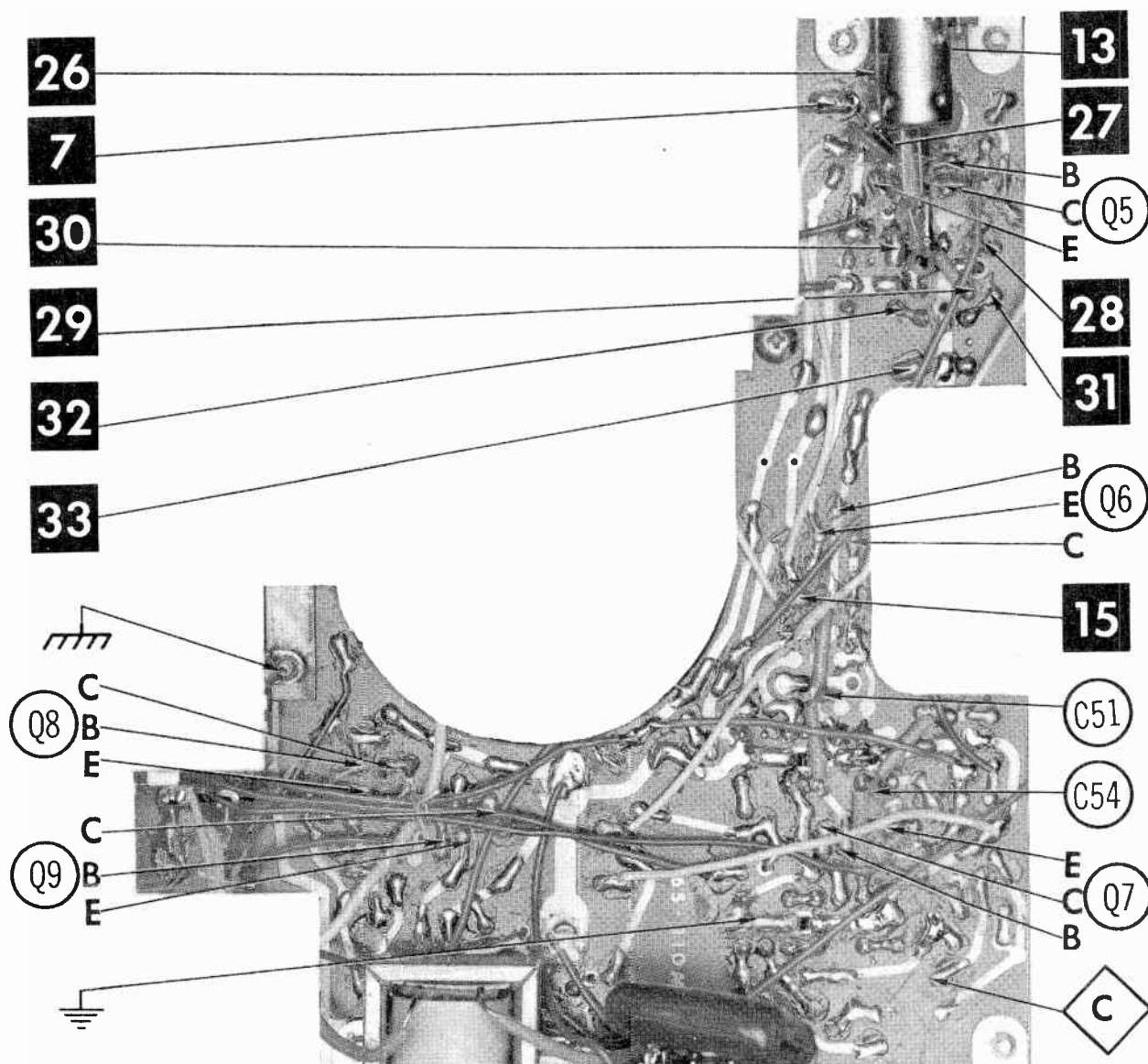
© Howard W. Sams & Co., Inc. 1966

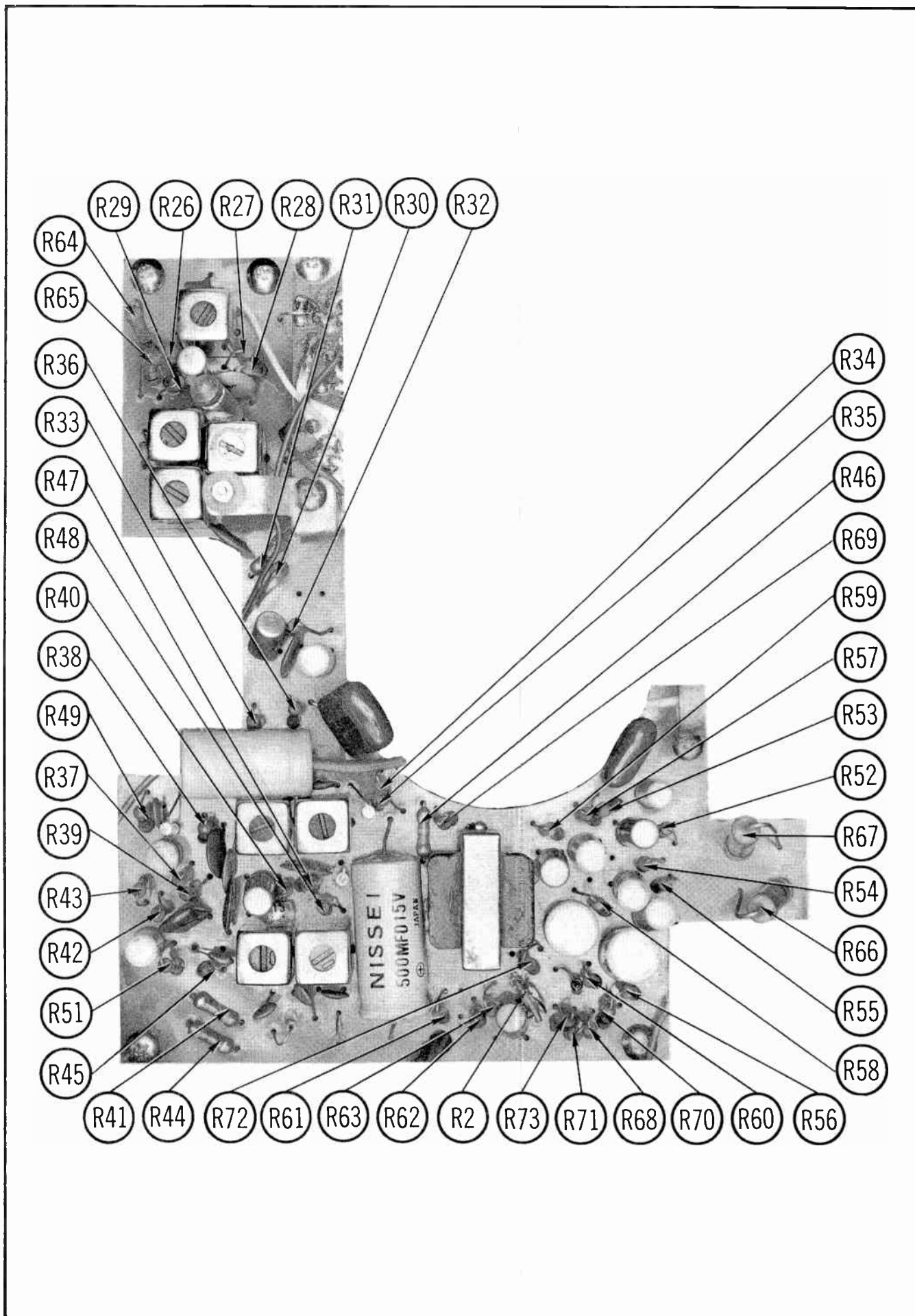


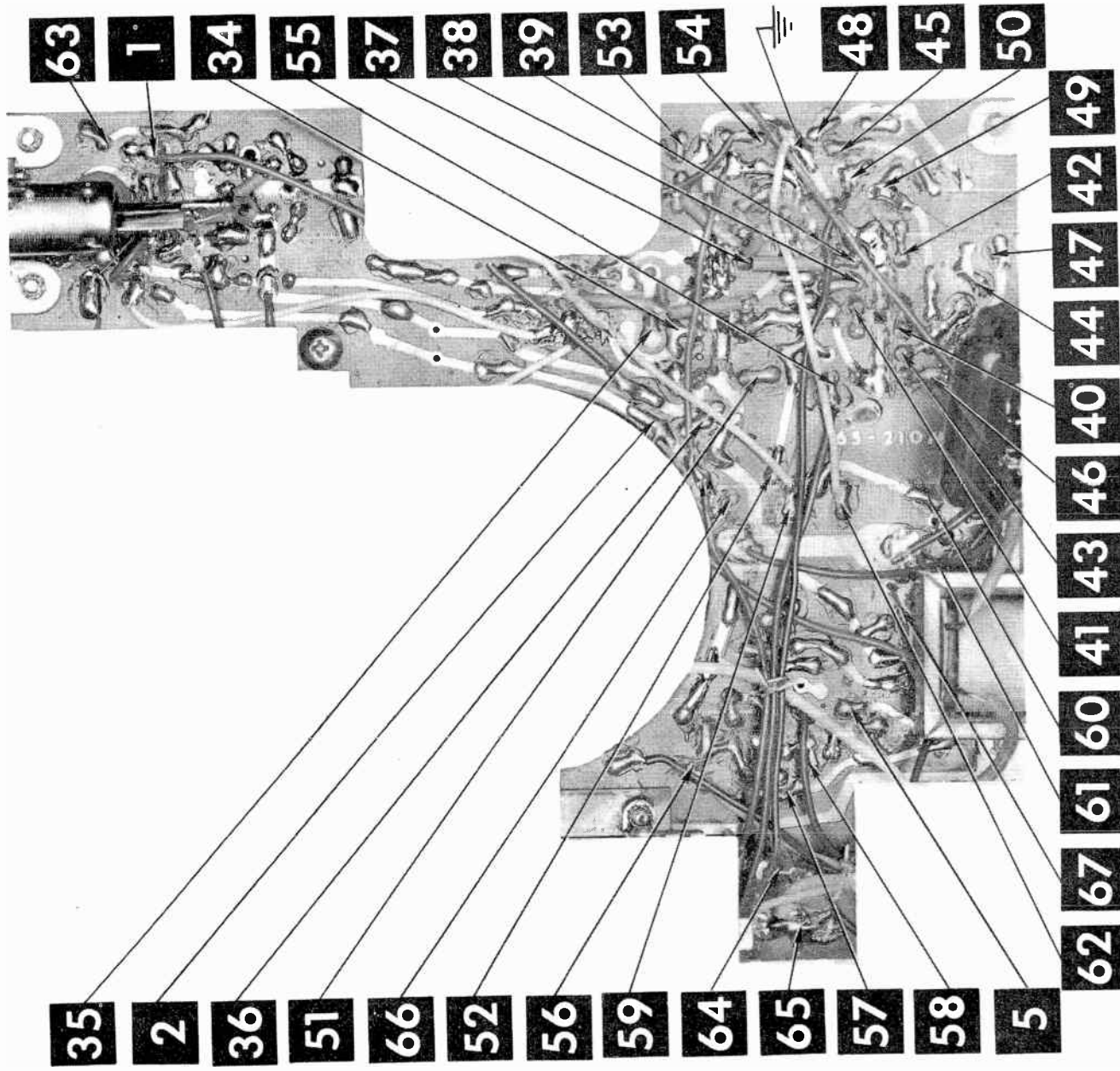


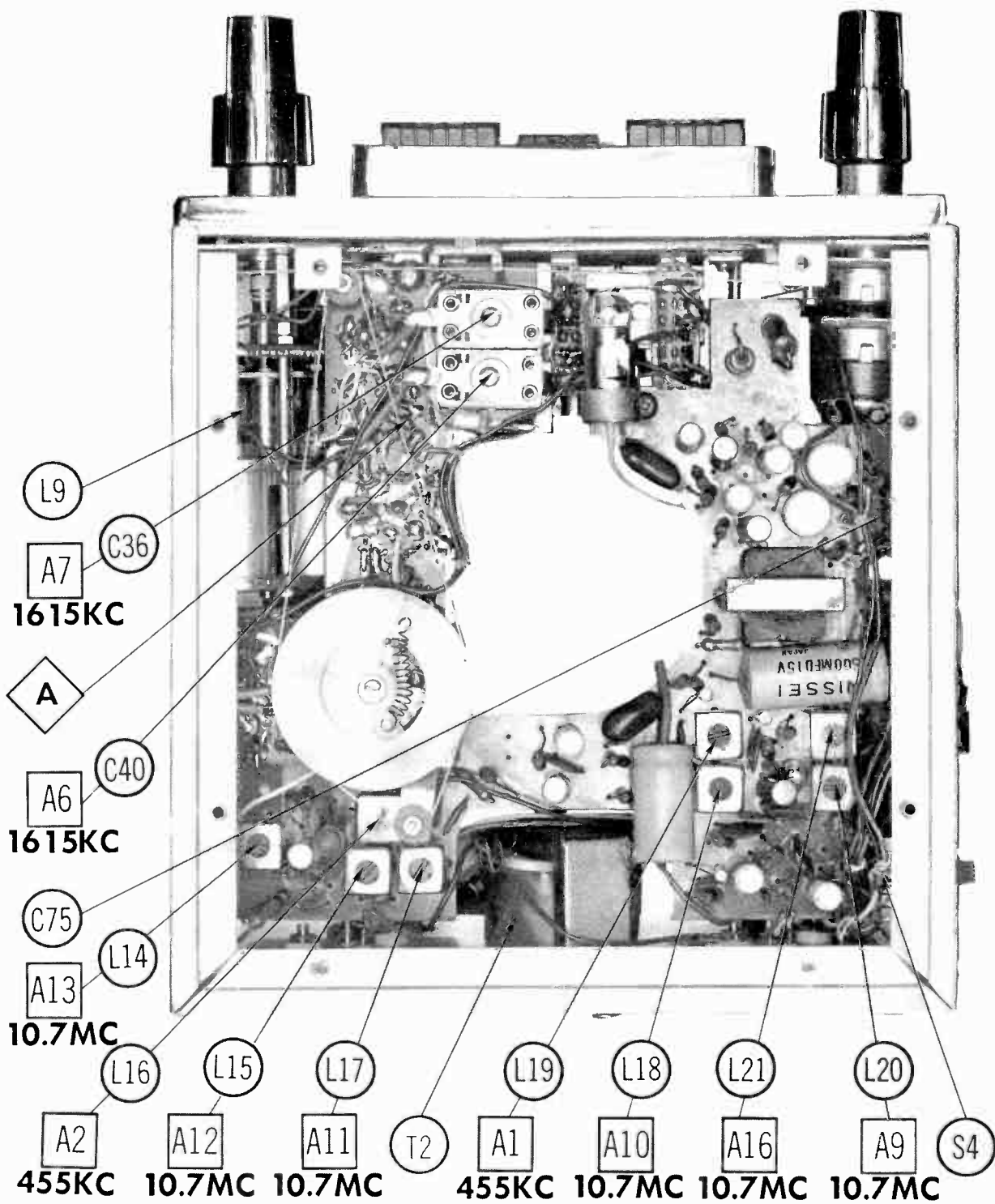


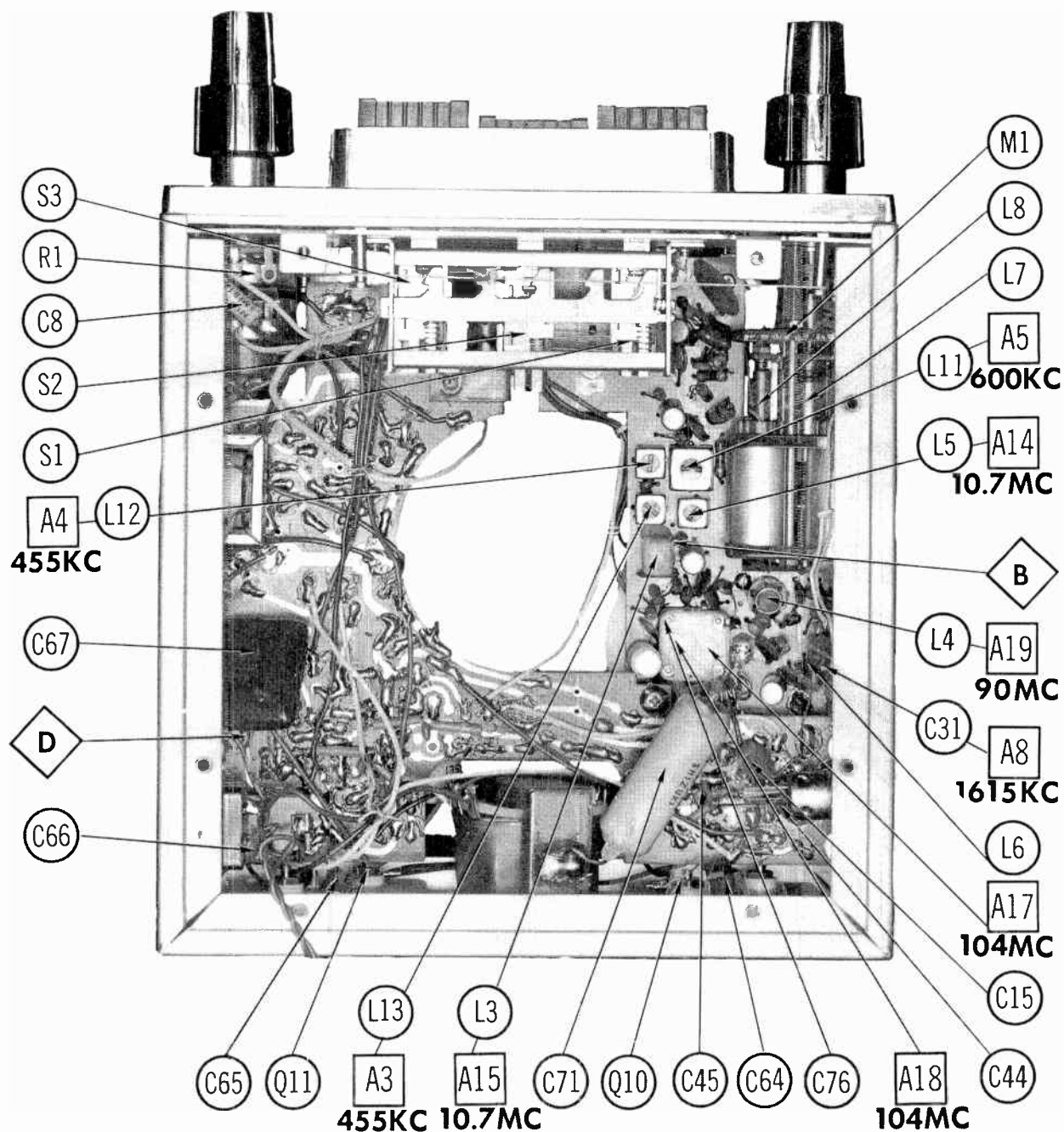












ALIGNMENT INSTRUCTIONS

Check for specified source voltage.

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

A1 thru A19.

GENERAL CEMENT: 9440

WALSCO: 2501

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point $\diamond$, low side to ground.	455KC (400% Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	600KC	Tune to Signal.	"	A5	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A6, A7, A8) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	High Freq. End Stop.	Output Meter across voice coil.	A6, A7, A8.	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A8 for maximum output.						

FM ALIGNMENT USING AM SIGNAL GENERATOR — SELECTOR IN FM POSITION

High side thru .1mfd to point $\diamond$, low side to ground.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point $\diamond$; common to ground.	A9, A10, A11, A12, A13, A14.	Adjust for maximum.
5.	"	"	"	A15.	Adjust for MINIMUM.
6.	"	"	DC probe to point $\diamond$; common to ground.	A16.	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR — SELECTOR IN FM POSITION

High side thru .1mfd to point $\diamond$, low side to ground. Use only enough marker signal to obtain indication. Use 60% frequency modulated signal with 450KC sweep. Use 120% sawtooth voltage in scope for horizontal deflection.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point $\diamond$; low side to ground.	A9, A10, A11, A12, A13, A14.	Disconnect stabilizing capacitor C7. Adjust for maximum gain and symmetry of response similar to Fig. 2 with marker as shown. Reconnect C7.
6.	"	"	Vert. amp. to point $\diamond$; low side to ground.	A16.	Adjust A16 (Secondary) to place marker at center of crossover lines similar to Fig. 3. Adjust A9 (Primary) for maximum amplitude and straightness of crossover lines.

FM RF ALIGNMENT

Connect generator across antenna terminals with 120Ω carbon resistors in series with each lead.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
7.	108.5MC	Set at high end.	DC probe of VTVM to point $\diamond$; common to ground.	A17, A18.	Adjust for maximum.
8.	90MC	Tune to signal.	"	A19.	Rock tuning and adjust for maximum. Repeat steps 7 and 8 until no further improvement can be made.

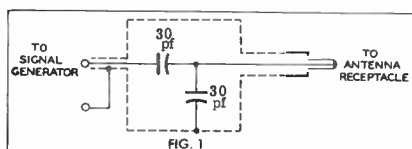


FIG. 2

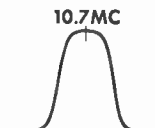
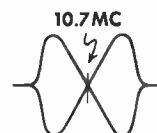


FIG. 3



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	2SA235	FM RF Amp.	DS-41		SK-3006	PNP
Q2	2SA235	FM Converter	DS-41		SK-3006	PNP
Q3	2SA355	AM RF Amp.	DS-25	GE-9	SK-3008	PNP
Q4	2SA15	AM Converter	DS-25	GE-9	SK-3005	PNP
Q5	2SA350	1st AM-FM IF Amp.	DS-56	GE-9	SK-3007	PNP
Q6	2SA350	2nd AM-FM IF Amp.	DS-56	GE-9	SK-3007	PNP
Q7	2SA350	3rd FM IF	DS-56	GE-9	SK-3007	PNP
Q8	2SB75	AF Amp.	DS-26	GE-2	SK-3003	PNP
Q9	2SB77	Driver	DS-26	GE-2	SK-3003	PNP
Q10	2SB77	Output	DS-520①	GE-3①	SK-3009①	PNP *
Q11	2SB367	Output	DS-520①	GE-3①	SK-3009①	PNP *
Q12	2SB75	Voltage Regulator	DS-26	GE-2	SK-3003	

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

① Drill new mounting holes.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1S251					
X2		1N50	1N60	1N60			
X3		1N40	1N80	1N60			
X4		1N40	1N60	1N60			
X5		1N40	1N60	1N60			
X6		1N60	1N60	1N60			
X7		HV-21					

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MIDLAND PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	500	15		PRS1220	BR500-15	QT1-30	TC1505	TL-1166
C2	200	10		BCD10190	NLW200-12	MT1-25	TT10X200	TL-1137
C3	50	6		BCD6050	NLW50-6	MT1-16	PET1260	VL-1094
C4	500	6		BCD12500	BR500-6	QT1-30	TC605	TL-1108
C5	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C6	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C7	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C8	5	10		CRE404A	NLW5-15	MT1-3	TT12X5	TL-1127
C9	1	6		BCD6001	NLW1-6	MT1-1	TT6X1	VL-1080
C10	30	6		BCD6025	NLW30-6	MT1-13	TT6X30	VL-1092
C11	30	6		BCD6025	NLW30-6	MT1-13	TT6X30	VL-1092
C12	10	6		BCD6010	NLW10-6	MT1-5	PET1340	VL-1087
C13	100	6		BCD6100	NLW100-12	MT1-21	PET1400	VL-1100

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C15	200		DI-200	DM-201		CCD-201	GP320	10TS-T20
C16	20		NPO-DI22	DTZ-22	CY401CG220K	CCTO-220	CNO422	10TCC-Q22
C17	30		NPO-DI33	DTZ-33	CS601CG330K	CCTO-330	CNO433	10TCC-Q33
C18	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C19	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C20	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C21	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C22	15		NPO-DI15	DTZ-15	CZ601CG150J	CCTO-150	CNO415	10TCC-Q15
C23	3		NPO-DI3.0	DTZ-3R3	CZ601CH6R8D	CCTO-3R3	CNO533	10TCC-V30
C24	7		NPO-DI6.8	DTZ-6R8	CZ601CG100J	CCTO-6R8	CNO568	10TCC-V68
C25	10		NPO-DI10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C26	500		DI-500	DD-501	JBZ601YP501K	CCD-501	GP350	10TS-T50
C27	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C28	50		DI-50	DD-500	JBZ601YP500K	CCD-500	GP450	10TS-Q50
C29	10		NPO-DI10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C30	100		NPO-DI100	DTZ-100	CV601CG101K	CCTO-101	CNO310	10TCC-T10
C31	50-70					462		
C32	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C33	.05		TTD-05	CK-503	HOY101ZV503Z		TA150	TG-S50
C34	.2			UK10-204	HCZ3R0XR224P		MAG3022	HY-325
C35	120		DI-120	DD-121	JBZ601YP121K	CCD-121	GP312	5GA-T12

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS™ for the most up-to-date replacement.

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALA8 PART No.	CORNELL- DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C36								
C37	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C38	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C39	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C40								
C41	150		NPO-DI 150	DTZ-150		CCTO-151	CNO315	10TCC-T15
C42	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C43	4		NPO-DI 4.7	DTZ-4R7		CCTO-4R7	CNO547	10TCC-V47
C44	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C45	10		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C46	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C47	2		NPO-DI 2.2	DTZ-2R2	CZ601CJ2R2D	CCTO-2R2	CNO522	10TCC-V22
C48	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C49	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C50	30		NPO-DI 33	DTZ-33	CS601CG330K	CCTO-330	CNO433	10TCC-Q33
C51	5		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50
C52	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C53	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C54	5		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50
C55	15		NPO-DI 15	DTZ-15	CZ601CG150J	CCTO-150	CNO415	10TCC-Q15
C56	80			DTZ-82		CCTO-820	CNO482	10TCC-Q82
C57	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C58	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C59	.04		TTD-05	CK-503	HOY101ZV503Z		TA150	TG-S50
C60	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C61	.03		TTD-03	CK-303		CCD-303	GP130	TG-S30
C62	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C63	.2			UK10-204	HCZ3R0XR224P		MAG3022	HY-325
C64	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C65	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C66	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C67	.5			UK10-204	HCZ3R0XR224P		MAG3022	HY-325
C68	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C69	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C70	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C71	1mfd	150V		UK-105	HGX3R0XR105P		MAG31	HY-135
C72	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C73	.1		TTD-1	CK-104	HOY101ZV104Z		TA010	TG-P10
C74	.02		TTD-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C75	.001		EF-001	MFT-1000		CCF-102	CT280A	
C76A								
B								

CONTROLS

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

ITEM No.	USE	RESIST- ANCE	REPLACEMENT DATA				
			MIDLAND PART No.	CENTRALA8 PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	10K					
B	Volume	10K					
R2	Bias	10K					

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MIDLAND PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna					
L2	FM RF					
L3	FM IF Trap					
L4	FM Oscillator					
L5	1st FM IF					
L6	RF Choke					
L7	AM Antenna					
L8	AM RF					
L9	AM Oscillator					
L10	Image Trap					
L11	AM Oscillator Tuning					
L12	1st AM IF Pri.					
L13	1st AM IF Sec.					
L14	2nd FM IF					
L15	3rd FM IF					
L16	2nd AM IF					
L17	4th FM IF					
L18	5th FM IF					
L19	3rd AM IF					
L20	Ratio Detector Pri.					
L21	Ratio Detector Sec.					

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MIDLAND PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L22	220ma	.4Ω	3MH		C-4095	TC-1	TR-159	TY16XT	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MIDLAND PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	3	1						

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MIDLAND PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	24Ω CT	8Ω CT						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MIDLAND PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5"	PM	8Ω			5A07Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1		1 Amp.			361001	155014	AGX 1	HDI

MISCELLANEOUS

ITEM No.	PART NAME	MIDLAND PART No.	NOTES
M1	AM Tuner		
S1	FM Switch		
S2	FM-AFC Switch		
S3	AM Switch		
S4	Voltage Selector Switch		

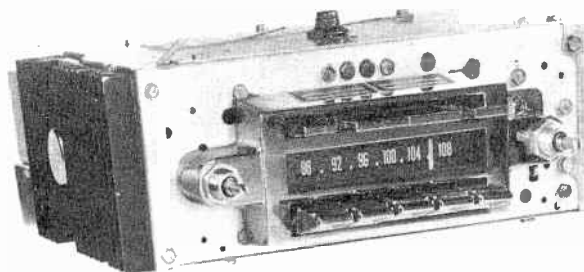
WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
	8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Mopar Model 420 (1966 Imperial)

SUPPLIER : For Current Address, See Annual Index.

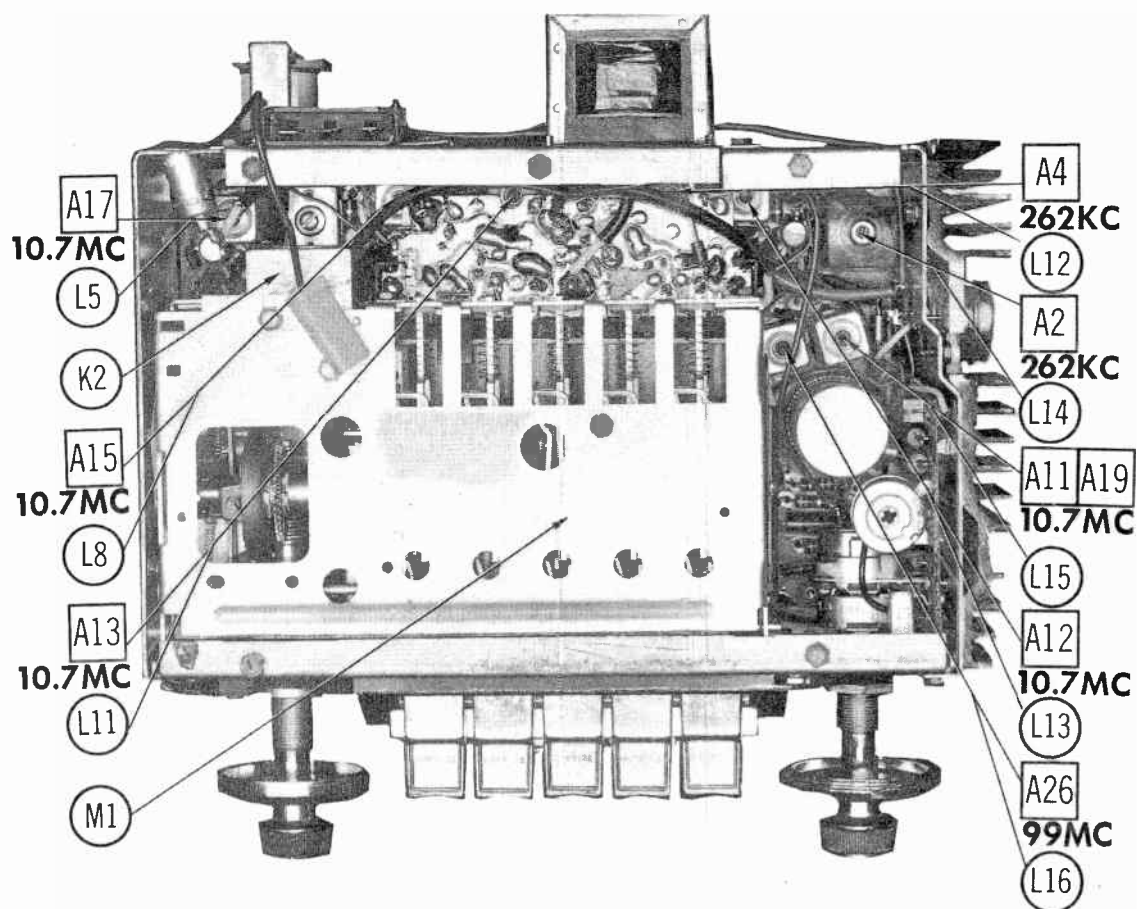
TYPE SET : 14 Transistor AM-FM Receiver

POWER SUPPLY : 12 Volt Storage Battery

RATING : 1.5 Amp. @ 12.6 Volts DC

TUNING RANGE: BROADCAST 540-1615KC
FREQ. MOD: 88-108MC

MOPAR MODEL 420



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

A1 thru A4, A11 thru A18.

A5 thru A10, A19 thru A26.

GENERAL CEMENT: 5009, 8782A, 8987

WALSCO: 2531-X, 2538

GENERAL CEMENT: 8290, 8888, 9087

WALSCO: 2525, 2528, 2587

PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. High side thru .1mfd to point $\diamond$ A, low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
Check setting of AM Oscillator coil core (A5). Rear of core should be 1 3/8" from mounting end of coil form.					
2. High side thru 82mmf to antenna receptacle, low side to ground.	1615KC	High Freq. End Stop.	Output Meter across voice coil.	A6, A7, A8	Adjust for maximum.
3. "	600KC	600KC Signal	"	A9, A10	Adjust for maximum. Repeat step 2.
With radio installed in car and antenna extended 31", tune in a weak station near 1400KC and adjust A8 for maximum output.					

FM ALIGNMENT USING AM SIGNAL GENERATOR — SELECTOR IN FM POSITION

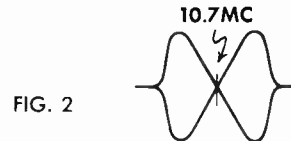
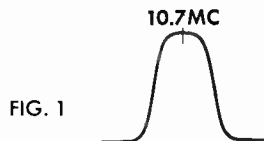
High side thru .1mfd to point $\diamond$ B, low side to ground.					
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
4. 10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point $\diamond$ C; common to ground.	A11, A12, A13, A14, A15, A16, A17, A18.	Adjust for maximum.	
5. "	"	DC probe to point $\diamond$ D; common to	A19.	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.	

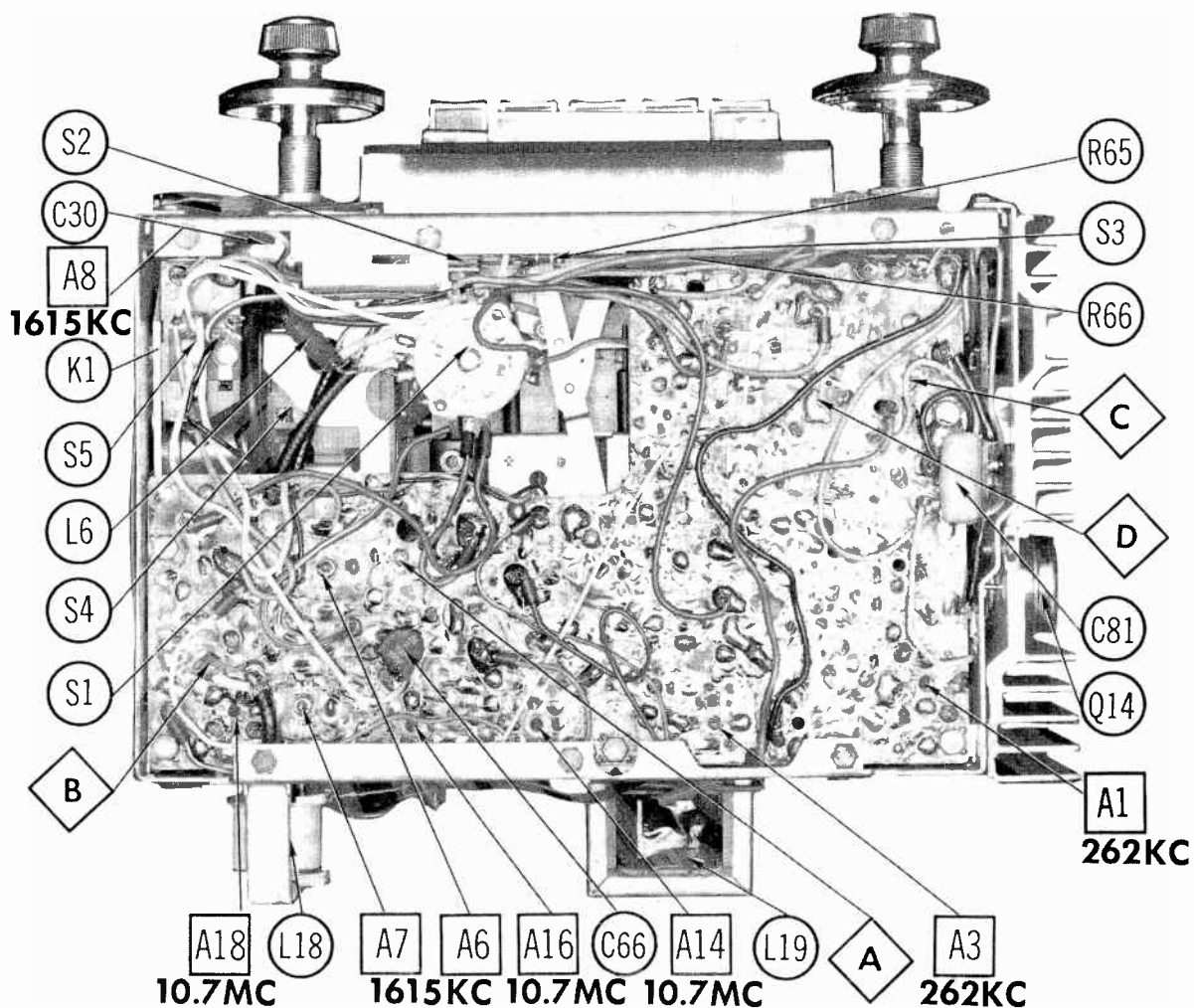
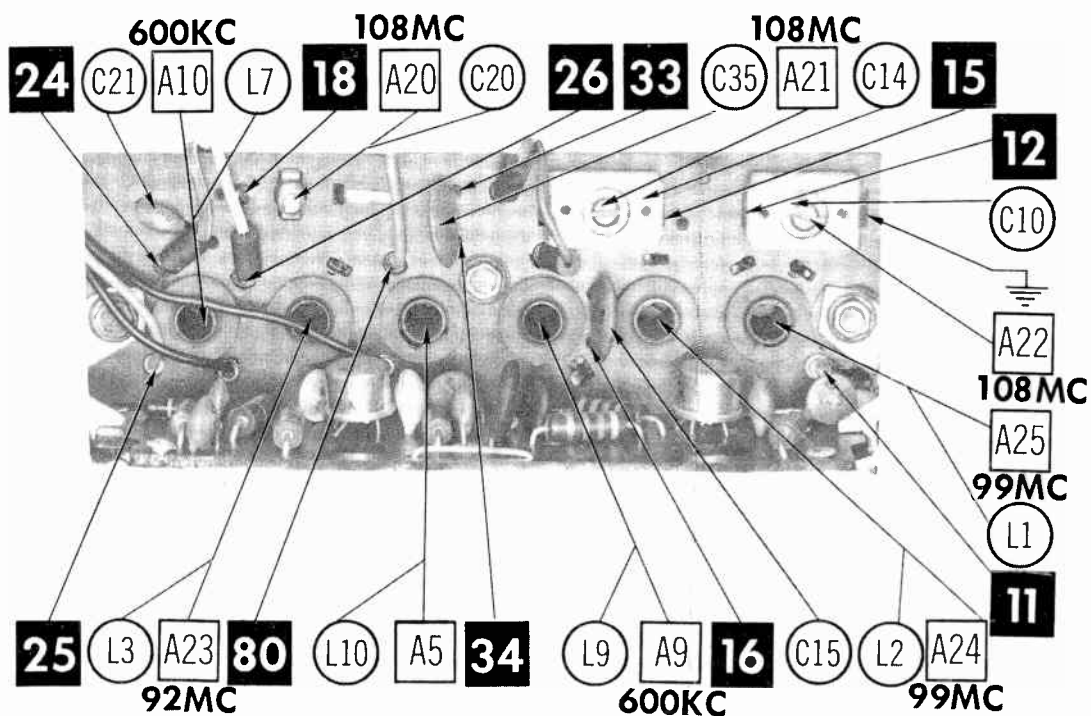
FM IF ALIGNMENT USING FM SIGNAL GENERATOR — SELECTOR IN FM POSITION

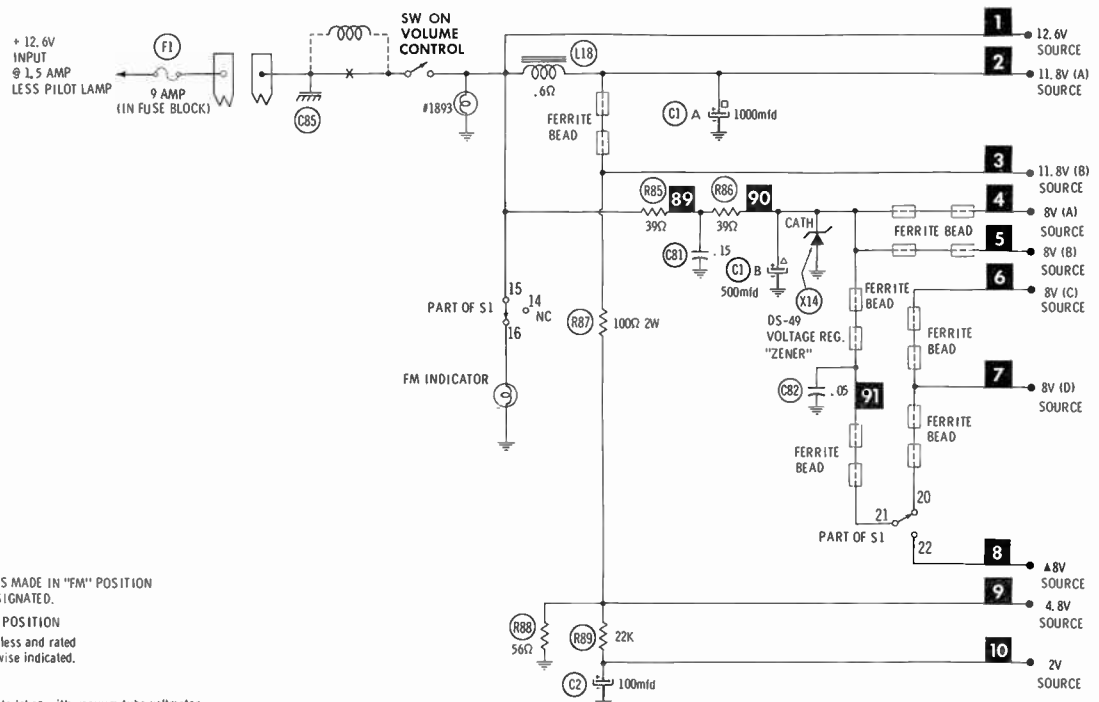
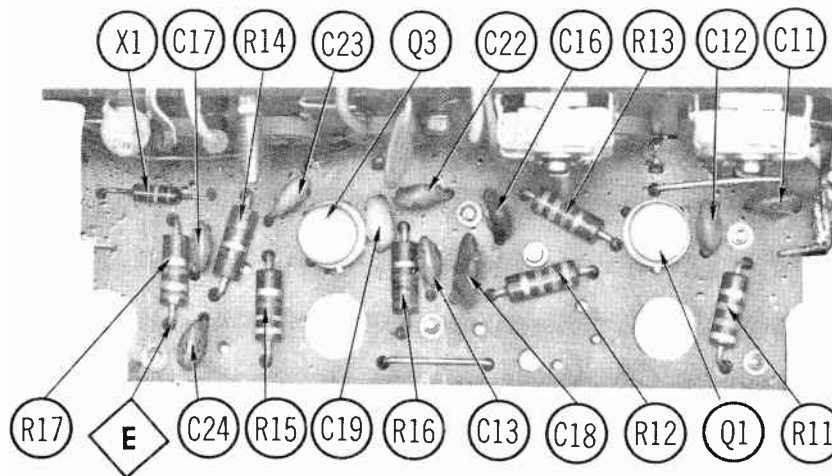
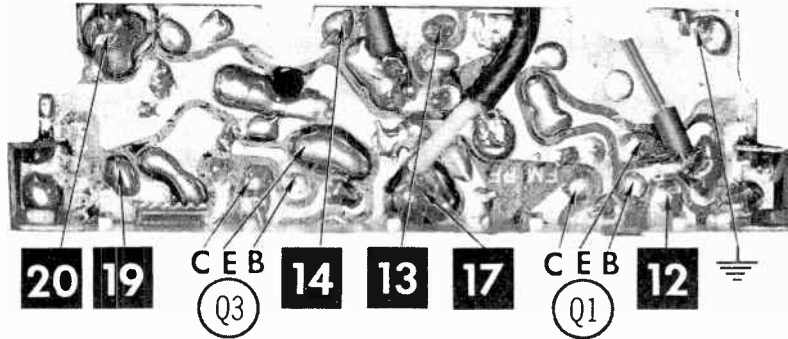
High side thru .1mfd to point $\diamond$ B, low side to ground. Use only enough marker signal to obtain indication. Use 60v frequency modulated signal with 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.					
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
4. 10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point $\diamond$ C; low side to ground.	A11, A12, A13, A14, A15, A16, A17, A18.	Disconnect stabilizing capacitor C6. Adjust for maximum gain and symmetry of response similar to Fig. 1 with marker as shown. Reconnect C6.	
5. "	"	Vert. amp. to point $\diamond$ D; low side to ground.	A19.	Adjust A19 (Secondary) to place marker at center of crossover lines similar to Fig. 2. Adjust A11 (Primary) for maximum amplitude and straightness of crossover lines.	

FM RF ALIGNMENT Check setting of FM Oscillator coil core (A23). Rear of core should be 1 3/8" from mounting end of coil form

Connect generator across antenna terminals with 120Ω carbon resistors in series with each lead.					
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
6. 108MC	Set at high end.	DC probe of VTVM to point $\diamond$ C; common to ground.	A20, A21, A22.	Adjust for maximum. Ground Point $\diamond$ E.	
7. 99MC	Tune to signal.	"	A24, A25.	Rock tuning and adjust for maximum. Repeat steps 6 and 7 until no further improvement can be made.	
8. 99MC	Tune to signal.	"	A26.	Adjust for MINIMUM.	







VOLTAGE MEASUREMENTS MADE IN "FM" POSITION
UNLESS OTHERWISE DESIGNATED.

▲ MEASURED IN "AM" POSITION

Resistors are 1/2 watt or less and rated
10% or 20% unless otherwise indicated.

⊖ See parts list

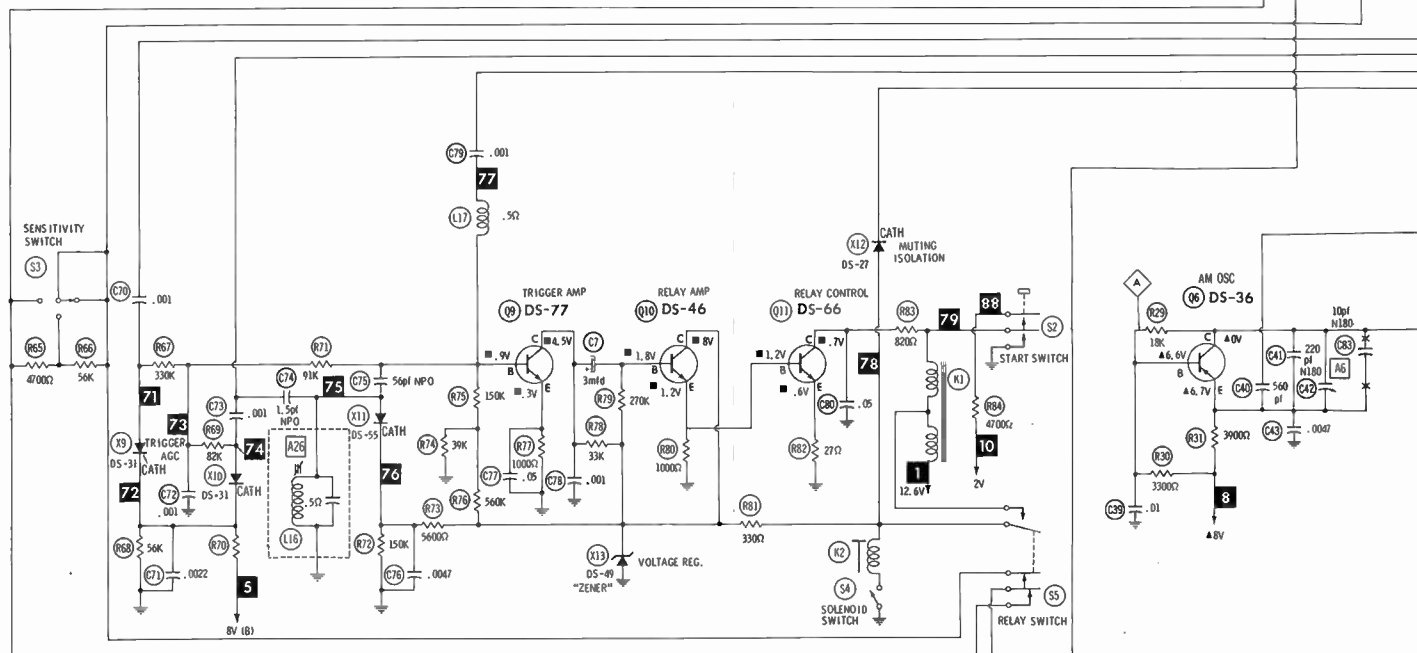
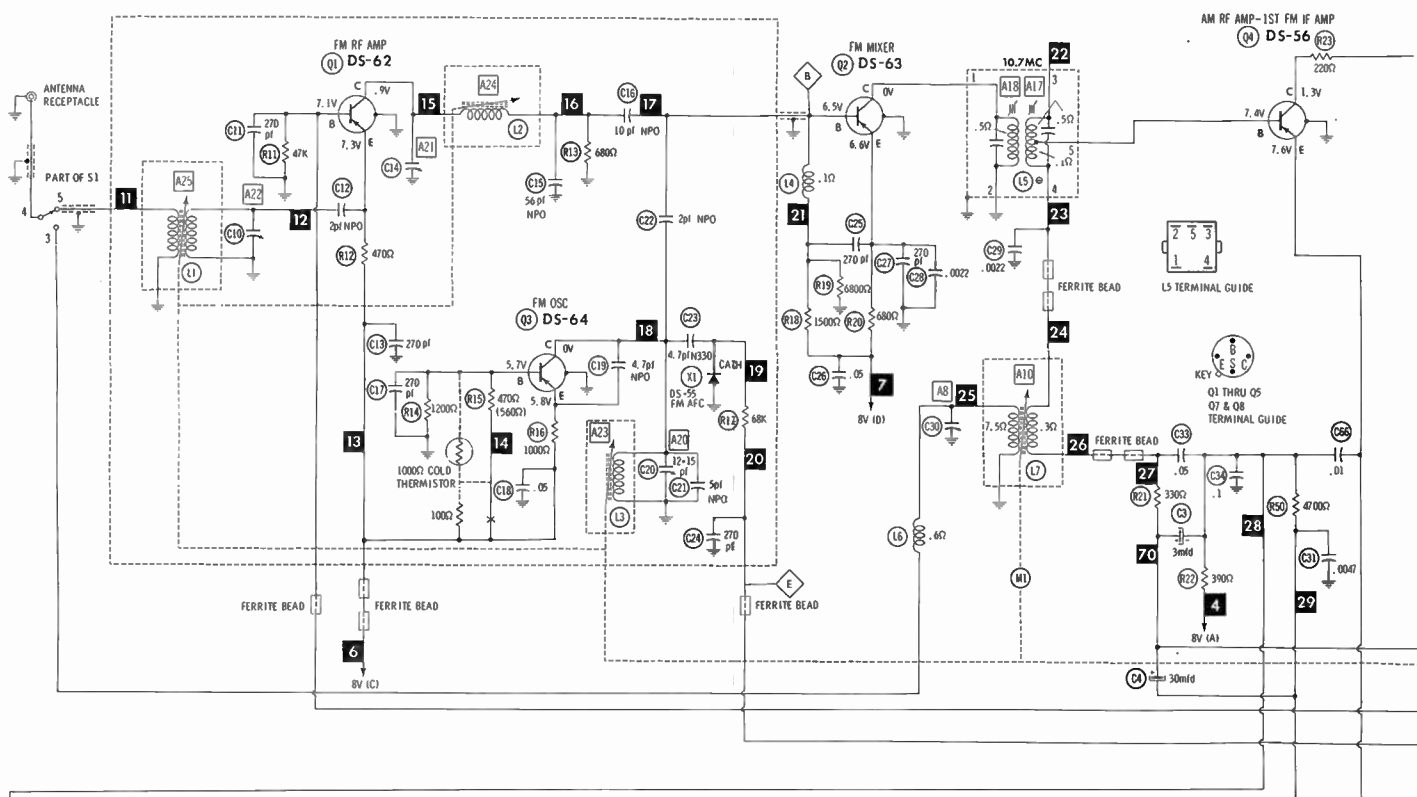
1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE®**

© Howard W. Sams & Co., Inc. 1966

MOPAR MODEL 420

MOPAR MODEL 420



NC NO CONNECTION.

▲ TAKEN IN "AM" POSITION.

■ MEASURED WITH TUNER SEEKING

⊙ See parts list

1. Voltage measurements taken with vacuum tube voltmeter.

2. All controls set for normal operation, no signal applied.

3. Measured values are from socket pin or terminal to common ground.

4. All terminals viewed from bottom unless otherwise designated.

5. Numbers assigned to terminals may not be found on the unit.

6. Supply voltage maintained at rated value for voltage readings.

7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

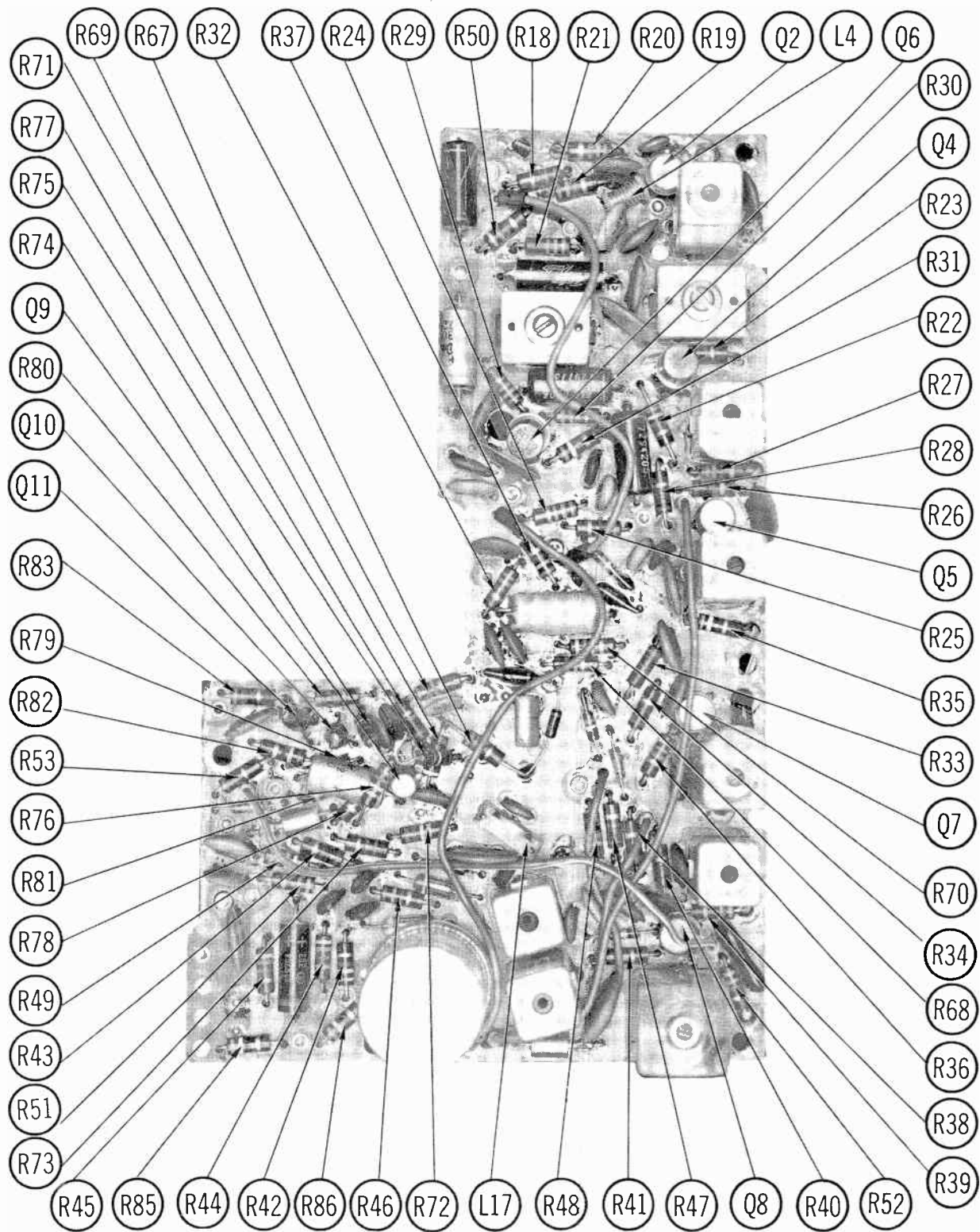
Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

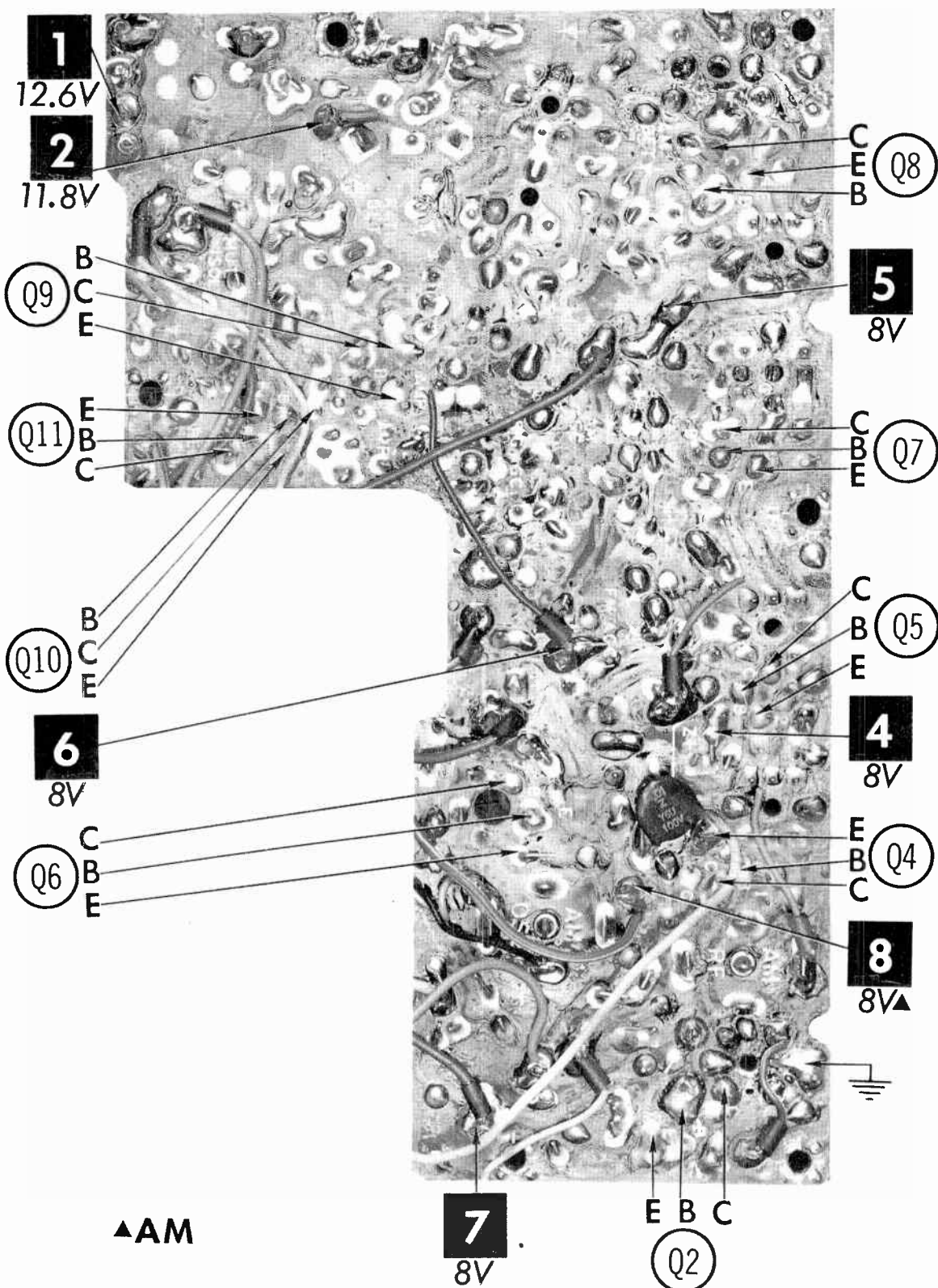
A PHOTOFACT STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**

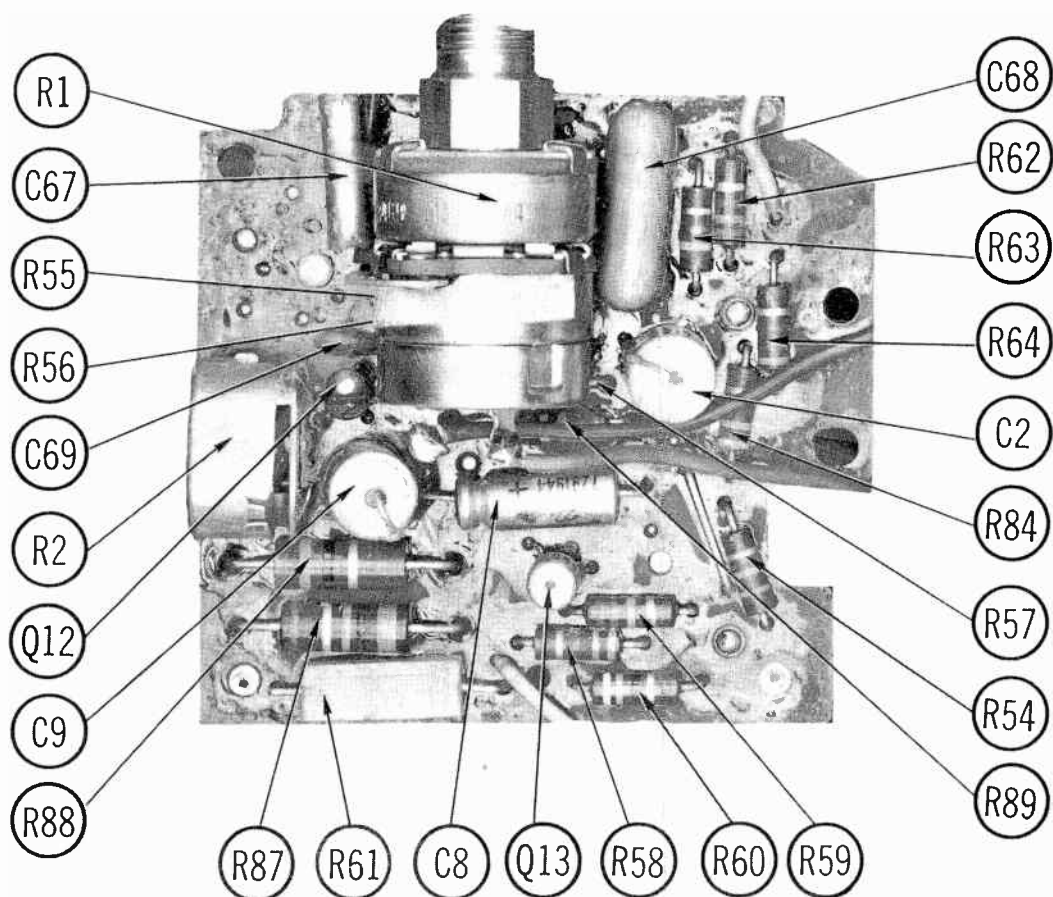
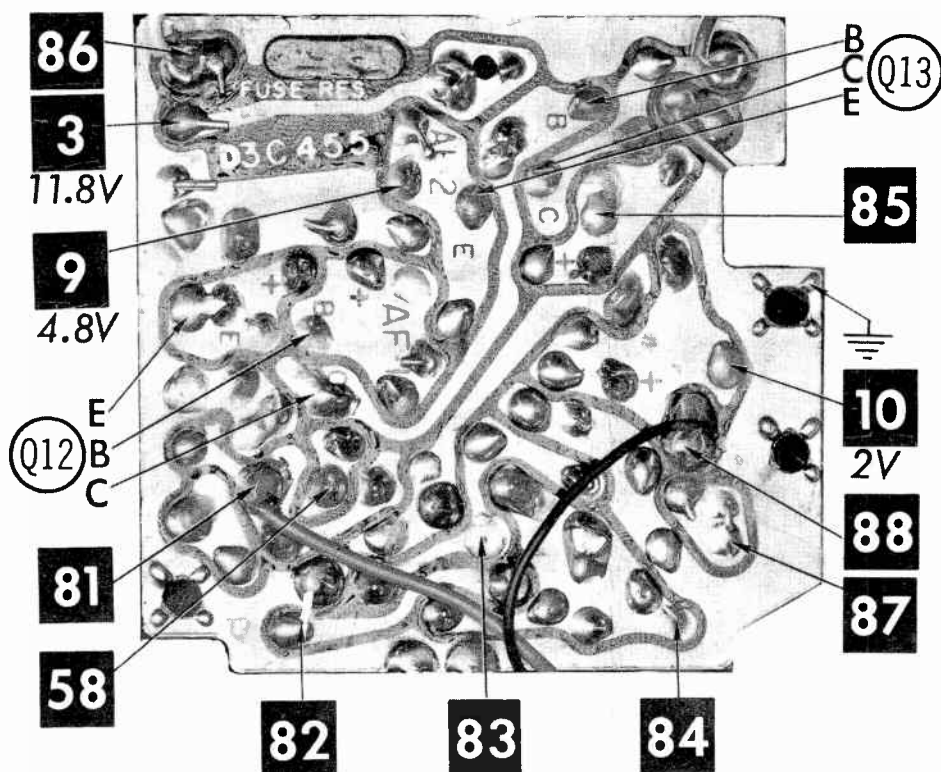
© Howard W. Sams & Co., Inc. 1966

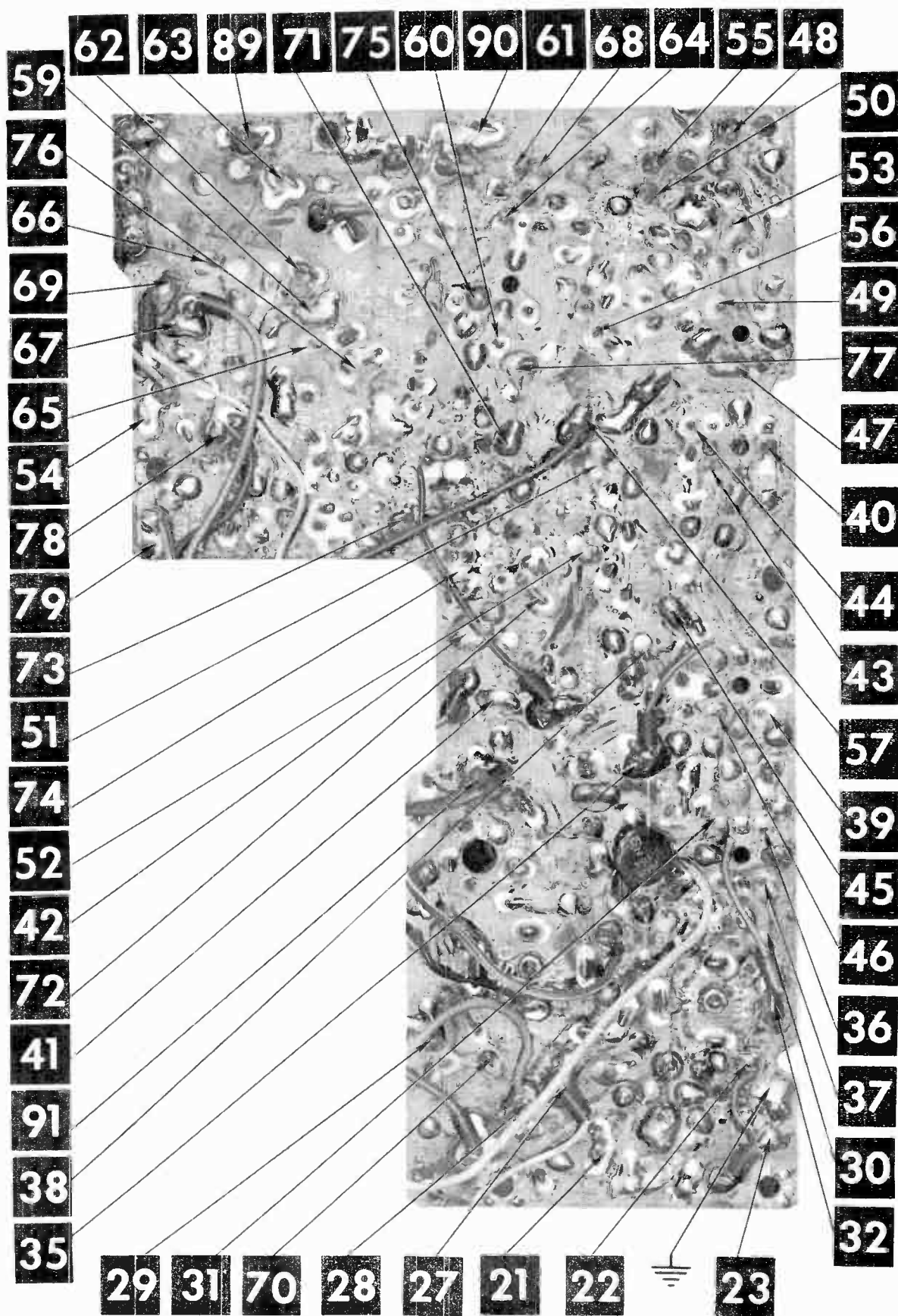


World Radio History

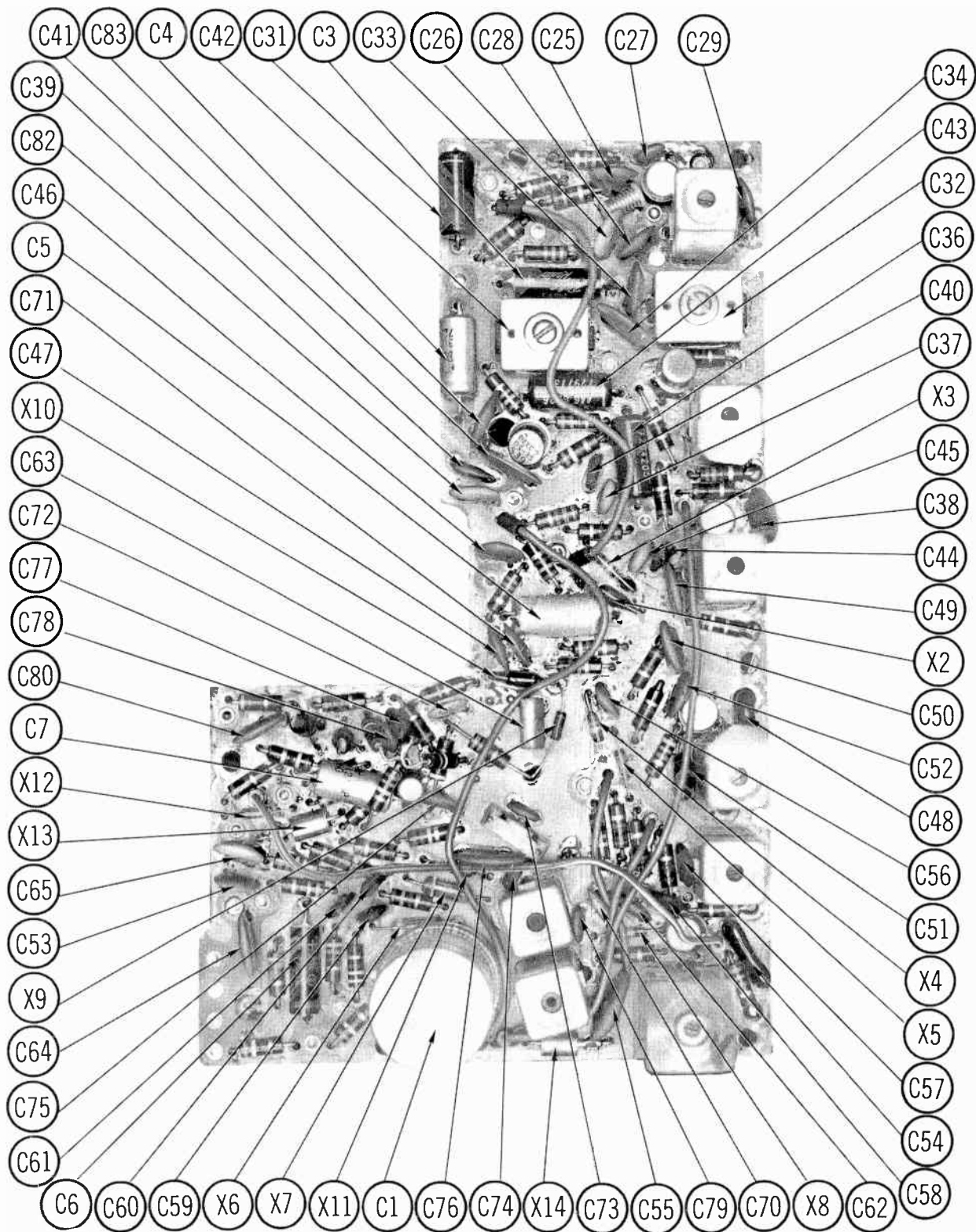








A Howard W. Sams CIRCUITRACE® Photo



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	DS-26	FM RF Amp.	DS-41		SK-3006	PNP
Q2	DS-36	FM Mixer	DS-41		SK-3006	PNP
Q3	DS-64	FM Oscillator	DS-41		SK-3006	PNP
Q4	DS-56	AM RF -1st FM IF	DS-56		SK-3006	PNP
Q5	DS-63	AM Mixer-2nd FM IF	DS-56		SK-3007	PNP
Q6	DS-36	AM Oscillator	DS-25	GE-2	SK-3006	PNP
Q7	DS-63	AM IF-3rd FM IF	DS-56		SK-3006	PNP
Q8	DS-63	4th FM IF	DS-56		SK-3007	PNP
Q9	DS-77	Trigger Amp.	DS-77		SK-3020	NPN
Q10	DS-46	Relay Amp.	DS-66	GE-10	SK-3020	NPN
Q11	DS-46	Relay Control	DS-66	GE-10	SK-3020	NPN
Q12	DS-66	AF Amp.	DS-66	GE-10	SK-3020	NPN
Q13	DS-66	AF Amp.	DS-66	GE-10	SK-3020	NPN
Q14	DS-501	Output	DS-501	GE-4	SK-3012	PNP *

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.
Check bias adjustment.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		DS-55	1N34AS	1N34A			
X2		DS-27	1N34AS	1N34A			
X3		DS-27	1N34AS	1N34A			
X4		DS-27	1N34AS	1N34A			
X5		DS-27	1N34AS	1N34A			
X6		DS-39	1N34AS	1N34A			
X7		DS-39	1N34AS	1N34A			
X8		DS-27	1N34AS	1N34A			
X9		DS-31	1N34AS	1N34A			
X10		DS-31	1N34AS	1N34A			
X11		DS-55	1N34AS	1N34A			
X12		DS-27	1N34AS	1N34A			
X13		DS-49					
X14		DS-49					

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	DELCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	1000	16	7291356	PWH3-54-45			FPS300.93	PCL-3021.9
B	500	16						
C	15	115rms						
C2	100	4	7291810	PTT30	NLW125-6	MT1-21	TT6X100	TE-1102
C3	3	12	7282359	PTT50	NLW3-15	MT1-3	TT12X3	TE-1122
C4	30	6	7296313	PTT27	NLW30-6	MT1-13	TT6X30	TE-1092
C5	10	20	7295247	PTT114	NLW10-25	MT1-5	TT25X10	TE-1204
C6	3	12	7282359	PTT50	NLW3-15	MT1-3	TT12X3	TE-1122
C7	3	12	7291860	PTT50	NLW3-15	MT1-3	TT12X3	TE-1122
C8	10	12	7291944	PTT53	NLW10-15	MT1-5	TT12X10	TE-1128
C9	100	4	7291810	PTT30	NLW125-6	MT1-21	TT6X100	TE-1102

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.
C10	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C11	2	NPO	NPO-DI 2.2	DTZ-2R2	CZ601CJ2R2D	CCTO-2R2	CN0522	10TCC-V22
C12	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C13								
C14								
C15	56	NPO		TCZ-56		CCTO-560	CN0456	10TCC-Q56
C16	10	NPO		DTZ-10	CZ601CG100J	CCTO-100	CN0410	10TCC-Q10
C17	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C18	.05	25V	TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C19	4.7	NPO	NPO-DI 4.7	DTZ-4R7	830B	CCTO-4R7	CN0547	10TCC-V47
C20	12-15					461	ST554-N	
C21	5	NPO	NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CN0547	10TCC-V50
C22	2	NPO	NPO-DI 2.2	DTZ-2R2	CZ601CJ2R2D	CCTO-2R2	CN0522	10TCC-V22
C23	4.7	N330				*		10TCS-V47
C24	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C25	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C26	.05	16V	TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C27	270		DI-270	DD-271	CD15F271J500	CCD-271	GP327	5GA-T27
C28	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C29	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C30								
C31	.0047	75V			DMF6D47	6DP-427	PVC6247	6PS-D47
C32								
C33	.05	16V		CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50

MOPAR MODEL 420

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

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.
C34	.1 16V	#7282165	TTD-1	CK-104	HCZ3R0XR104P		TA010	TG-P10
C35	200 N750		N750-DI200	DTN-200		CCTN-201	CN7320	10TCU-T20
C36	.0033 75V		DBE6D33		DMF6D33	6DP-1-332	PVC6233	6PS-D33
C37	.02 16V		TTD-02	CK-203	HCZ3R0XR203P	CCD-203	TA120	TG-S20
C38	.07 16V		BPD-.05	DD-503			GP150	5GA-S50
C39	.01 16V		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C40	560		DI-560	DD-561	JBX601YP561K	CCD-561	GP356	5GA-T56
C41	220 N180							
C42								
C43	.0047 75V		DBE6D47		DMF6D47	6DP-472	PVC6247	6PS-D47
C44	10 NPO		NPO-DI10	DTZ-10	CZ601CG100J	CCTO-100	CN0410	10TCC-Q10
C45	.02 16V		TTD-02	CK-203	HCZ3R0XR203P	CCD-203	TA120	TG-S20
C46	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C47	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C48	330 5%		ADM-15-331	CPR-330J	CD15F331J500	DM-15-331	SX333	MS-333
C49	.05 16V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C50	.05 16V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C51	150 5%		ADM-15-151	CPR-150J	CD15F151J500	DM-15-151	SX315	MS-315
C52	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C53	.033		TTD-03	CK-303		CCD-303	GP130	TG-S30
C54	1200 5%		ADM-20-122	CPR-1200J	CD19F122J500	DM-19-122	SX212	MS-212
C55	120 N080							
C56	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	10TCN-T12
C57	.05		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	5GAB-D10
C58	.05		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C59	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C60	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C61	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C62	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C63	.012		DBE6S12		DPMS6S12	6DP-2-123	PVC6112	6PS-S12
C64	1 3V			UK-105	HCX3R0XR105P		MAG31	HY-135
C65	.05 16V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C66	.01 100V		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C67	.047		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C68	.1		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C69	470		DI-470	DD-471	JBZ601YP471K	CCD-471	GP347	10TS-T47
C70	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C71	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C72	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C73	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C74	1.5 NPO		NPO-DI1.5	DTZ-1R5			CN0515	10TCC-V15
C75	56 NPO 100V			TCZ-56		CCTO-560	CN0456	10TCC-Q56
C76	.0047		DI-4700	DD-472	JBT601YP472K	CCD-472	GP247	10TS-D47
C77	.05 25V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C78	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C79	.001		DI-1000	DM-102	JBS601YP102K	CCD-102	SM210	5GAB-D10
C80	.05 15V		TTD-05	CK-503	HCZ3R0XR503P	CCD-503	TA150	TG-S50
C81	.15 75V		DBE4P15		DMF4P15	4DP-4-154	PVC6015	4PS-P15
C82	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C83	10 N180							
C84		#7271564						
C85		#7271564						

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

Delco Part Numbers.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			DELCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	100K	7293633	F2-100K, R14-25K, FFS203, RFS211, BC204①, SC004, KR7		†QJ-2284A	
B	Volume	20K Tap @ 12K					
R2	Bias	600Ω 2W	7286601	V-600	U39-600	110-600	MR600P

① Alter bushing and adjust spacer nut to meet requirements.

† "CONCENTRIKIT" Equivalent: K8 Kit, with Base Elements and Shafts: B13-128, P14-206 (Panel)
B19-119X, R1-220 (Rear)
S18① (Bushings)
N3 (Spacer Nut)
76-2 (Switch)

"SNAPTROL" Equivalent: BU10①, CF52, CR50T, SF19, SR54, N3, WF.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	DELCO PART No.			IRC PART No.	WORKMAN PART No.	DELCO PART No.
	1000Ω (Cold) Thermistor			7291750					
					R61	.47Ω (Fusible)			7281890

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS™ for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		DELCO PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna	①				
L2	FM RF	①				
L3	FM Oscillator	①				
L4	RF Choke (.18uh)	7291800				
L5	1st FM IF	7292791				
L6	RF Choke (8uh)	7255738	19-1009	BC-565	4611	T822
L7	AM Antenna	①				
L8	2nd FM IF	7291358				
L9	AM RF	①				
L10	AM Oscillator	①				
L11	3rd FM IF	7291359				
L12	1st AM IF	7288144			8005	
L13	4th FM IF	7291380				
L14	2nd AM IF	7293318				
L15	Ratio Detector	7294335				
L16	FM Trigger IF	7287612				
L17	RF Choke (100uh)	7294748	19-3100	BC-689	6112	T341

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	DELCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L18	1.5 Amp.	.6Ω	8MH	1221623	C-4095	TC-2	TR-154	TY17XT	

CHOKE (AUDIO OUTPUT)

ITEM No.	INDUCTANCE	REPLACEMENT DATA					NOTES
		DELCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L19	30MH	7296712					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				DELCO PART No.	JENSEN PART No.	QUAM PART No.	
SP1	7"	PM	8Ω			7A21Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	SFE	9 Amp.		In Fuse Block	307009		SFE9	

MISCELLANEOUS

ITEM No.	PART NAME	DELCO PART No.	NOTES
K1	Relay	7295713	
K2	Solenoid	1221409	
M1	Tuner Coil Assembly	7290996	
S1	AM-FM Selector Switch	7296365	
S2	Start Switch	1222521	
S3	Sensitivity Switch	1222521	
S4	Solenoid Switch	7268030	
S5	Relay Switch	7293447	

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	7296705	Pushbutton	7290419
Dial Pointer	7293582		

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
	8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



PHOTOFACT[®] with

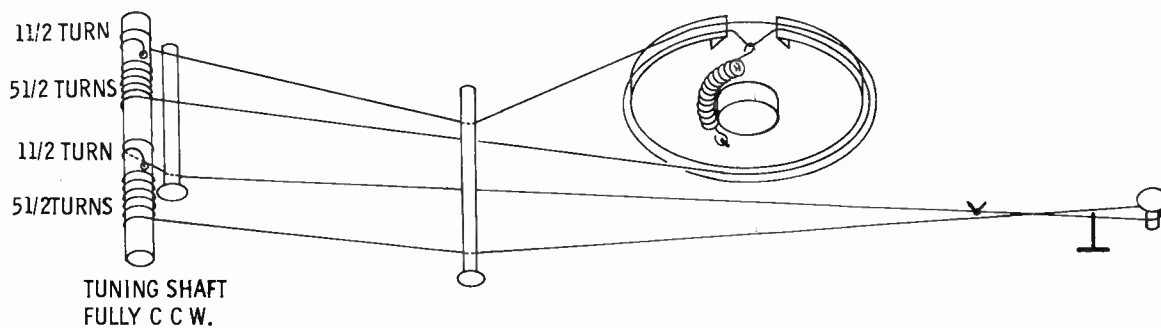
CIRCUITRACE[®]



TRADE NAME : Motorola Model FM106M
 SUPPLIER : For Current Address, See Annual Index.
 TYPE SET : 13 Transistor AM-FM Receiver
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .62 Amp. @ 12.6 Volts DC
 TUNING RANGE: BROADCAST 540-1615KC
 FREQ: MOD: 87.5-108MC

MOTOROLA MODEL FM106M

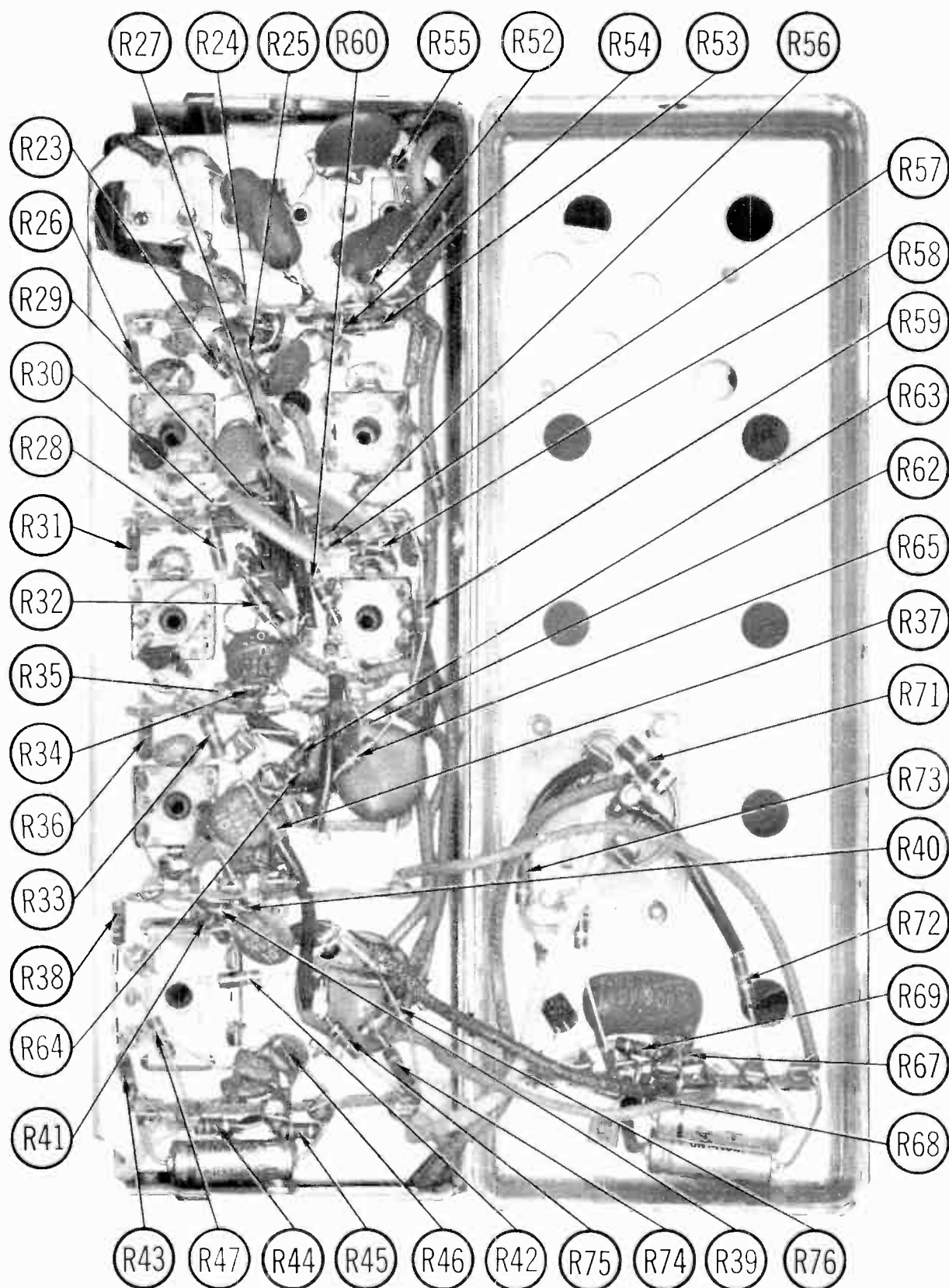
DIAL CORD STRINGING



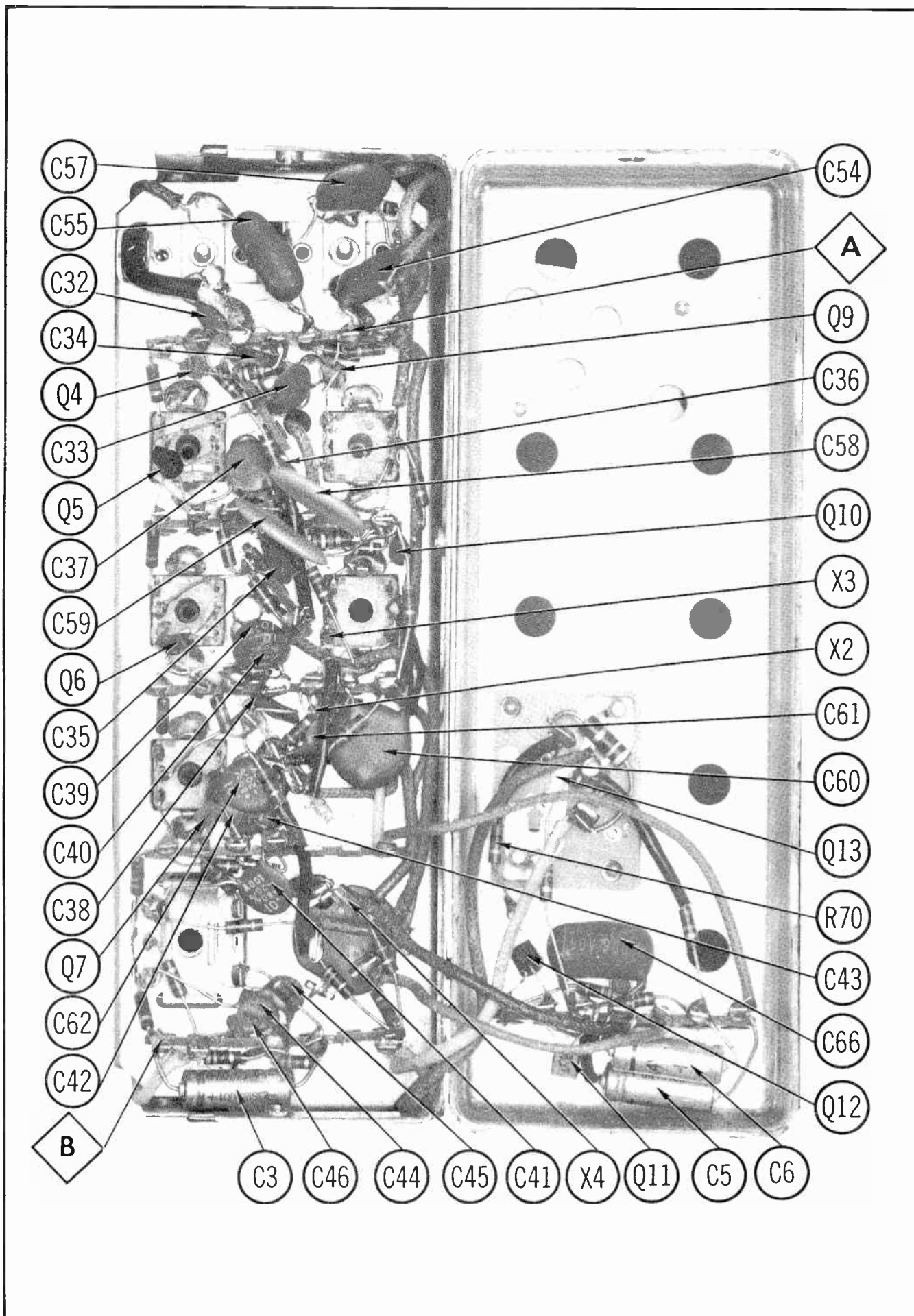
HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

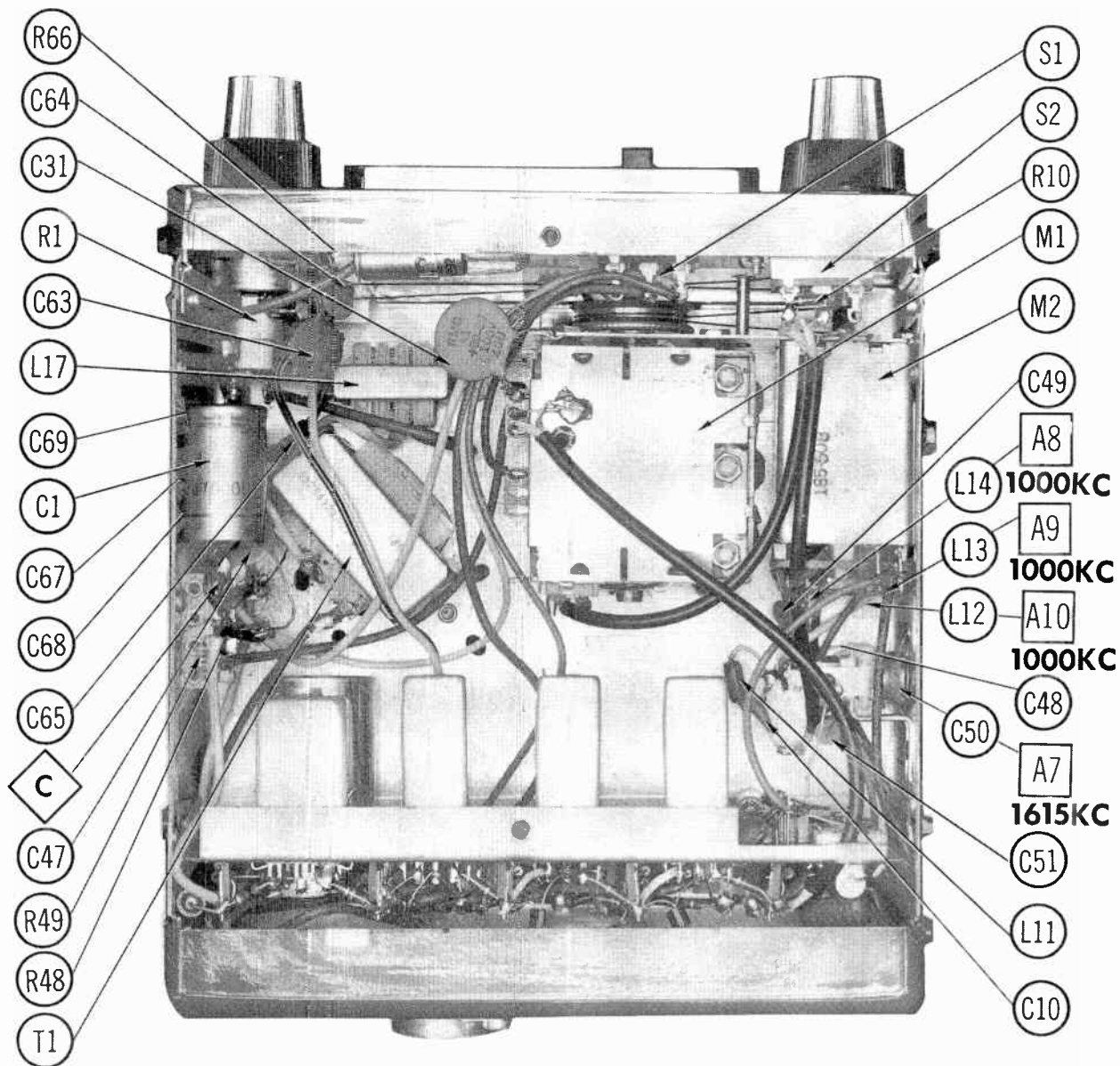
© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD715

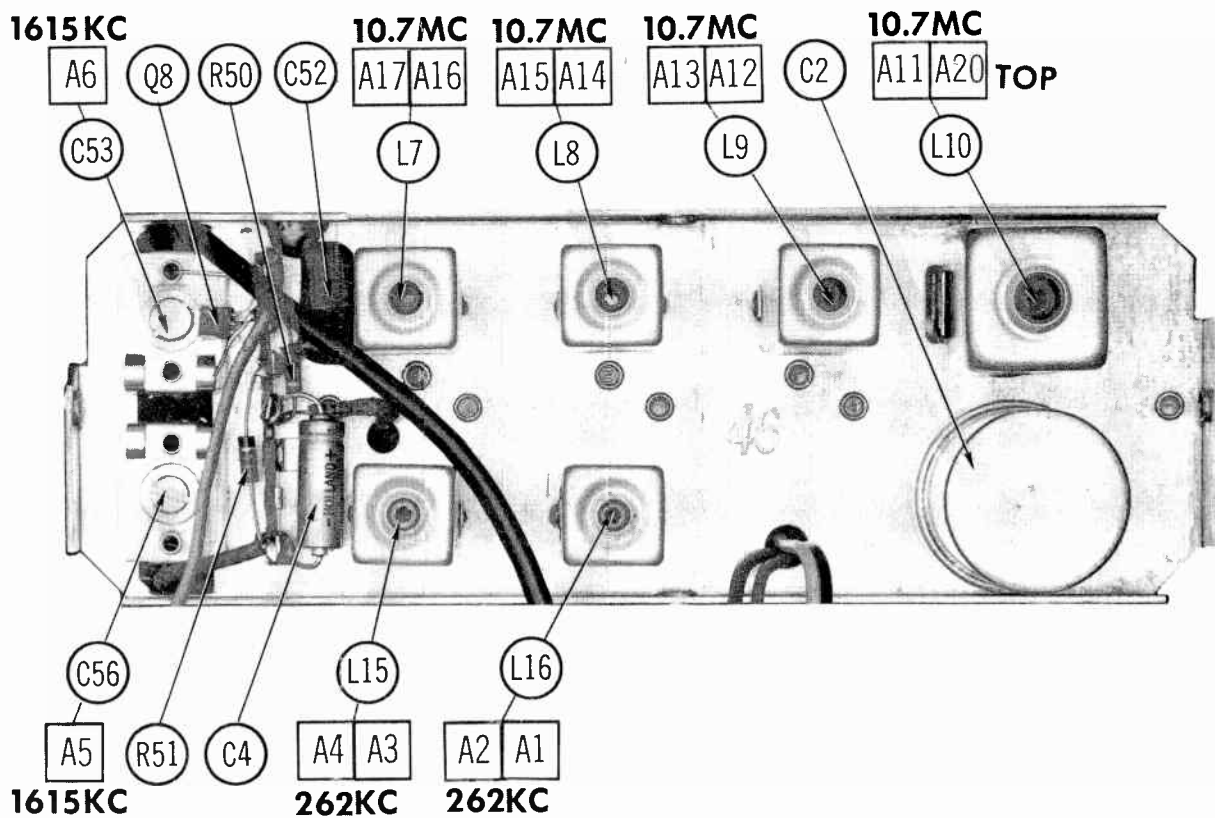
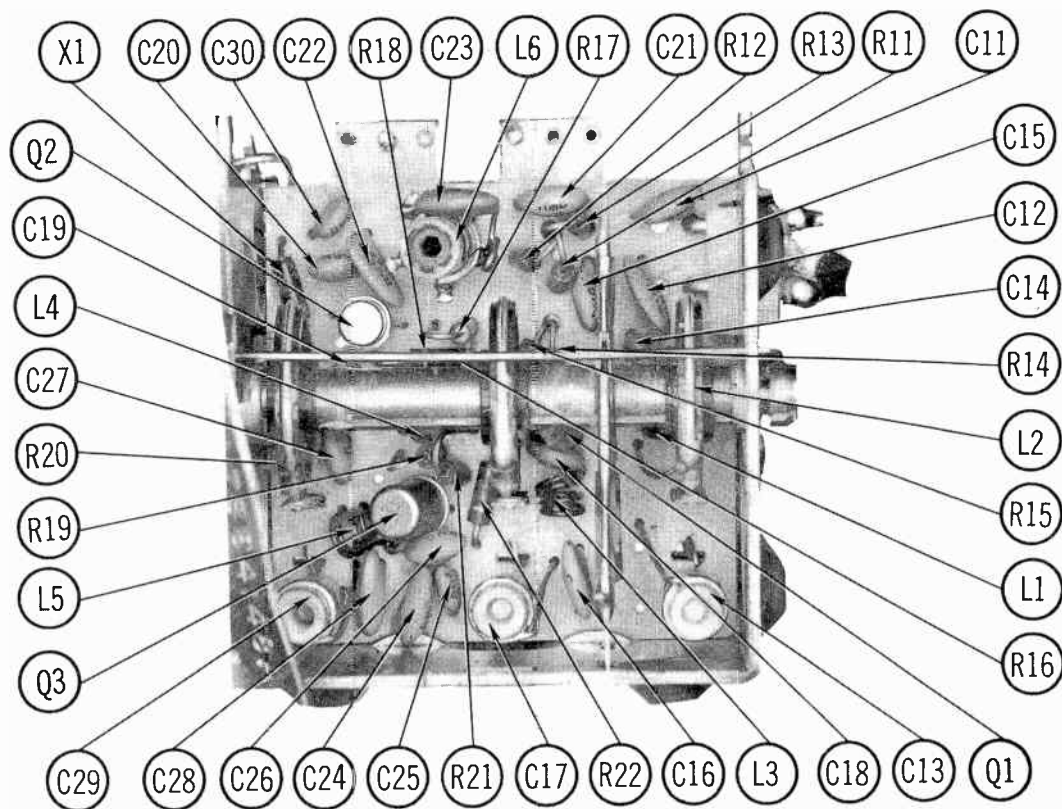
World Radio History











ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

A1 thru A4, A12 thru A19.	GENERAL CEMENT: 9296, 9297, 9300	WALSCO: 2510, 2546, 2547
A6, A7, A8, A21, A22 & A23.	GENERAL CEMENT: 8290, #868, 9087	WALSCO: 2525, 2528, 2587
A11 & A20.	GENERAL CEMENT: 8606, #806L, 8869	WALSCO: 2543, 2544, 2588

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
High side thru .1mfd to point  , low side to ground.	262KC (400% Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
Thru dummy (Fig. 1) to antenna receptacle.	1515KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.					
Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coil.	A8, A9, A10	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
With radio installed in car and antenna extended 31", tune in a weak station near 1400KC and adjust A7 for maximum output.					

FM ALIGNMENT USING AM SIGNAL GENERATOR — SELECTOR IN FM POSITION

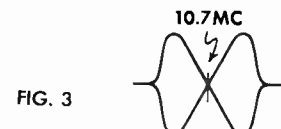
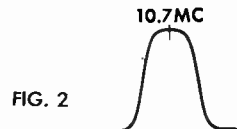
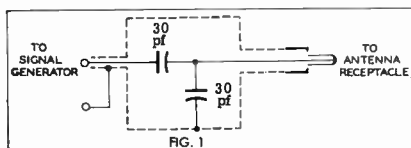
High side thru dummy (Fig. 1) to antenna receptacle.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point  ; common to ground.	A11, A12, A13, A14, A15, A16, A17, A18, A19.	Adjust for maximum.
5.	"	"	DC probe to point  ; common to ground.	A20.	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR — SELECTOR IN FM POSITION

High side thru dummy (Fig. 1) to antenna receptacle. Use only enough marker signal to obtain indication. Use 80% frequency modulated signal with 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point  ; low side to ground.	A11, A12, A13, A14, A15, A16, A17, A18, A19.	Disconnect stabilizing capacitor C3. Adjust for maximum gain and symmetry of response similar to Fig. 2 with marker as shown. Reconnect C3.
5.	"	"	Vert. amp. to point  ; low side to ground.	A20.	Adjust A20 (Secondary) to place marker at center of crossover lines similar to Fig. 3. Adjust A11 (Primary) for maximum amplitude and straightness of crossover lines.

FM RF ALIGNMENT

Connect generator across antenna terminals with 120Ω carbon resistors in series with each lead.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
6.	98MC	98MC	DC probe of VTVM to point  ; common to ground.	A21, A22, A23.	Adjust for maximum.



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	MOTOROLA PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1	TI-400	FM RF Amp.	DS-41		SK-3006	PNP	48P64978A27
Q2	TI-401	FM Mixer	DS-41		SK-3006	PNP	48P64978A28
Q3	TI-387	FM Oscillator	DS-41		SK-3006	PNP	48P64978A29
Q4	4857	1st FM IF	DS-66	GE-10	SK-3018	NPN	48S134857
Q5	4857	2nd FM IF	DS-66	GE-10	SK-3018	NPN	48S134857
Q6	4857	3rd FM IF	DS-66	GE-10	SK-3018	NPN	48S134857
Q7	4857	4th FM IF	DS-66	GE-10	SK-3018	NPN	48S134857
Q8	829A	AM RF Amp.				PNP	48S134831
Q9	829B	AM Converter				PNP	48S134831
Q10	829C	AM IF				PNP	48S134831
Q11	54D	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134811
Q12	54C	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134811
Q13	SP1556-2	Output	DS-520	GE-3	SK-3009	PNP *	48S134759

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		(FM AFC Vari-Cap)					
X2		1N139	1N295	1N295			
X3		1N139	1N295	1N295			
X4		1N756A					

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	1000	16	23S187A06	PRS1230	BR1000-15	QT1-32	TC1501	TL-1166.5
C2A	500	16	23S184A05	AFH3-00-94.5	CC0013		PFP300.18	PCL-3026.11
B	100	16	(23C64722A02)					
C	500	16						
C3	6.4	40	23S187A01	CRE755A	NLW6-50	MT1-5	TT50X6	TE-1303.1
C4	25	25	23S187A02	CRE612A	NLW25-25	MT1-11	TT25X25	TE-1207
C5	6.4	40	23S187A01	CRE755A	NLW6-50	MT1-5	TT50X6	TE-1303.1
C6	100	6.4	23S187A07	CRE423A	NLW100-12	MT1-21	TT10X100	TL-1135

CAPACITORS

ITEM No.	RATING		REMARKS	REPLACEMENT DATA						
				AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.	
C10	22	NPO		NPO-DI22	DTZ-22	CY601CG220K	CCTO-220	CN0422	10TCC-Q22	
C11	150			DI-150	DD-151		CCD-151	GP315	10TS-T15	
C12	39	N330					*	*	10TCS-Q39	
C13										
C14	6.8	N330					*	*	10TCS-V68	
C15	220			DI-220	DD-221	JBZ601YP221K	CCD-221	GP322	10TS-T22	
C16	30	N330					*	*	10TCS-Q30	
C17										
C18	3.9	NPO							10TCC-V39	
C19	150			DI-150	DD-151		CCD-151	GP315	10TS-T15	
C20	.001			DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10	
C21	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C22	39	N330					*	*	10TCS-Q39	
C23	33	N330			TCA-33		*	*	10TCS-Q33	
C24	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C25	.001			DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10	
C26	2.2	NPO		NPO-DI2.2	DTZ-2R2	CZ601CJ2R2D	CCTO-2R2	CNO522	10TCC-V22	
C27	5	NPO		NPO-DI5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50	
C28	20	N150					*	*	10TCP-Q20	
C29										
C30	.001			DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10	
C31	.1			TTD-01	CK-104	HCZ3R0XR104P	CCD-103	TA010	TG-P10	
C32	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C33	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C34	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C35	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C36	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C37	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C38	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C39	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C40	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C41	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C42	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C43	.01			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10	
C44	330			DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33	
C45	330			DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33	
C46	330			DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33	
C47	.01			TTD-01	CK-103	HCZ3R0XR103K	CCD-103	TA110	TG-S10	
C48	90		#21A591682							
C49	12	NPO			TCZ-12	CZ601CG120J	CCTO-120	CNO412	10TCC-Q12	
C50	20-120		#20B64019B01				S463			
C51	.002			DI-2000	DM-202	JBX601YP202K	CCD-202	GP220	5GAB-D22	
C52	.05	200V		DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-S50	
C53	20-120		#20B64413A02				S463			

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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.
C54	.005 200V	#20B64413A03	DBE6D5	CPR-5000J	DPMS6D5	6DP-1-502	PVC625	6PS-D50
C55	.01 100V		DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C56	300-400							
C57	150 N750		N750-DI 150	DTN-150		CCTN-151	CN7315	10TCU-T15
C58	.05		TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50
C59	.05		TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50
C60	180 N750			TCN-180			CN7318	10TCU-T18
C61	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C62	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C63	.2			UK20-204			MAG25022	HY-325
C64	.47	#21A560232 #21A560232 #21A560232		UK10-404			MAG12047	HY-330
C65	.2			UK20-204			MAG25022	HY-325
C66	.08 50V		DBE6S82		DPMS6S82	6DP-4-823	PVC6168	6PS-S82
C67								
C68								
C69								

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

Motorola Part Number.

CONTROLS

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

ITEM No.	USE	RESIST- ANCE	REPLACEMENT DATA				
			MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	100K	8C64588A10	F2-100K①, R14-50K, FFS015, RFS106, KR4			FA15A①, RU54DT353②, OS937A, IS1375, US41
B	Volume/Switch	50K Tap @ 25K					

① Use original spring mounting clips.

② Do not use 35K Tap.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MOTOROLA PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna	①				
L2A	FM Antenna Tuning	①				
B	FM RF Tuning					
C	FM Oscillator Tuning					
L3	FM RF	①				
L4	FM IF Trap (1uh)	①				
L5	FM Oscillator	①				
L6	1st FM IF	①				
L7	2nd FM IF	24C64104A01				
L8	3rd FM IF	24C64104A01				
L9	4th FM IF	24C64104A01				
L10	Ratio Detector	24D64391A01				
L11	RF Choke (1.5uh)	24A64389A02	19-X001	BC-562	4604	T856
L12	AM Antenna	②				
L13	AM RF	②				
L14	AM Oscillator	②				
L15	1st AM IF	24C64105A01				
L16	2nd AM IF	24C64105A02				

① Part of M1.

② Part of M2 or (Coil & Mounting Plate Assembly, Part #1V41800A12).

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES	INDUCTANCE (0 CURRENT 1000~)	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L17	620ma	.4Ω	5MH	25C64172A01	C-4095	TC-2	TR-157	TY17XT	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	25Ω Tap	@ 8Ω	25D64129A01					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MOTOROLA PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5" x 7"	PM	8Ω	50C64137A01	P5X7V8	57A15Z8	

MOTOROLA MODEL FM106M

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGA	5A	65R122345	1V64964A32	301005	155004	AGA 5	HAF

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M1	FM Tuner	77D64224A02	MT-567
M2	AM Tuner	77D40632A06	
	(Tuning Coil Assembly)	1V41800A12	
S1	AM-FM Selector Sw.	40B64138A02	
S2	Local-Distance Sw.	40B64138A01	

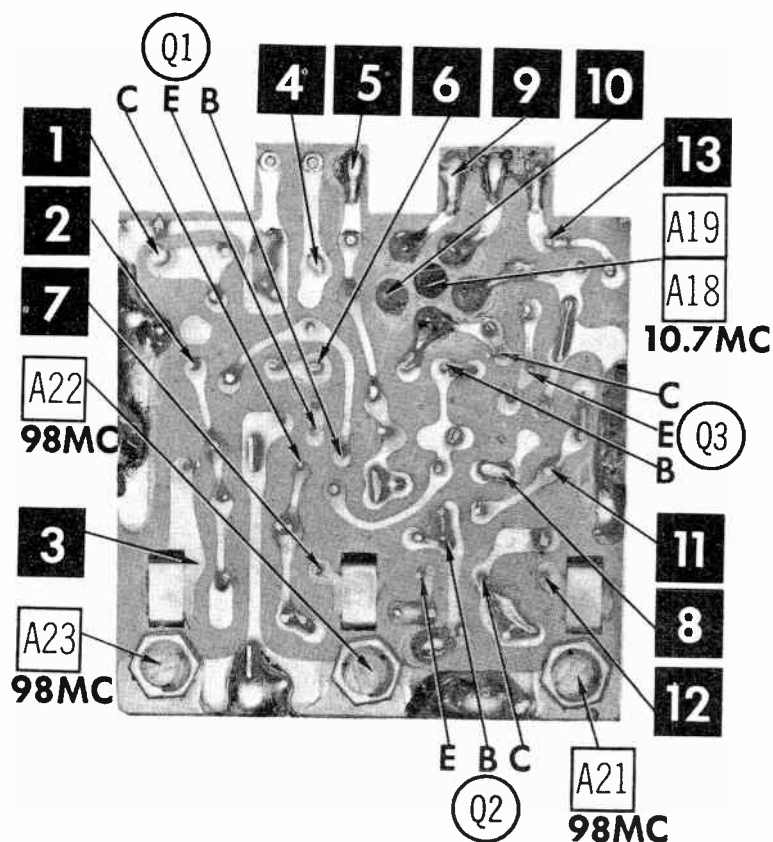
CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	13D64145A01	Knob-Tuning or Volume	36K544598
Dial Scale	34B64126A01	Knob-Tone	36K544812
Dial Pointer	52B64128A01	Knob-Sensitivity	36K544883

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
 8524 (Stranded) Available in 12 Colors
 Power Cord Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) - 6 Ft.
 17109 (Plastic) or 17129 (Rubber) - 9 Ft.
 Power Cord (Interlock Type) Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
 Low-Loss Shielded Lead (Interconnecting) Use BELDEN No. 8401 or 8421
 Phono Pick-up Arm Cable Use BELDEN No. 8430 (Two Conductor-Unshielded)
 8429 (Two Conductor-Shielded)
 8419 (Three Conductor-Shielded)

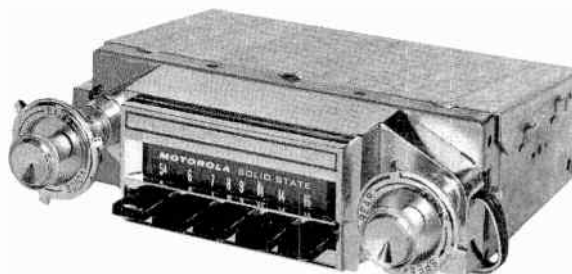




PHOTOFACT[®] with

CIRCUITRACE[®]

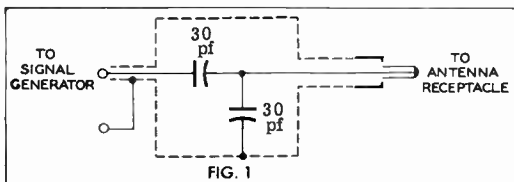
TRADE NAME: Motorola Models:
 OE66A (1965/66 Oldsmobile)
 PC66A (1966 Pontiac)
 SUPPLIER: For Current Address, See Annual Index.
 TYPE SET: 6 Transistor Receiver
 POWER SUPPLY: 12 Volts Storage Battery
 RATING: .3 Amp. @ 12.6 Volts DC
 TUNING RANGE: BROADCAST 540-1615KC



ALIGNMENT INSTRUCTIONS

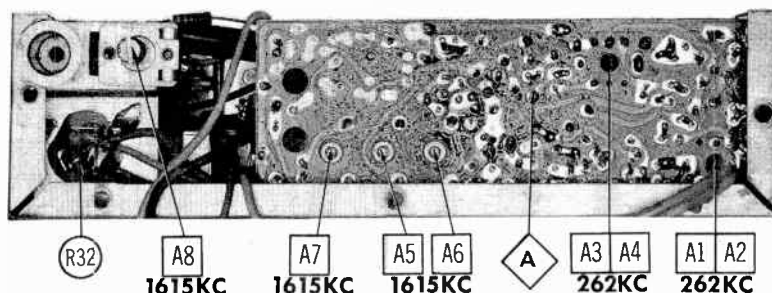
Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:
 A1 thru A4. GENERAL CEMENT: 9296, 9297, 9300
 WALSCO: 2510, 2546, 2547
 A5 thru A8. GENERAL CEMENT: 8290, 8868, 9087
 WALSCO: 2525, 2528, 2587

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point Δ , low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7, A8	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A9, A10, A11) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coil.	A9, A10, A11	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A8 for maximum output.						



PUSH-BUTTON ADJUSTMENT

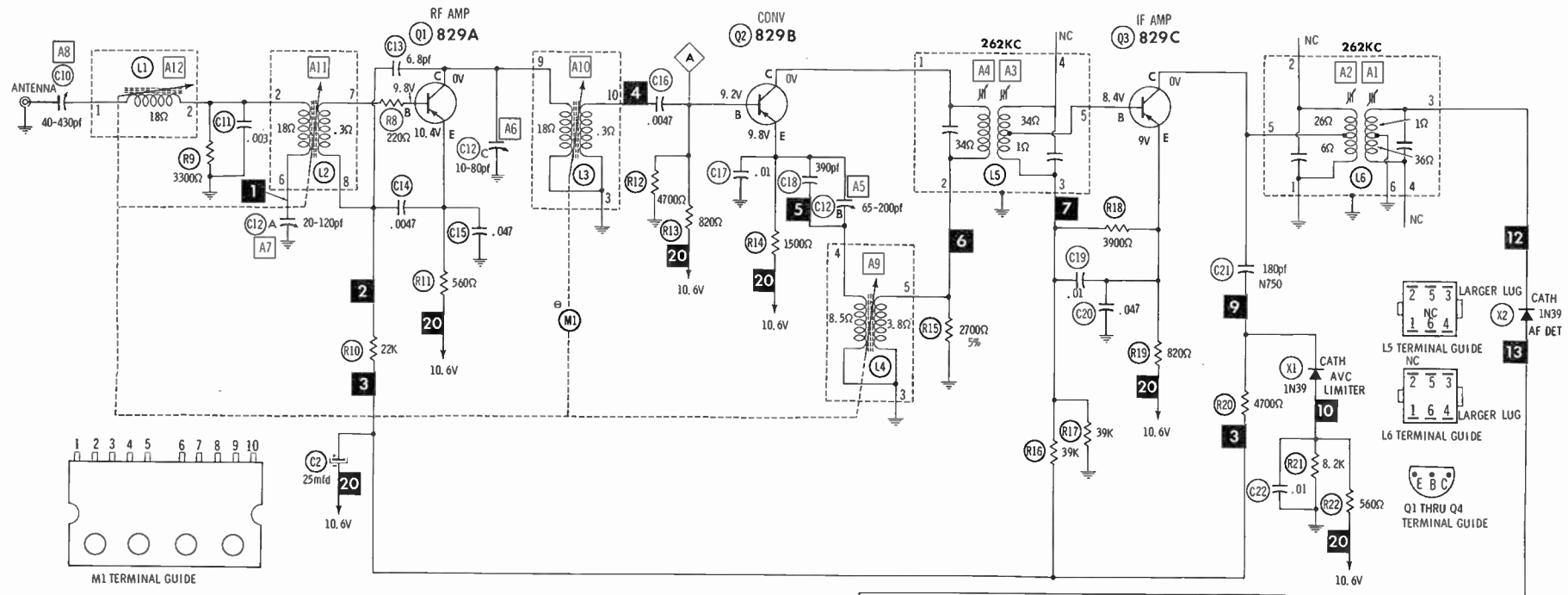
1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U.S. of America RD811

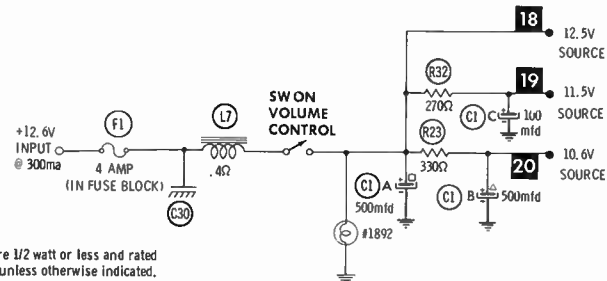
MOTOROLA MODELS OE66A, PC66A



NC NO CONNECTION.

⊖ See parts 1

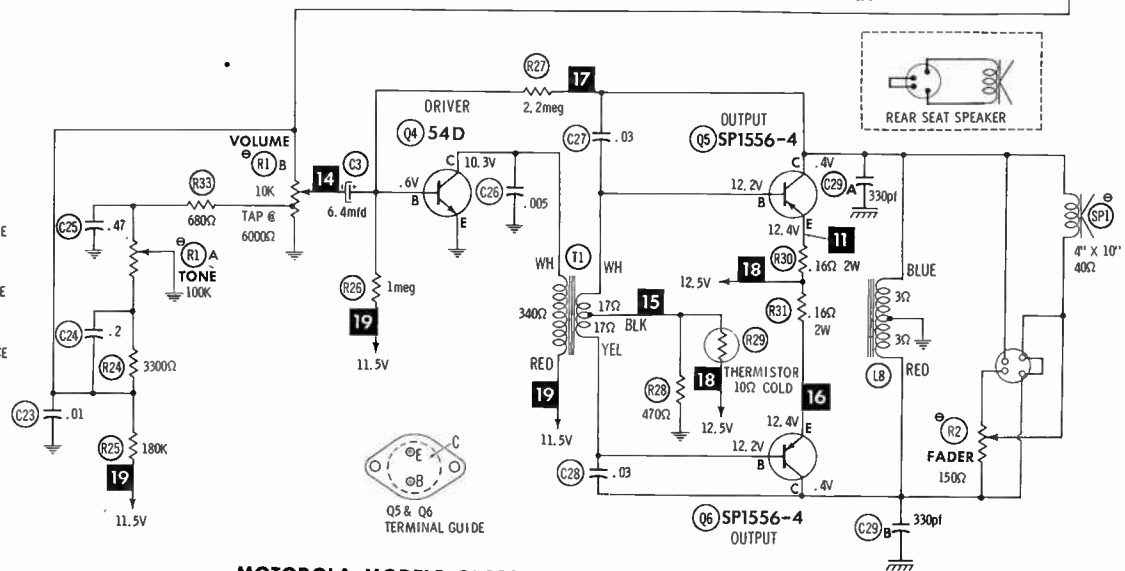
1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

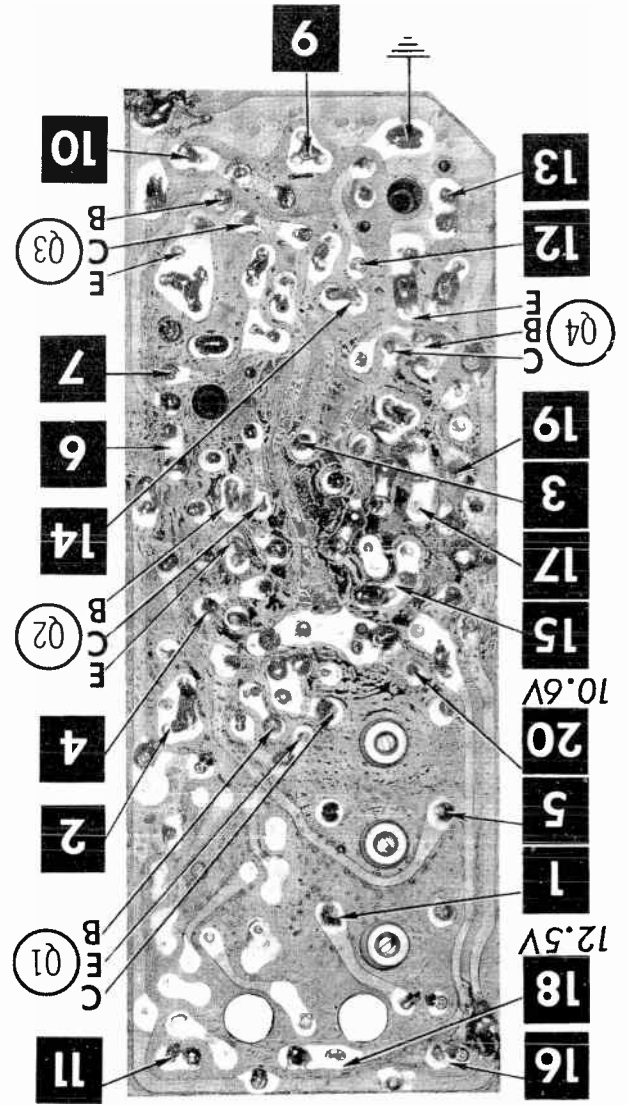
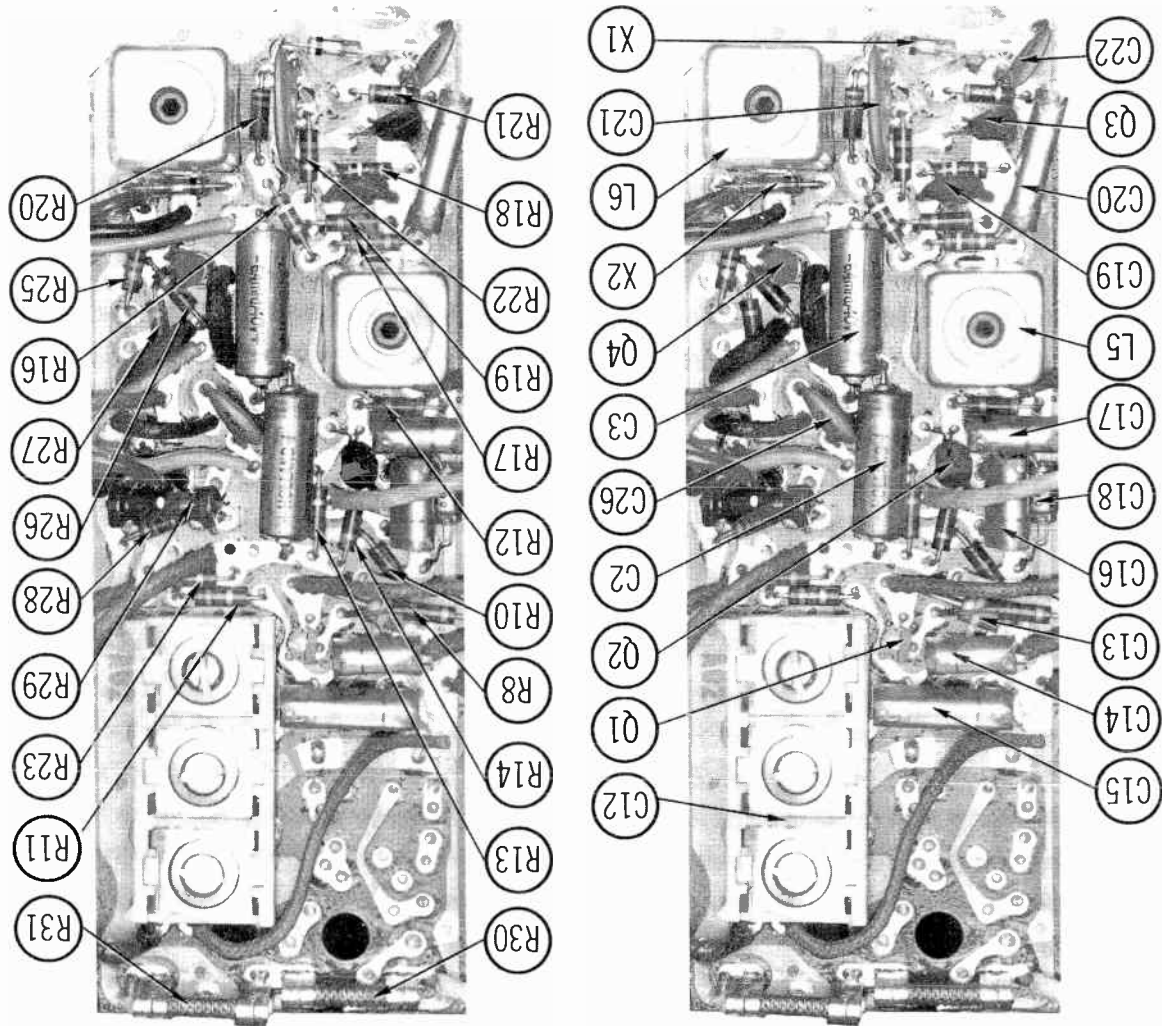


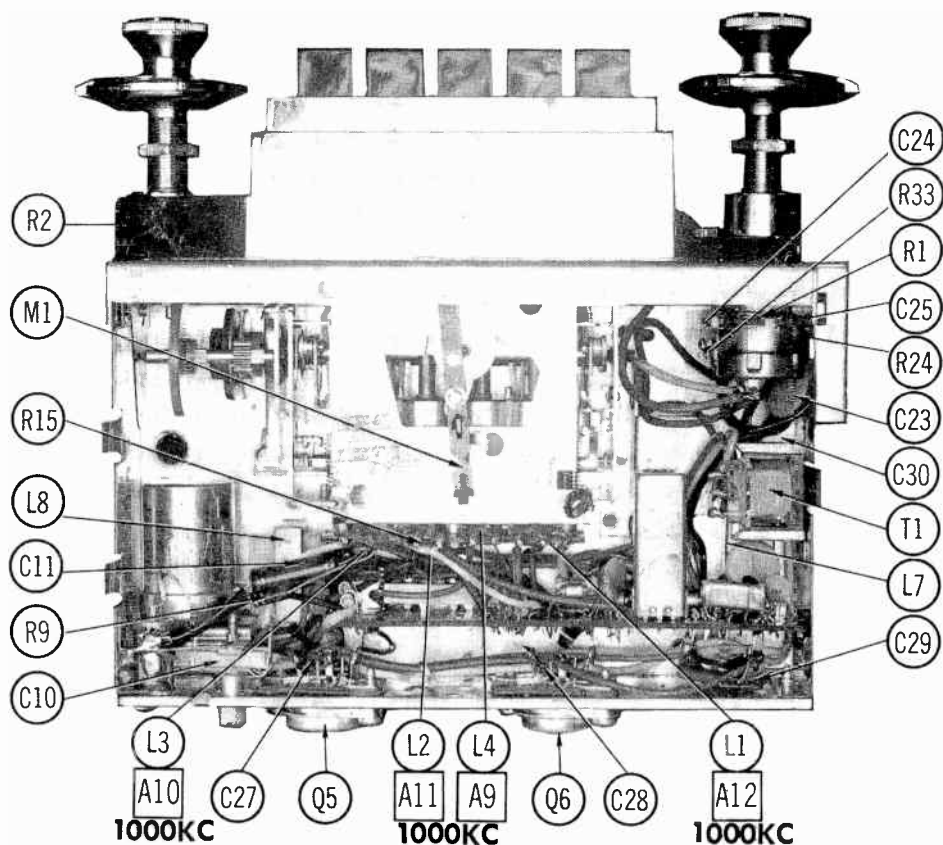
Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**™

© Howard W. Soms & Co., Inc. 1966

**MOTOROLA MODELS OE66A, PC66A**





PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
	8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8970 (3/4 In.)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	MOTOROLA PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1	829A	RF Amp.				PNP	48S134830
Q2	829B	Converter				PNP	(48S134831) ①
Q3	829C	IF Amp.				PNP	48S134831
Q4	54D	Driver				NPN	48S134832
Q5	SP1556-4	Output	DS-66	GE-10	SK-3020	PNP *	48S134811
			DS-520	GE-3	SK-3009		48S134761
Q6	SP1556-4	Output	DS-520	GE-3	SK-3009	PNP *	(48S134759) ①
							48S134761
							(48S134759) ①

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

① Use this Part Number when ordering from Motorola.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1N139 (48C134587)	1N295	1N295			
X2		1N139 (48C134587)	1N295	1N295			

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	500	16	23S184A05	AFH3-00-94.5	CC0013		PFP300.18	PCL-3026.11
B	500	16						
C	100	16	25C64722A02 ①					
C2	25	25	23S187A02	CRE612A	NLW25-25	MT1-11	TT25X25	TE-1207
C3	6.4	40	23S187A01	CRE755A	NLW6-50	MT1-5	TT50X6	TE-1303.1

① Use this Part Number when ordering from Motorola.

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.
C10	40-430	#20B64871A01				S465		
C11	.003 100V		DBE6D3	CPR-3000J	DPMS6D3	6DP-1-302	PVC423	6PS-D30
C12A	20-120	#20C64352A03						
B	10-80							
C	65-200							
C13	6.8		NPO-DI8.8	DTZ-6R8	CZ601CH6R8D	CCTO-6R8	CN0568	10TCC-V68
C14	.0047 100V		DBE6D47	CPR-4700J	WMF2D47	6DP-1-472	PVC4247	6PS-D47
C15	.047 100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C16	.0047 100V		DBE6D47	CPR-4700J	WMF2D47	6DP-1-472	PVC4247	6PS-D47
C17	.01 100V		DBE4S1	CPR-10000J	DMF2S1	4DP-1-102	PVC211	2TM-S10
C18	390		DI-390	DD-391		CCD-391	GP339	10TS-T39
C19	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C20	.047 100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C21	180 N750			TCN-180			CN7318	10TCU-T18
C22	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C23	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C24	.2			UK20-204			MAG25022	HY-325
C25	.47			UK10-404			MAG12047	HY-330
C26	.005		TTD-005	CK-502	HCZ3R0XR502P	CCD-502	TA250	TG-D50
C27	.03		TTD-03	CK-303		CCD-303	GP130	TG-S30
C28	.03		TTD-03	CK-303		CCD-303	GP130	TG-S30
C29A	300	#21A522033						
B	300							
C30	300	#64A530176						

Motorola Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	100K	18C84588A09	F1-100K ③		†QJ-1927A	FA15L③, RU14T53, OS1812A, IS2312, US41
B	Volume/Switch	10K Tap @ 6000Ω	①	R16-10K, FFS113, RFS205, KR4			
	Tone	100K	18C84588A08	F1-100K ③		††QJ-1928A	FA15L③, RU14T53, OS1500A, IS2062, US41
	Volume/Switch	10K Tap @ 6000Ω	②	R16-10K, FFS108, RFS201, KR4			
R2	Fader	150Ω 2W	18B64440A05			*QJ-2139A	
	Fader	150Ω 2W	①			**QJ-2138A	
			②				

① Used in Model: OE66A. ② Used in Model: PC66A. ③ Use Original spring mounting clips.

† "CONCENTRIKIT" Equivalent: K8③Kit, with Base Elements and Shafts: B11-128, P17-126 (Panel)
B19-116X, R9-208 (Rear)
76-1 (Switch)

†† "CONCENTRIKIT" Equivalent: K8③Kit, with Base Elements and Shafts: B11-128, P22-115 (Panel)
B19-116X, R1-200 (Rear)
76-1 (Switch)

* "SNAPTROL" Equivalent: WF1, None, SF7, None.

** "SNAPTROL" Equivalent: WF1, None, SF5, None.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MOTOROLA PART No.			IRC PART No.	WORKMAN PART No.	MOTOROLA PART No.
R29	10Ω (Cold) Thermistor			6K544646	R30	.16Ω			17B64753A01
					R31	.16Ω			17B64753A01

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MOTOROLA PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	1st Antenna	①				
L2	2nd Antenna	①				
L3	RF	①				
L4	Oscillator	①				
L5	Input IF	24C64327A03				
L6	Output IF	24C64327A02				

① Part of M1 or (Coil Assembly Part #1V41700A95).

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS™ for the most up-to-date replacement.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L7	300ma	.4Ω	5MH	25C64172A01	C-4095	TC-2	TR-157	TY17XT	

CHOKE (AUDIO OUTPUT)

ITEM No.	INDUCTANCE	REPLACEMENT DATA					NOTES
		MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L8	120MH	25C64173A01					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	9	1	25D64174A01					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MOTOROLA PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4" x 10"	PM	40Ω	1V64954A92	P4X10U40	410A2Z40	Model: OE66A.
	4" x 10"	PM	40Ω	50D64373A02	P4X10U40	410A2Z40	Model: PC66A.

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	7 AG	4Amp.	65S131812	In Fuse Block	303004		AGW 4	

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M1	Tuner Coil Assembly Tuner Coil Assembly	77D43039A02 1V41700A95 77D41925A03 1V41700A95	AT-540, Model: OE66A. Model: OE66A. AT-541, Model: PC66A. Model: PC66A.

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

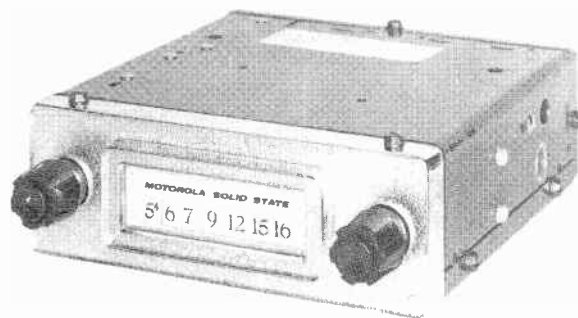
ITEM	MODEL	PART No.	ITEM	MODEL	PART No.
Escutcheon	OE66A	13D64257A01	Knob-Tone or Dummy	PC66A	36B64049A01
Escutcheon	PC66A	13D64260A01	Knob-Dummy	OE66A	36C64275A02
Dial Scale	OE66A	34B64253A01	Dial Pointer	OE66A	52C42062A21
Dial Scale	PC66A	34B64245A01	Dial Pointer	PC66A	1B40875A12
Knob-Tuning or Volume	OE66A	36C64265A01	Pushbutton, 1st, 3rd, 5th.	OE66A	38C41815A02
Knob-Tuning or Volume	PC66A	36B64090A01	Pushbutton, 1st, 3rd, 5th.	PC66A	38C44097A03
Knob-Tone	OE66A	36C64275A01	Pushbutton, 2nd, 4th.	OE66A	38C41815A01
			Pushbutton, 2nd, 4th.	PC66A	38C44097A01



PHOTOFACT[®] with

CIRCUITRACE[®]

TRADE NAME : Motorola Model TM296M
 SUPPLIER : For Current Address, See Annual Index.
 TYPE SET : 6 Transistor AM Receiver
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .7 Amp. @ 12.6 Volts DC
 TUNING RANGE : BROADCAST 540-1615KC

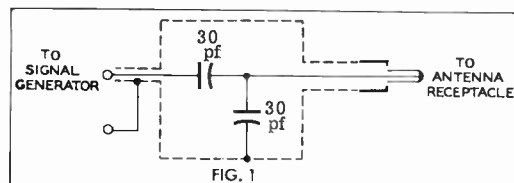


ALIGNMENT INSTRUCTIONS

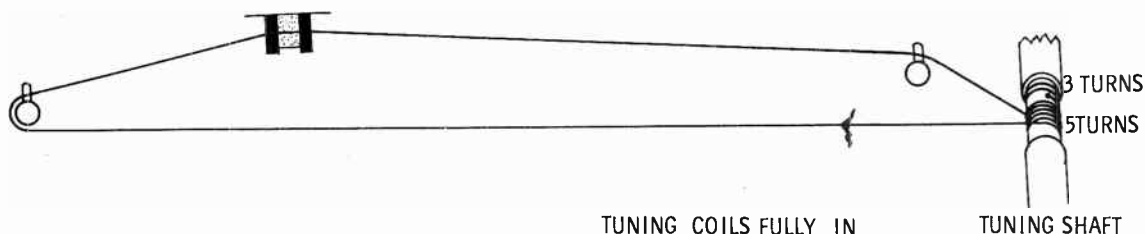
Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

A1 thru A4. GENERAL CEMENT: 9296, 9297, 9300
 WALSCO: 2510, 2546, 2547
 A5, A6, A7. GENERAL CEMENT: 8290, 8868, 9087
 WALSCO: 2525, 2528, 2587

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point A, low side to ground.	262KC (400% Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coil.	A8, A9, A10	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A7 for maximum output.						

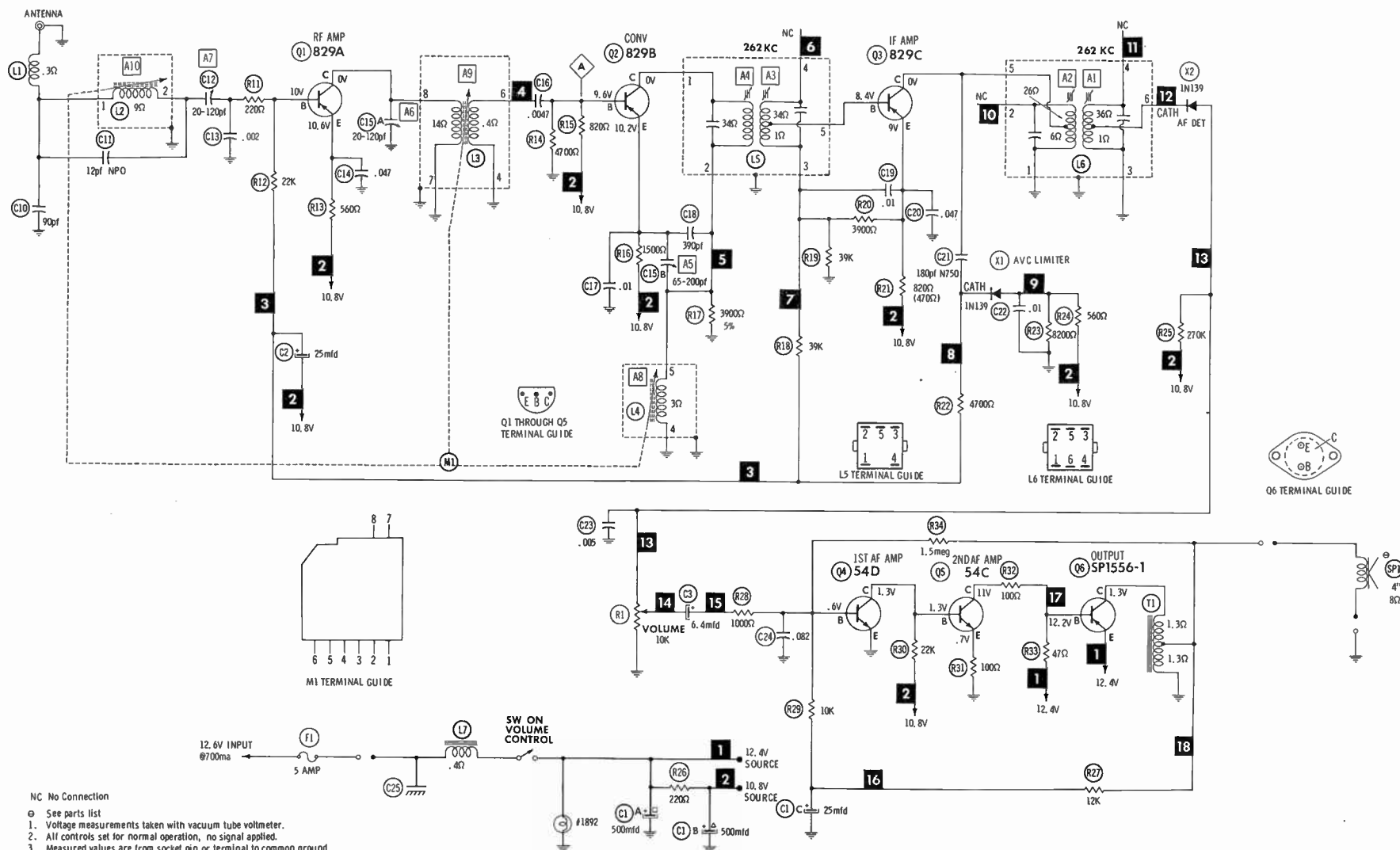


DIAL CORD STRINGING



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD812



NC No Connection

See parts list

1. Voltage measurements taken with vacuum tube voltmeter.

2. All controls set for normal operation, no signal applied.

3. Measured values are from socket pin or terminal to common ground.

4. All terminals viewed from bottom unless otherwise designated.

5. Numbers assigned to terminals may not be found on the unit.

6. Supply voltage maintained at rated value for voltage readings.

7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

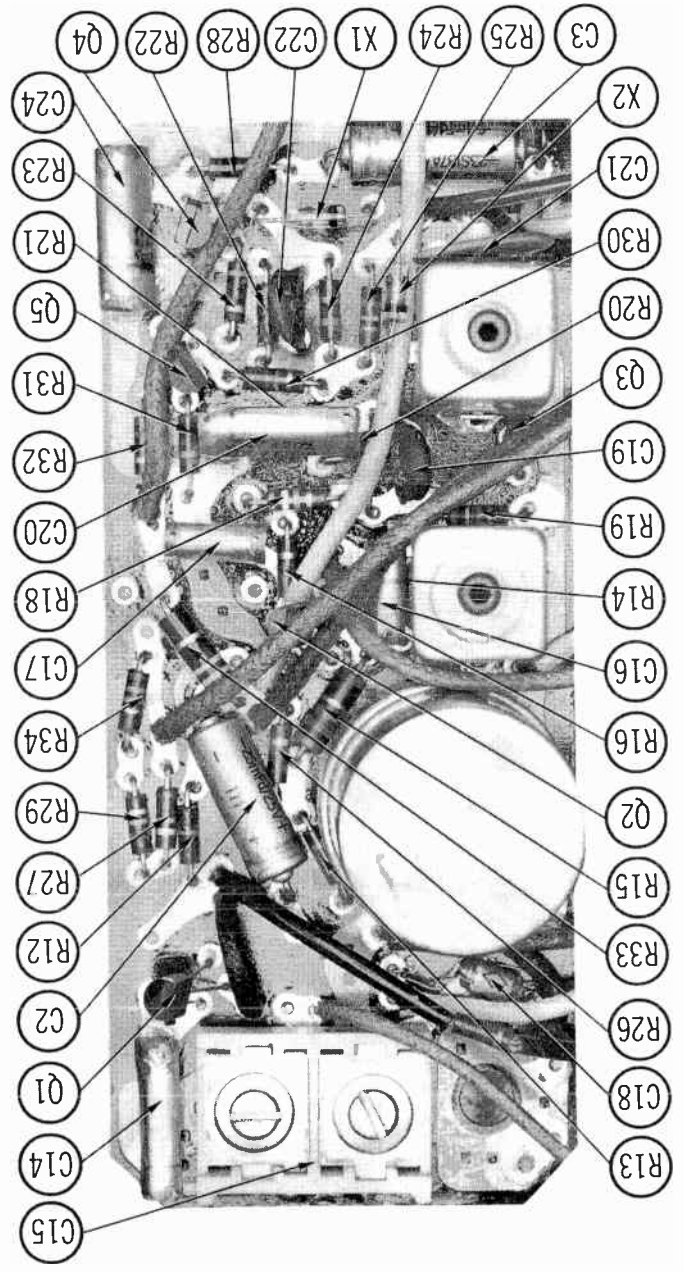
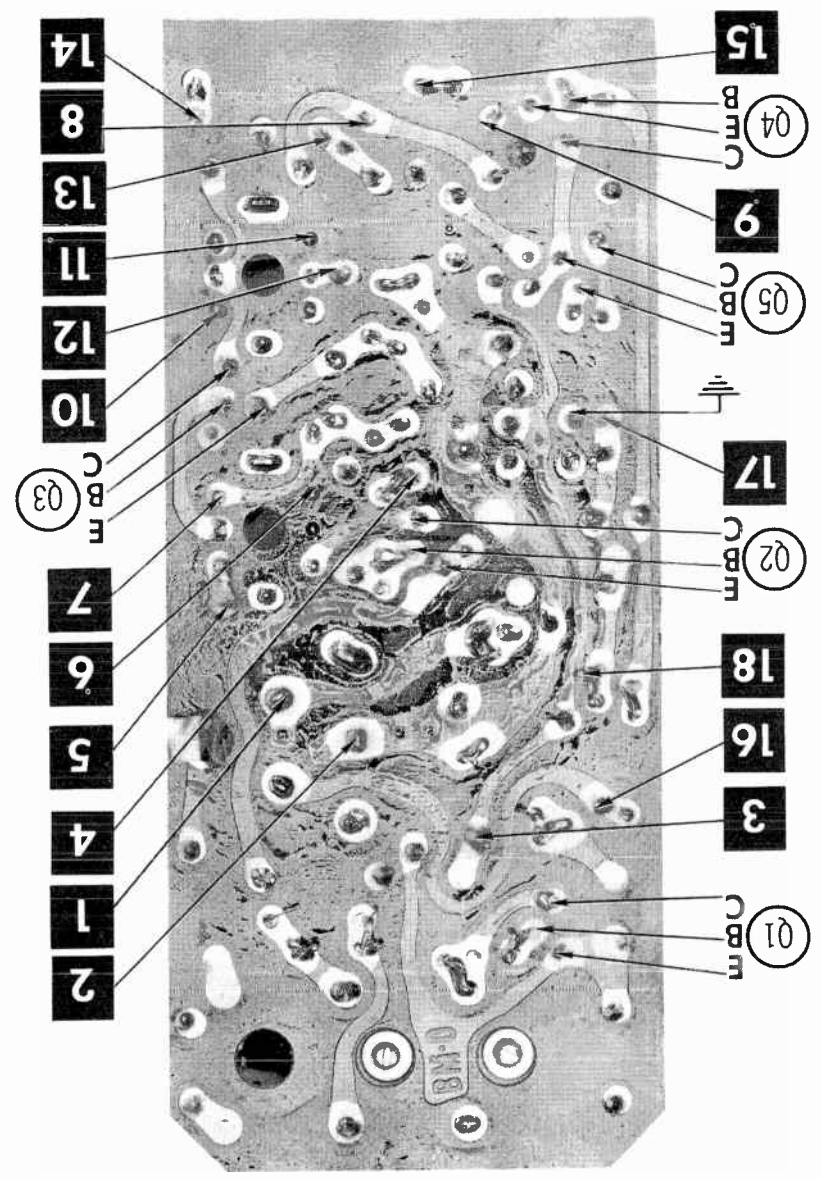
A PHOTOFACT STANDARD NOTATION SCHEMATIC
with CIRCUITRACE™

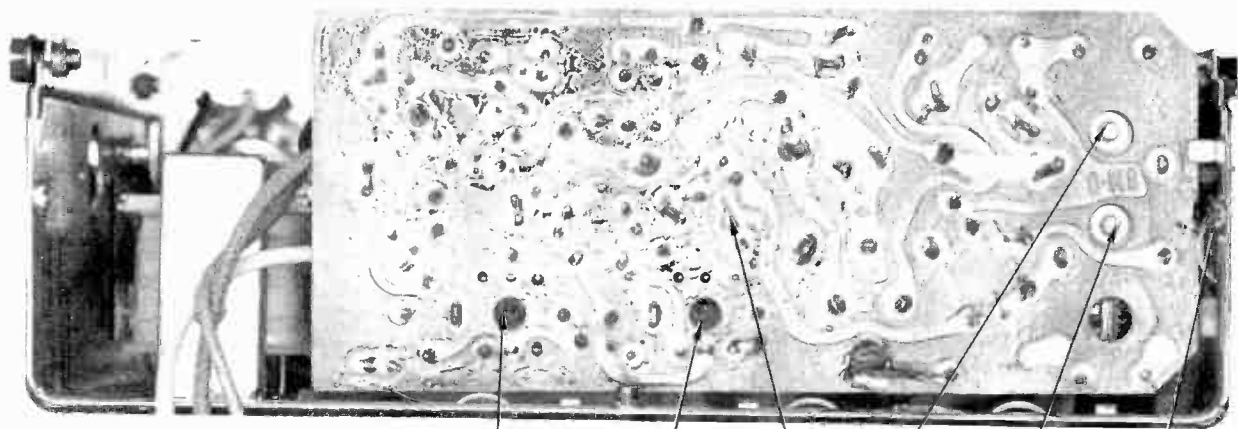
© Howard W. Sams & Co., Inc. 1966

MOTOROLA MODEL TM296M

MOTOROLA MODEL TM296M

A Howard W. Sams CIRCUITRACE Photo





A1 A2
262KC

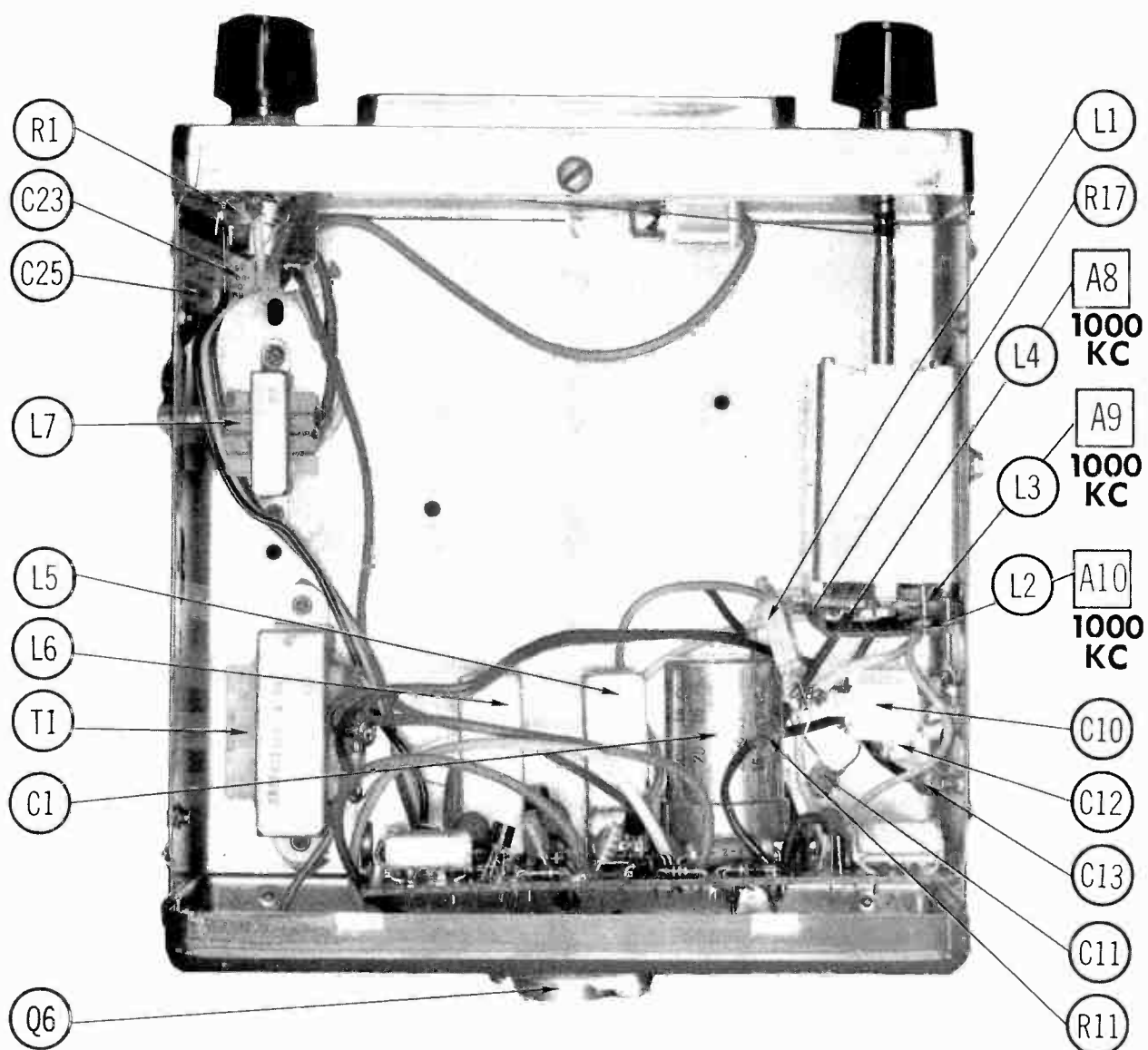
A3 A4
262KC

A

A6
1615KC

A5
1615KC

A7
1615KC



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	MOTOROLA PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1	829A	RF Amp.				PNP	48S134831
Q2	829B	Converter				PNP	48S134831
Q3	829C	IF Amp.				PNP	48S134831
Q4	54D	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134811
Q5	54C	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134910
Q6	SP1556-1	Output	DS-520	GE-3	SK-3009	PNP *	48S134758

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		48C134587 (1N139)	1N295	1N295			
X2		48C134587 (1N139)	1N295	1N295			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	500	16	23S184A01	PWH3-00-94.7			PFP300.18	PCL-3026.17
B	500	16						
C	25	16						
C2	25	25	23S187A02	CRE612A	NLW25-25	MT1-11	TT25X25	TE-1207
C3	6.4	40	23S187A01	CRE755A	NLW6-50	MT1-5	TT50X6	TE-1303.1

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.
C10	90		#21A591682						
C11	12	NPO			TCZ-12	CZ601CG120J	CCTO-120	CNO412	10TCC-Q12
C12	20-120		#20B64154A01				S463		
C13	.002			DI-2000	DM-202	JBX601YP202K	CCD-202	GP220	5GAB-D22
C14	.047	100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C15A	20-120		#20C64618A02						
B	65-200								
C16	.0047	100V		DBE6D47	CPR-4700J	WMF1S47	6DP-1-472	PVC6247	6PS-D47
C17	.01	100V		DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C18	390			DI-390	DD-391		CCD-391	GP339	10TS-T39
C19	.01			TTD-01	CK-105	HOY101ZV103P	CCD-103	TA110	TG-S10
C20	.047	100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C21	180	N750			TCN-180			CN7318	10TCU-T18
C22	.01			TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C23	.005			TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50
C24	.082	100V		DBE6S82		DPMS6S82	6DP-4-823	PVC6168	6PS-S82
C25			#64A530177						

Motorola Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CYS-IRC PART No.	MALLORY PART No.
R1	Volume/Switch	10K	18C64158A01	F2-10K T, SFS212. KR4		B13-116, TM8 T, 76-1	UA14A T, SD3500, US41 or (U18 T, DS37, US26)

T Use spring mounting clips.

MOTOROLA MODEL TM296M

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MOTOROLA PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Choke (1.8uh)	24B64785A03	19-1001	BC-562	74F186AP	T810
L2	Antenna	①				
L3	RF	①				
L4	Oscillator	①				
L5	Input IF	24C64327A03				
L6	Output IF	24C64327A02				

① Part of M1 or (Coil Assembly Part #1V41800A12).

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L7	700ma	.4Ω	5MH	25C64172A01	C-4095	TC-2	TR-157	TY17XT	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	24Ω Tap @ 8Ω		25D64129A06					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MOTOROLA PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4"	PM	8Ω	50C64120A01	C4T8	4A1Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGA	5A	65R122345	9K543179	301005	155004	AGA 5	HAF

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M1	Tuner Coil Assembly	77D40632A04 1V41800A12	MT-510

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	13D64367A03	Knob-Tuning or Volume	36B543382
Dial Scale	34B64358A02	Dial Pointer	52A64360A01

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
	8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



PHOTOFACT[®] with

CIRCUITRACE[®]

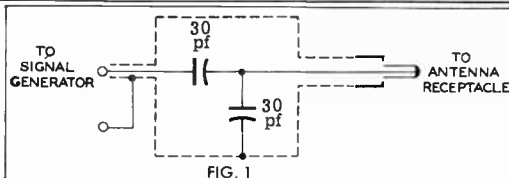
TRADE NAME : Motorola Models TM316M, TM336M
 SUPPLIER : For Current Address, See Master Index.
 TYPE SET : 6 Transistor AM Receiver
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .620 Amp. @ 12.6 Volts DC
 TUNING RANGE: BROADCAST 540-1615KC



ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

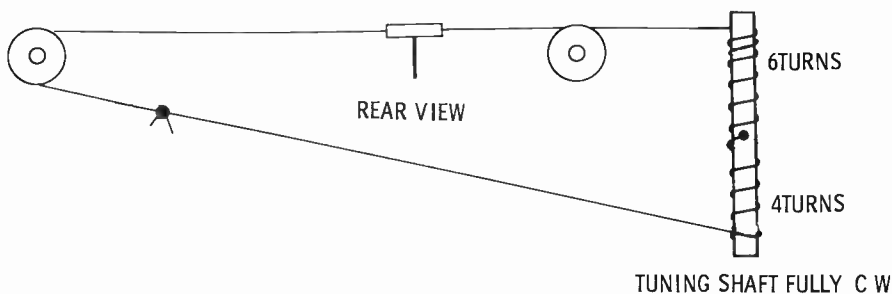
A1 thru A4. GENERAL CEMENT: 9296, 9297, 9300
 WALSCO: 2510, 2546, 2547
 A5 thru A8. GENERAL CEMENT: 8290, 8868, 9087
 WALSCO: 2525, 2528, 2587



	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mf to point A, low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7, A8	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A9, A10, A11, A12) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1600KC	Tune to Signal.	Output Meter across voice coil.	A9, A10, A11, A12	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A8 for maximum output.
 Antenna Adjustment (A8) located on right rear of radio next to Antenna Input.

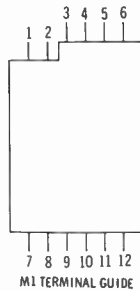
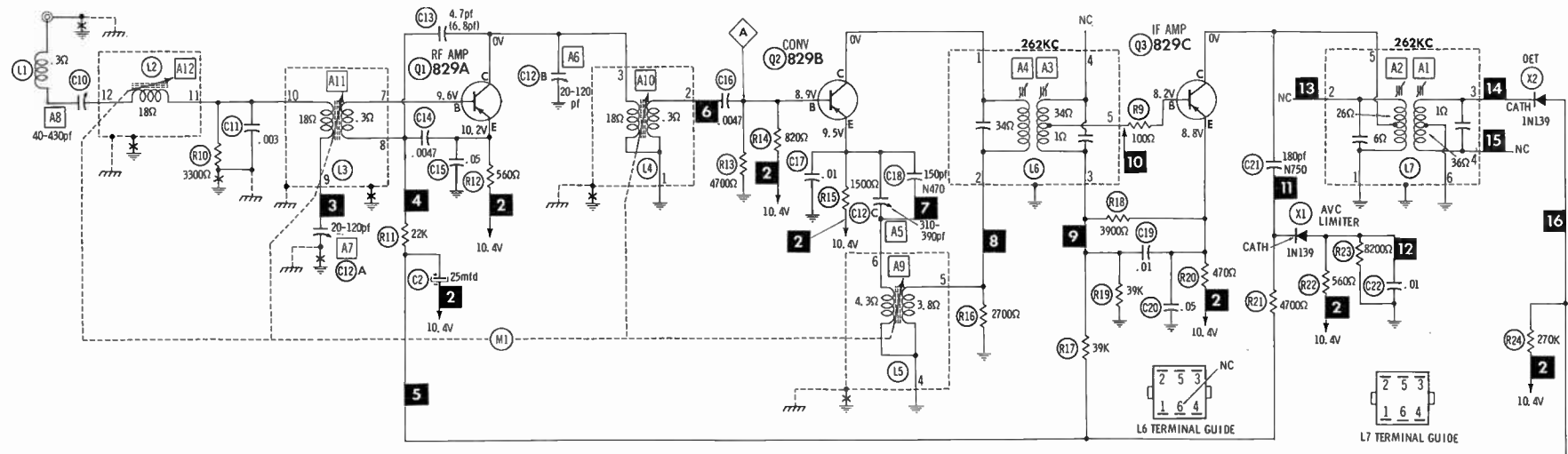
DIAL CORD STRINGING



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD762
 World Radio History

MOTOROLA MODELS TM316M, TM336M

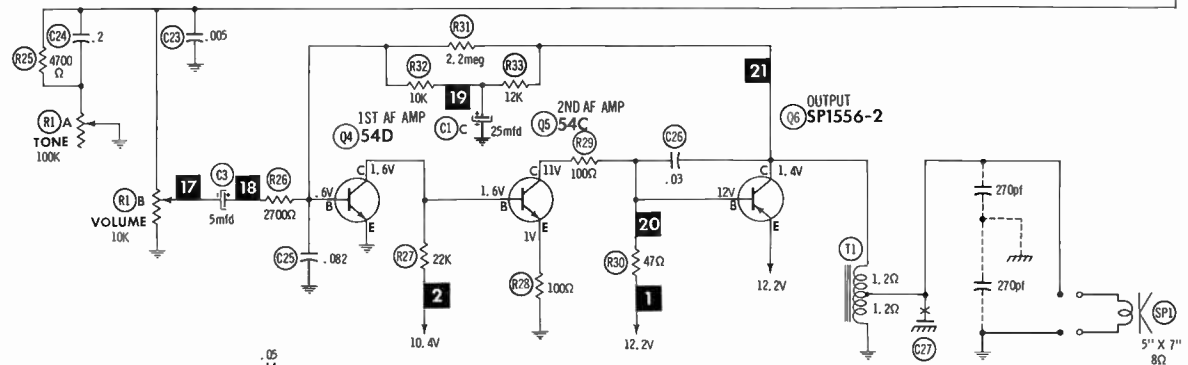


Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

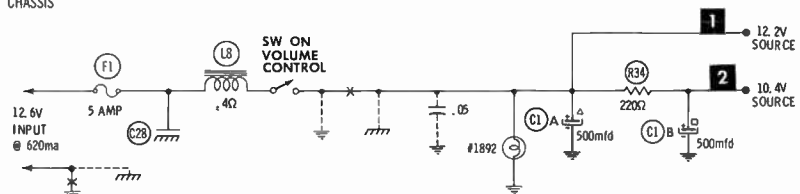
1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

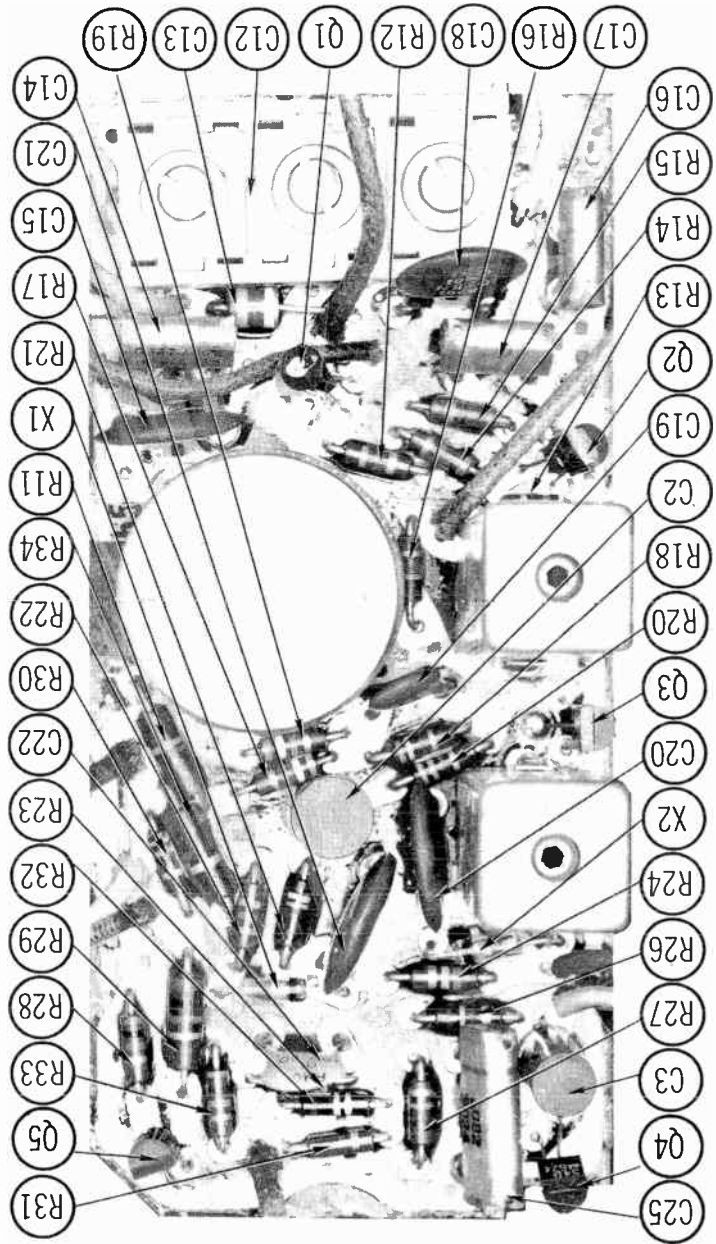
A PHOTOFAC STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**
© Howard W. Sams & Co., Inc. 1966

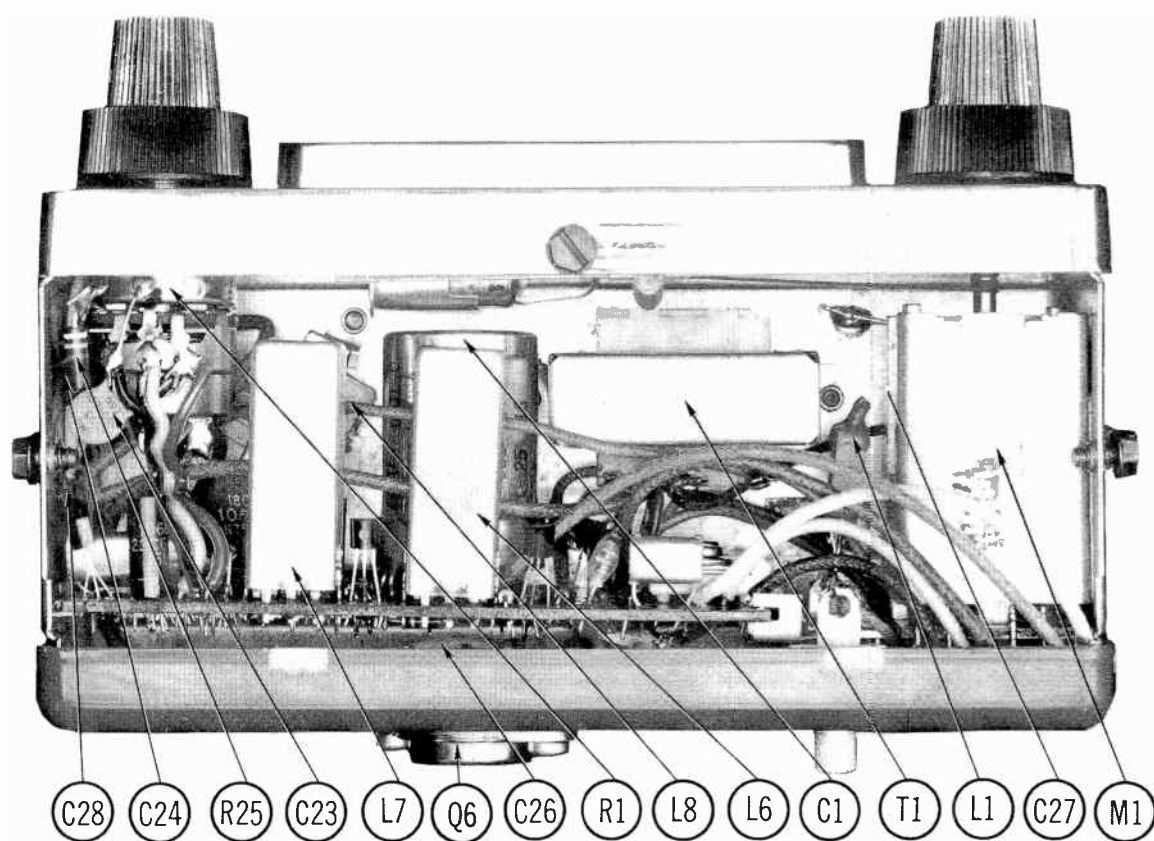
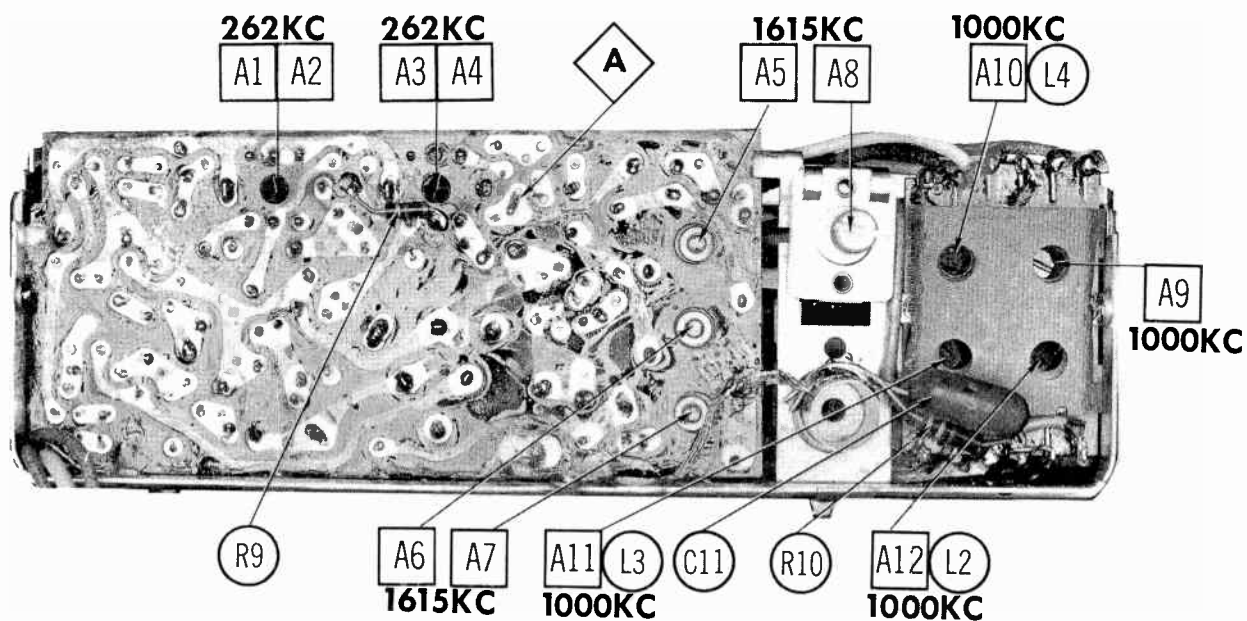
MOTOROLA MODELS TM316M, TM336M



ALTERNATE CIRCUITS (SHOWN IN BROKEN LINE) USED IN MODEL TM336M ONLY.







PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	MOTOROLA PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1	829A	RF Amp.				PNP	48S134831
Q2	829B	Converter				PNP	48S134831
Q3	829C	IF Amp.				PNP	48S134831
Q4	54D	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134811
Q5	54C	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134810
Q6	SP15562	Output	DS-520	GE-3	SK-3009	PNP *	48S134759

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKIS TARZIAN PART No.
X1		1N139	1N295	1N295			
X2		1N139	1N295	1N295			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	500	16	23S184A01	PWH3-00-94.7			PFP300, 18	PCL-3026, 17
B	500	16						
C	25	16						
C2	25	3	23C64612A02	BCD3025	NLW25-3	MT1-13	PET1960	VL-1041
C3	5	3	23C64612A01	BCD3005	NLW5-15	MT1-3	PET1210	VL-1035

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.
C10	40-430	#20B84871A01				S466		
C11	.003 200V		DBE6D3	CPR-3000J	DPMS6D33	6DP-1-302	PVC623	6PS-D30
C12A	20-120	#20C64352A01						
B	20-120							
C	310-390							
C13	4.7	(6.8)Δ	NPO-DI4.7	DTZ-4R7		CCTO-4R7	CN0547	10TCC-V47
C14	.0047 100V		DBE6D47	CPR-4700J	WMF1S47	6DP-1-472	PVC6247	6PS-D47
C15	.05		TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50
C16	.0047 200V		DBE6D47	CPR-4700J	WMF1S47	6DP-1-472	PVC6247	6PS-D47
C17	.01 100V		DBE6S1	CPR-10000J	DMF6S1	6DP-1-103	PVC611	6PS-S10
C18	150 N470					*	*	10TCT-T15
C19	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C20	.05		TTD-05	CK-503	HCZ3R0XR503P	*	TA150	TG-S50
C21	180 N750						CN7318	10TCU-T18
C22	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C23	.005		TTD-005	CK-502	HCZ3R0XR502P	CCD-502	TA250	TG-D50
C24	.2			UK20-204			MAG25022	HY-325
C25	.082 100V		DBE6S82		WMF1S82	6DP-4-823		6PS-S82
C26	.03		TTD-03	CK-303		CCD-303	GP130	TG-S30
C27		#64S10181A02 ①						
C28		#64S10181A01						

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

Motorola Part Number. Δ Used in Model TM336M. ① Not used in Model TM336M.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	100K	18C64734A06	F2-100K, R1-10K, FFS103, RFS110, BA012, CA005, KR-4		†QJ-1979A	
B	Volume/Switch	10K					

① When ordering from Motorola, use Part #18C64734A02.

† "CONCENTRIKIT" Equivalent: K8 Kit, with Base Elements and Shafts: B13-128, P22-027 (Panel)
B11-116, R16-106 (Rear)
S45 (Bushing)
76-1 (Switch)

"SNAPTROL" Equivalent: BU15A①, CF52, CR5, SF4, SR40, GC.

① Alter bushing to meet requirements.

MOTOROLA MODELS TM316M, TM336M

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MOTOROLA PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Choke (1.8uh)	24B64785A03	19-1001	BC-562	74F186AP	T810
L2	1st Antenna	①				
L3	2nd Antenna	①				
L4	RF	①				
L5	Oscillator	①				
L6	Input IF	24C64327A03				
L7	Output IF	24C64327A02				

① Part of M1 or (Coil Assembly Part #IV43800A23).

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L8	620ma	.4Ω	5MH	25C64172A01	C-4095	TC-2	TR-157	TY17XT	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	12Ω Tap	@ 4Ω	25D64129A06					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MOTOROLA PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5" x 7"	PM	8Ω	50C64137A02 (50C64137A01)	P5X7V8	57A2MT	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGA	5Amp.	65S122345	9K543179	301005	155004A	AGA 5	HAF

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M1	Tuner Coil Assembly	77D40987A03 1V43800A23	MT-571

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	13D64367A04	Knob-Tone	36K544812
Dial Scale	34B64358A01	Knob-Dummy	36K544813
Knob-Tuning or Volume	36B544598	Dial Pointer	1V64954A07

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire Use BELDEN No. 8885
Bonding Strap Use BELDEN No. 8861 (3/8 In.) or 8870 (3/4 In.)



PHOTOFACT[®] with

CIRCUITRACE[®]

TRADE NAME : Motorola Model TM326M
 SUPPLIER : For Current Address, See Annual Index.
 TYPE SET : 6 Transistor AM Receiver
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .6 Amp. @ 12.6 Volts DC
 TUNING RANGE : BROADCAST 540-1615KC



ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

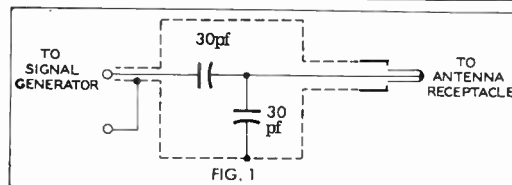
A1 thru A4 GENERAL CEMENT #9296, 9297, 9300 ... WALSCO #2510, 2546, 2547
 A5 thru A8 GENERAL CEMENT #8290, 8868, 9087 ... WALSCO #2525, 2528, 2587

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
High side thru .1mfd to point  , low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7, A8	"

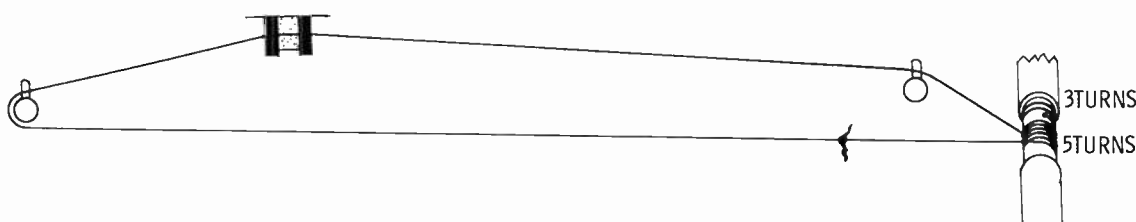
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.

Thru dummy (Fig. 1) to antenna receptacle.	1080KC	Tune to Signal.	Output Meter across voice coil.	A8, A9, A10, A11, A12	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
--	--------	-----------------	---------------------------------	-----------------------------	---

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A8 for maximum output.



DIAL CORD STRINGING

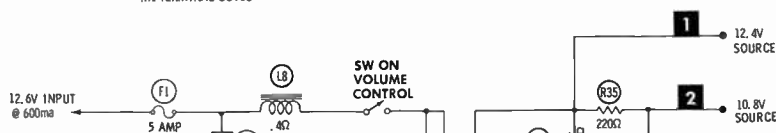
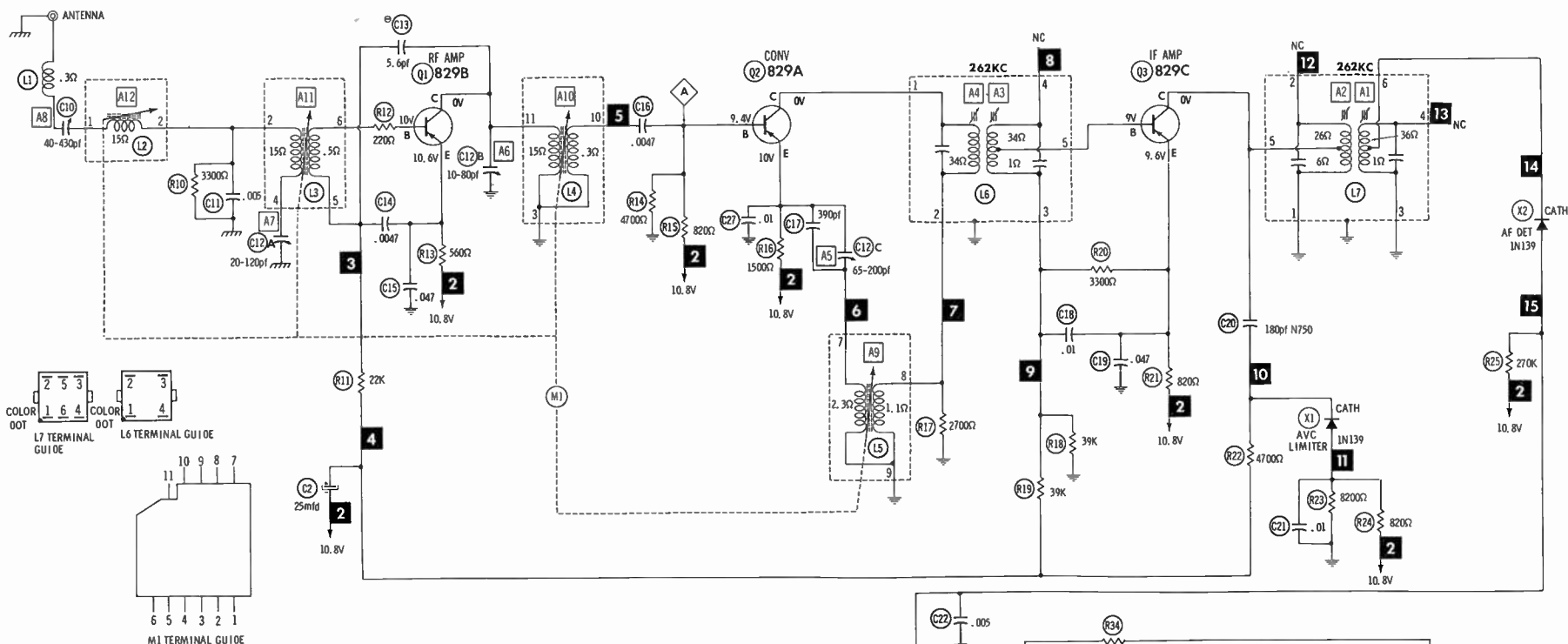


HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD813

World Radio History

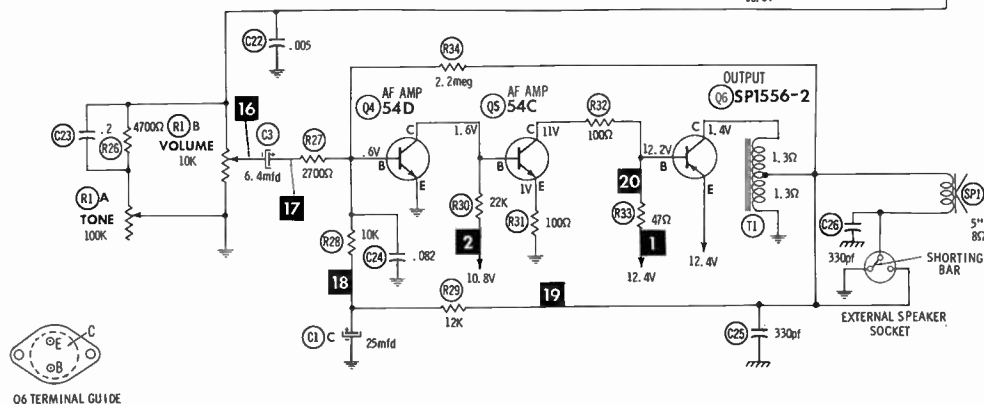
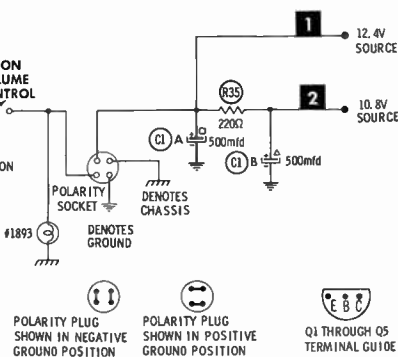
MOTOROLA MODEL TM326M



VOLTAGES TAKEN WITH POLARITY PLUG IN NEGATIVE GROUND POSITION

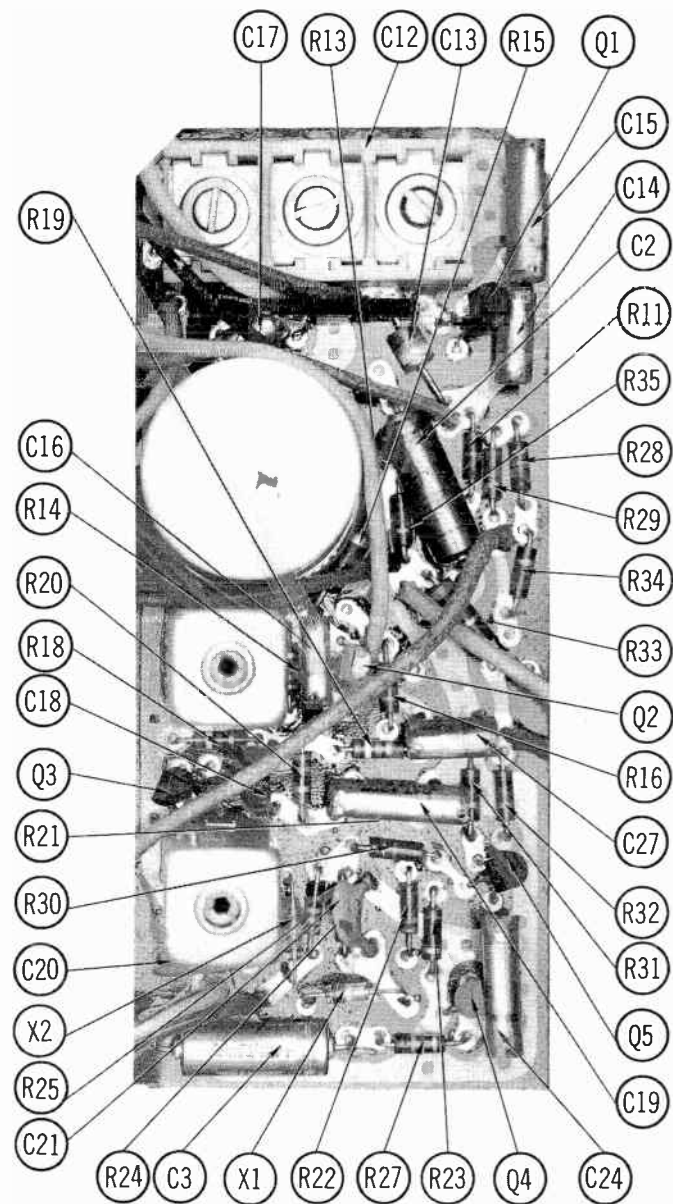
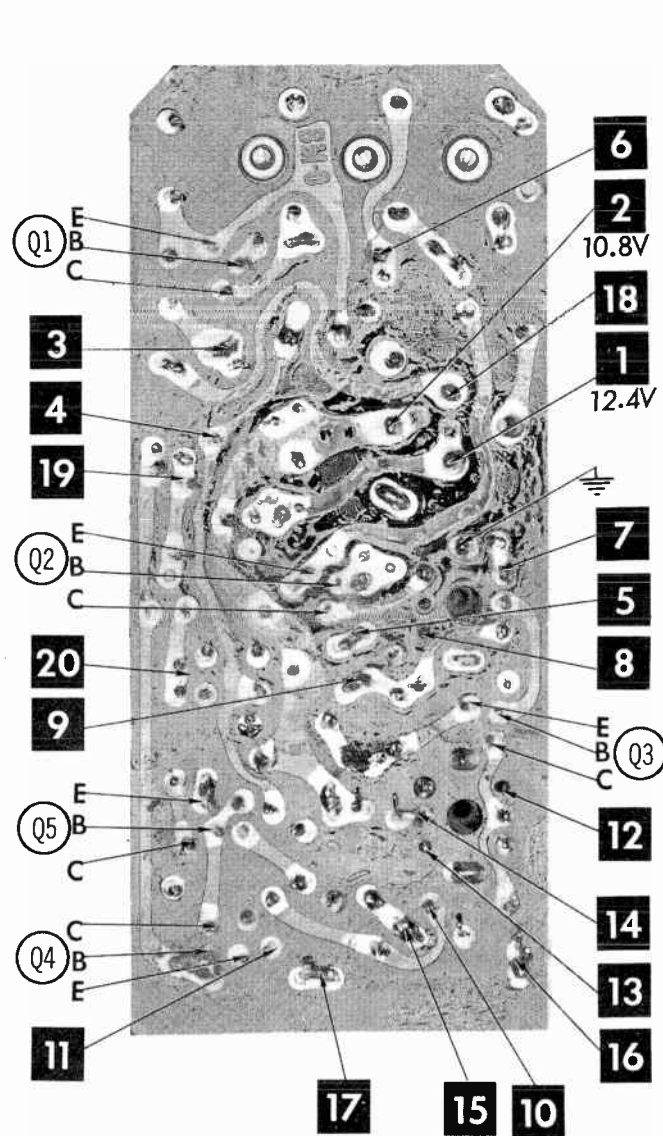
1. See parts list for alternate value or application.
 2. Voltage measurements taken with vacuum tube voltmeter.
 3. All controls set for normal operation, no signal applied.
 3. Measured values are from socket pin or terminal to common ground.
 4. All terminals viewed from bottom unless otherwise designated.
 5. Numbers assigned to terminals may not be found on the unit.
 6. Supply voltage maintained at rated value for voltage readings.
 7. Resistance measurements not given because of the wide variation in internal resistance of transistor.
- Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

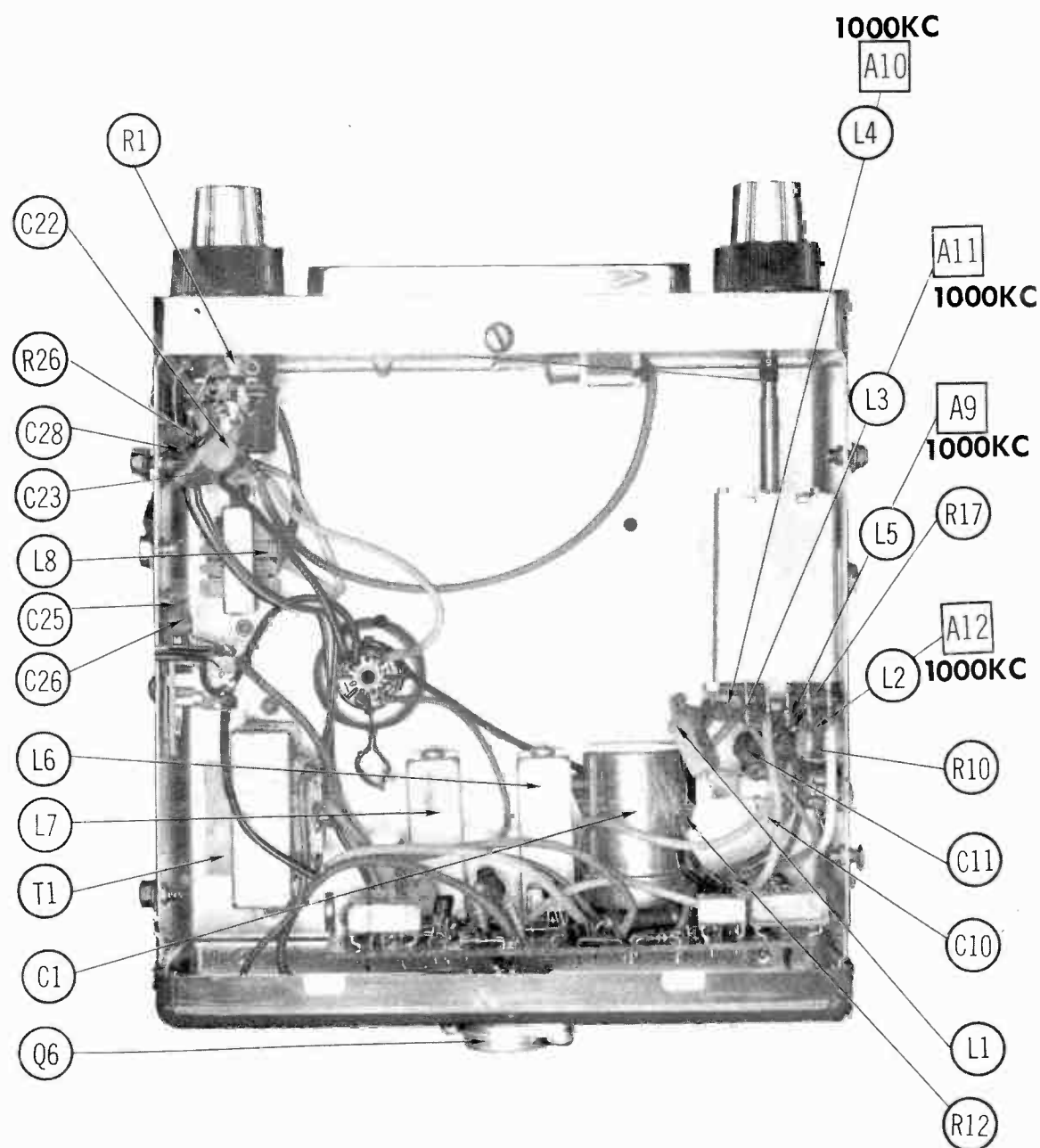
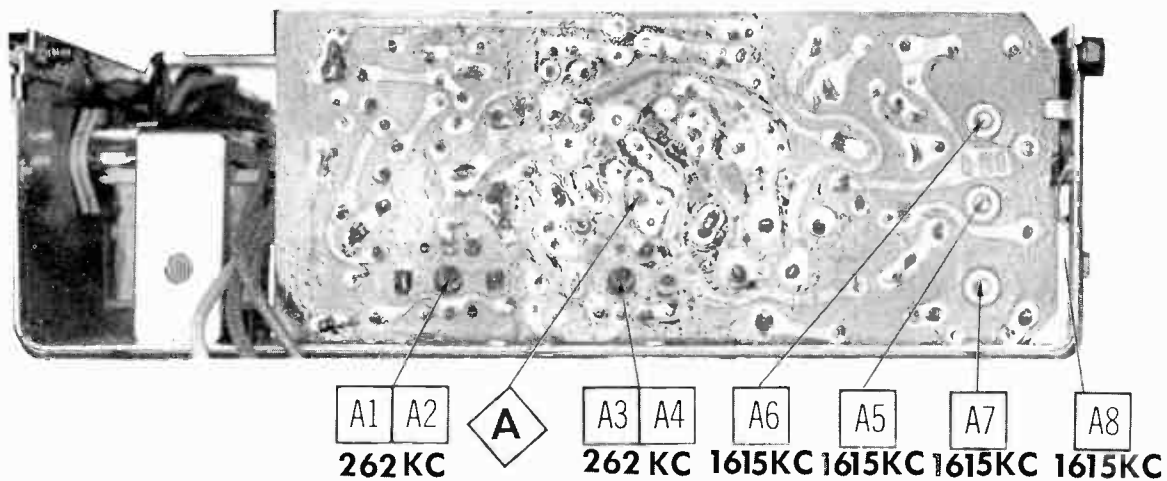
Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.



A PHOTOFAC[®] STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE[™]**

© Howard W. Sams & Co., Inc. 1966





PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	MOTOROLA PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1	829B	RF Amp.				PNP	48S134831
Q2	829A	Converter				PNP	48S134831
Q3	829C	IF Amp.				PNP	48S134831
Q4	54D	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134811
Q5	54C	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134810
Q6	SP15562	Output	DS-520	GE-3	SK-3009	PNP *	48S134759

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKIS TARZIAN PART No.
X1		48C134587 (1N139)	1N295	1N295			
X2		48C134587 (1N139)	1N295	1N295			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	500	16	23S184A01	PWH3-00-94.7			PFP300.18	PCL-3026.17
B	500	16						
C	25	18						
C2	25	25	23S187A02	CRE612A	NLW25-25	MT1-11	TT25X25	TE-1207
C3	6.4	40	23S187A01	CRE755A	NLW6-50	MT1-5	TT50X6	TE-1303.1

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.	
C10	40-430	#20B64616A02				S466			
C11	.005 100V		DBE8D5	CPR-5000J	DPMS8D5	6DP-1-502	PVC825	6PS-D50	
C12A	20-120	#20C64352A02							
B	10-80								
C	65-200								
C13	5.6		NPO-DI5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50	
C14	.0047 100V		DBE8D47	CPR-4700J	WMF2D47	6DP-1-473	PVC4247	6PS-D47	
C15	.047 100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47	
C16	.0047 100V		DBE8D47	CPR-4700J	WMF2D47	6DP-1-473	PVC4247	6PS-D47	
C17	390		DI-390	DD-391		CCD-391	GP339	10TS-T39	
C18	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10	
C19	.047 100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47	
C20	180 N750			TCN-180			CN7318	10TCU-T18	
C21	.01		TTD-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10	
C22	.005		TTD-005	CK-502	HOY101ZV502P	CCD-502	TA250	TG-D50	
C23	.2			UK20-204			MAG25022	HY-325	
C24	.082 100V		DBE8S82		DPMS8S82	6DP-4-823	PVC6168	6PS-S82	
C25	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33	
C26	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33	
C27	.01 100V		DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10	
C28		#64A530177							

Motorola Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
RIA	Tone	100K	18C64734A02	F2-100K, R1-10K		†QJ-1628A	■UE4434S
B	Volume/Switch	10K	FFS102, RFS109, BA010, CA005, KR-4				

† "CONCENTRIKIT" Equivalent: K8 Kit, with Base Elements and Shafts: B13-128, P17-024 (Panel)
B11-116, R18-106 (Rear)
S44 (Bushing)
76-1 (Switch)

"SNAPTROL" Equivalent: BU6①, CF52, CR5, SF3, SR39, GC.

■ "STA-LOC" Equivalent: FF15A, RU14L, OS875A, IS1312, US41.

① Alter bushing to meet requirements.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MOTOROLA PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Choke (1.8uh)	24B64785A03				
L2	1st Antenna	①				
L3	2nd Antenna	①				
L4	RF	①				
L5	Oscillator	①				
L6	Input IF	24C64327A03				
L7	Output IF	24C64327A02				

① Part of M1 or (Coil Assembly Part #1V43800A12).

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L8	600ma	.4Ω	5MH	25C64172A01	C-4095	TC-2	TR-157	TY17XT	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	24Ω Tap @	8Ω	25D64129A06					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MOTOROLA PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5"	PM	8Ω	50C64119A01		5A05Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGA	5A	65R122345	9K543179	301005	155004A	AGA 5	HAF

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M1	Tuner Coil Assembly	77D40898A05 1V43800A12	MT-572

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	13D64387A04	Knob-Tone	36K544812
Dial Scale	34B64358A01	Knob-Dummy	36K544813
Knob-Tuning or Volume	36K544598	Dial Pointer	1V64954A07

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



PHOTOFACT[®]

TRADE NAME :

SUPPLIER :

TYPE SET :

POWER SUPPLY :

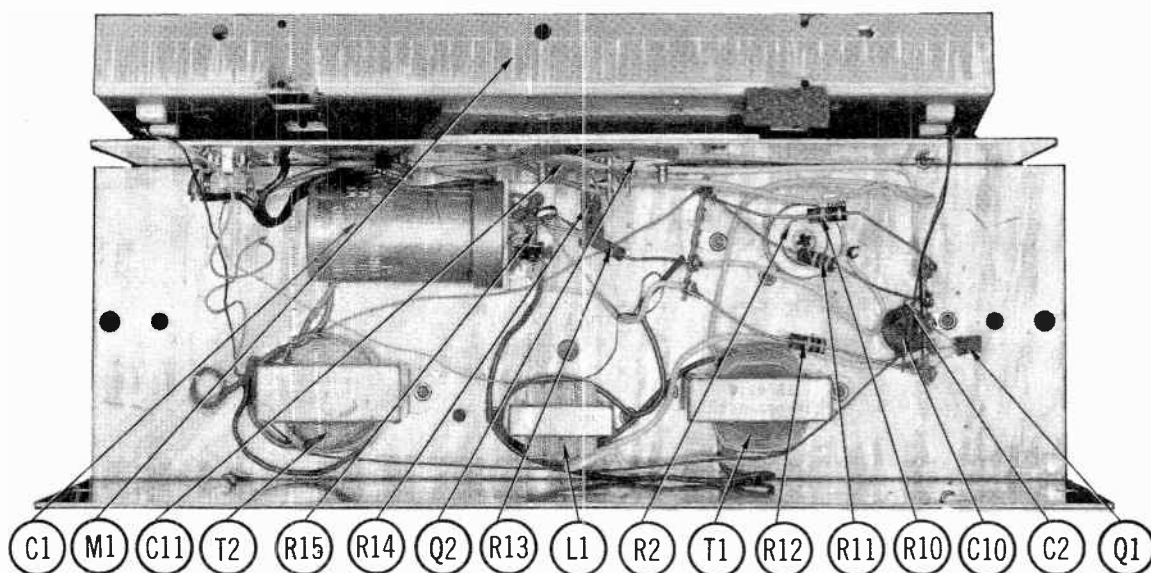
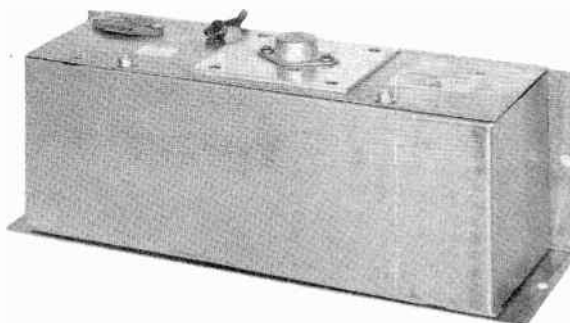
RATING :

Ranger Models RR-10R (5-004),
RR-11R (5-014), RR-12R (5-016).
Tenna Models RU-111TC (5-004),
RU-112TC (5-014), RU-113TC (5-016)
For Current Address, See Annual Index.

2 Transistor Reverberation Unit

12 Volt Storage Battery

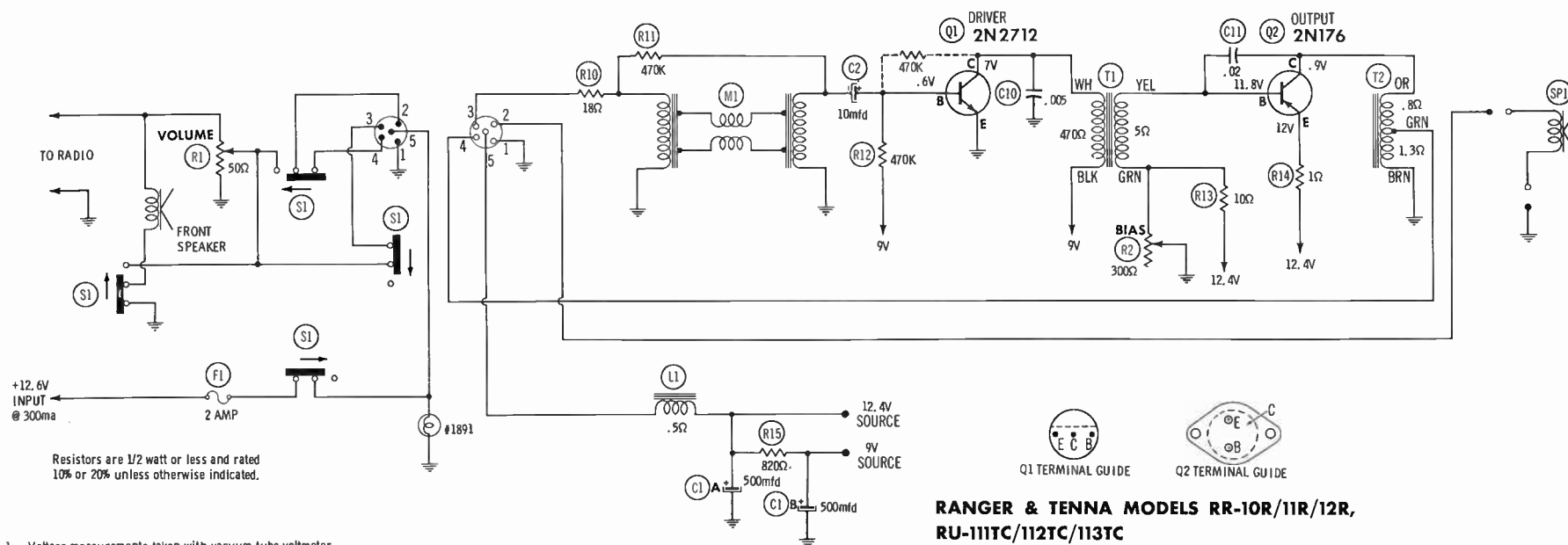
.3 Amp. @ 12.6 Volts DC



RANGER & TENNA MODELS RR-10R/11R/12R, RU-111TC/112TC/113TC

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RZ700



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8881 (3/8 in.) or 8870 (3/4 in.)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	TENNA PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1	2N2712	Driver	DS-88	GE-10	SK-3020	NPN	162002-090
Q2	2N176	Output	DS-520	GE-3	SK-3009	PNP *	162002-033

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.
Check bias adjustment.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		TENNA PART No.	REPLACEMENT DATA				
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	500	16	111000-080	PWH2-02-40	BPC010	XC2-43.05	FP200.6	TVL-2157
B	500	16						
C2	10	15	111002-001	CRE457A	NLW10-15	MT1-5	TT15X10	TE-1155

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.
C10	.005		DI-5000	DD-502	JBT601YPS02K	CCD-502	GP250	10TS-D50
C11	.02		BPD-02	DD-203	BYT601ZU203Z	CCD-203	GP120	10TS-S20

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	TENNA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L1	300ma	.5Ω	3MH	161000-146	C-4124	TC-1	TR-159	TY16XT	

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			TENNA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume	50Ω 2W	145005-016				
R2	Bias	300Ω 2W	145000-501	V-300	U39-300	110-300	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	TENNA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	8	1	161005-005					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	TENNA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	16Ω Tap	@ 8Ω	161005-006				TR-184	

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				TENNA PART No.	QUAM PART No.	
SP1	6" x 9"	PM	8Ω	155009-147	89A2Z8	Models RU-111TC, RR-10R
	6"	PM	8Ω	155009-152		Models RU-112TC, RR-11R

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGA	2 Amp	128000-013	120000-140①	301002	155004A	AGA 2	HDH

① Includes "A" Lead.

MISCELLANEOUS

ITEM No.	PART NAME	TENNA PART No.	NOTES
M1	Reverb Unit	163004-013	
S1	Switch Assembly	175005-150	On/Off-Front and Rear Seat Speaker.

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

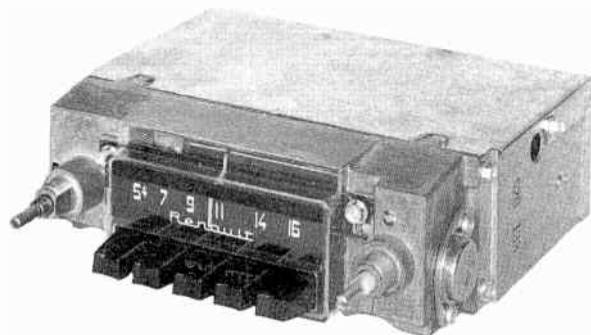
ITEM	PART No.	ITEM	PART No.
Knob, Volume	134004-015		

RANGER & TENNA MODELS RR-10R/11R/12R, RU-111TC/112TC/113TC



PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Renault Model 5SMXD (55566)
(1966 Dauphine, Caravelle, R-8)

SUPPLIER : For Current Address, See Annual Index.

TYPE SET : 6 Transistor AM Receiver

POWER SUPPLY : 12 Volt Storage Battery

RATING : .620 Amp. @ 12.6 Volts DC

TUNING RANGE: BROADCAST 540-1615KC

RENAULT MODEL 5SMXD

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
Use only enough generator output to provide a usable indication.
Suggested Alignment Tools:

A1 thru A4.

GENERAL CEMENT: 9296, 9297, 9300
WALSCO: 2510, 2546, 2547

A5, A6, A7.

GENERAL CEMENT: 8290, 8868, 9087
WALSCO: 2525, 2528, 2587

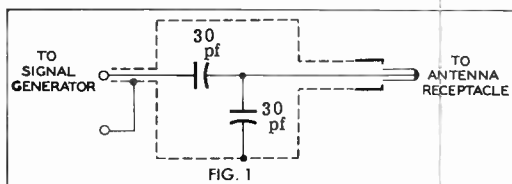
PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point A, low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coil.	A8, A9, A10	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A7 for maximum output.

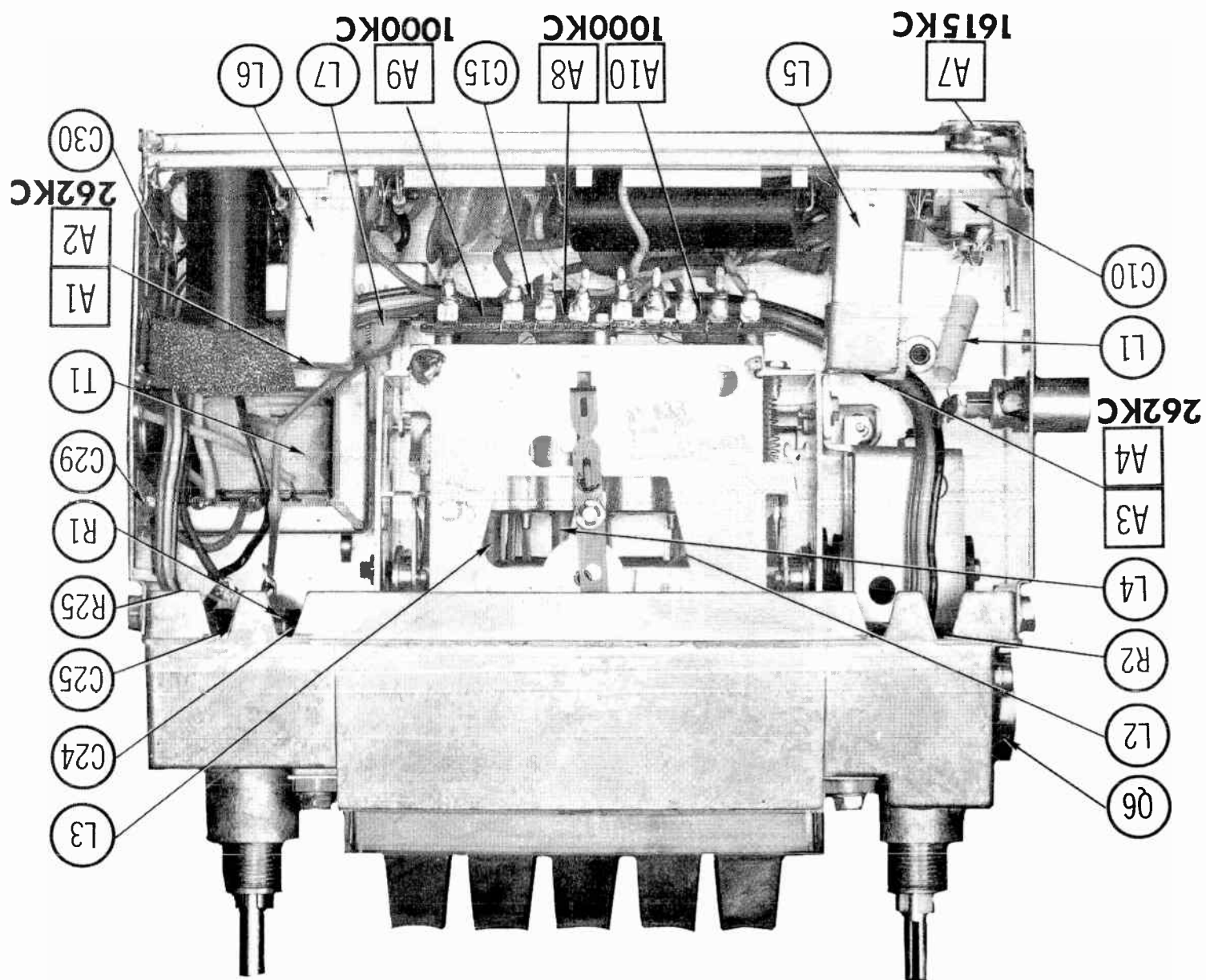
Antenna Adjustment (A7) located on right side, rear.

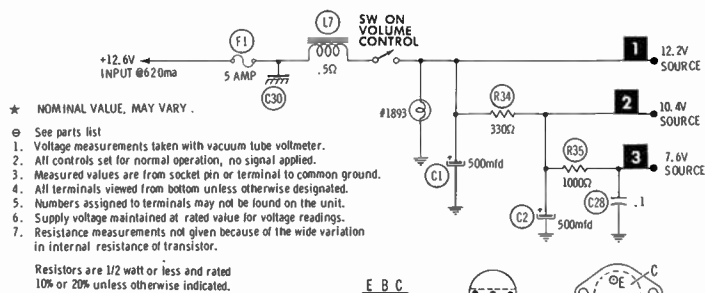


HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD816

World Radio History





Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

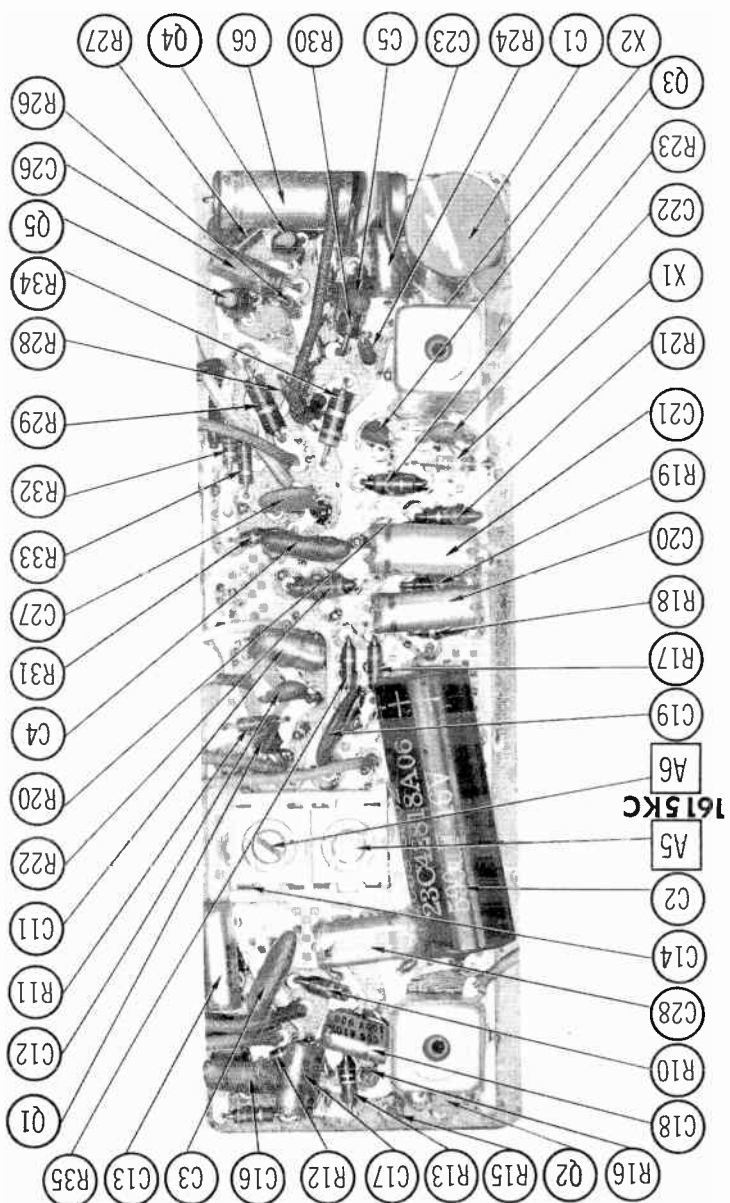
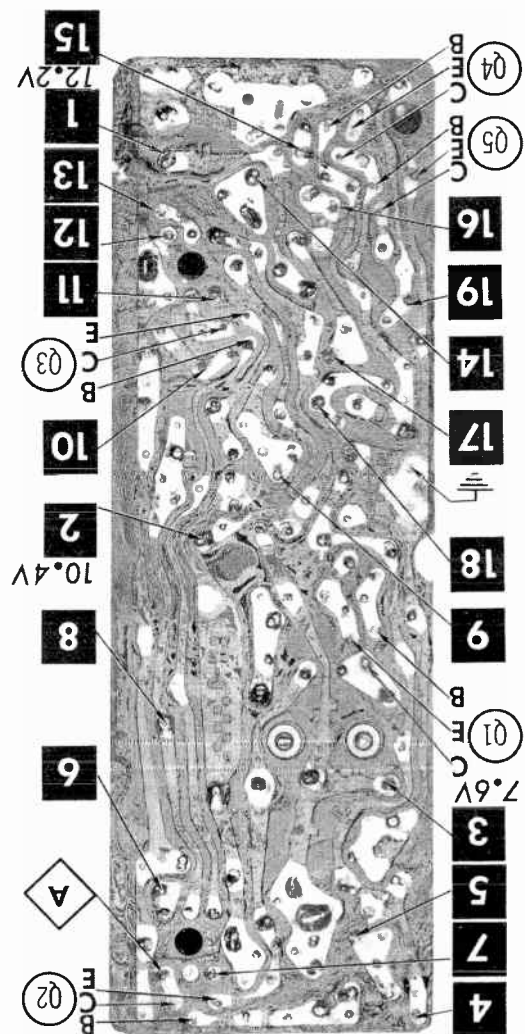




Q1, Q2, & Q3 TERMINAL GUIDE Q4 & Q5 TERMINAL GUIDE Q6 TERMINAL GUIDE

© Howard W. Sams & Co., Inc. 1966





RENAULT MODEL 55MXD

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	MOTOROLA PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1	25B	RF Amp.	DS-75	GE-10	SK-3018	NPN	48S134805
Q2	25A	Converter	DS-75	GE-10	SK-3018	NPN	48S134804
Q3	24B	IF Amp.	DS-75	GE-10	SK-3018	NPN	48S134807
Q4	M54	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134686
Q5	M54	AF Amp.	DS-66	GE-10	SK-3020	NPN	48S134686
Q6	2N176	Output	DS-520	GE-3	SK-3009	PNP ♦	48S134747

♦ When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1N139 (48C134587)	1N295	1N295			
X2		1N139 (48C134587)	1N295	1N295			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	500	16	23C42818A05	BCD15500	BR500-15	QT1-30	TC1505	TL-1166
C2	500	16	23C42818A06	BCD15500	BR500-15	QT1-30	TC1505	TL-1166
C3	10	25	23C41928A17 (23D65282A21) ①	CRE607A	NLW10-25	MT1-5	TT25X10	TE-1204
C4	10	25	23C41928A17 (23D65282A21) ①	CRE607A	NLW10-25	MT1-5	TT25X10	TE-1204
C5	.5	6	23C43280A04	CRE300A	NLW1-50	MT1-1	TT6X1	TE-1080
C6	100	16	23C41928A01	CRE623A	NLW100-25	MT1-20	TT25X100	TL-1162

① When ordering from Motorola, use this Part Number.

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C10	125-350	#20B43088A02				428		
C11	.005 100V		DBE6D5	CPR-5000J	DPMS6D5	1DP-1-502	PVC625	6PS-D50
C12	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C13	.1 100V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C14A	325-400	#20C40481A10						
C15	180 N750							
C16	.01 100V		DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	CN7318	10TCU-T18
C17	.005 100V		DBE6D5	CPR-5000J	DPMS6D5	1DP-1-502	PVC211	2TM-S10
C18	.005 100V		DBE6D5	CPR-5000J	DPMS6D5	1DP-1-502	PVC825	6PS-D50
C19	150 N470					*	PVC625	6PS-D50
C20	.15 100V		DBE4P15		DMF4P15	4DP-4-154	PVC6015	10TCT-T15
C21	.22 100V		DBE4P22		DMF4P22	4DP-5-224	PVC4022	4PS-P15
C22	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	4PS-P22
C23	.01 100V		DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	10TS-T33
C24	.47			UK10-404			PVC211	2TM-S10
C25	.47			UK10-404			MAG12047	HY-330
C26	.0015 100V		DBE6D15	CPR-1500J	DPMS6D15	6DP-1-152	MAG12047	HY-330
C27	22 N150					*	PVC6215	6PS-D15
C28	.1 100V		DBE2P1		DMF2P1	2DP-3-104	*	10TCP-Q22
C29		#64A41668A07					PVC201	2PS-P10
C30		#64K563410						

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

Motorola Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
RIA	Tone	20K	18D42832A07	F1-25K ①			
B	Volume/Switch	10K Tap @ 2200Ω		R14-7500, FFS106 RFS114, KR-4		†QJ-2287A	FA24L ①, RU14T53 OS1375, IS1875, US41

① Use original spring mounting clips.

† "CONCENTRIKIT" Equivalent: K8 ①, Kit, with Base Elements and Shafts: B11-119, P23-112 (Panel)
B19-116X, R26-124 (Rear)
76-1 (Switch)

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		MOTOROLA PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Choke (1.5uh)	24C40788A04	19-1001	BC-562	4804	T856
L2	Antenna	①				
L3	RF	①				
L4	Oscillator	①				
L5	Input IF	24D42517A13			8009	
L6	Output IF	24D42517A14			8010	

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L7	620ma	.5Ω	11MH	25D43221A01	C-4095	TC-2	TR-154	TY17XT	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			MOTOROLA PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	12Ω	Tap @ 8Ω	25D43922A01					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				MOTOROLA PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5" x 7"	PM	8Ω	50C40856A01	P5X7V8	57A2MT	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGA	5 A	65R122345	9C41095A25	301005	155004A	AGA 5	HAF

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M1	Tuner Coil Assembly	77D43175A03 1V43200A09	AT-592

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Dial Scale	34C43181A04	Knob-Tuning or Volume	36B543876
Pushbutton	38B42343A03	Knob-Tone or Dummy	36B543877
Dial Pointer	52B42600A02		

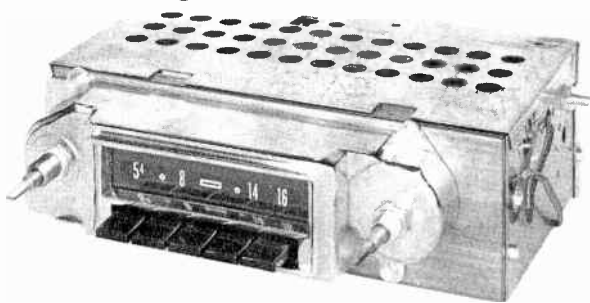
WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Soundex Models:
 CHP-166T (1966 Chevrolet)
 COP-066T (1966 Corvair)
 CTR-166T (1966 Chevrolet Truck)
 POP-666T (1966 Pontiac)
 For Current Address, See Annual Index.

SUPPLIER :

TYPE SET : 5 Transistor AM Receiver

POWER SUPPLY : 12 Volt Storage Battery

RATING : .4 Amp. @ 12.6 Volts DC

TUNING RANGE: BROADCAST 540-1615KC

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

A1 thru A4.

A5, A6, A7.

GENERAL CEMENT: 8606, 8606L, 8869
 WALSCO: 2543, 2544, 2588
 GENERAL CEMENT: 8290, 8868, 9087
 WALSCO: 2525, 2528, 2587

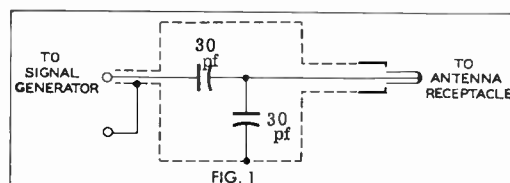
PUSH-BUTTON ADJUSTMENT

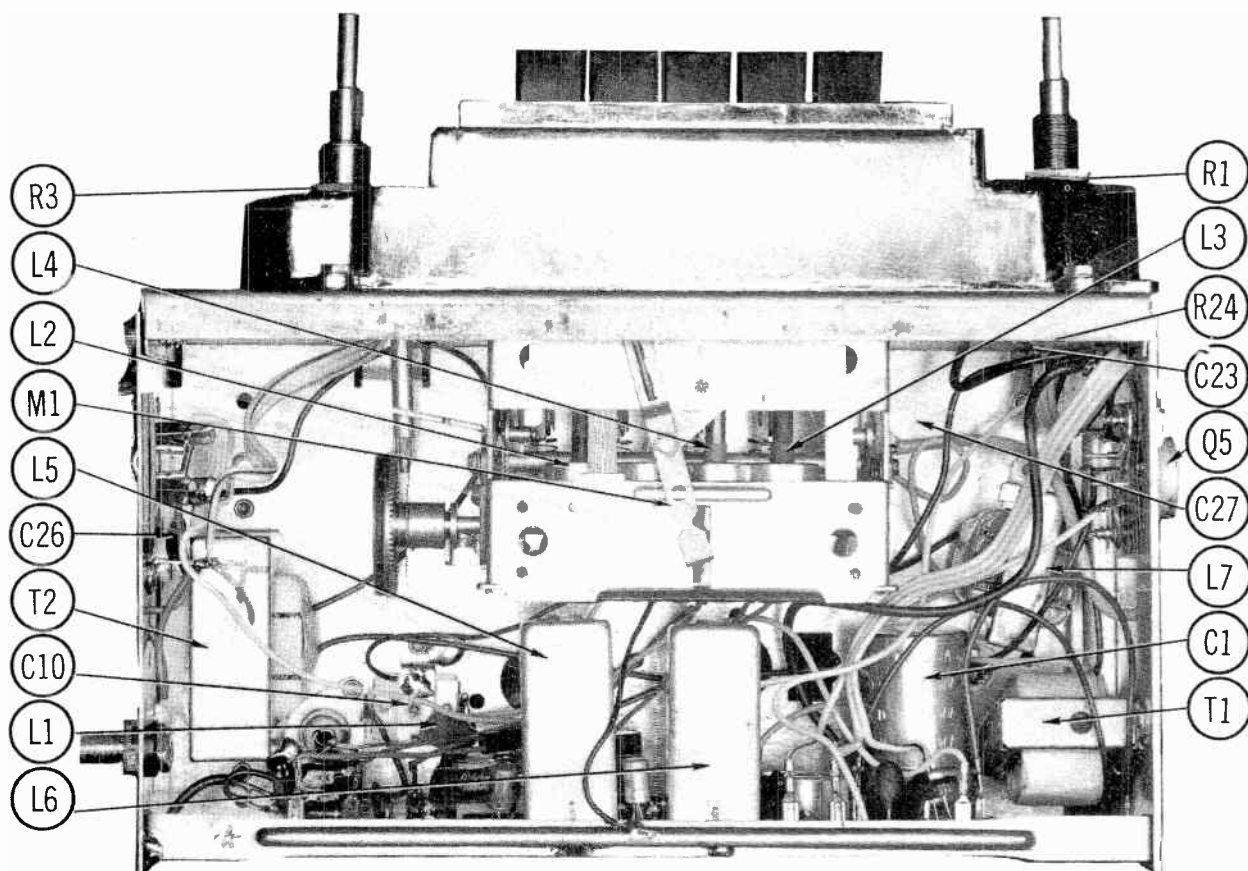
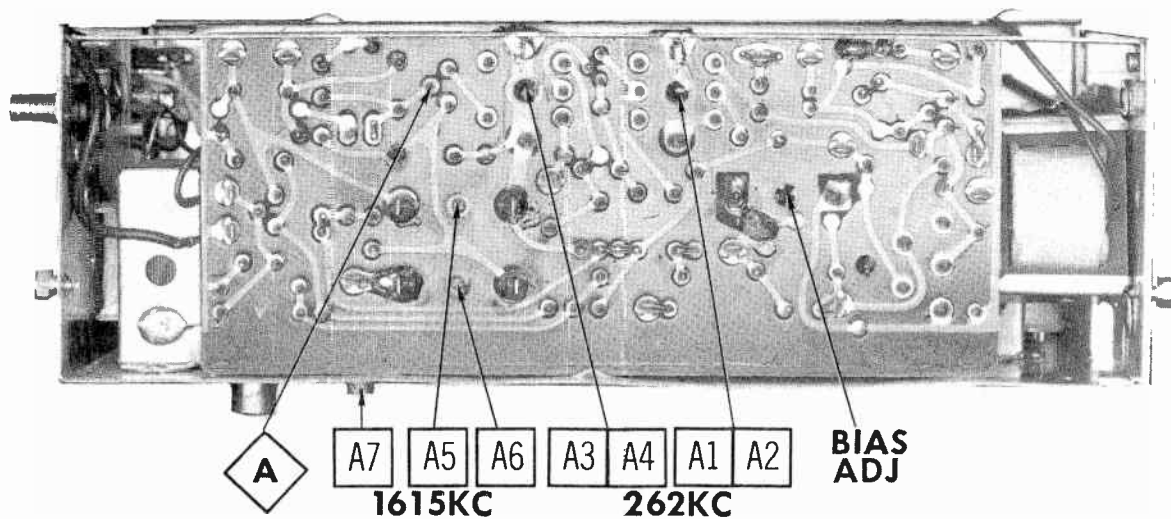
1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.

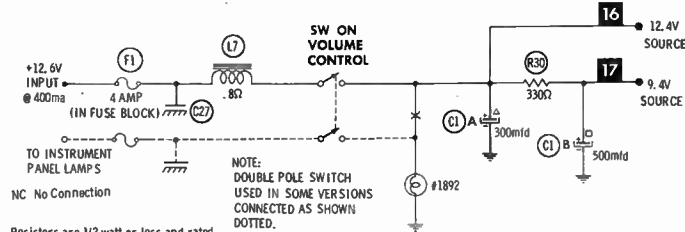
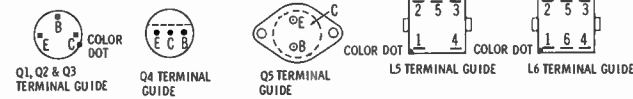
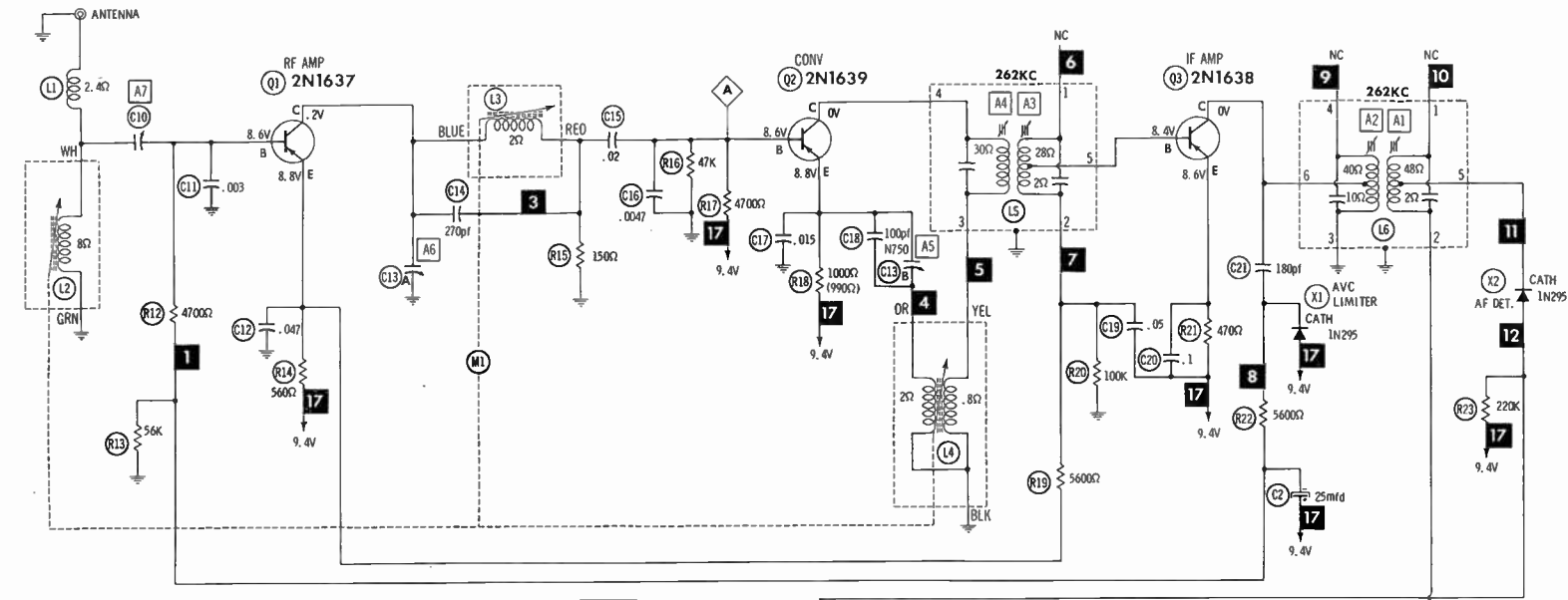
SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. High side thru .1mfd to point Δ , low side to ground.	262KC (400 μ Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2. Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7	"

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A7 for maximum output.

Antenna Adjustment (A7) located on right side, rear,





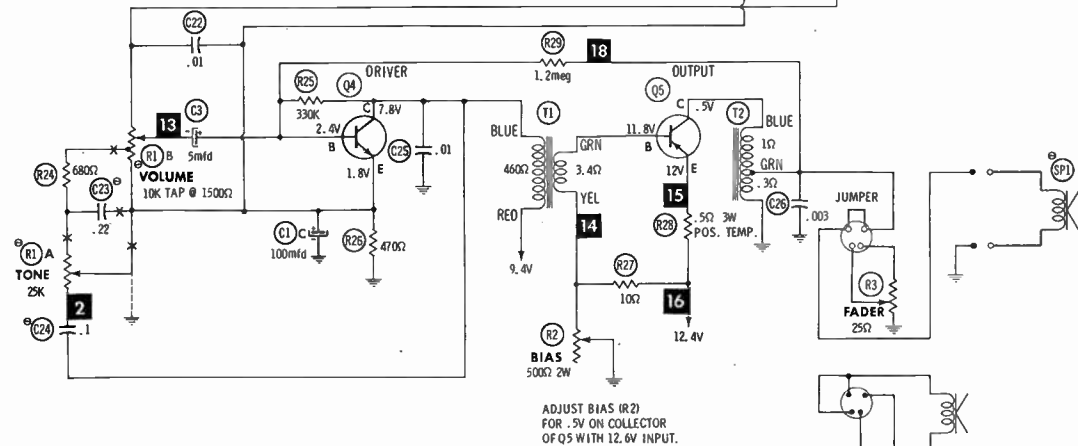


Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

- See parts list
- 1. Voltage measurements taken with vacuum tube voltmeter.
- 2. All controls set for normal operation, no signal applied.
- 3. Measured values are from socket pin or terminal to common ground.
- 4. All terminals viewed from bottom unless otherwise designated.
- 5. Numbers assigned to terminals may not be found on the unit.
- 6. Supply voltage maintained at rated value for voltage readings.
- 7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
with **CIRCUITACE**

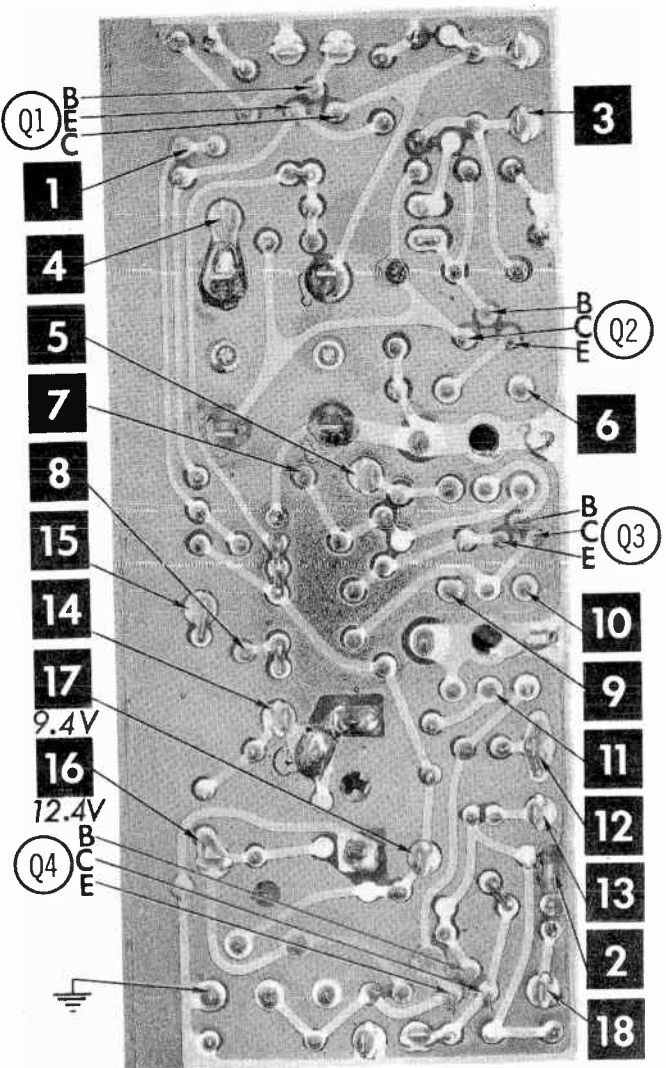
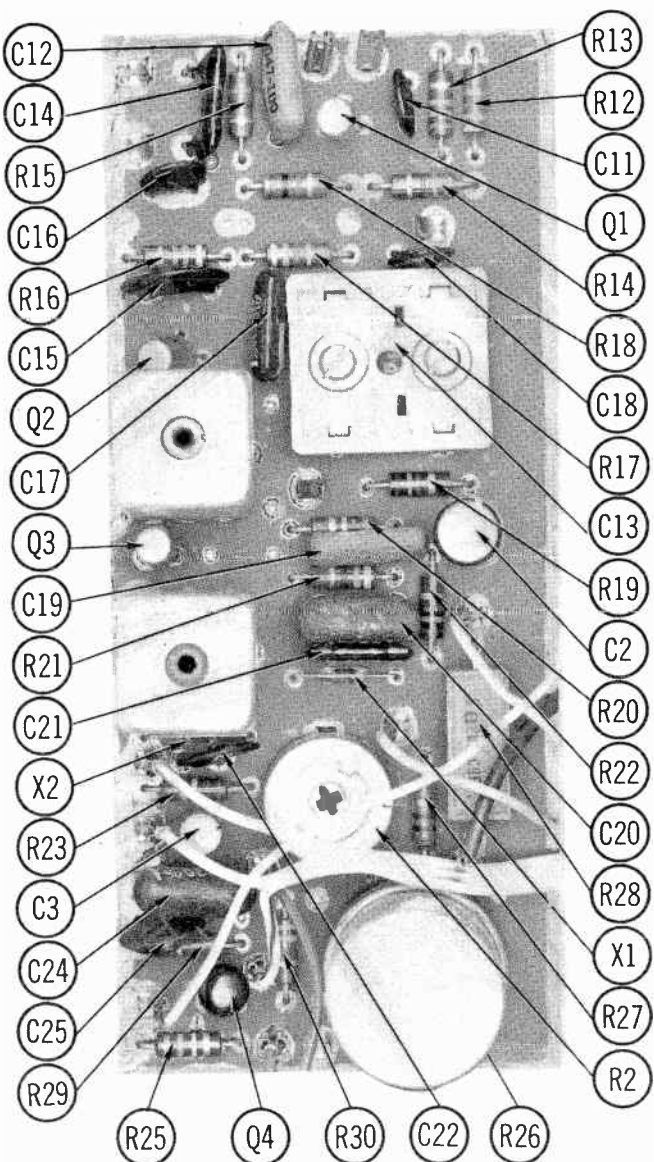
© Howard W. Sams & Co., Inc. 1966



ADJUST BIAS (R2) FOR .5V ON COLLECTOR OF Q5 WITH 12.6V INPUT.

REAR SEAT SPEAKER CIRCUIT USED IN SOME VERSIONS.

**SOUNDEX MODELS CHP-166T, COP-066T,
CTR-166T, POP-666T**



SOUNDEX MODELS CHP-166T, COP-066T, CTR-166T, POP-666T

A Howard W. Sams **CIRCUITRACE** Photo

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	2N1637	RF Amp.	DS-25	GE-9	SK-3008	PNP
Q2	2N1639	Converter	DS-25	GE-9	SK-3008	PNP
Q3	2N1637	IF Amp.	DS-25	GE-9	SK-3008	PNP
Q4	2N2712	Driver	DS-68	GE-10	SK-3020	PNP
Q5	TRA-7RW	Output	DS-520	GE-3	SK-3009	PNP •

• When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.
Check bias adjustment.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1N295	1N295	1N295			
X2		1N295	1N295	1N295			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		SOUNDEX PART No.	REPLACEMENT DATA				
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	300	16	C-66	PWH3-00-95	CC0010	XC3-48	PFP300.18	PCL-3026.10
B	500	16						
C	100	16						
C2	25	15	C-53	BCD15025	NLW25-15	MT1-14	PET1570	VL-1170
C3	5	15	C-54	BCD15005	NLW5-15	MT1-3	PET1535	VL-1164

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C10		#TR-5B	DI-3000	DM-302	BYS601ZU302P	CCD-302	GP230	10TS-D30
C11	.003		DIE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C12	.047	100V						
C13A		#TR-14A						
C14	270	10%		DD-271	RR05CW271K	CCD-271	GP327	10TS-T27
C15	.02		BPD-02	DD-203	BYT601ZU203Z	CCD-203	GP120	10TS-S20
C16	.0047		DI-4700	DD-472	JBT601YP472K	CCD-472	GP247	10TS-D47
C17	.015	100V	DBE4815		DMF4515	4DP-1-153	PVC6115	4PS-S15
C18	100	N750	N750-DI 100	DTN-100	CX601UJ101K	CCTN-101	CNT310	10TCU-T10
C19	.05	100V	DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-S50
C20	.1	100V	DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C21	180	10%		DD-181	JBZ601YP181K	CCD-181	GP318	10TS-T18
C22	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C23	.22			UK20-204			MAG25022	HY-325
C24	.1	100V	DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C25	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C26	.003		DI-3000	DM-302	BYS601ZU302P	CCD-302	GP230	10TS-D30
C27		#SPK-P-2						

Soundex Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			SOUNDEX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	12K	VC-21T-①	F1-15K, R14-7500		†QJ-2285A	
B	Volume/Switch	10K Tap @ 1700Ω		FFS105, RFS115, BB100, SB004, KR-4			
	Tone	250K	VC-3T-②	F2-250K, R2-10K, FFS115, RFS207, BB114, KR-4		††QJ-1775A	■UE4541S
R2	Volume/Switch	10K					
R3	Bias	500Ω 2W	PT-2	V-500	U39-500	110-600	MR-600P
	Fader	25Ω 2W	FC-9③				
	Fader	25Ω 2W	FC-5②			†††QJ-2286A	

① Used in Models: CHP-166T, COP-066T, CTR-166T.

③ Used in Model: CHP-166T.

② Used in Model: POP-166T.

④ Alter bushing and adjust spacer nut to meet requirements.

⑤ Alter bushing to meet requirements.

† "CONCENTRIKIT" Equivalent: K8 Kit, with Base Elements and Shafts: B11-118, P17-105 (Panel)
B19-118X, R26-121 (Rear)
S6④ (Bushings)
N4 (Spacer Nut)
76-1 (Switch)

"SNAPTROL" Equivalent: BU8④, CF10, CR49T, SF8, SR44, N4, GC.

■ "STA-LOC" Equivalent: FJ254A, RU14A, OS1937, IS2437, US41.

†† "CONCENTRIKIT" Equivalent: K8 Kit, with Base Elements and Shafts: B13-130, P17-126 (Panel)
B13-116, R9-208 (Rear)
S9⑤ (Bushings)
76-1 (Switch)

"SNAPTROL" Equivalent: BU8⑤, CF23, CR52, SF16, SR17, GC.

††† "SNAPTROL" Equivalent: BU8⑤, WF17, None, SF8, None.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	SOUNDEX PART No.			IRC PART No.	WORKMAN PART No.	SOUNDEX PART No.
R28	.5Ω 3W (Cold) PTC			R-2AAA					

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		SOUNDEX PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Choke (6.8uh)	TF-14	19-1004	BC-565	74F686AP	T859
L2	Antenna	①				
L3	RF	①				
L4	Oscillator	①				
L5	Input IF	TF-32	16-6712	BC-636	6522	
L6	Output IF	TF-33				

① Part of Tuner M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	SOUNDEX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L7	400ma	.8Ω	15MH	TF-4C					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	SOUNDEX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	14, 4	1	TF-1E					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	SOUNDEX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	25Ω Tap	@ 8Ω	TF-35			TR-168		

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				SOUNDEX PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4" x 10"	PM	8Ω	SK37W	P4X10V8	410A2Z8	Model: CHP-166T. Model: COP-066T. Model: CTR-166T.
	4" x 10"	PM	4Ω	SK27W	P4X10V3	410A2	
	6" x 9"	PM	8Ω	SK34W	P6X9V8	69A3Z8	
	4" x 10"	PM	8Ω	SK36W	P4X10V8	410A2Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGC	4 Amp.	FU-3		311004	155020	AGC 4	HDJ

MISCELLANEOUS

ITEM No.	PART NAME	SOUNDEX PART No.	NOTES
M1	Tuner	TUN-35TPC	

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire Use BELDEN No. 8885
Rear Seat Speaker Extension Cable Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap Use BELDEN No. 8661 (3/8 in.) or 8670 (3/4 in.)

SOUNDEX MODELS CHP-166T, COP-066T, CTR-166T, POP-666T



PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Tenatronics Models SA-712, SM-711
(Revised)
SUPPLIER : For Current Address, See Annual Index.
TYPE SET : 6 Transistor AM Receiver
POWER SUPPLY : 12 Volt Storage Battery
RATING : .85 Amp. @ 12.6 Volts DC
TUNING RANGE : BROADCAST 540-1615KC

TENATRONICS MODELS SA-712, SM-711

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
Use only enough generator output to provide a usable indication.
Suggested Alignment Tools:

A1 thru A7. GENERAL CEMENT: 8290, 8868, 9087
WALSCO: 2525, 2528, 2587

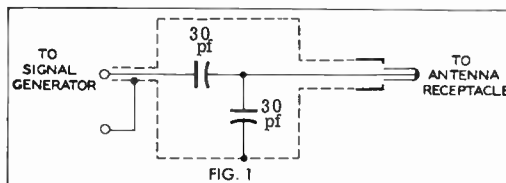
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mf to point A, low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A5, A6, A7	"

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A7 for maximum output.

Antenna Adjustment (A7) located, left side of radio, above antenna receptacle.

PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	2N1837	RF Amp.	DS-25	GE-9	SK-3008	PNP
Q2	2N1839	Converter	DS-25	GE-9	SK-3008	PNP
Q3	2N1838	IF Amp.	DS-25	GE-9	SK-3008	PNP
Q4	2N408	AF Amp.	DS-26	GE-2	SK-3003	PNP
Q5	2N408	AF Amp.	DS-26	GE-2	SK-3003	PNP
Q6	40022	Output	DS-520	GE-3	SK-3009	PNP

♦ When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

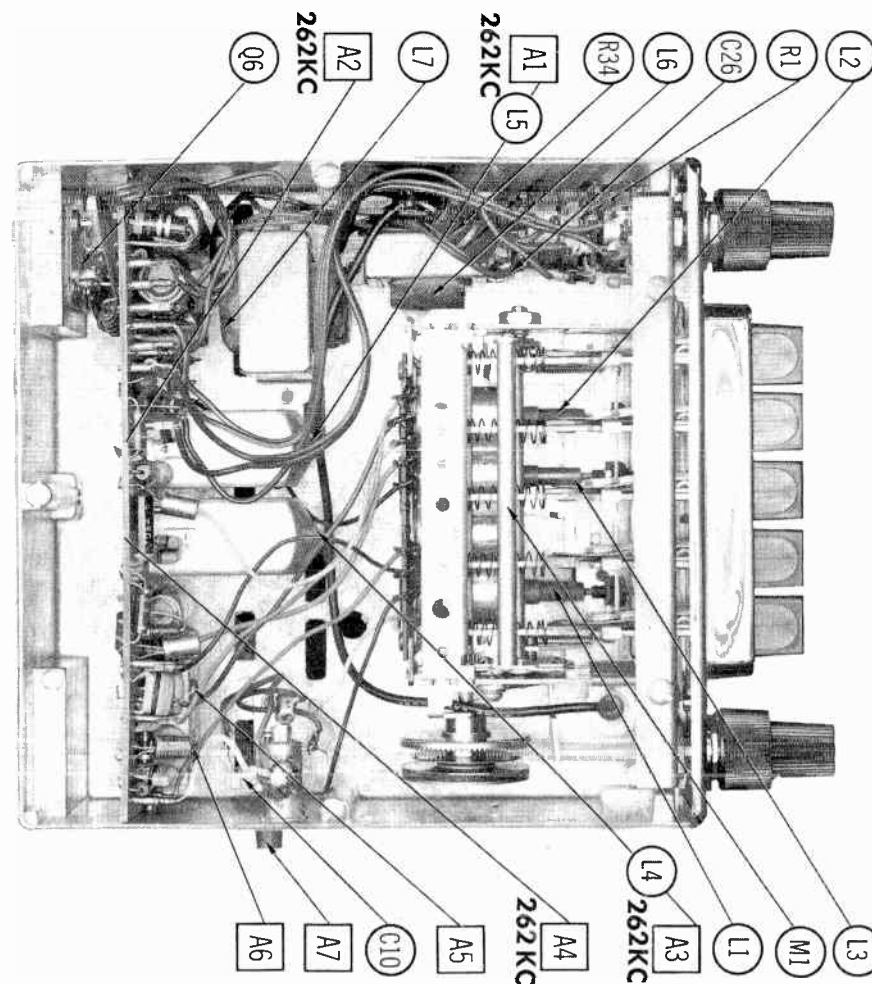
ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1N295	1N295	1N295			
X2		1N295	1N295	1N295			

ELECTROLYTIC CAPACITORS

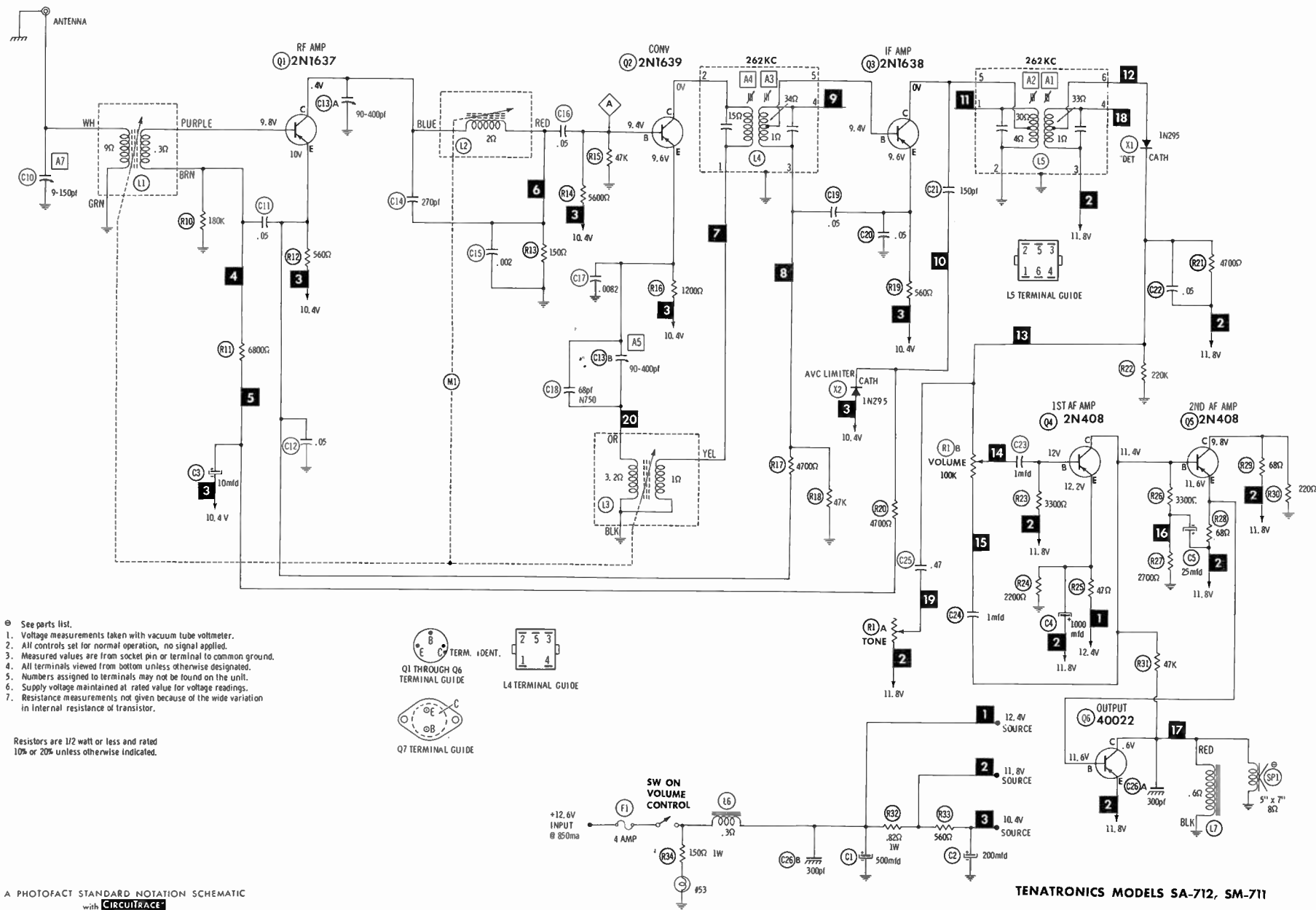
ITEM No.	RATING		Tenatronics PART No.	REPLACEMENT DATA				SPRAGUE PART No.
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	
C1	500	15	T700-417	PRS1220	BR500-15	QT1-30	TC1505	TL-1166
C2	200	16	T700-411	CRE481A	NLW200-15	MT1-23	MTA200F25	TL-1164
C3	10	6	T700-435	CRE307A	NLW10-6	MT1-5	T76X10	TE-1087
C4	1000	3	T800-440	PRS1130	BR1000-6	QT1-32	TC310	TL-1068
C5	25	25	T700-414	CRE612A	NLW25-25	MT1-14	TT25X25	TL-1207

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.
C10	9-150					S463		
C11	.05		DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-550
C12	.05		DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-550
C13A	90-400							
C13B	90-400							
C14	270		DI-270	DD-270	RR05CW271K	CCD-271	GP327	5GA-T27
C15	.002		DI-2000	DM-202	JBX601YP202K	CCD-202	GP220	5GAB-D22
C16	.05		DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-550
C17	.0082	100V	DBE6D82	CPR-8200J	DPMS6D82	6DP-2-822	PVC682	6PS-D82
C18	68	N750	NPO-DI68	DTZ-68	CX601CG680K	CCTO-680	CNO468	10TCC-Q68
C19	.05		DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-550
C20	.05		DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-550
C21	150		DI-150	DD-151	DPMS6S5	CCD-151	GP315	10TS-T15
C22	.05		DBE6S5		DPMS6S5	6DP-3-503	PVC615	6PS-550
C23	1mfd			UK-105	HXC3R0XR105P		MAG31	HY-135
C24	1mfd			UK-105	HXC3R0XR105P		MAG31	HY-135
C25	.47			UK10-404			MAG12047	HY-330
C26A	300							
C26B	300							



TENATRONICS MODELS SA-712, SM-711



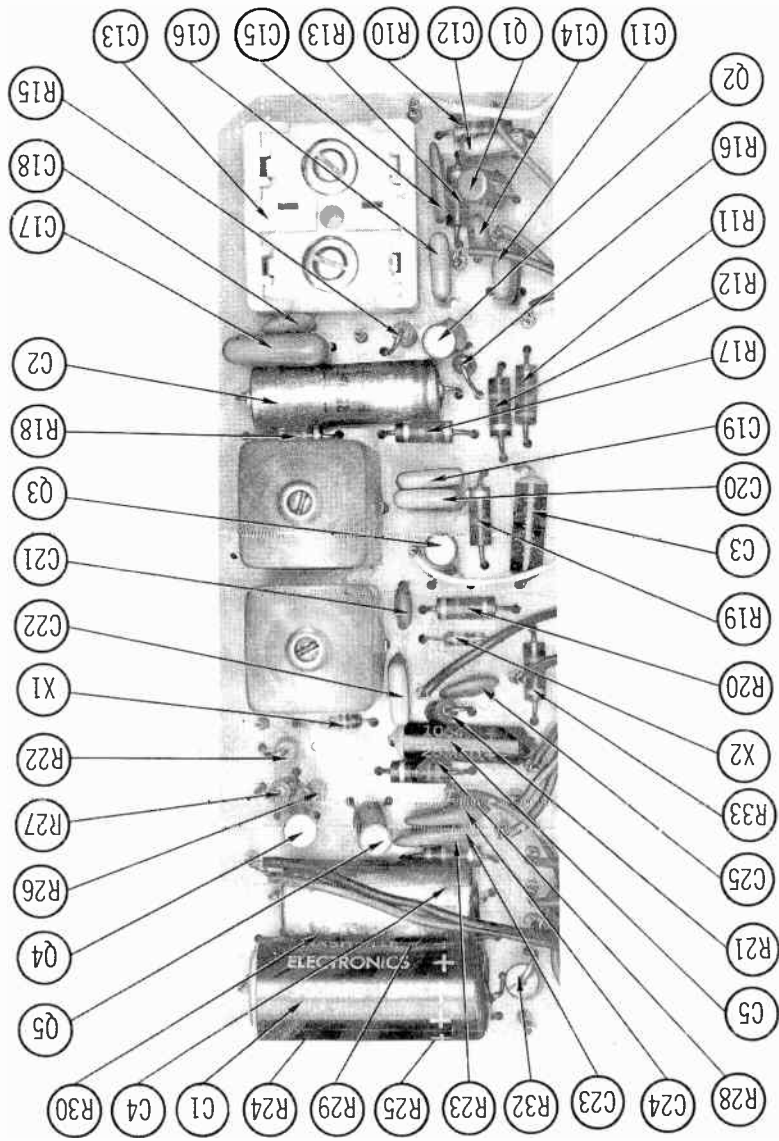
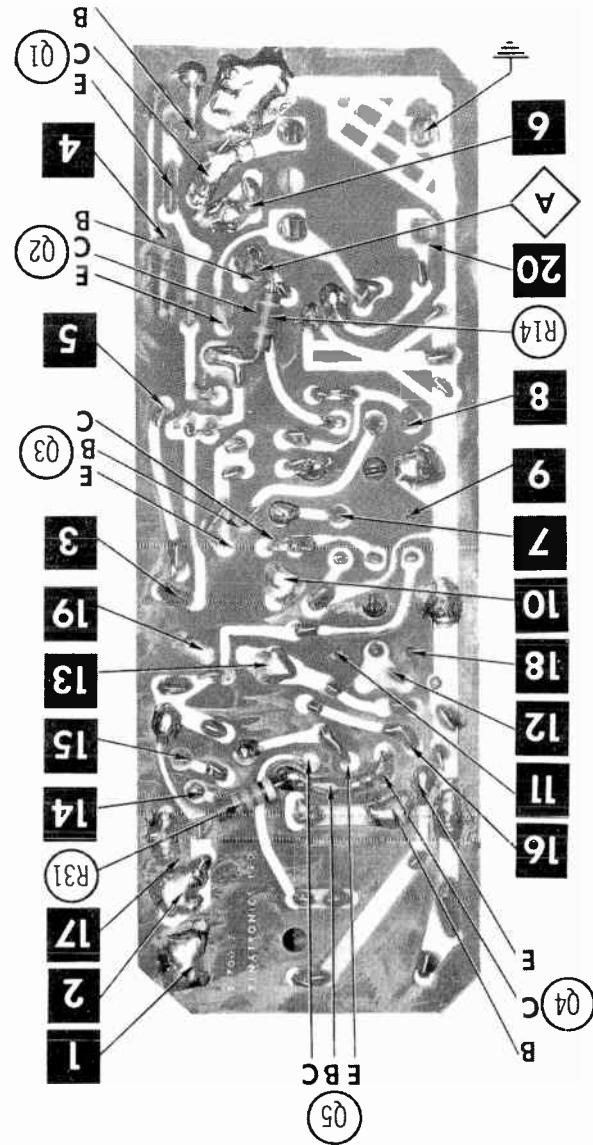
A PHOTOFAC STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**

© Howard W. Sams & Co., Inc. 1966

TENATRONICS MODELS SA-712, SM-711

TENATRONICS MODELS SA-712, SM-711

A Howard W. Sams CIRCUITRACE® Photo



PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			Tenatronics PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-JRC PART No.	MALLORY PART No.
R1A	Tone	10K	T700-525				
B	Volume/Switch	100K					

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		Tenatronics PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	Antenna	T700-310	16-6714	BC-638	6555	
L2	RF					
L3	Oscillator					
L4	Input IF					
L5	Output IF					

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	Tenatronics PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L6	850ma	.3Ω	3MH	T700-305	C-4124	TC-1	TR-158	TY16XT	

CHOKE (AUDIO OUTPUT)

ITEM No.	INDUCTANCE	REPLACEMENT DATA					NOTES
		Tenatronics PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L7	20MH	T700-301					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				Tenatronics PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5" x 7"	PM	16Ω	S-159A		5TA1Z16	Model: SA-712
	5"	PM	16Ω	S-160RA		5A07Z16	Model SM-711

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	SFE	4A	T700-65	T700-64	307004	155004A	SFE 4	HAF

MISCELLANEOUS

ITEM No.	PART NAME	Tenatronics PART No.	NOTES
M1	Tuner	T700-85C	Model: SA-712
	Tuner	T700-80C	Model: SM-711

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Knob-Tuning or Volume	T700-35	Knob-Dummy	T700-36
Knob-Tone	T700-37	Pushbutton	T700-77

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



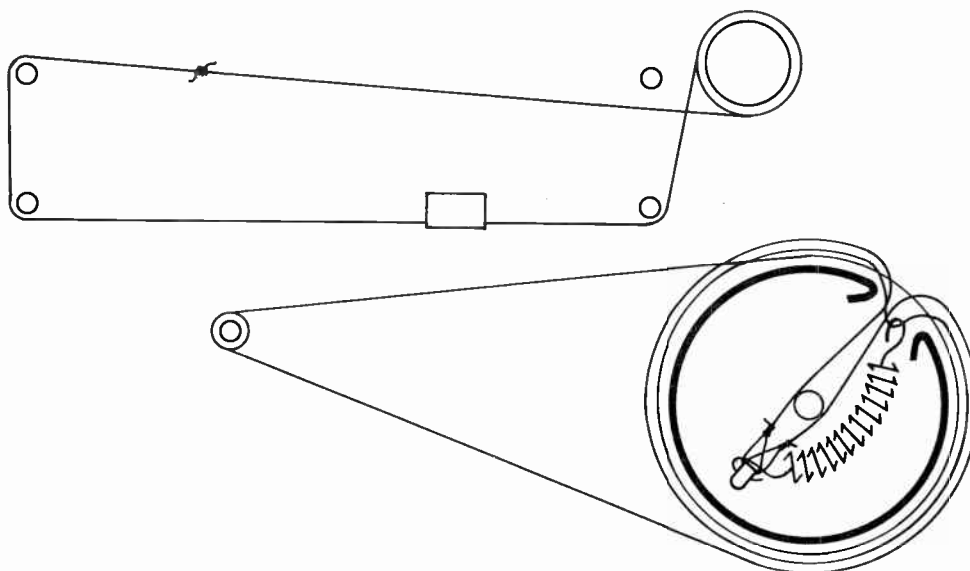
PHOTOFACT[®] with

CIRCUITRACE[®]

TRADE NAME : Tenatronics SM751 (Revised) VWM751
 SUPPLIER : For Current Address, See Annual Index.
 TYPE SET : 12 Transistor AM-FM Receiver
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .21 Amp. @ 12.6 Volts DC
 TUNING RANGE: BROADCAST 540-1615KC
 FREQ. MOD: 88-108MC



DIAL CORD STRINGING



TENATRONICS MODELS SM751, VWM751

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD699

World Radio History

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

A1 thru A22.

GENERAL CEMENT: 9440

WALSCO: 2501

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point  , low side to ground.	262KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4, A5, A6	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	"	"	A7, A8, A9	"

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A9 for maximum output.

FM ALIGNMENT USING AM SIGNAL GENERATOR — SELECTOR IN FM POSITION

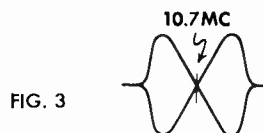
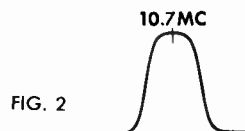
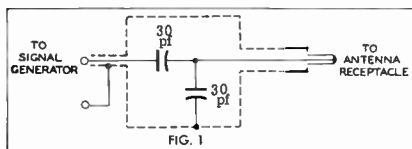
High side thru .1mfd to point B, low side to ground.						
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
3.	10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point  ; common to ground.	A10, A11, A12, A13, A14, A15, A16, A17, A18.	Adjust for maximum.	
4.	"	"	DC probe to point  ; common to ground.	A19.	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.	

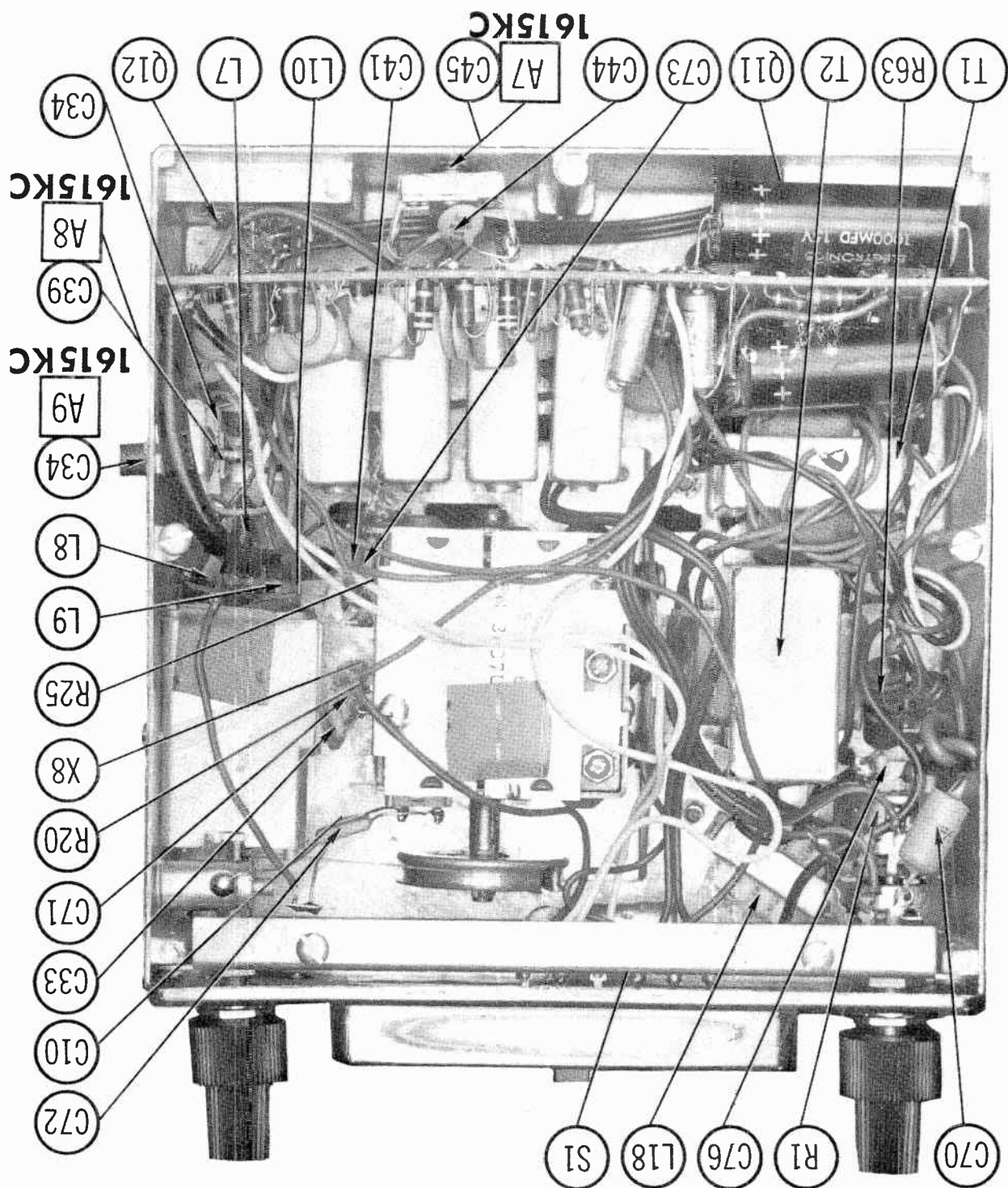
FM IF ALIGNMENT USING FM SIGNAL GENERATOR — SELECTOR IN FM POSITION

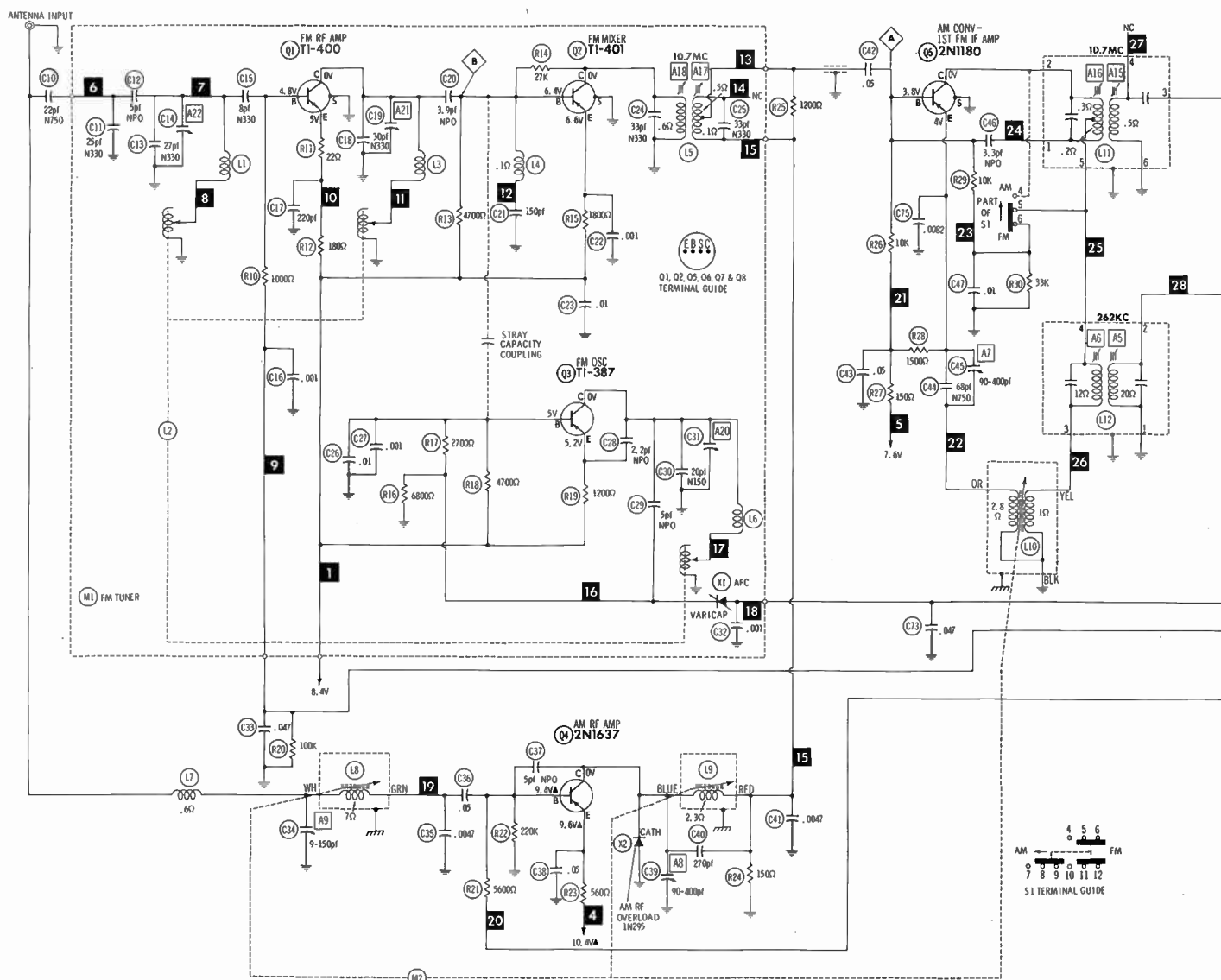
High side thru .1mfd to point B, low side to ground. Use only enough marker signal to obtain indication. Use 60v frequency modulated signal with 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.						
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
3.	10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point  ; low side to ground.	A10, A11, A12, A13, A14, A15, A16, A17, A18.	Disconnect stabilizing capacitor C5. Adjust for maximum gain and symmetry of response similar to Fig. 2 with marker as shown. Reconnect C5.	
4.	"	"	Vert. amp. to point  ; low side to ground.	A19.	Adjust A19 (Secondary) to place marker at center of crossover lines similar to Fig. 3. Adjust A10 (Primary) for maximum amplitude and straightness of crossover lines.	

FM RF ALIGNMENT

Connect generator across antenna input with 120Ω carbon resistors in series with each lead.						
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS	
5.	108MC	Set at high end.	DC probe of VTVM to point  ; common to ground.	A20, A21, A22.	Adjust for maximum.	







All measurements taken in "FM" position unless otherwise designated.

▲ Measured in "AM" position.

NC No Connection.

Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

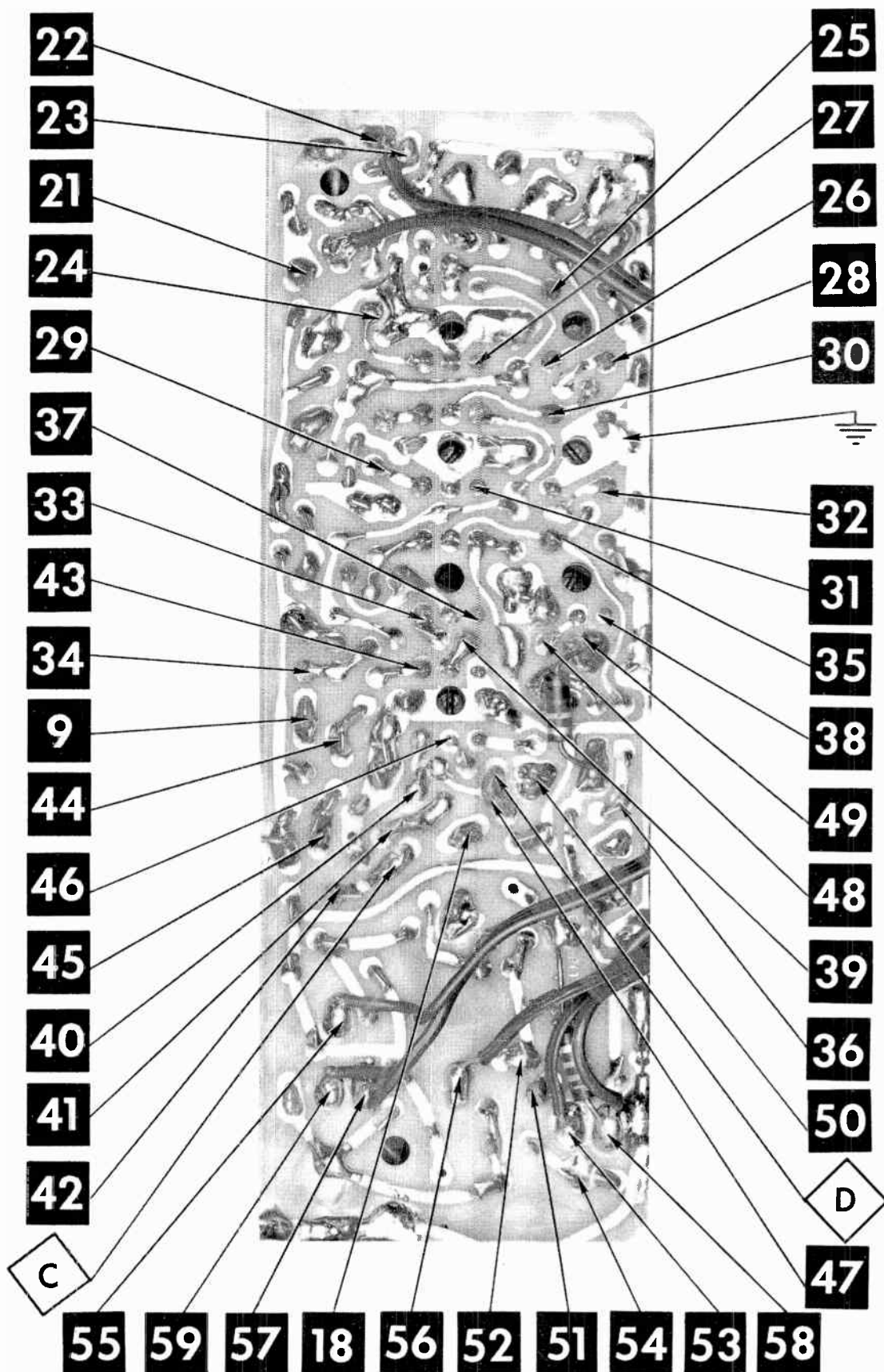
1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

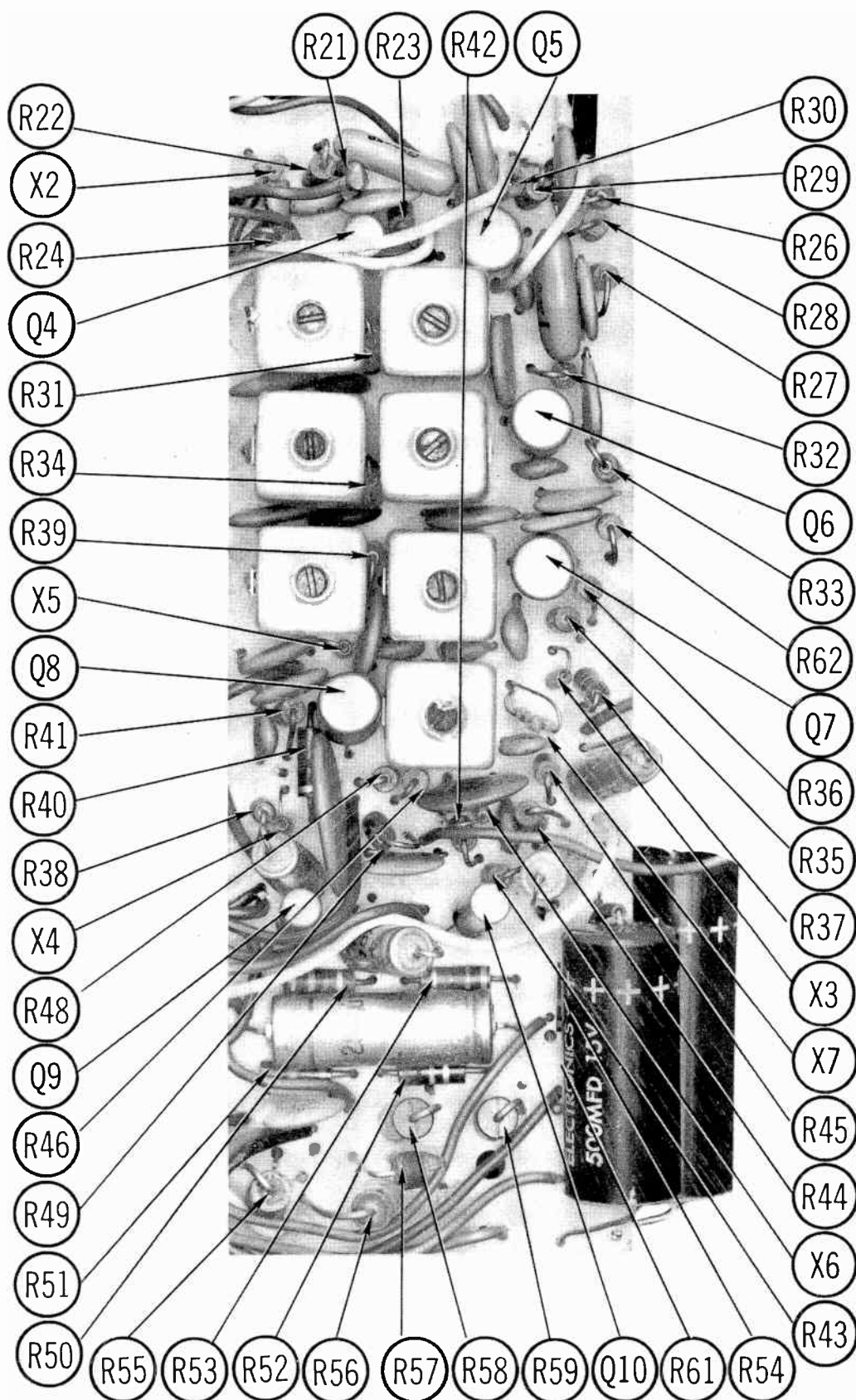
TENATRONICS MODELS SM751, VMW751

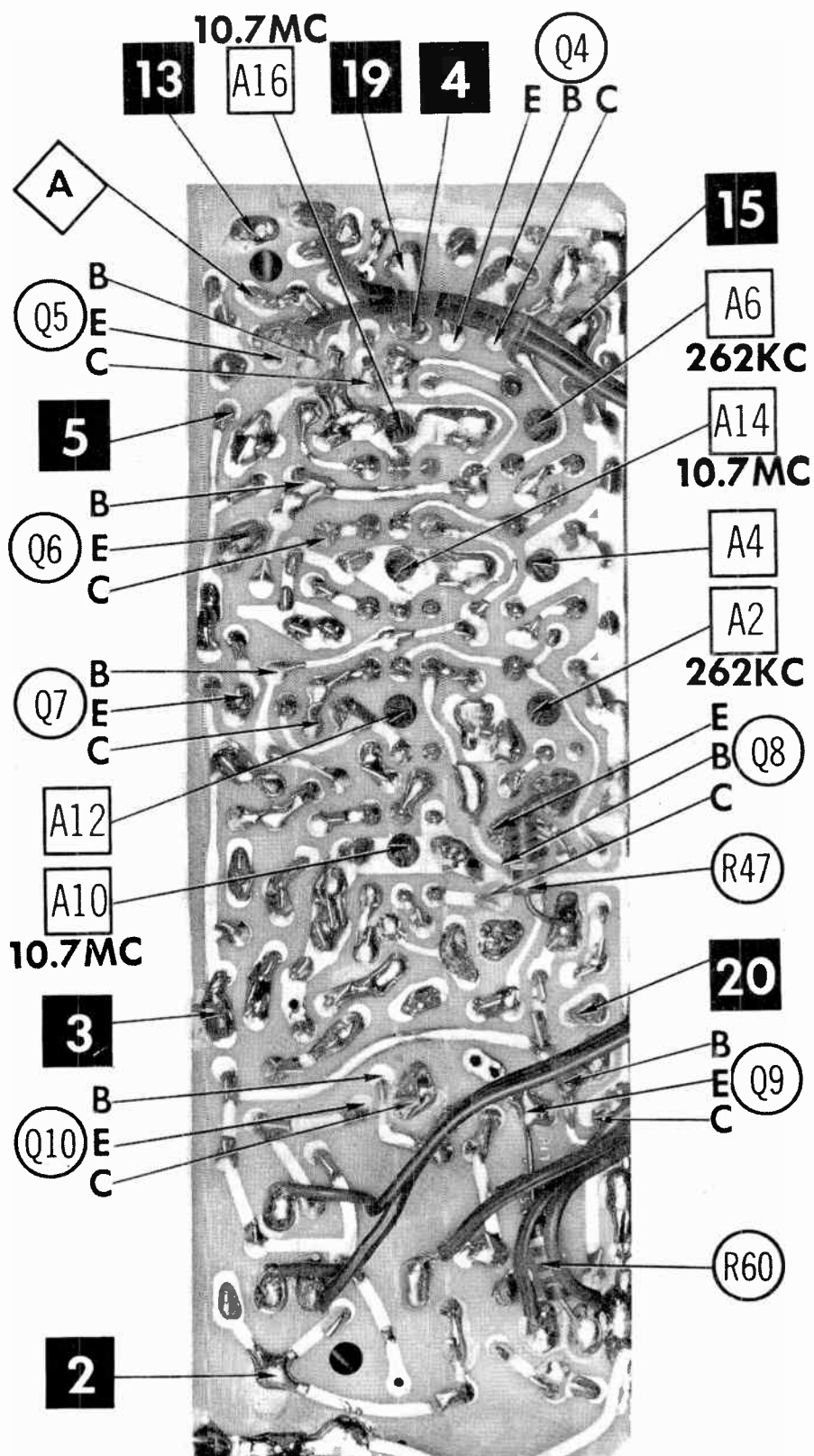
A PHOTOFAC STANDARD NOTATION SCHEMATIC with CIRCUITRACE

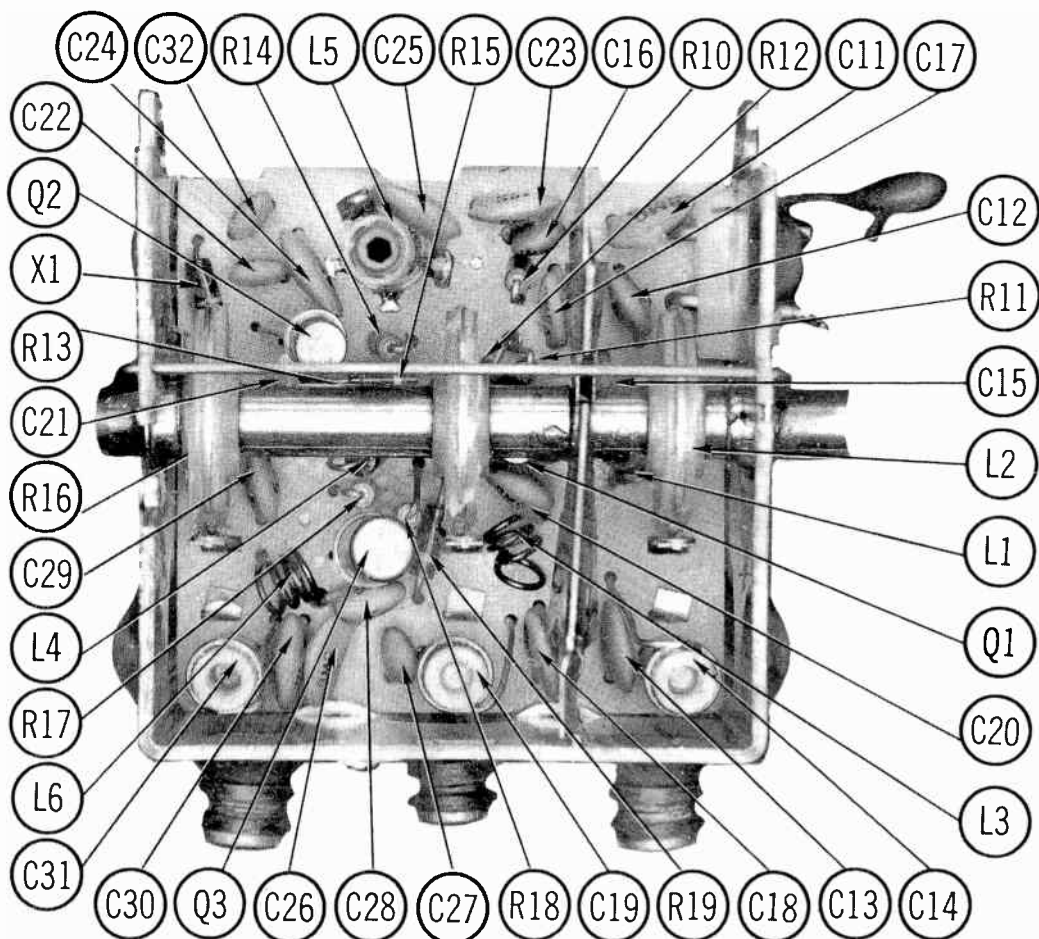
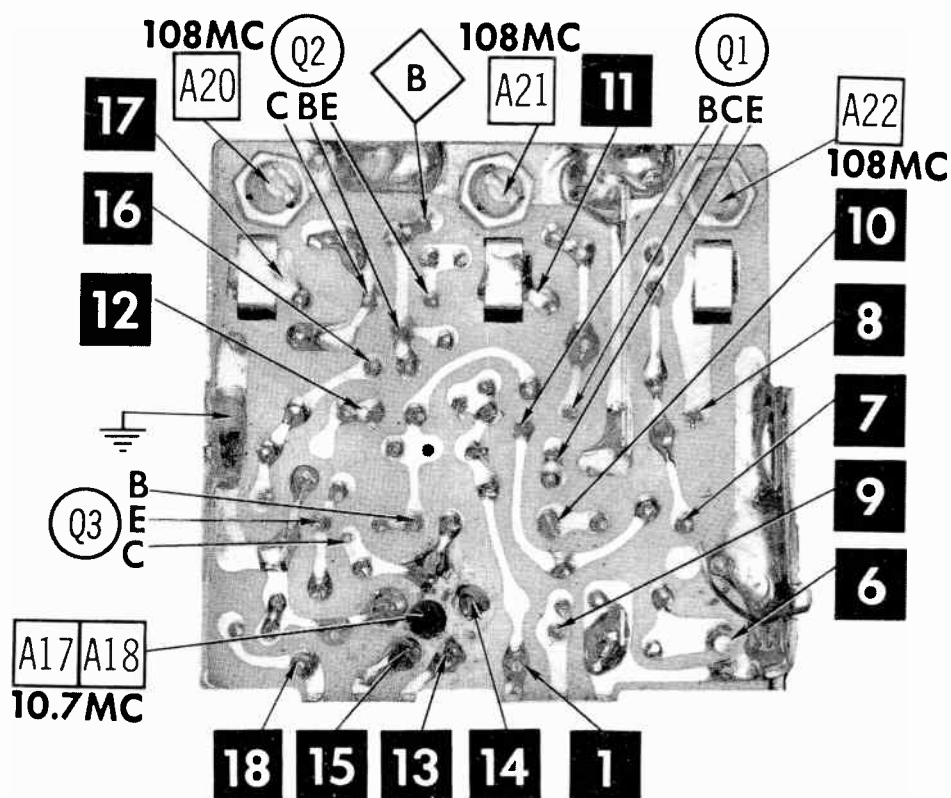
© Howard W. Sams & Co., Inc. 1966











PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	TI-400	FM RF Amp.	DS-41		SK-3006	PNP
Q2	TI-401	FM Mixer	DS-41		SK-3006	PNP
Q3	TI-387	FM Oscillator	DS-41		SK-3006	PNP
Q4	2N1637	AM RF	DS-25	GE-9	SK-3008	PNP
Q5	2N1180	AM Converter/1st FM IF	DS-56		SK-3006	PNP
Q6	2N1180	1st AM IF / 2nd FM IF	DS-56		SK-3006	PNP
Q7	2N1180	2nd AM IF / 3rd FM IF	DS-56		SK-3006	PNP
Q8	2N1180	4th FM IF	DS-56		SK-3006	PNP
Q9	2N591	AF Amp.	DS-26	GE-2	SK-3004	PNP
Q10	2N591	Driver	DS-26	GE-2	SK-3004	PNP
Q11	40022	Output	DS-520	GE-3	SK-3009	PNP *
Q12	40022	Output	DS-520	GE-3	SK-3009	PNP *

* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1							
X2		1N295					
X3		1N295					
X4		1N295					
X5		1N295					
X6		1N542 ①					
X7		1N542 ①					
X8		1N757					

① X6 and X7, matched pair.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		Tenatronics PART No.	REPLACEMENT DATA				
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	500	15	T-700-417	PRS1220	BR500-15	QTI-30	TC1505	TL-1166
C2	1000	15		PRS1230	BR1000-15	QTI-32	TC1501	TL-1166.5
C3	10	25	T-750-435	CRE607A	NLW100-25	MT1-5	TT25X10	TL-1204
C4	25	25	T-700-414	CRE612A	NLW25-25	MT1-14	TT25X25	TL-1207
C5	10	25	T-750-435	CRE607A	NLW10-25	MT1-5	TT25X10	TL-1204
C6	10	25	T-750-435	CRE607A	NLW10-25	MT1-5	TT25X10	TL-1204
C7	200	16	T-700-411	CRE481A	NLW200-15	MT1-23	MTA200F25	TL-1164

CAPACITORS

ITEM No.	RATING		REMARKS	REPLACEMENT DATA					
				AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C10	22	N750		N750-DI 22	DTN-22	CZ601UJ220K	CCTN-220	CN7422	10TCU-Q22
C11	25	N330					*	*	10TCS-Q25
C12	5	NPO		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50
C13	27	N330					*	*	10TCS-Q27
C14									
C15	8	N330					*	*	10TCS-V82
C16	.001			DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10
C17	220			DI-110	DD-221	JBZ601YP221K	CCD-221	GP322	10TS-T22
C18	30	N330					*	*	10TCS-Q30
C19									
C20	3.9	NPO							10TCC-V39
C21	150			DI-150	DD-151		CCD-151	GP315	10TS-T15
C22	.001			DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10
C23	.01			TTD-01	CK-103	HCZ3ROXR103P	CCD-103	TA110	TG-S10
C24	33	N330			TCA-33		*	*	10TCS-Q33
C25	33	N330			TCA-33		*	*	10TCS-Q33
C26	.01			TTD-01	CK-103	HCZ3ROXR103P	CCD-103	TA110	TG-S10
C27	.001			DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10
C28	2.2			NPO-DI 2.2	DTZ-2R2	CZ601CJ2R2D	CCTO-2R2	CNO522	10TCC-V22
C29	5	NPO		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50
C30	20	N150					*	*	10TCP-Q20
C31									
C32	.001			DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10
C33	.047	100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C34	9-150		#T-700-401				S463		
C35	.0047	200V		DBE6D47	CPR-4700J	WMF1S47	6DP-1-473	PVC6247	6PS-D47
C36	.05			TTD-05	CK-503	HCZ3ROXR503P	TA150	TA150	TG-S50
C37	5	NPO		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50
C38	.05			TTD-05	CK-503	HCZ3ROXR503P	TA150	TA150	TG-S50
C39	90-400		#T-700-422				466		
C40	270			DI-270	DD-271	RR05CW271K	CCD-271	GP327	5GA-T27
C41	.0047	200V		DBE6D47	CPR-4700J	WMF1S47	6DP-1-473	PVC6247	6PS-D47
C42	.05			TTD-05	CK-503	HCZ3ROXR503P	TA150	TA150	TG-S50
C43	.05			TTD-05	CK-503	HCZ3ROXR503P	TA150	TA150	TG-S50
C44	68	N750		N750-DI 68	DTN-68	CS601UJ680K	CCTN-680	CN7468	10TCU-Q68
C45	90-400		#T-700-422				466		

TENATRONICS MODELS SM751, VWM751

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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.
C46	3.3 NPO		NPO-DI 3.0	DTZ-3R3	HCZ3ROXR103 P	CCTO-3R3	CNO633	10TCC-V30
C47	.01		TTD-01	CK-103	HCZ3ROXR103 P	CCD-103	TA110	TG-S10
C48	22		NPO-DI 22	DTZ-22	CY601CG220K	CCTO-220	CNO422	10TCC-Q22
C49	.001		DI-1000	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C50	3.3 NPO		NPO-DI 3.0	DTZ-3R3	HCZ3ROXR503 P	CCTO-3R3	CNO633	10TCC-V30
C51	.05		TTD-05	CK-503	HCZ3ROXR503 P		TA150	TG-S50
C52	.0015		DI-1500	DD-152		CCD-152	GP215	10TS-D15
C53	37		NPO-DI 39	TCZ-36	CD10E360K500	CCTO-360	CNO437	10TCC-Q39
C54	.001		DI-1000	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C55	.05		TTD-05	CK-503	HCZ3ROXR503 P		TA150	TG-S50
C56	3.3 NPO		NPO-DI 3.0	DTZ-3R3		CCTO-3R3	CNO633	10TCC-V30
C57	5 NPO		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO647	10TCC-V50
C58	.0015		DI-1500	DD-152		CCD-152	GP215	10TS-D15
C59	180		DI-180	DD-181	JBZ601YP181K	CCD-181	GP318	5GA-T18
C60	.01		TTD-01	CK-103	HCZ3ROXR103 P	CCD-103	TA110	TG-S10
C61	5 NPO		NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO647	10TCC-V50
C62	.05		TTD-05	CK-503	HCZ3ROXR503 P		TA150	TG-S50
C63	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C64	330		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C65	.05		TTD-05	CK-503	HCZ3ROXR503 P		TA150	TG-S50
C66	.02		TTD-02	CK-203	HCZ3ROXR203 P	CCD-203	TA120	TG-S20
C67	.01		TTD-01	CK-103	HCZ3ROXR103 P	CCD-103	TA110	TG-S10
C68	.05		TTD-05	CK-503	HCZ3ROXR503 P		TA150	TG-S50
C69	.05		TTD-05	CK-503	HCZ3ROXR503 P		TA150	TG-S50
C70	.1 200V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C71	.047 100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C72	.047 100V		DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C73	.047 100V		DBE2S47		DMF2s	4DP-3-473	PVC2147	2PS-S47
C74	.05		TTD-05	CK-503	HCZ3ROXR503 P		TA150	TG-S50
C75	.0082 200V		DBE6D82	CPR-8200J	DPMS6D82	6DP-2-822	PVC628	6PS-D82
C76A	300	#T-700-418						
B	300							

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

Tenatronics Part Number

CONTROLS

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

ITEM No.	USE	RESIST- ANCE	REPLACEMENT DATA				
			Tenatronics PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	250K	T-750-525				
B	Volume/Switch	100K					

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	Tenatronics PART No.			IRC PART No.	WORKMAN PART No.	Tenatronics PART No.
R57	10Ω (Cold) Thermistor			#T-750-543					

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		Tenatronics PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna	①				
L2A	FM Antenna Tuning	①				
B	FM RF Tuning					
C	FM Osc. Tuning					
E3	FM RF	①				
L4	10.7MC Trap	①				
L5	1st FM IF	①				
L6	FM Osc.	①				
L7	RF Choke (6.5uh)	T-700-306	19-1004	BC-565	4610	T859
L8	AM Antenna	②				
L9	AM RF	②				
L10	AM Osc.	②				
L11	2nd FM IF	T-750-312				
L12	1st AM IF	T-750-316				
L13	3rd FM IF	T-750-313				
L14	2nd AM IF	T-750-317				
L15	4th FM IF	T-750-314				
L16	3rd AM IF	T-750-318				
L17	Radio Detector	T-750-315				

① Part of M1.

② Part of M2.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	Tenatronics PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L18	210 ma	.3Ω	3uh	T-750-307	C-4095	TC-1	TR-158	TY16XT	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Tenatronics PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	3.5	1	T-750-319					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Tenatronics PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	30Ω CT	8Ω	T-750-320	A-2745		TR-158	TY-64X	

SPEAKER

ITEM No.	TYPE		REPLACEMENT DATA			NOTES
			Tenatronics PART No.	JENSEN PART No.	QUAM PART No.	
SP1	6" x 9"	PM 8Ω	T-750-139	P6X9V8	69A3Z8	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	SFE	4A	T-700-65	T-700-64	307004	155004A	SFE4	HAF

MISCELLANEOUS

ITEM No.	PART NAME	Tenatronics PART No.	NOTES
M1	FM Tuner	T-750-80	
M2	AM Tuner	T-750-80C	
S1	AM-FM Selector Sw.		

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Dial Assembly	T-750-10A	Knob - Tone	T-700-37
Knob, Tuning or Volume	T-700-35	Knob - Dummy	T-700-36

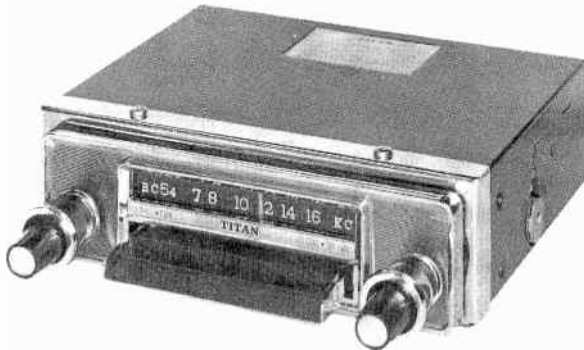
WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Power Cord	8524 (Stranded) Available in 12 Colors
	17108 (Plastic) or 17128 (Rubber) - 8 Ft.
	17109 (Plastic) or 17129 (Rubber) - 9 Ft.
Power Cord (Interlock Type)	Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
Low-Loss Shielded Lead (Interconnecting)	Use BELDEN No. 8401 or 8421
Phono Pick-up Arm Cable	Use BELDEN No. 8430 (Two Conductor-Unshielded)
	8429 (Two Conductor-Shielded)
	8419 (Three Conductor-Shielded)



PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Titan Model ETB-1600
 SUPPLIER : For Current Address, See Annual Index.
 TYPE SET : 9 Transistor AM Receiver W/Automatic Tuning
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .14 Amp. @ 12.6 Volts DC
 TUNING RANGE : BROADCAST 535-1615KC

TITAN MODEL ETB-1600

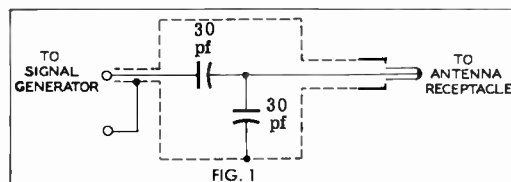
ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Use only enough generator output to provide a usable indication.
 Suggested Alignment Tools:

A1 thru A11. GENERAL CEMENT: 9440 WALSCO: 2501

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	High side thru .1mfd to point Δ , low side to ground.	455KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	600KC	600KC	"	A5.	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.						
3.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	High Freq. End Stop.	Output Meter across voice coil.	A6, A7.	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
4.	High side thru .1mfd to point Δ , low side to ground.	455KC (400v Mod.)	High Freq. End Stop.	DC Probe of VTVM to point B, common to C.	A9, A10, A11 & R2	Adjust for maximum.

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A8 for maximum output.

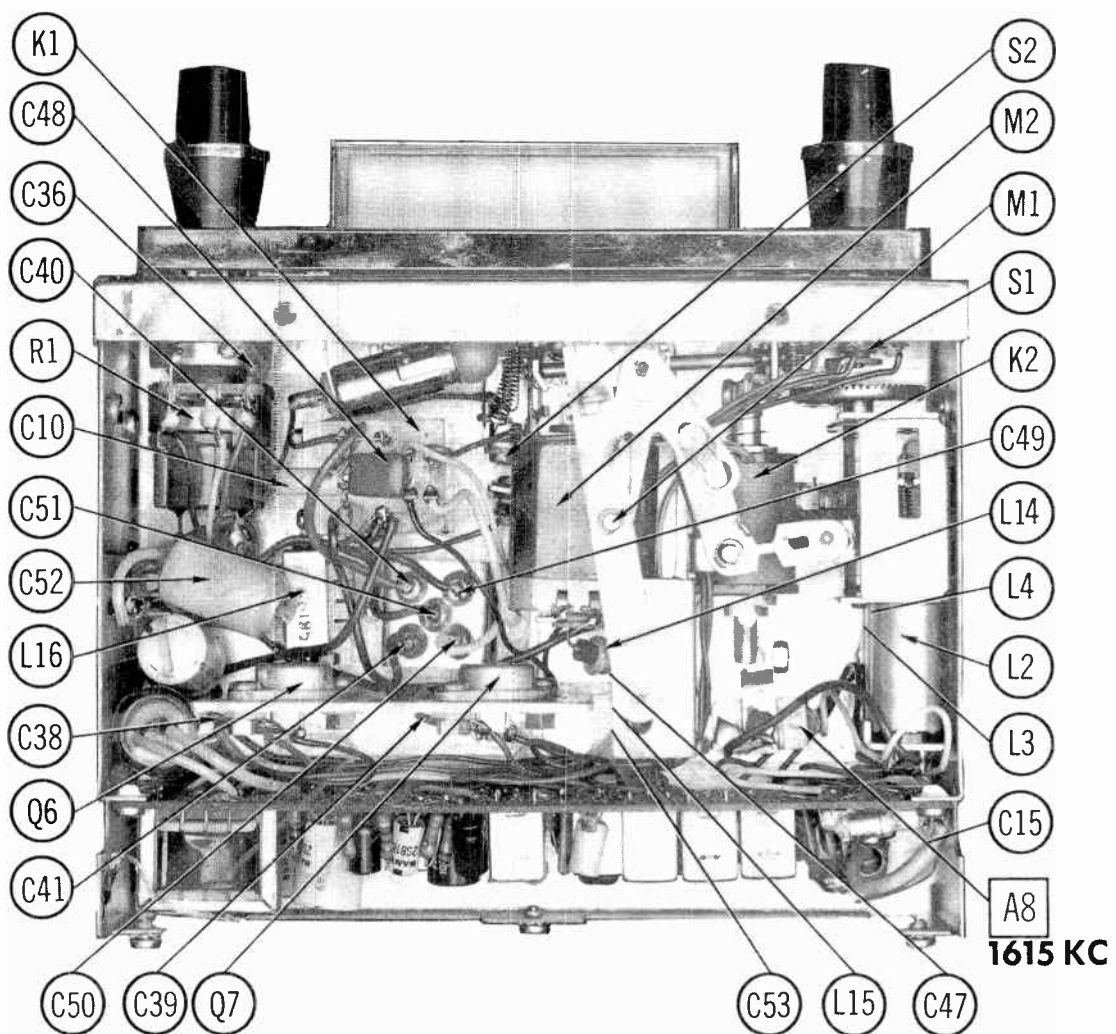
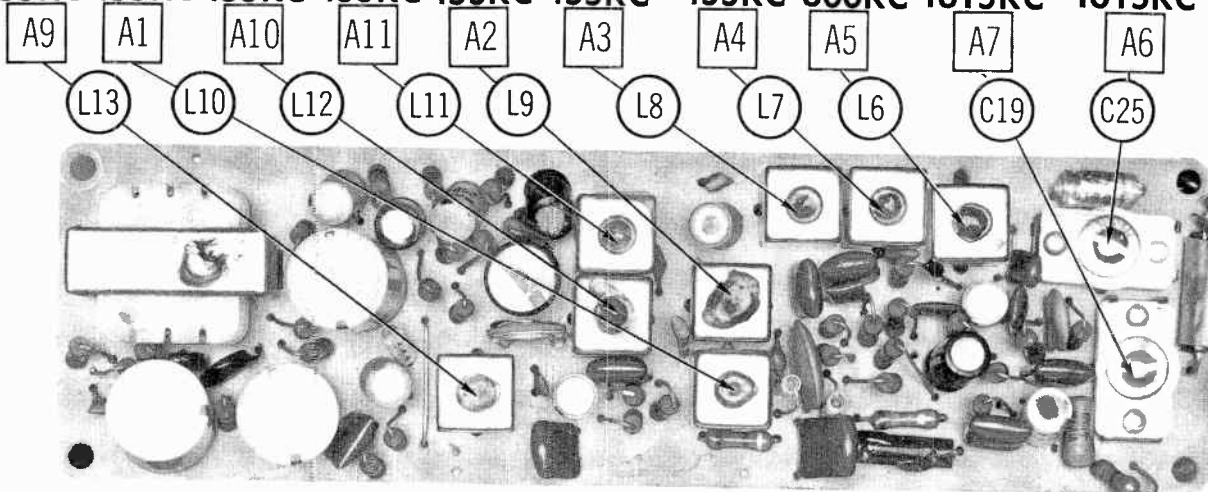


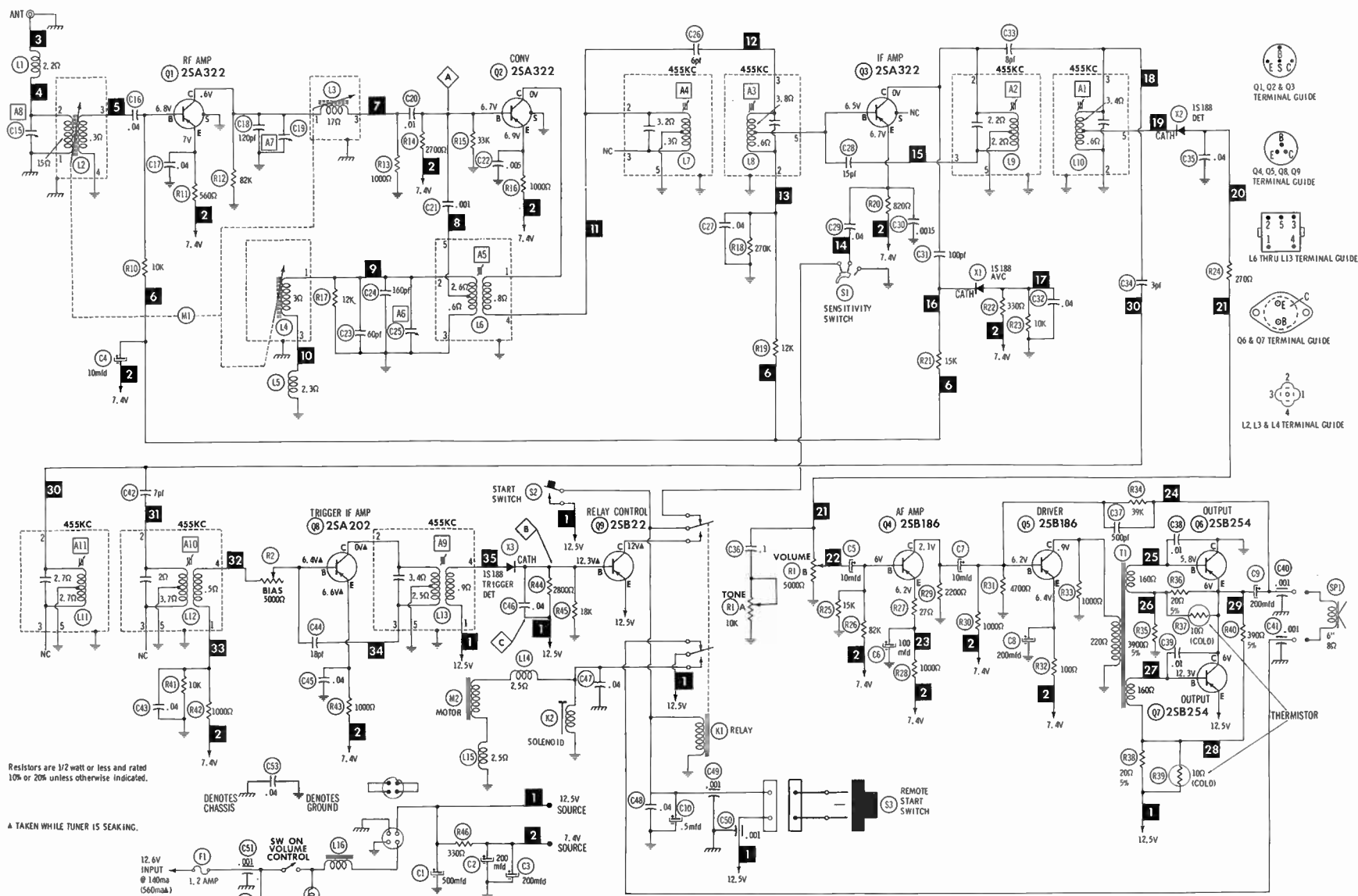
HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD719

World Radio History

455KC 455KC 455KC 455KC 455KC 455KC 455KC 600KC 1615KC 1615KC



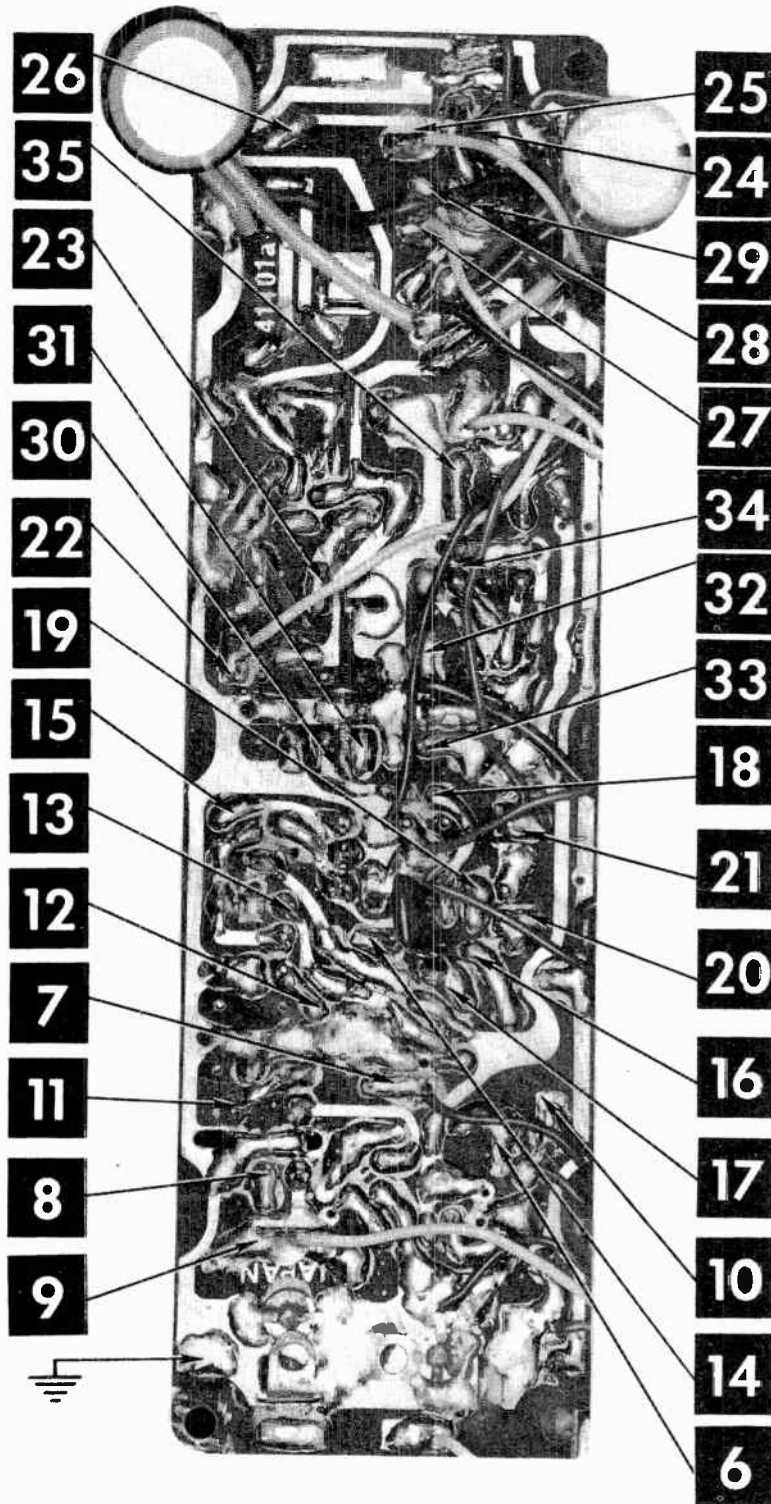


A PHOTOFACT STANDARD NOTATION SCHEMATIC

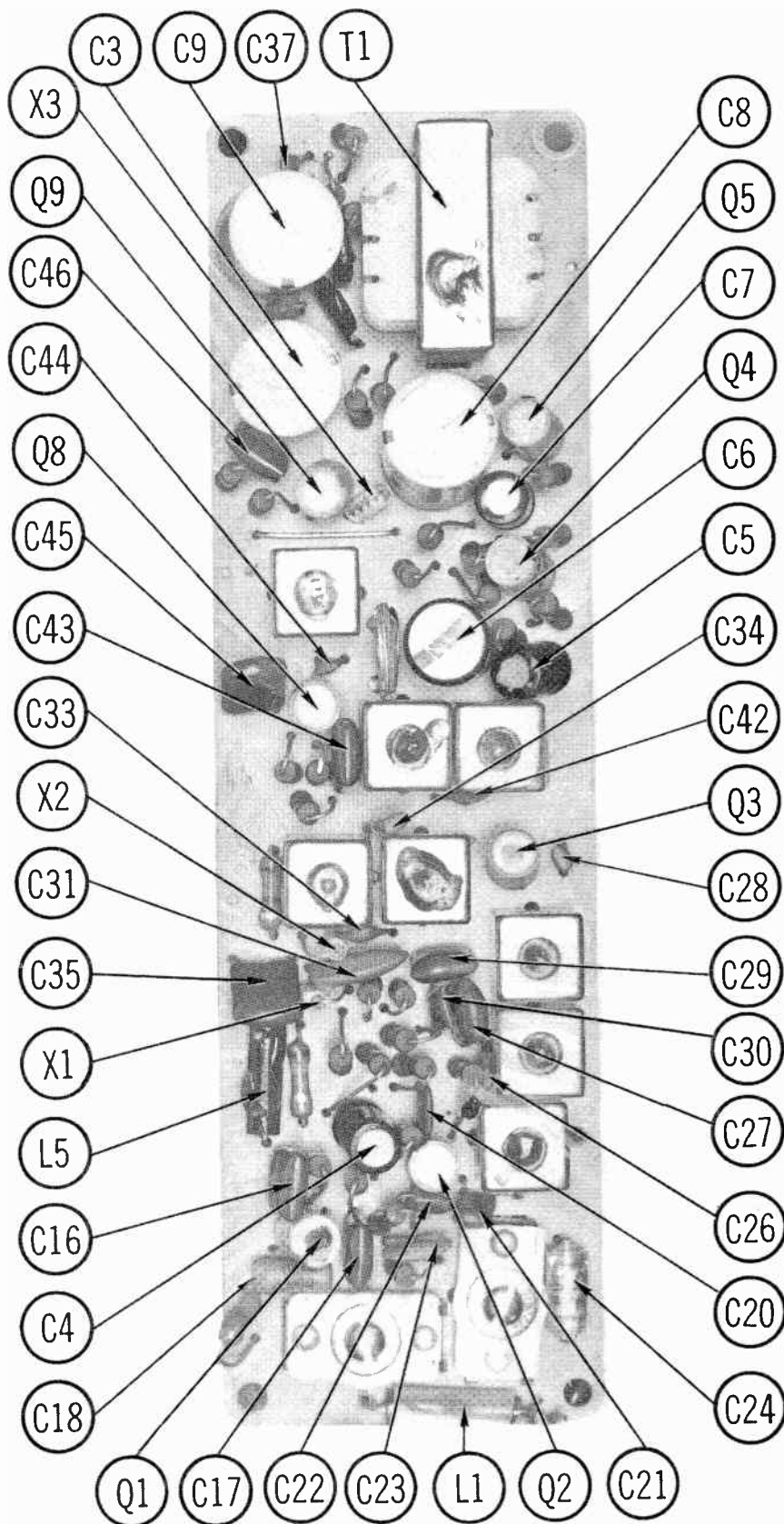
with **Circuitrace**

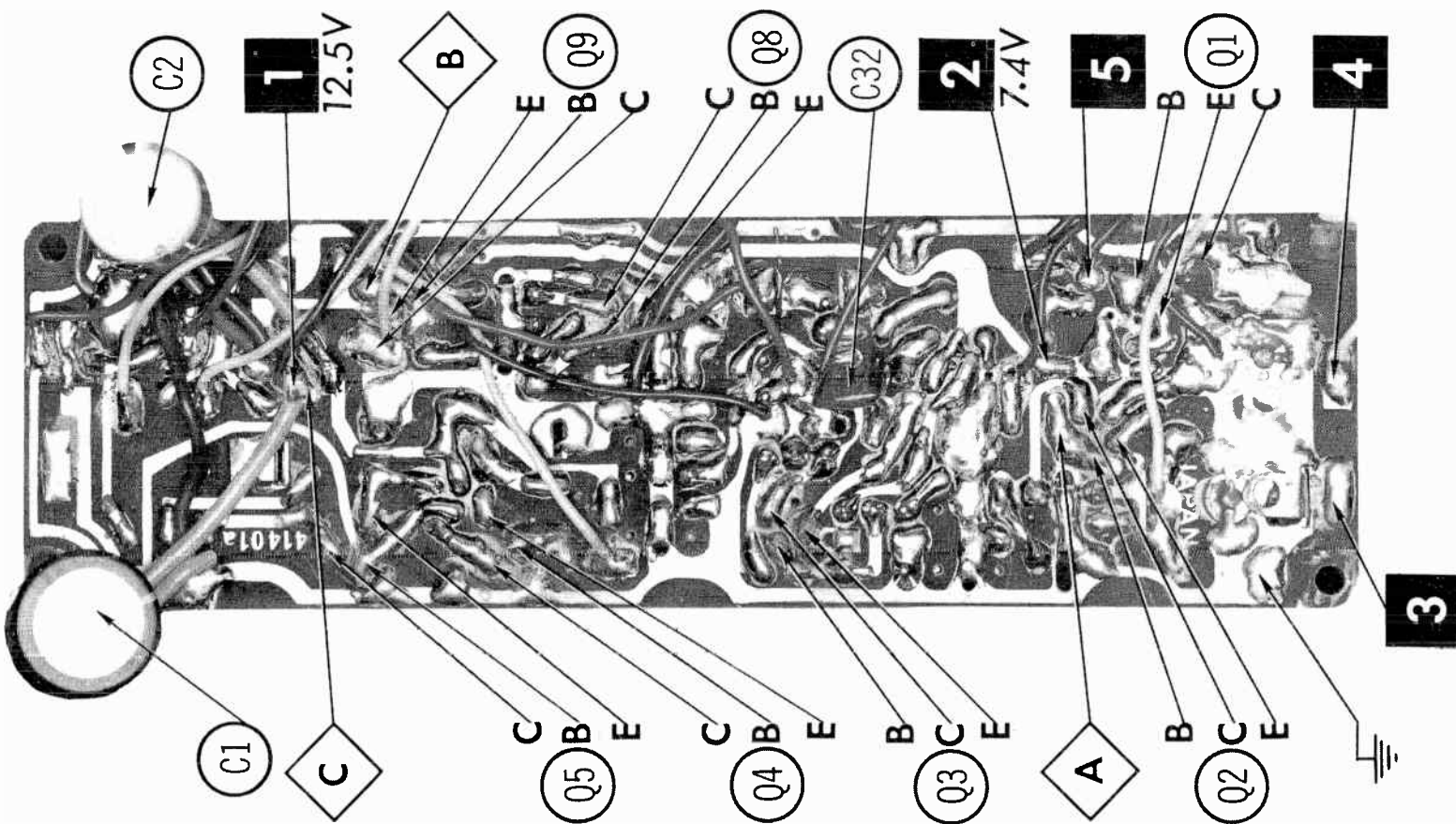
© Howard W. Samt & Co., Inc 1966

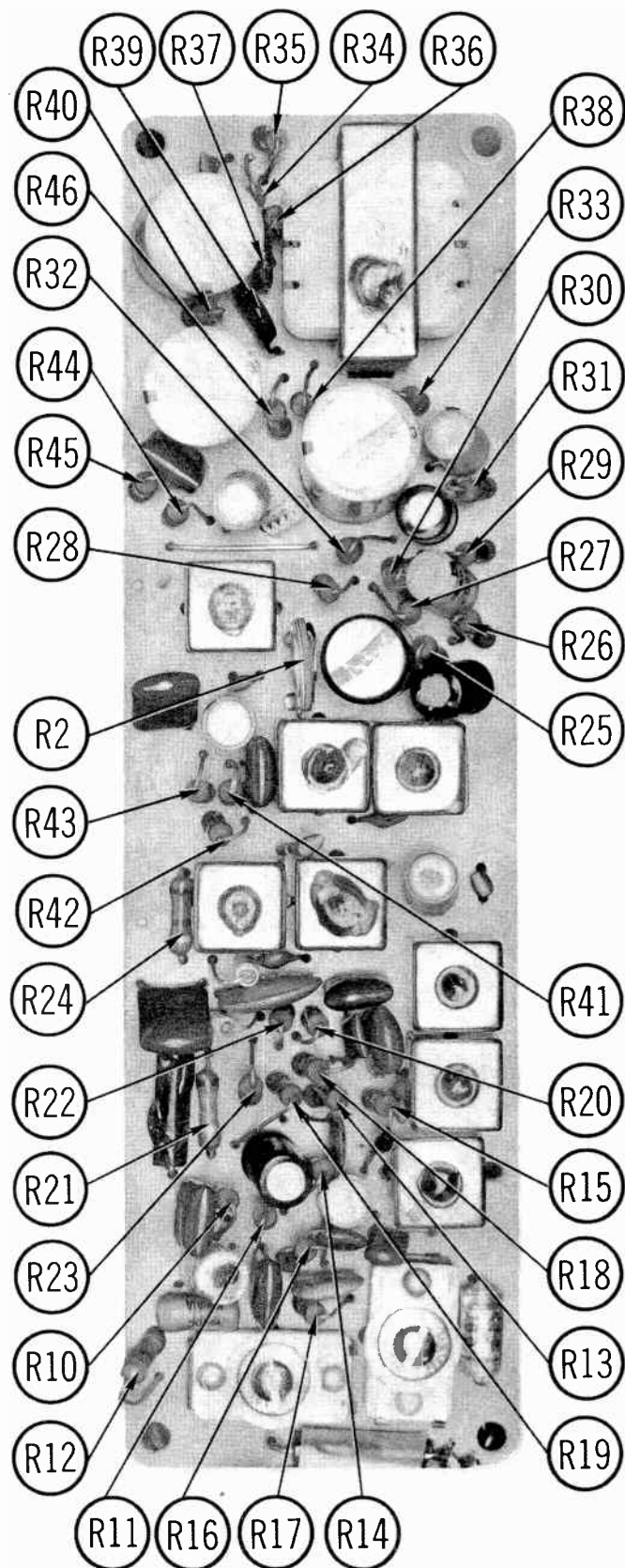
TITAN MODEL ETB-1600



A Howard W. Sams **CIRCUITRACE** Photo







PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	2SA322	RF Amp.	DS-25	GE-9	SK-3008	PNP
Q2	2SA322	Converter	DS-25	GE-9	SK-3008	PNP
Q3	2SA322	IF Amp.	DS-25	GE-9	SK-3008	PNP
Q4	2SB186	AF Amp.	DS-26	GE-2	SK-3004	PNP
Q5	2SB186	Driver	DS-26	GE-2	SK-3004	PNP
Q6	2SB254	Output	DS-520	GE-3	SK-3009	PNP
Q7	2SB254	Output	DS-520	GE-3	SK-3009	PNP
Q8	2SA202	Trigger IF Amp.	DS-25	GE-9	SK-3005	PNP
Q9	2SB22	Relay Control	DS-26	GE-2	SK-3004	PNP

♦ When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1S188	1N34AS	1N34A			
X2		1S188	1N34AS	1N34A			
X3		1S188	1N34AS	1N34A			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	TITAN PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	500	15		PRS1220	BR500-15	QT1-32	TC1505	TL-1166
C2	200	10		BCD12250	NLW200-12	MT1-25	TT10X200	TL-1137
C3	200	10		BCD12250	NLW200-12	MT1-25	TT10X200	TL-1137
C4	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C5	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C6	100	10		BCD10100	NLW100-12	MT1-19	PET1400	VL-1140
C7	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C8	200	10		BCD12250	NLW200-12	MT1-25	TT10X200	TL-1137
C9	200	10		BCD12250	NLW200-12	MT1-25	TT10X200	TL-1137
C10	.5	25		BCD25001	NLW1-50	MT1-1	TT25X1	VL-1200

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.	
C15	50	"	TTD-05	CK-503	HCZ3R0XR503P	CCD-121	TA150	TG-S50	
C16	.04		TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50	
C17	.04		DI-120	DD-121	JBZ601YP121K		GP312	5GA-T12	
C18	120		"	TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C19	65			DI-1000	DD-102	JB8601YP102K	CCD-102	GP210	10TS-D10
C20	.01			TTD-005	CK-502	HCZ3R0XR502P	CCD-502	TA250	TG-D50
C21	.001			DI-56	DD-560	JBZ601YP680K	CCD-560	GP456	5GA-Q56
C22	.005		"	DI-150	DD-151		CCD-151	GP315	10TS-T15
C23	60			NPO-DI 6.8	DTZ-6R8	CZ601CH6R8D	CCTO-6R8	CN0568	10TCC-V68
C24	160			TTD-05	CK-503	HCZ3R0XR503P	CCTO-150	TA150	TG-S50
C25	60	NPO-DI 15		DTZ-15	CZ601CG150J	TA0415		10TCC-Q15	
C26	6	"	TTD-05	CK-503	HCZ3R0XR503P	CCD-152	TA150	TG-S50	
C27	.04		DI-1500	DD-152			GP215	10TS-D15	
C28	15		NPO-DI 100	DTZ-100	CV601CG101K	CCTO-101	CN0310	10TCC-T10	
C29	.04		TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50	
C30	.0015		NPO-DI 8.2			CCTO-3R3	CN0533	10TCC-V82	
C31	100		NPO-DI 3.3	DTZ-3R3			TA150	10TCC-V30	
C32	.04		"	TTD-05	CK-503	HCZ3R0XR503P	CCD-501	TA150	TG-S50
C33	8			TTD-1	CK-104	HCZ3R0XR104P		TA010	TG-P10
C34	3			DI-500	DD-501	JBZ601YP501K	CCD-103	GP350	10TS-T50
C35	.04			TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C36	.1	TTD-01		CK-103	HCZ3R0XR103P	CCF-102	TA110	TG-S10	
C37	500	EF-001		MFT-1000		CCF-102	CT280A		
C38	.01	EF-001		MFT-1000		CCF-102	CT280A		
C39	.01	"		NPO-DI 6.8	DTZ-6R8	CZ601CH6R8D	CCTO-6R8	CN0568	10TCC-V68
C40	.001			TTD-05	CK-503	HCZ3R0XR503P	CCTO-180	TA150	TG-S50
C41	.001			TCZ-18	CK-503	CY601CG180J		CN0418	10TCC-Q18
C42	7		TTD-05	CK-503	HCZ3R0XR503P	TA150	TG-S50		
C43	.04		TTD-05	CK-503	HCZ3R0XR503P	TA150	TG-S50		
C44	18		TTD-05	CK-503	HCZ3R0XR503P	TA150	TG-S50		
C45	.04		TTD-05	CK-503	HCZ3R0XR503P	TA150	TG-S50		
C46	.04		TTD-05	CK-503	HCZ3R0XR503P	TA150	TG-S50		
C47	.04		TTD-05	CK-503	HCZ3R0XR503P	TA150	TG-S50		
C48	.04		TTD-05	CK-503	HCZ3R0XR503P	TA150	TG-S50		
C49	.001	"	EF-001	MFT-1000		CCF-102	CT280A		
C50	.001		EF-001	MFT-1000		CCF-102	CT280A		
C51	.001		EF-001	MFT-1000		CCF-102	CT280A		
C52	.5		150V	DBE2P47		DMF2P47	2DP-5-474	PVC2047	2PS-P47
C53	.04			TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50

• Nominal Value.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			TITAN PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A B R2	Tone Volume/Switch Bias	10K 5000Ω 5000Ω					

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	TITAN PART No.			IRC PART No.	WORKMAN PART No.	TITAN PART No.
R37	10Ω (Cold) Thermistor				R39	10Ω (Cold) Thermistor			

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		TITAN PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Choke (6uh)	①	19-1004	BC-565	4610	T859
L2	Antenna					
L3	RF					
L4	Oscillator Tuning	①	19-1004	3C-565	4610	T859
L5	RF Choke (6uh)					
L6	Oscillator					
L7	1st IF Prim.					
L8	1st IF Sec.					
L9	2nd IF Prim.					
L10	2nd IF Sec.					
L11	1st Trigger IF					
L12	2nd Trigger IF					
L13	3rd Trigger IF					
L14	RF Choke (10uh)		19-1005	BC-561	4612	T860
L15	RF Choke (10uh)		19-1005	BC-566	4612	T860

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	TITAN PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L16	140ma	.4Ω	3MH		C-4095	TC-1	TR-159	TY16XT	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	TITAN PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	3	1	1						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				TITAN PART No.	JENSEN PART No.	QUAM PART No.	
SP1	6"	PM	8Ω		C6T8	6A15MT	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1		1.2 Amp.			31201.5	155020	AGC 11/4	HJ

MISCELLANEOUS

ITEM No.	PART NAME	TITAN PART No.	NOTES
K1	Relay		
K2	Solenoid		
M1	Tuner		
M2	Motor		
S1	Sensitivity Switch		
S2	Start Switch		
S3	Remote Start Switch		

WIRING DATA

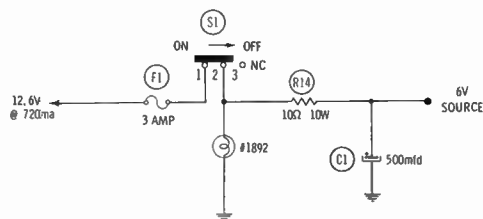
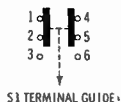
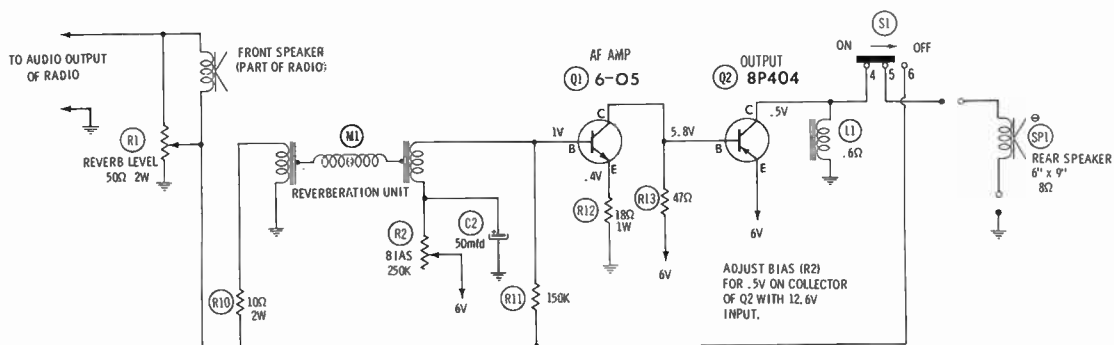
General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Rear Seat Speaker Extension Cable	Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)



PHOTOFACT[®] with

CIRCUITRACE[®]

TRADE NAME : Titan Model RV-66
 SUPPLIER : For Current Address, See Annual Index.
 TYPE SET : 2 Transistor Reverberation Unit
 POWER SUPPLY : 12 Volt Storage Battery
 RATING : .72 Amp. @ 12.6 Volts DC



- ⊗ See parts list
 1. Voltage measurements taken with vacuum tube voltmeter.
 2. All controls set for normal operation, no signal applied.
 3. Measured values are from socket pin or terminal to common ground.
 4. All terminals viewed from bottom unless otherwise designated.
 5. Numbers assigned to terminals may not be found on the unit.
 6. Supply voltage maintained at rated value for voltage readings.
 7. Resistance measurements not given because of the wide variation in internal resistance of transistor.

Resistors are 1/2 watt or less and rated 10% or 20% unless otherwise indicated.

TITAN MODEL RV-66

A PHOTOFACT STANDARD NOTATION SCHEMATIC
 © Howard W. Sams & Co., Inc. 1966

TITAN MODEL RV-66

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1 Q2	6-05 8P404/ 2N176	AF Amp. Output	DS-66 DS-520	GE-10 GE-3	SK-3020 SK-3009	PNP PNP •

• When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.
Check bias adjustment.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		TITAN PART No.	REPLACEMENT DATA			
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.
C1 C2	500 50	15 10	20-507 20-506	PRS1220 CRE417A	BR500-15 NLW50-10	QT1-30 MT1-16	TC1505 TT10X50

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			TITAN PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1 R2	Fader Bias	50Ω 250K	81A4461	TT-50	B47-250K-S	X201R254B	MTC254L1

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	TITAN PART No.			IRC PART No.	WORKMAN PART No.	TITAN PART No.
R14	10Ω 10W	PW10-10	10W-9Q-10	03-100-10S					

CHOKE (AUDIO OUTPUT)

ITEM No.	INDUCTANCE	REPLACEMENT DATA					NOTES
		TITAN PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L1	6MH	75A2043	C-4095	TC-2	TR-155	TY17XT	

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		TITAN PART No.	JENSEN PART No.	QUAM PART No.	
SP1	6" x 9" PM 8Ω	73B2671K	P6X9V8	69A2210	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGC	3A	108-303	12B4468-3	312003	155003	AGC 3	HDJ

MISCELLANEOUS

ITEM No.	PART NAME	TITAN PART No.	NOTES
M1 S1	Reverb Unit On-Off Switch	130A4497 94A4462	

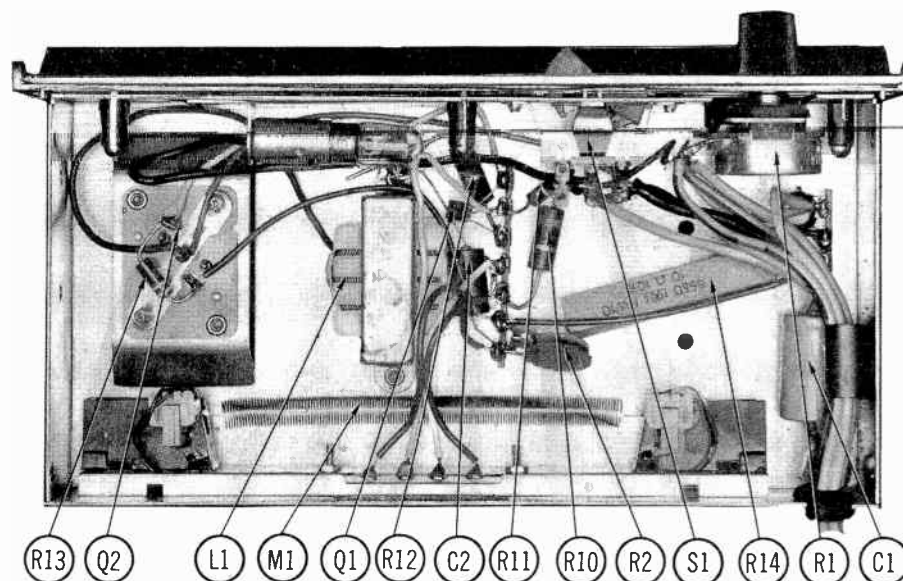
CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon Knob-Fader	54B4456 47A4465	Lens	55A4471

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in 12 Colors
8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire Use BELDEN No. 8885
Rear Seat Speaker Extension Cable Use BELDEN No. 8782 (Stranded) Coded Parallel Leads
Bonding Strap Use BELDEN No. 8661 (3/8 in.) or 8670 (3/4 in.)





PHOTOFACT[®] with

CIRCUITRACE[®]

TRADE NAME: Titan Model TMA-1500

SUPPLIER: For Current Address, See Annual Index.

TYPE SET: 6 Transistor AM Receiver

POWER SUPPLY: 12 Volt Storage Battery

RATING: .3 Amp. @ 12.6 Volts DC

TUNING RANGE: BROADCAST 540-1615KC



ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
Use only enough generator output to provide a usable indication.
Suggested Alignment Tools:

A1 thru A8.

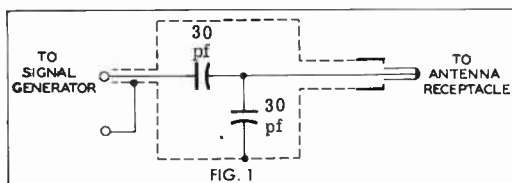
GENERAL CEMENT: 9440

WALSCO: 2501

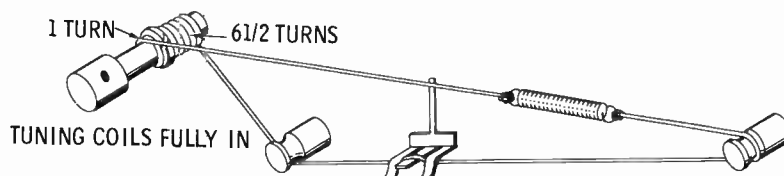
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST •	REMARKS
1.	High side thru .1mfd to point $\textcircled{A}$, low side to ground.	455KC (400% Mod.)	High Freq. End Stop.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum.
2.	Thru dummy (Fig. 1) to antenna receptacle.	600KC	Tune to Signal.	"	A5.	"
3.	Thru dummy (Fig. 1) to antenna receptacle.	1615KC	High Freq. End Stop.	Output Meter across voice coil.	A6, A7, A8.	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.

With radio installed in car and antenna fully extended, tune in a weak station near 1400KC and adjust A8 for maximum output.

Antenna Adjustment A8, located left rear corner (Bottom).



DIAL CORD STRINGING

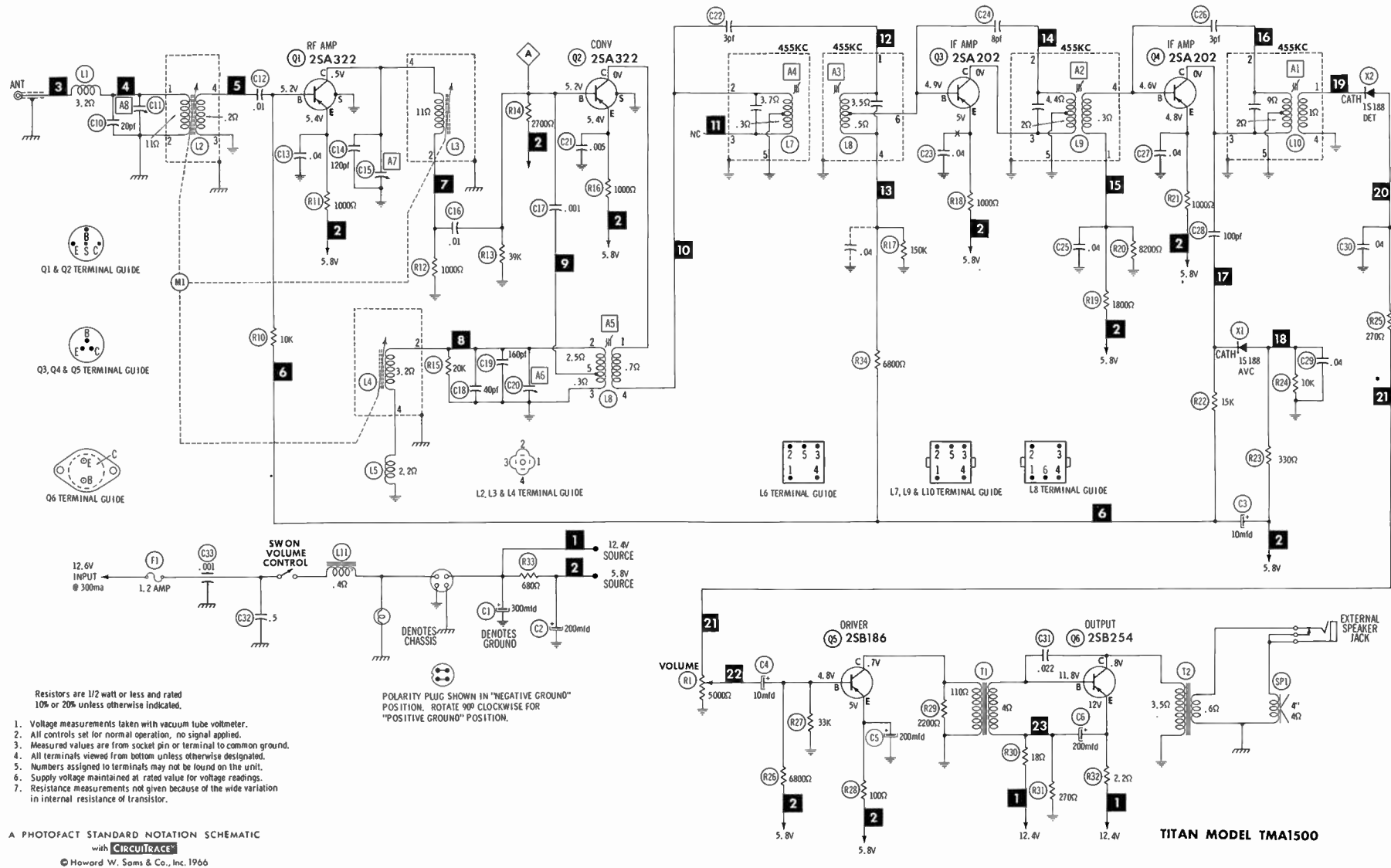


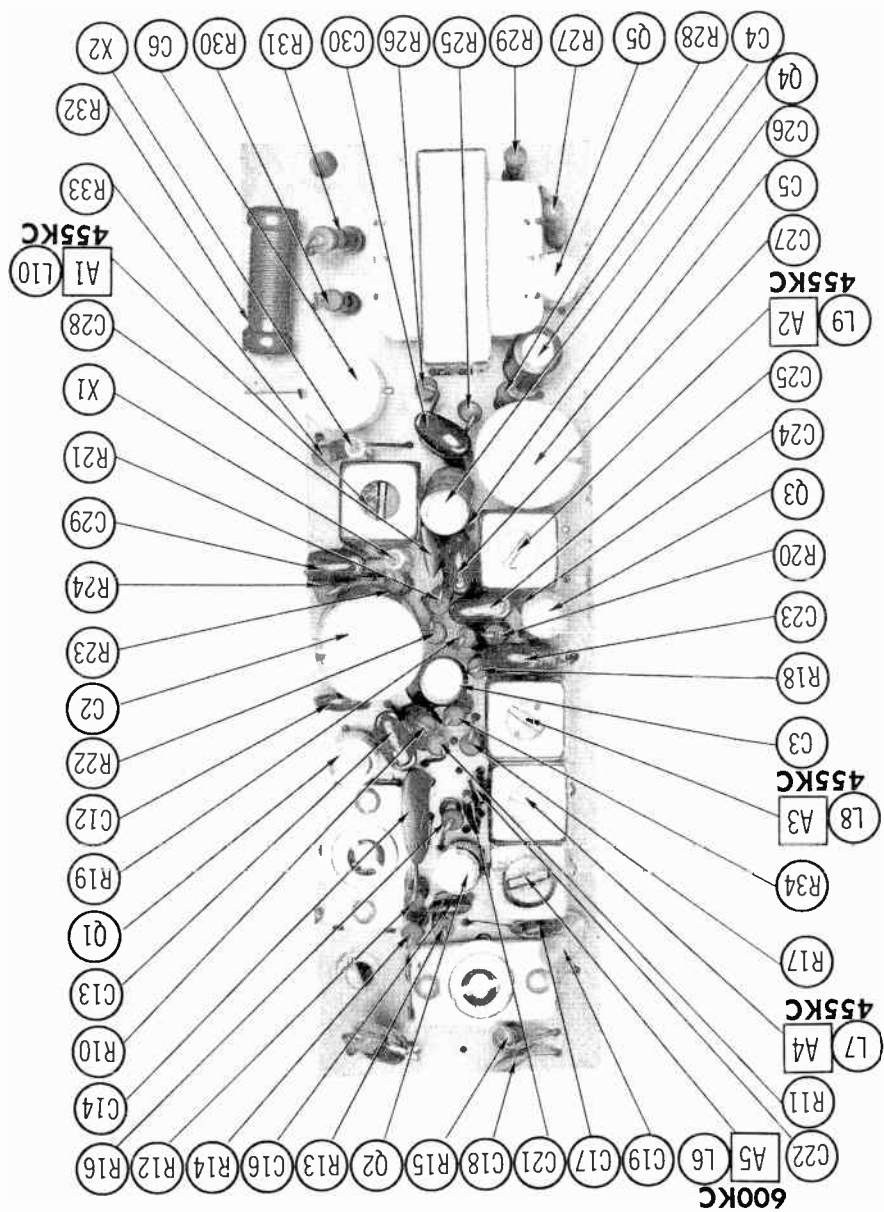
HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

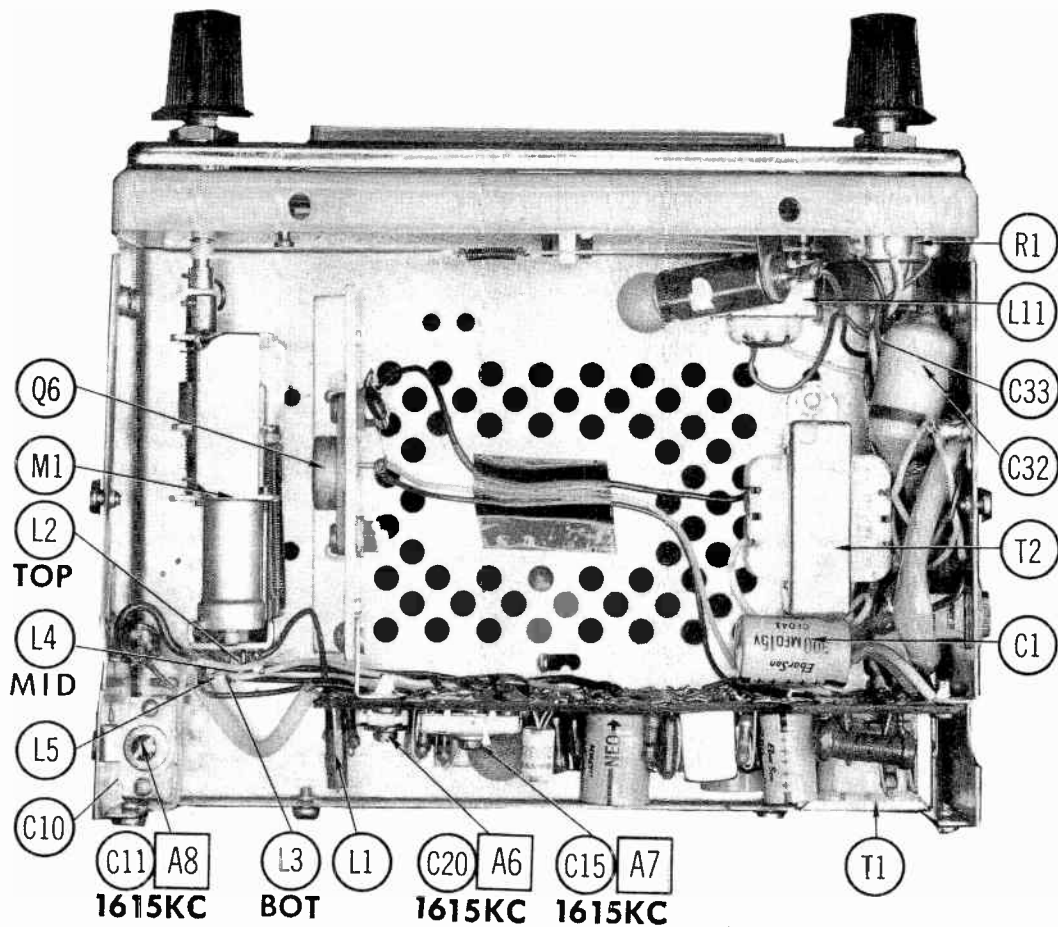
© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD765

World Radio History

TITAN MODEL TMA1500



A Howard W. Sams
CIRCUITRACE® Photo



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS for the most up-to-date replacement.

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8524 (Stranded) Available in 12 Colors
Bonding Strap	Use BELDEN No. 8885
	Use BELDEN No. 8661 (3/8 in.) or 8670 (3/4 in.)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q1	2SA322	RF Amp.	DS-25	GE-9	SK-3008	PNP
Q2	2SA322	Converter	DS-25	GE-9	SK-3008	PNP
Q3	2SA202	IF Amp.	DS-25	GE-9	SK-3005	PNP
Q4	2SA202	IF Amp.	DS-25	GE-9	SK-3005	PNP
Q5	2SB186	Driver	DS-26	GE-2	SK-3004	PNP
Q6	2SB254	Output	DS-520	GE-3	SK-3009	PNP

♦ When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		1S188	1N34AS	1N34A			
X2		1S188	1N34AS	1N34A			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		TITAN PART No.	REPLACEMENT DATA				
	CAP.	VOLT.		AEROVOX PART No.	CORNELI-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	300	15		BCD15300	BR500-15	QT1-30	MTA300F15	TL-1168
C2	200	10		BCD10190	NLW200-12	MT1-25	TT10X200	TL-1137
C3	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C4	10	10		BCD10010	NLW10-15	MT1-5	PET1340	VL-1127
C5	200	10		BCD10190	NLW200-12	MT1-25	TT10X200	TL-1137
C6	200	3		BCD3200	NLW200-3	MT1-24	TT3X200	VL-1059

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

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.
C10	20	†	NPO-DI 22	DTZ-22	CY601CG220K	CCTO-220 423	CN0422	10TCC-Q22
C11	60		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C12	.01		TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50
C13	.04		NPO-DI 120	DTZ-120	JBZ601YP121K	CCTO-121 423	CN0312	10TCC-T12
C14	120	†	TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C15	65		DI-1000	DD-102	JBS601YP102K	CCD-102	GP210	10TS-D10
C16	.01		NPO-DI 39	TCZ-39	CD10E390K500	CCTO-390	CN0439	10TCC-Q39
C17	.001		ADM-15-151	CPR-150J	CD15F151J500	DM-15-151 423	SX315	MS-315
C18	40	†	TTD-005	CK-502	HCZ3R0XR502P	CCD-502	TA250	TG-D50
C19	160		NPO-DI 3.0	DTZ-3R3	HCZ3R0XR503P	CCTO-3R3	CN0533	10TCC-V30
C20	50		TTD-05	CK-503	HCZ3R0XR503P		TA150	TG-S50
C21	.005		NPO-DI 8.2	CK-503	HCZ3R0XR503P		TA150	10TCC-V82
C22	3	①	TTD-05	DTZ-3R3	HCZ3R0XR503P	CCTO-3R3	CN0533	TG-S50
C23	.04		NPO-DI 3.0	CK-503	HCZ3R0XR503P		TA150	10TCC-V30
C24	8		TTD-05	DTZ-100	CV601CG101K	CCTO-101	CN0310	TG-S50
C25	.04		NPO-DI 100	CK-503	HCZ3R0XR503P		TA150	10TCC-T10
C26	3	†	TTD-05	CK-503	HCZ3R0XR503P	CCD-203	TA150	TG-S50
C27	.04		NPO-DI 100	CK-503	HCZ3R0XR503P	2DP-5-474	TA120	TG-S20
C28	100		TTD-05	CK-203	HCZ3R0XR203P	CCF-102	PVC2047	2PS-P47
C29	.04		DBE2P47		DMF2P47		CT280A	
C30	.04	150V	EF-001	MFT-1000				
C31	.022							
C32	.5							
C33	.001							

† Nominal Value.

① Not used in some versions.

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			TITAN PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume/Switch	5000Ω					

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		TITAN PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Choke (10uh)	① ① ① ①	19-1005	BC-566	4612	T860
L2	Antenna					
L3	RF					
L4	Oscillator Tuning		19-1004	BC-565	4610	T859
L5	RF Choke (6uh)					
L6	Oscillator					
L7	1st IF Pri.					
L8	1st IF Sec.		16-9028		8901	
L9	2nd IF		16-9028		2068	
L10	3rd IF					

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	TITAN PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L11	300ma	.4Ω	3MH		C-4095	TC-1	TR-159	TY16XT	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			TITAN PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	5	1						

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			TITAN PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T2	36Ω	3-4Ω						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				TITAN PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4"	PM	4Ω		P4W3	4A07	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1		1.2 Amp.			31201.5	155020	AGC 11/4	HDJ

MISCELLANEOUS

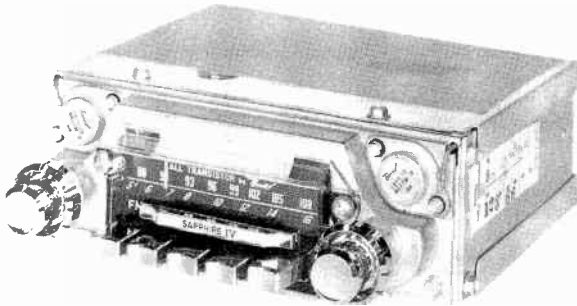
ITEM No.	PART NAME	TITAN PART No.	NOTES
M1	Tuner		

TITAN MODEL TMA1500



PHOTOFACT[®] with

CIRCUITRACE[®]



TRADE NAME : Volkswagen Models
 6FBVG (1966 Karmann Ghia)
 6FBVT (1966 Transporter)
 6FBVW (1966 Sedan)
 6FBV3 (1966 Volkswagen Type 3)
 For Current Address, See Annual Index.

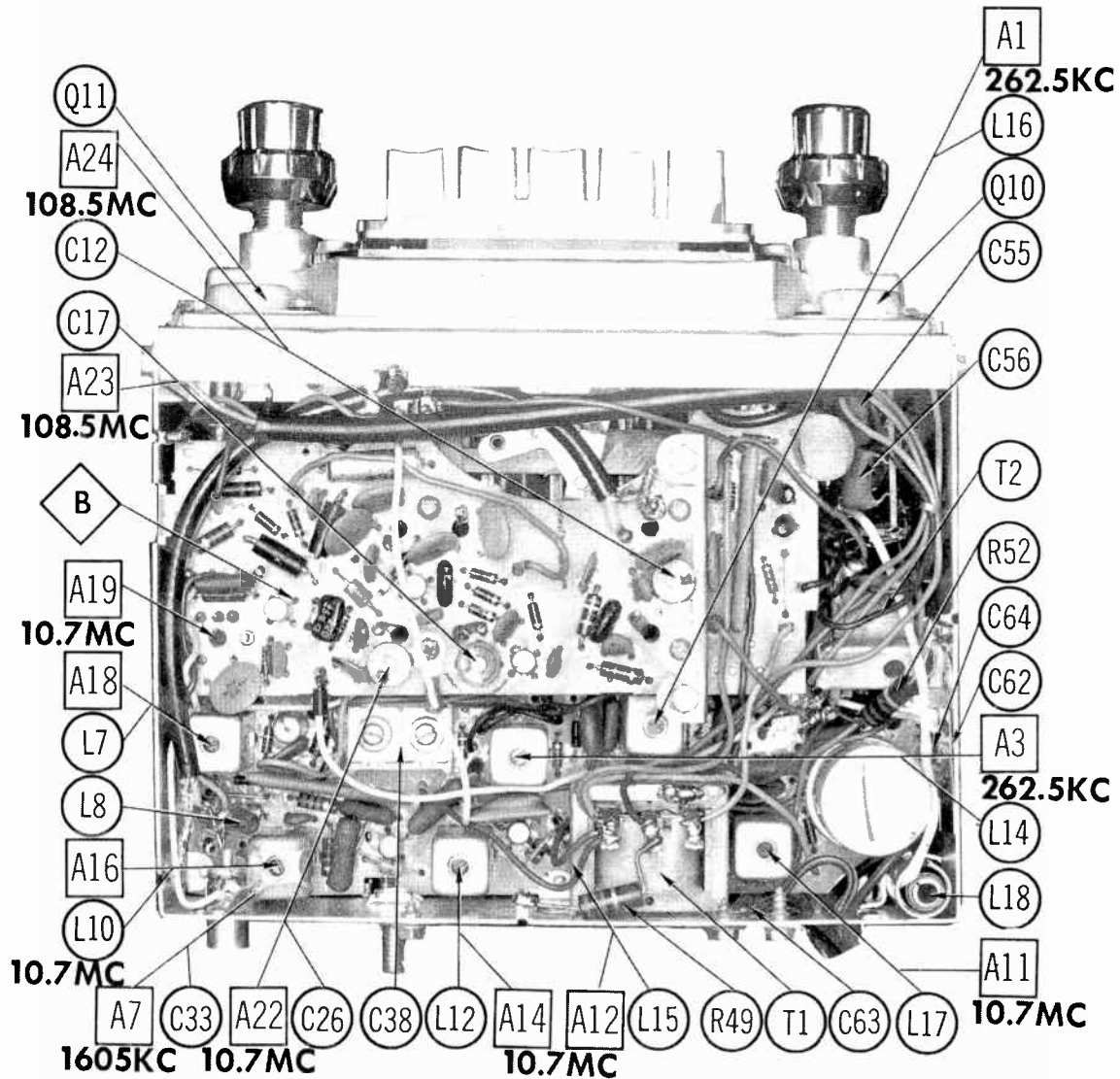
SUPPLIER :
 TYPE SET : 11 Transistor AM-FM Receiver

POWER SUPPLY : 6 Volt Storage Battery

RATING : .15 Amp. @ 6 Volts DC

TUNING RANGE : BROADCAST 540-1605KC
 FREQ. MOD: 88-108MC

VOLKSWAGEN MODELS 6FBVG, 6FBVT, 6FBVW, 6FBV3



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

© 1966 Howard W. Sams & Co., Inc. Printed in U. S. of America RD707

World Radio History

ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
Use only enough generator output to provide a usable indication.
Suggested Alignment Tools:

A1 thru A23. GENERAL CEMENT: 9440
 WALSCO: 2501

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
High side thru .1mfd to point  , low side to ground.	262.5KC (400v Mod.)	High Freq. End Stop.	Output Meter across voice coll.	A1, A2, A3, A4	Adjust for maximum.
Thru dummy (Fig. 1) to antenna receptacle.	1605KC	"	"	A5, A6, A7	"
Step 3 is not necessary unless tuner has been tampered with or associated components have been replaced. IF necessary, back tuning cores (A8, A9, A10) out of coils but not out of forms. Repeat step 2.					
Thru dummy (Fig. 1) to antenna receptacle.	1000KC	Tune to Signal.	Output Meter across voice coil.	A8, A9, A10	Adjust for maximum. Repeat steps 2 & 3 until no further improvement is noted.
With radio installed in car and antenna extended 30', tune in a weak station near 1400KC and adjust A7 for maximum output.					

FM ALIGNMENT USING AM SIGNAL GENERATOR — SELECTOR IN FM POSITION

High side thru .01mfd to point  , low side to ground.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point  ; common to ground.	A11, A12, A13, A14, A15, A16, A17, A18, A19, A20.	Adjust for maximum.
5.	"	"	DC probe to point  ; common to ground.	A21.	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR — SELECTOR IN FM POSITION

High side thru .01mfd to point  , low side to ground. Use only enough marker signal to obtain indication. Use 80% frequency modulated signal with 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point  ; low side to ground.	A11, A12, A13, A14, A15, A16, A17, A18, A19, A20.	Adjust for maximum gain and symmetry of response similar to Fig. 2 with marker as shown.
5.	"	"	Vert. amp. to point  ; low side to ground.	A21.	Adjust A21 (Secondary) to place marker at center of crossover lines similar to Fig. 3. Adjust A11 (Primary) for maximum amplitude and straightness of crossover lines.

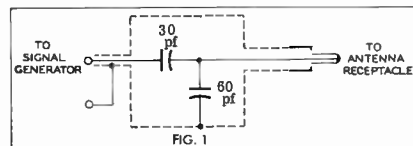
FM RF ALIGNMENT

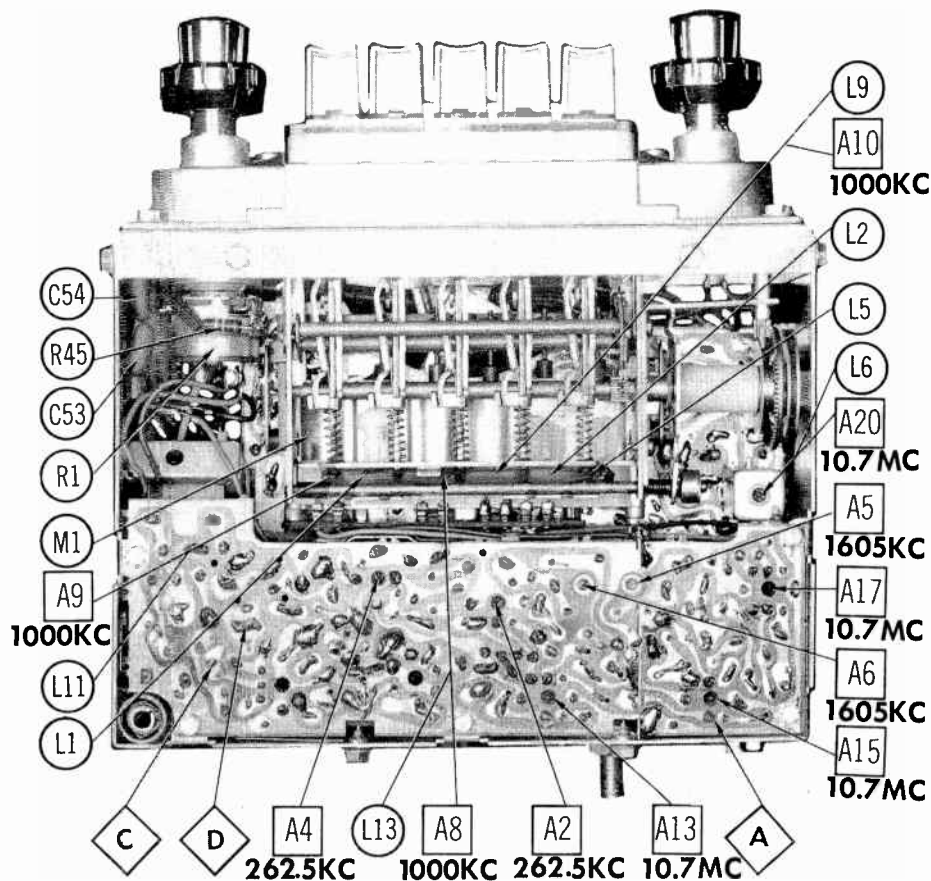
Connect generator across antenna terminals with 120Ω carbon resistors in series with each lead.					
	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
6.	98MC	98MC	DC probe of VTVM to point  ; common to ground.	A22, A23, A24.	Adjust for maximum.

Antenna Adjustment (A7) located right rear.

PUSH-BUTTON ADJUSTMENT

1. Pull button out.
2. Tune manually to desired station.
3. Press button in firmly.
4. Repeat for remaining buttons.





PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES	BENDIX PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.		
Q1		FM RF Amp.				NPN	2092417-0711
Q2		FM Mixer				NPN	2092417-0712
Q3		FM Oscillator				NPN	2092417-0713
Q4		AM RF /1st FM IF				NPN	2092416-0715
Q5		AM Conv./2nd FM IF				NPN	2092418-0716
Q6		AM IF/3rd FM IF				NPN	2092418-0717
Q7		Limiter				NPN	2092418-0716
Q8		Driver	DS-66	GE-10	SK-3020	NPN	2092809-0707 (2092809-0715)
Q9		AF Amp.	DS-66	GE-10	SK-3020	NPN	2092809-0002
Q10		Output	DS-520	GE-3	SK-3009	PNP *	2091859-0722
Q11		Output	DS-520	GE-3	SK-3009	PNP *	2091859-0722

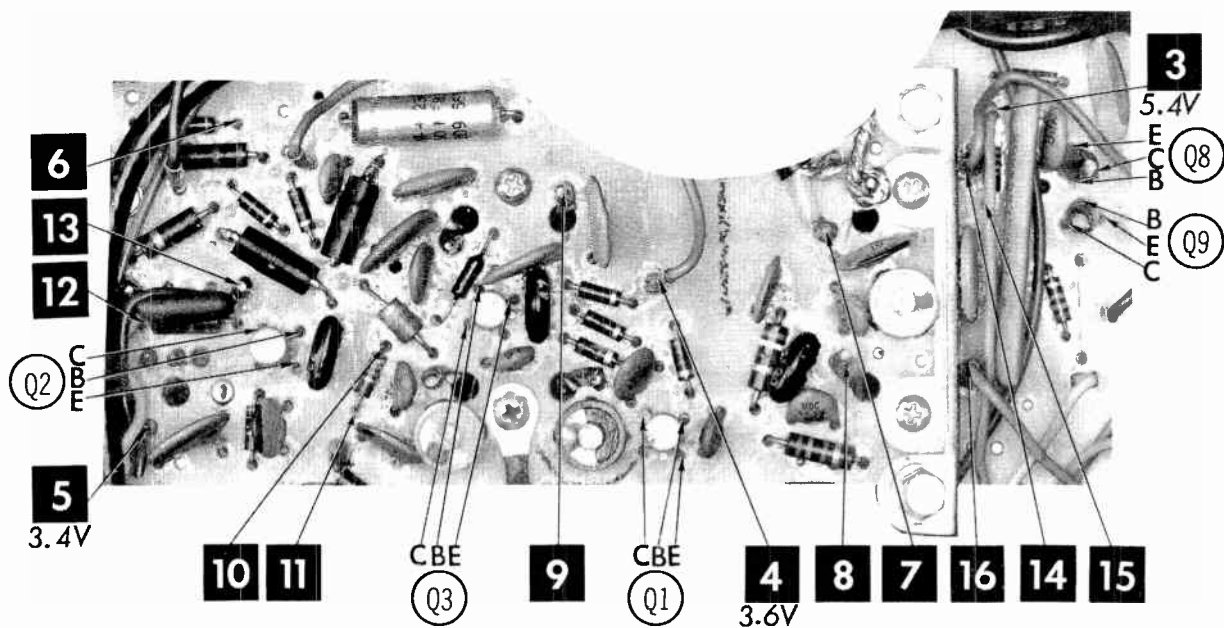
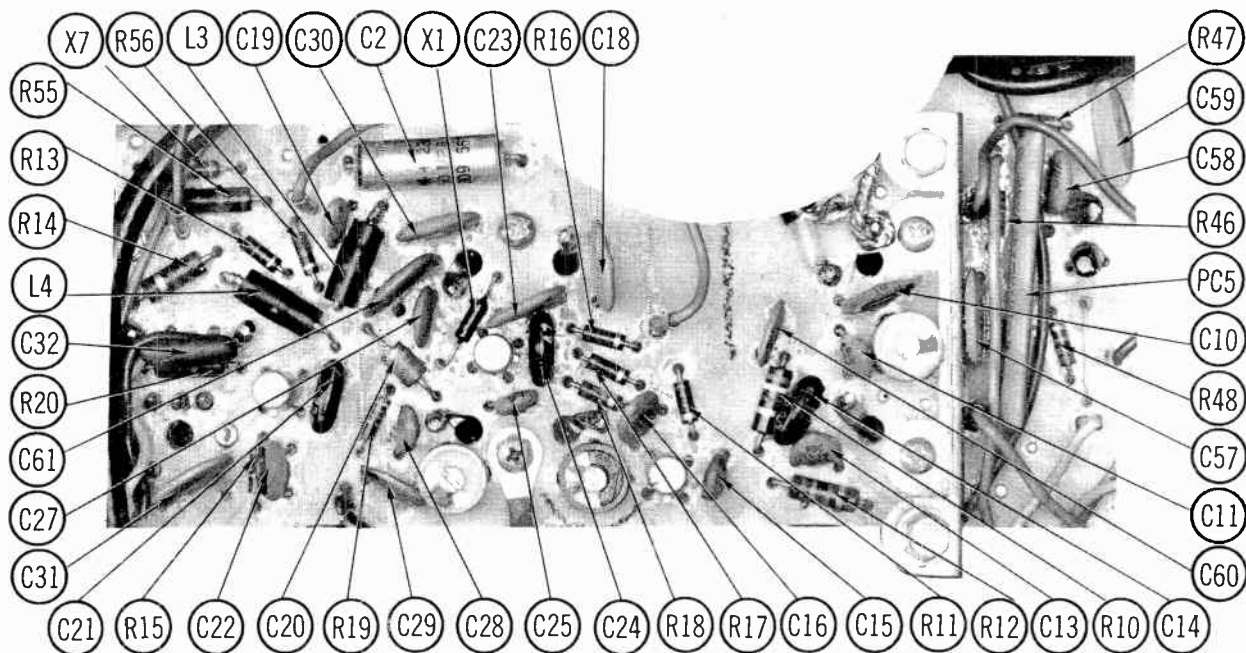
* When replacing, apply silicone grease to both sides of insulator. Tighten mounting screws securely.

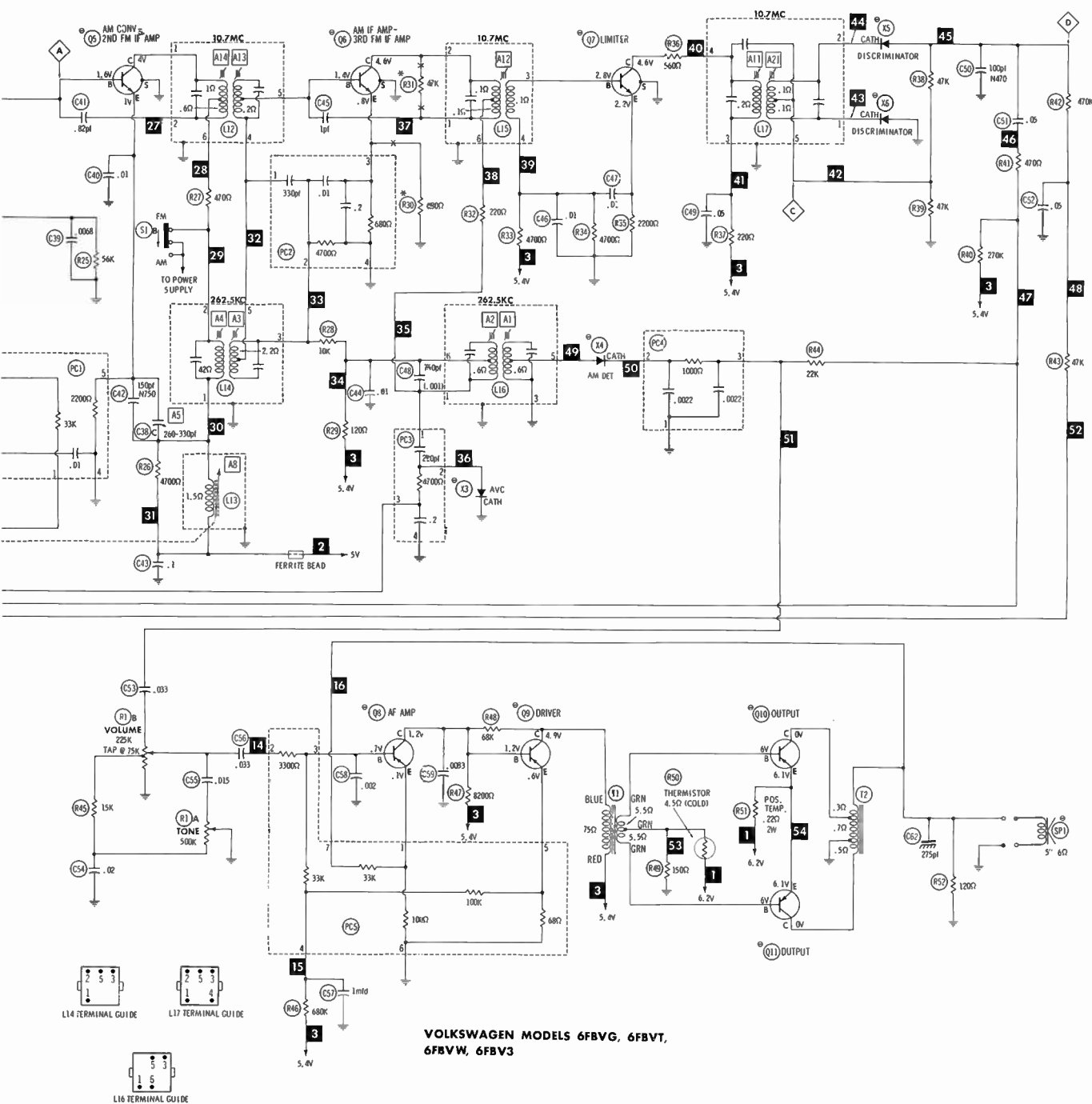
POWER RECTIFIERS & SIGNAL DIODES

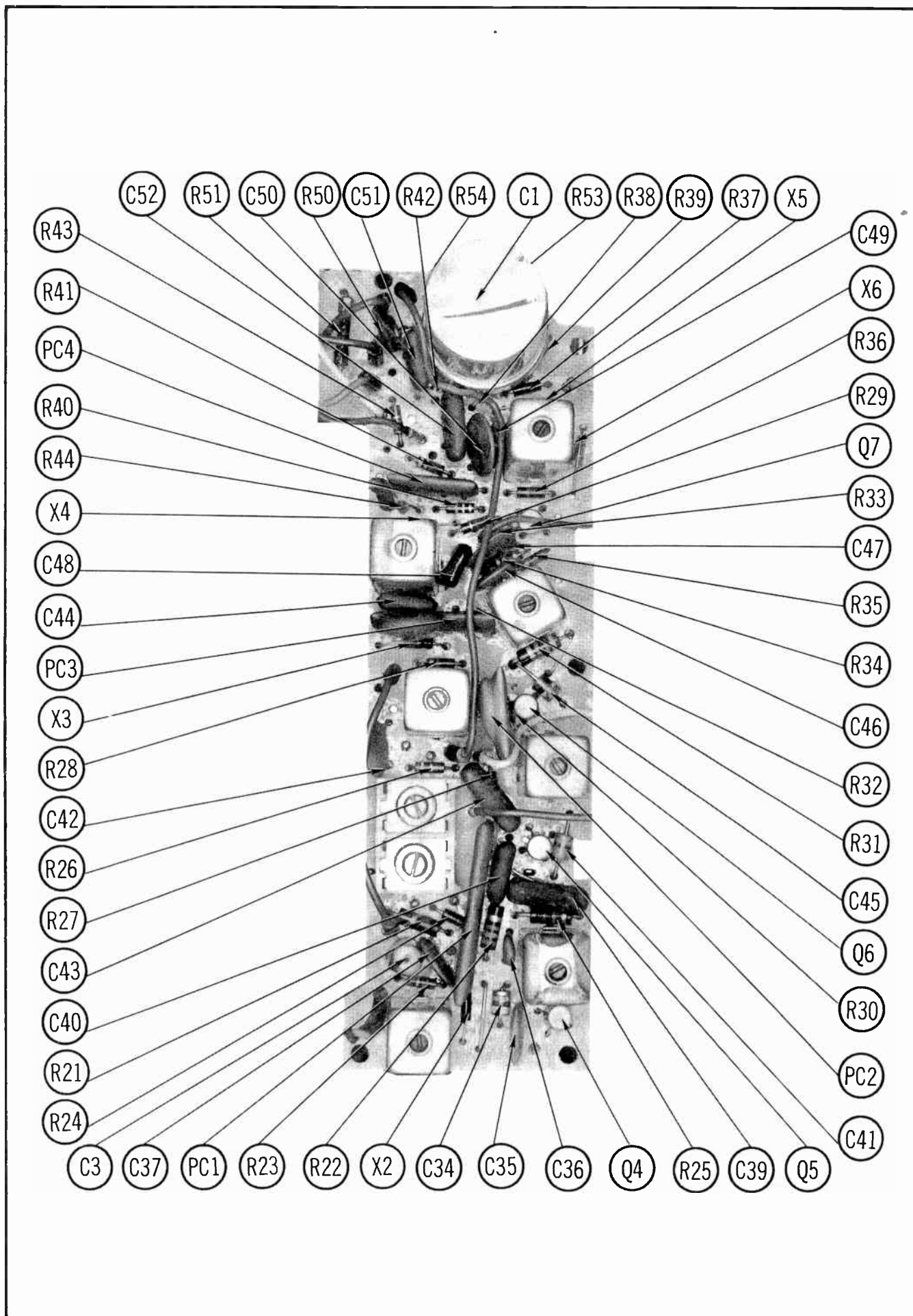
ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1		2092055-0003					
X2		2092055-0706	1N34AS	1N34A			
X3		2092055-0706	1N34AS	1N34A			
X4		2092055-0001	1N34AS	1N34A			
X5		2092055-0007	1N34AS	1N34A			
X6		2092055-0007	1N34AS	1N34A			
X7		2092055-0004					

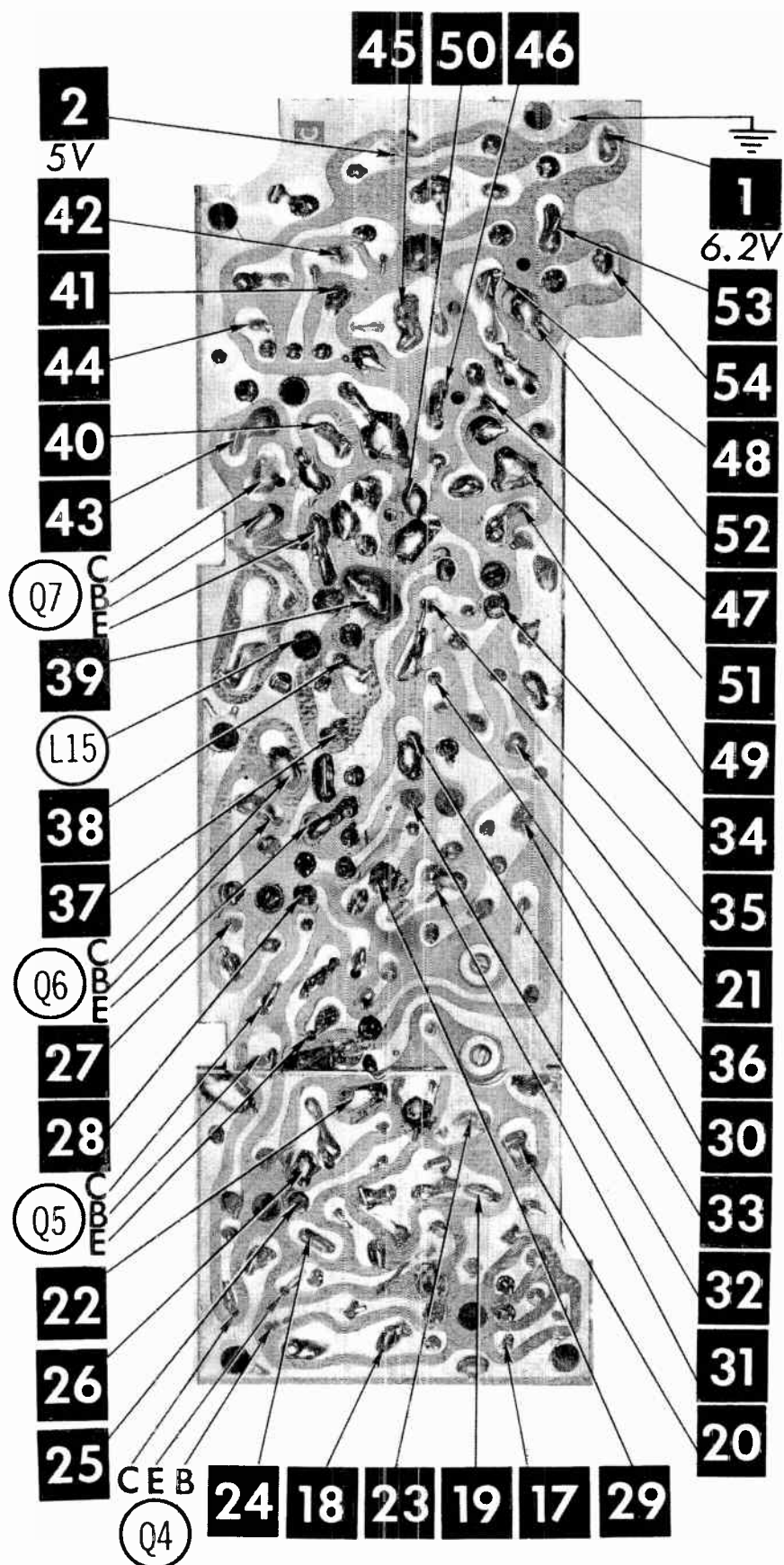
ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	BENDIX PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	1000	6	220353-0040	PWH3-54-13				PCL-3018.4
B	200	8						
C	500	6						
C2	50	8	2093687-0712	CRE417A	NLW50-10	MT1-16	TT10X50	TE-1119
C3	50	8	2093687-0711	CRE417A	NLW50-10	MT1-16	TT10X50	TE-1119









PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

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.
C10	51 NPO	#2094703-0701	NPO-DI50	TCZ-51	CZ601CH6R8D	CCTO-510	CN0450	10TCC-Q50
C11	6.8 NPO		NPO-DI 6.8	DTZ-6R8		CCTO-6R8	CN0568	10TCC-V68
C12	1-7							
C13	15 N150					*	*	10TCP-Q15
C14	120	#2094703-0703	DI-120	DD-121	JBZ601YP121K	CCD-121	GP312	10TCC-Q27
C15	220		DI-220	DD-221	JBZ601YP221K	CCD-221	GP322	10TS-T22
C16	27 NPO		NPO-DI 25	TCZ-27		CCTO-270	CN0427	5GA-T12
C17	4-20							
C18	68 NPO	#2093231-2338	NPO-DI 68	DTZ-68	CX601CG880K	CCTO-680	CN0468	10TCC-Q68
C19	3.3 NPO		NPO-DI3.0	DTZ-3R3		CCTO-3R3	CN0533	10TCC-V30
C20	.33							
C21	220		DI-220	DD-221	JBZ601YP221K	CCD-221	GP322	10TS-T22
C22	.001	#2094703-0701	DI-1000	DD-102	JBX601YP102K	CCD-102	GP210	10TS-D10
C23	.0022		DI-2200	DD-222	JBX601YP222K	CCD-222	GP222	10TS-D22
C24	47		NPO-DI 47	DTZ-47	CX601CG470K	CCTO-470	CN0547	10TCC-Q47
C25	1.5		NPO-DI 1.5	DTZ-1R5			CN0515	10TCC-V15
C26	1-7	#2094703-0701				*	*	10TCP-T18
C27	180 N150					CCTO-3R3	CN0533	10TCC-V30
C28	3.3 NPO		NPO-DI3.0	DTZ-3R3		CCD-502	TA250	TG-D50
C29	.005		TTD-005	CK-502	HCZ3R0XR502P	CCD-222	GP222	10TS-D22
C30	.0022	#2093114-0708	DI-2200	DD-222	JBX601YP222K	CCD-502	TA250	TG-D50
C31	.005		TTD-005	CK-502	HCZ3R0XR502P	4DP-1-103	PVC211	2TM-S10
C32	.01 25V		DBE4S1	CPR-10000J	DMF2S1	424		
C33	30-140							
C34	.47	#2092422-0715	DI-1800	DD-182	JBX601YP182K	CCS-182	GP218	5GA-D18
C35	.0018		NPO-DI 22	DTZ-22	CY601CG220K	CCTO-220	CN0422	10TCC-Q22
C36	22		CM-30D-822	DD-822	CD30F822K500	CCD-822	B282	30GA-D82
C37	.0082							
C38A	305-375	#2093231-2828						
B	180							
C	280-330							
C39	.0088 100V		DBE8D58	CPR-6800J	WMF1D68	1DP-1-682	PVC4268	6PS-D68
C40	.01 25V	#2093231-2828	DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C41	.82							
C42	150 N750		N750-DI 150	DTN-150		CCTN-151	CN7315	10TCU-T15
C43	.1 25V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C44	.01 25V	① ① (.001)†	DBE4S1	CPR-10000J	DMF2S1	4DP-1-103	PVC211	2TM-S10
C45	1		NPO-DI 1.0	TCZ-1		CCD-103	CN0510	10TCC-V10
C46	.01		TTD-01	CK-103	HCZ3R0XR103P	CCD-103	TA110	TG-S10
C47	.01		TTD-01	CK-103	HCZ3R0XR103P	CM-15-E-751	GP375	MS-375
C48	750	#2093050-0705	CM-20D-751	DD-751	CD19F751J500		TA150	TG-S50
C49	.05		TTD-05	CK-503	HCZ3R0XR503P			10TCT-T10
C50	100 N470					*	*	8PS-S50
C51	.05 25V		DBE6S5		DPMS6S5	6DP-3-503	PVC615	8PS-S50
C52	.05 25V	#2093050-0705	DBE6S5		DPMS6S5	6DP-3-503	PVC615	8PS-S50
C53	.033 25V		DBE4S33		DMF4S33	4DP-2-333	PVC6133	4PS-S33
C54	.02 25V		DBE4S22		DMF4S22	4DP-2-223	PVC6122	4PS-S22
C55	.015 25V		DBE4S15		DMF4S15	4DP-1-153	PVC6115	4PS-S15
C56	.033 25V	#2093050-0705	DBE4S33		DMF4S33	4DP-2-333	PVC6133	4PS-S33
C57	1mfd			UK-105	HCX3R0XR105P		MAG31	HY-135
C58	.002		DI-2000	DM-202	JBX601YP202K	CCD-202	GP220	5GAB-D22
C59	.0033		DI-3300	DD-332	JBV601YP332K	CCD-332	GP233	10TS-D33
C60	.005	#2093050-0705	TTD-005	CK-502	HCZ3R0XR502P	CCD-502	TA250	TG-D50
C61	.005		TTD-005	CK-502	HCZ3R0XR502P	CCD-502	TA250	TG-D50
C62	275							
C63	275							
C64	275							

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

① May be part of PC Unit, Part #2094691-0701. † Alternate Value.

Bendix Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			BENDIX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1A	Tone	500K	2094685-0701	F1-500K, R14-250K, FFS113, RFS206, KR-7	NP-500K-S, NRF1-250K, UPC-B-113, UP-D-206, NWE-23	†QJ-2276A	■ UE4629S
B	Volume/Switch	225K Tap @ 75K					

† "CONCENTRIKIT" Equivalent: K15 Kit, with Base Elements and Shafts: B11-133, P17-126 (Panel)
B18-130X, R9-208 (Rear)
76-2 (Switch)

"SNAPTROL" Equivalent: BU4, CF16, CR29T, SF15, SR51, WF.

■ "STA-LOC" Equivalent: FB55L, RU254T753, OS1812A, IS2375, US42.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	BENDIX PART No.			IRC PART No.	WORKMAN PART No.	BENDIX PART No.
R50	4.5Ω (Cold) Thermistor			220629-0017	R51	.22Ω 2W (PTC)			2090948-0007

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		BENDIX PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna	2056765-0001①				
L2	FM RF	2056767-0001①				
L3	RF Choke (1uh)	2092210-0005	19-1000	BC-561	4602	T855
L4	FM IF Trap (1uh)	2094901-0701	19-1000	BC-561	4602	T855
L5	FM Oscillator	2056766-0001①				
L6	1st FM IF	2093587-0706				
L7	2nd FM IF	2093587-0707				
L8	RF Choke (2uh)	2092210-0007	19-1002	BC-563	74F226AP	TA812
L9	AM Antenna	①				
L10	3rd FM IF	2092421-0717				
L11	AM RF	①				
L12	4th FM IF	2092421-0719				
L13	AM Oscillator	①				
L14	1st AM IF	2092419-0720				
L15	5th FM IF	2092421-0718				
L16	2nd AM IF	2092419-0719				
L17	Discriminator	2093856-0702				

① Part of M1.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (Ø CURRENT 1000~)	BENDIX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L18	150ma	.4Ω	240uh	2094209-0703					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			BENDIX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	2.2	1	2092192-0706					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			BENDIX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T2	22Ω Tap	@ 8Ω	2094696-0701					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA			NOTES
				BENDIX PART No.	JENSEN PART No.	QUAM PART No.	
SP1	5"	PM	6Ω	2093455-0701	C525T8	5A15Z6	Model: 6FBVG.
	6"	PM	6Ω	2093006-0701	C6T8	6A15Z6	Models: 6FBVT, 6FBVW.
	4" x 8"	PM	8Ω	2094561-0701	P4X8V8	48A2Z6	Model: 6FBV3.

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
F1	AGA	5 Amp.	2091811-0009	2094348-0507	301005	155004	AGA	HAF

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	BENDIX PART No.	REPLACEMENT DATA
PC1	IF Network	470Ω, 2200Ω, 33K, 68K, .01mfd, .01mfd.	2094687-0701	
PC2	IF Network	680Ω, 4700Ω, 330pf, .01mfd, .2mfd.	2094688-0702	
PC3	AVC Network	4700Ω, 220pf, .2mfd	2094690-0701	
PC4	AM Det Network	1000Ω, .0022mfd, .0022mfd	2094692-0701	
PC5	Biasing Network	68Ω, 100Ω, 3300Ω, 33K, 33K, 100K	2094689-0701	

MISCELLANEOUS

ITEM No.	PART NAME	BENDIX PART No.	NOTES
M1	Tuner (AM Tuning Coil Assy)	2094066-0507	(Complete with Pushbuttons)
S1	AM-FM Selector Sw.	2096131-0097	
		2092719-0707	

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	2094551-0501	Dial Pointer Assembly	2090129-0085
Dial Glass	2094516-0002	Knob-Tuning of Volume	2091420-0502
Pushbutton	2094440-0002	Knob-Tone or Dummy	2094480-0001

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
	8524 (Stranded) Available in 12 Colors
Shielded Hook-up Wire	Use BELDEN No. 8885
Bonding Strap	Use BELDEN No. 8661 (3/8 In.) or 8670 (3/4 In.)

VOLKSWAGEN MODELS 6FBVG, 6FBVT, 6FBVW, 6FBV3

This index lists all radios appearing in
"Auto Radio Manuals" and "PHOTOFACT Auto Radio Series"

152

AUTOMATIC (Continued)

Vol.

AUTOMATIC (Continued)

Vol.

AUTOMATIC (Continued)

Vol.

CPA-4533 (1964 Corvair)..... AR-28
 CPV-4048 (1964 Chevelle)..... AR-28
 CPV-5007 (1965 Chevelle)..... AR-29
 CR-3006 (1963 Corvair)..... AR-23
 CR-4034 (1964 Corvair)..... AR-28
 CRA-3046 (1963 Corvair)..... AR-23
 CRA-4534 (1964 Corvair)..... AR-28
 CRP-442A/AT (1963 Corvair)..... AR-23
 CRP-3007 (1963 Corvair)..... AR-23
 CRP-4033 (1964 Corvair)..... AR-28
 CRP-5009 (1965 Corvair)..... AR-29
 CT-356 (1955-56 Chevrolet)..... AR-13
 CT-387 (1957 Chevrolet)..... AR-12
 CT-4058 (1964 Comet)..... AR-27
 CTP-792AT (1962 Comet)..... AR-23
 CTP-3004 (1963 Comet)..... AR-23
 CTP4059 (1964 Comet)..... AR-27
 CTP-5071 (1965 Comet)..... AR-29
 CTR-6A (1955-56 Chevrolet)..... AR-12
 CTR-6B (1955-56 Chevrolet)..... AR-13
 CTR-77A (1957 Chevrolet)..... AR-9
 CU-39..... AR-12
 CY-3010 (1963 Chevy II)..... AR-23
 CY-4025 (1964 Chevy II)..... AR-28
 CY-5005 (1965 Chevy II)..... AR-29
 CYP-3009 (1963 Chevy II)..... AR-23
 CYP-4032 (1964 Chevy II)..... AR-28
 CYP-5006 (1965 Chevy II)..... AR-29
 D-2 (1959 Renault Dauphine)..... AR-12
 D-8 (1959 Renault Dauphine)..... AR-12
 DAD-6508 (1966 Dodge Dart)..... AR-39
 DAP-39 (1959 Dodge)..... AR-13
 DD-5125 (1965 Dart)..... AR-30
 DD-5125N (1965 Dart 270)..... AR-35
 DD-6008 (1966 Dodge Dart)..... AR-39
 DE-300 (1960 DeSoto)..... AR-14
 DE-3077 (1963 Dodge Dart)..... AR-22
 DE-3078 (1963 Dodge Dart)..... AR-22
 DEP-4154..... AR-27
 DEP-4654..... AR-27
 DET-28 (1957-58 DeSoto)..... AR-9
 DFM-3095..... AR-26
 DM-132 (1953 Dodge)..... AR-5
 DP-6 (1957-59 Renault Dauphine)..... AR-12
 DP-11 (1957-59 Renault Dauphine)..... AR-12
 DP-3082 (1964 Dodge 880)..... AR-26
 DP-4107 (1964 Dodge 880)..... AR-26
 DP-5127N (1965 Dodge 880, Polara, Monaco)..... AR-35
 DTX-67A (1957-58 Dodge)..... AR-12
 DTX-68 (1957-58 Dodge)..... AR-12
 DUP-42..... AR-20
 DUP-4151..... AR-27
 DUP-4651..... AR-27
 DX-410 (1960 Dart, DeSoto, Dodge)..... AR-14
 DX-618 (1959 Dodge)..... AR-13
 DX-3013 (1963 Dodge)..... AR-22
 DX-5121 (1965 Coronet)..... AR-30
 DX-5121N (1965 Coronet)..... AR-35
 DXA-50 (1960 Dart, DeSoto, Dodge)..... AR-14
 DXA-3053 (1963 Dodge)..... AR-22
 EM-29..... AR-21
 EP-108 (1958 Edsel)..... AR-12
 F-100 (Revised)(1949-50 Ford)..... AR-6
 F-128 (1958 Ford)..... AR-12
 F-128C (1958 Ford)..... AR-12
 F-139 (1959 Ford)..... AR-6
 F-151 (Revised)(1951 Ford)..... AR-6
 F-152 (1952 Ford)..... AR-6
 F-241 (1954 Ford)..... AR-6
 F-322A..... AR-19
 F-3016 (1963 Ford)..... AR-23
 F-4055 (1964 Ford)..... AR-27
 F-5058N (1965 Galaxie)..... AR-36
 F-6105P (1965/66 Galaxie)..... AR-40
 FA-219 (1959 Ford)..... AR-11
 FA-3056 (1963 Ford)..... AR-23
 FA-4555 (1964 Ford)..... AR-27
 FA-6605P (1965/66 Galaxie)..... AR-40
 FAL-4554..... AR-27
 FAN-3058 (1963 Fairlane)..... AR-23
 FAN-4551 (1964 Falcon)..... AR-27
 FAP-70 (1960 Ford)..... AR-14
 FAP-4556 (1964 Ford)..... AR-27
 FAP-6606P (1965/66 Galaxie)..... AR-40
 FAR-762AT (1962 Fairlane)..... AR-24
 FAR-3018 (1963 Fairlane)..... AR-23
 FAR-4054 (1964 Fairlane)..... AR-27
 FFM-3091A (1963 Ford)..... AR-22
 FM-61..... AR-14
 FM-731..... AR-6
 FM-3083..... AR-22
 FM-3083A..... AR-27
 FM-5099..... AR-32
 FN-4051 (1964 Falcon)..... AR-17
 FNP-430 (1960 Falcon)..... AR-24
 FNP-452AT (1962 Falcon)..... AR-23
 FNP-3015 (1963 Falcon)..... AR-23
 FNP-3015A (1963 Falcon)..... AR-23
 FNP-4052 (1964 Falcon)..... AR-27
 FNP-5051N (1965 Falcon)..... AR-36
 FOP-4528 (1964 F-85)..... AR-28
 FP-238 (1958 Ford)..... AR-12
 FP-238C (1958 Ford)..... AR-12

FP-260 (1960 Ford)..... AR-14
 FP-271AT (1960-61 Ford)..... AR-16
 FP-276TR (1959 Ford)..... AR-11
 FP-3017 (1963 Ford)..... AR-23
 FP-4056 (1964 Ford)..... AR-27
 FP-5057N (1965 Galaxie)..... AR-36
 FP-6106P (1965/66 Galaxie)..... AR-40
 FPA-220 (1960 Falcon)..... AR-14
 FPA-3055 (1963 Falcon)..... AR-23
 FPA-3057 (1963 Ford)..... AR-23
 FPA-4552 (1964 Falcon)..... AR-27
 FPF-4557 (1964 Falcon)..... AR-27
 FPO-4028 (1964 F-85)..... AR-28
 FPO-5033 (1965 Olds F-85)..... AR-29
 FT-227 (1957 Ford)..... AR-12
 FTP-37A (1957 Ford)..... AR-9
 FUP-3080 (1963 Falcon Futura)..... AR-23
 FUP-4057 (1964 Falcon)..... AR-27
 H-4 (1958 Hillman)..... AR-12
 H-9 (1958 Hillman)..... AR-12
 H-400 (1949-50-51 Hudson)..... AR-6
 HP-10 (1958 Hillman)..... AR-12
 HP-15 (1958 Hillman)..... AR-12
 K-700 (1951 Henry J)..... AR-6
 L-390 (1959-60 Studebaker Lark)..... AR-14
 L-559 (Early)(1959 Studebaker Lark)..... AR-11
 L-559 (Late)(1959-60 Studebaker Lark)..... AR-14
 LA-448 (1959 Studebaker Lark)..... AR-11
 LAP-29 (1959 Studebaker Lark)..... AR-11
 LAP-40 (1959-60 Studebaker Lark)..... AR-14
 LP-929 (1959 Studebaker Lark)..... AR-11
 MAP-99 (Early)(1959 Mercury)..... AR-11
 MAP-99 (Late)(1959-60 Mercury)..... AR-14
 MAP-3063 (1963 Mercury)..... AR-23
 MAP-4561 (1964 Mercury)..... AR-27
 MB-72..... AR-30
 MM-430 (1953 Mercury)..... AR-4
 MP-69..... AR-6
 MP-126..... AR-6
 MT-47C (1957 Mercury)..... AR-12
 MT-419 (Early)(1959 Mercury)..... AR-11
 MT-419 (Late)(1959-60 Mercury)..... AR-14
 MT-530 (1959-60 Mercury)..... AR-14
 MT-3023 (1963 Mercury)..... AR-23
 MT-4061 (1964 Mercury)..... AR-27
 MT-5073 (1965 Mercury)..... AR-29
 MTR-602AT (1962 Meteor)..... AR-24
 MU-34..... AR-6
 MUS-4067 (1964 Mustang)..... AR-27
 MUS-5059 (1965 Mustang)..... AR-29
 MUS-5059N (1965 Mustang)..... AR-36
 N-638 (1958-59 Rambler American)..... AR-13
 N-639 (1958-59 Rambler American)..... AR-13
 N-3028 (1963 Rambler American)..... AR-23
 NA-749 (1958-59 Rambler American)..... AR-13
 NA-3068 (1963 Rambler American)..... AR-23
 NAP-3069 (1963 Rambler American)..... AR-23
 NAY-3052 (1963 Chrysler)..... AR-23
 NP-3029 (1963 Rambler American)..... AR-23
 NP-5153 (1965 Rambler American)..... AR-29
 NU-63-AT..... AR-23
 NU-3107..... AR-23
 NU-3107A..... AR-28
 NY-400 (1960 Chrysler)..... AR-14
 NY-598A (1958 Chrysler)..... AR-10
 NY-3012 (1963 Chrysler)..... AR-23
 NY-3100 (1963 Chrysler New Yorker)..... AR-26
 NY-5101N (1965 Chrysler)..... AR-35
 OAE-10 (1960 Oldsmobile)..... AR-14
 OAE-4531 (1964 Oldsmobile)..... AR-28
 OE-160 (1960 Oldsmobile)..... AR-14
 OE-171AT (1961 Oldsmobile)..... AR-16
 OE-3024 (1963 Oldsmobile)..... AR-23
 OE-4031 (1964 Oldsmobile)..... AR-28
 OE-5031 (1965 Oldsmobile)..... AR-29
 P-89..... AR-20
 P-651 (Revised)(1951 Plymouth)..... AR-6
 P-4152..... AR-27
 P-4652..... AR-27
 P-5040 (1965 Pontiac)..... AR-29
 PA-74R..... AR-30
 PA-85..... AR-23
 PA-3065 (1963 Plymouth)..... AR-26
 PA-3285..... AR-23
 PAC-90 (1960 Pontiac)..... AR-14
 PAC-3067 (1963 Pontiac)..... AR-23
 PAC-4529 (1964 Pontiac)..... AR-28
 PAF-4340..... AR-29
 PAP-69 (1959 Plymouth)..... AR-15
 PAP-80 (1960 Plymouth)..... AR-15
 PAP-3066 (1963 Plymouth)..... AR-22
 PC-350 (1960 Oldsmobile)..... AR-14
 PC-361AT (1961 Pontiac)..... AR-16
 PC-3027 (1963 Pontiac)..... AR-23
 PC-4029 (1964 Pontiac)..... AR-28
 PC-5041 (1965 Pontiac)..... AR-29
 PFM-3092A (1963 Pontiac)..... AR-22
 PFM-3094 (1963 Plymouth)..... AR-22
 PFX-5109 (1965 Fury)..... AR-30
 PFX-5109N (1965 Fury)..... AR-35
 PM-236 (1953 Plymouth)..... AR-5
 PP-330 (1960 Plymouth)..... AR-15
 PP-341AT (1961 Plymouth)..... AR-16

PP-819 (1959 Plymouth)..... AR-15
 PP-3026 (1963 Plymouth)..... AR-22
 PP-5105 (1965 Belvedere)..... AR-30
 PP-5105N (1965 Belvedere)..... AR-35
 PS-4153..... AR-27
 PS-4653..... AR-27
 PT-3025 (1963 Plymouth)..... AR-26
 PUT-3108..... AR-23
 PUT-3108A..... AR-28
 R-54, B..... AR-11
 R-61..... AR-20
 RAP-89 (1959 Rambler)..... AR-13
 RAP-100 (1960 Rambler)..... AR-13
 RAP-3070 (1963 Rambler)..... AR-26
 RG-59..... AR-14
 RG-59C..... AR-14
 RP-470 (1960 Rambler)..... AR-13
 RP-481AT (1960-61 Rambler)..... AR-16
 RP-519 (1959 Rambler)..... AR-13
 RP-3030 (1963 Rambler)..... AR-26
 RP-3097 (1963 Rambler)..... AR-23
 RP-5151 (1965 Rambler)..... AR-29
 RT-7B..... AR-13
 RT-7D..... AR-11
 S-91 (1958-59 Simca Aronde)..... AR-11
 S-500 (1950-51 Studebaker)..... AR-6
 S-551 (Revised)(1950-51 Studebaker)..... AR-6
 SA-529 (1958-59 Simca Aronde)..... AR-11
 SAB-3071 (1963 Special)..... AR-23
 SB-3032 (1963 Special)..... AR-23
 SBP-3033 (1963 Special)..... AR-23
 SBP-4027 (1964 Buick Special)..... AR-28
 SP-1 (1958-59 Simca Aronde)..... AR-11
 SPA-209 (1958-59 Simca Aronde)..... AR-11
 SPA-3072 (1963 Special)..... AR-23
 SPA-4527 (1964 Buick Special)..... AR-28
 TA-3073 (1963 F-85, Tempest)..... AR-23
 TAC-3051 (1963 Chev. Truck)..... AR-22
 TAC-4541 (1964 Chevrolet Truck)..... AR-28
 TAC-5514N (1965 Chevrolet Truck)..... AR-37
 TAP-3074 (1963 F-85, Tempest)..... AR-23
 TAP-4526 (1964 Tempest)..... AR-28
 TAX-4542 (1964 Chevrolet Truck)..... AR-28
 TAX-5513N (1965 Chevrolet Truck)..... AR-37
 TC-3035 (1963 F-85, Tempest)..... AR-23
 TCM-3011 (1963 Chev. Truck)..... AR-22
 TCM-4041 (1964 Chevrolet Truck)..... AR-28
 TCM-5014 (1965 Chevrolet Truck)..... AR-29
 TCM-5014N (1965 Chevrolet Truck)..... AR-37
 TCX-4042 (1964 Chevrolet Truck)..... AR-28
 TCX-5013 (1965 Chevrolet Truck)..... AR-29
 TCX-5013N (1965 Chevrolet Truck)..... AR-37
 TPC-31 (1961 Buick Special, Oldsmobile F-85, Pontiac Tempest)..... AR-16
 TPC-31AT (1963 F-85, Tempest)..... AR-23
 TPC-42AT (1963 F-85, Tempest)..... AR-23
 TPC-3036 (1963 F-85, Tempest)..... AR-23
 TPC-4026 (1964 Tempest)..... AR-28
 TPP-87A (1957 Plymouth)..... AR-13
 TPP-88 (1957-58 Plymouth)..... AR-13
 TPP-88C (1957-58 Plymouth)..... AR-13
 TR-12 (Tractor)..... AR-4
 TR-13B..... AR-25
 TR-48AT..... AR-25
 TR-0048..... AR-25
 TUN-5..... AR-15
 UE-4155A..... AR-28
 UE-4171A..... AR-28
 UE-4655A..... AR-28
 UE-4671A..... AR-28
 UFM-3089..... AR-22
 UFP-3098..... AR-22
 UN-40..... AR-12
 VP-12..... AR-12
 VPA-280 (1960 Valiant)..... AR-15
 VPA-3076 (1963 Valiant)..... AR-22
 VT-5108 (1965 Valiant)..... AR-30
 VTP-440 (1960 Valiant)..... AR-15
 VTP-3038 (1963 Valiant)..... AR-22
 VTP-5107 (1965 Valiant)..... AR-30
 W-76 (Thru 1957 Volkswagen)..... AR-12
 W-84 (1958-63 Volkswagen)..... AR-23
 W-89 (1958-59 Volkswagen)..... AR-12
 W-3040 (1958-63 Volkswagen)..... AR-23
 W-3040A (1964 Volkswagen)..... AR-28
 W-5204 (See Page 41) (1965 Volkswagen)..... AR-28
 WP-4 (1958-59 Volkswagen)..... AR-12
 WP-7 (Thru 1957 Volkswagen)..... AR-12
 WP-7G (Karmann-Ghia)..... AR-12
 WP-19 (1958-59 Volkswagen)..... AR-12
 WP-21 (1958-63 Volkswagen)..... AR-23
 WP-167..... AR-15
 WP-3039 (1958-63 Volkswagen)..... AR-23
 WP-3093A (1964 Volkswagen)..... AR-28
 WP-5203 (See Page 41)(1965 Volkswagen)..... AR-28
 WPC-8 (Thru 1957 Volkswagen)..... AR-12
 YAM-3050 (1963 Chevy II)..... AR-23
 YAM-4525 (1964 Chevy II)..... AR-28
 YP-3049 (1963 Chevy II)..... AR-23
 YP-4532 (1964 Chevy II)..... AR-28

CORONADO	Vol.	FORD (Continued)	Vol.	FORD (Continued)	Vol.
35RA2-43-5101A	AR- 5	F6TBF (1966 Galaxie).....	AR-39	94BT (B9C-18805-A1)(1959 Truck).....	AR-11
CORTINA		F6TBD (1966 Fairlane).....	AR-39	94MF (B9FA-18806-C)(1959).....	AR-10
6BEF (1966).....	AR-39	F6TBZ (1966 Mustang).....	AR-39	94MFM (B9FA-18805-E)(1959).....	AR-10
CORVAIR (See Chevrolet)		RV2F (C20Z-18875-C).....	AR-19	94MS (B9SF-18805-B)(1959 Thunderbird)...	AR-11
DELRAY		RV4D (1965 Ford).....	AR-30	95MF (B9FA-18806-B)(1959).....	AR-10
SM-711	AR-22	RV4D-NS (1965 Ford).....	AR-30	GIBBS	
SM-751	AR-22	RV4F (1964 Ford).....	AR-24	440	AR-27
TRM-701.....	AR-22	RV6F (See page 75)(Reverb unit for	AR-30	441	AR-27
UA-702	AR-22	1965/66 Ford).....	AR-35	442	AR-27
UM-701	AR-22	T6SMF (C6AA-19A049-C)(1966 Galaxie)...	AR-35	445	AR-28
VWA-702.....	AR-22	T6SMS (C6SA-18806-C)(1966 Thunderbird)	AR-35	446	AR-28
VWM-701	AR-22	T6SMZ (C6ZA-18806-E)(1966 Mustang)...	AR-35	550	AR-37
DESOTO (See MoPar)		TOB5TBS (1965 Thunderbird).....	AR-32	551	AR-37
		TOB8TBS (1966 Thunderbird).....	AR-39	551-6	AR-37
		04BF (COAZ-18805, COAF-18806)	AR-12	552	AR-37
		(1960)(Early version only.)	AR-30	553	AR-37
		04BF (Late Prod.)(1960 Ford).....	AR-12	GMC	
		04BT (COTF-18805-F)(1960 Truck).....	AR-12	2233398 (12V Truck).....	AR- 9
		04MD (CODF-18805-D)(1960 Falcon).....	AR-12	2233850 (1960 GMC).....	AR-13
		04MF (COAF-18805-U)(1960).....	AR-12	2233944 (1961 GMC).....	AR-16
		04MFM (COAF-18805-T)(1960).....	AR-12	2233984 (1962 GMC).....	AR-18
		1TMC (C1VV-18810-C)(1961 Continental)...	AR-15	2234003 (1963 Truck).....	AR-20
		1TMS (C1SF-18810-B)(1961 Thunderbird)...	AR-15	2234040 (1964 Truck).....	AR-24
		2TBO (C2OZ-18805-B)(1962 Fairlane).....	AR-18	2234086 (1964 Truck).....	AR-24
		2TMF (C2AA-18806-M)(1962).....	AR-18	7291556 (1965 Truck).....	AR-29
		2TMX (C2AA-18806-N)(1962).....	AR- 4	7291576 (1965 Truck).....	AR-29
		3MF (FAD-18805-C)(1953).....	AR- 4	7293806 (1966 GMC Truck).....	AR-36
		3MFT (FAE-18805-A)(1953 Truck).....	AR- 4	7293816 (1966 GMC Truck).....	AR-36
		3SF755 (FAD-18805-D)(1953).....	AR-19	7297526 (1966 GMC Truck).....	AR-36
		3TBD (C3DZ-18805)(1963 Falcon).....	AR-19		
		3TBO (C3OZ-18805)(1963 Fairlane).....	AR-23	CONSET	
		3TMF (C3AA-18806)(1963 Galaxie).....	AR- 4	3239	AR- 9
		4BF (FDA-18805-C)(1954)(See Model M4B)	AR- 5	GRANCO	
		4MF (FDA-18805-B-2)(1954).....	AR- 5	ARC-60	AR-15
		4SF765 (FDA-18805-A)(1954).....	AR-23	HEATH	
		4TBD (C4DA-18805)(1964 Falcon).....	AR-23	GR-41	AR-22
		4TBO (C4OA-18805)(1964 Fairlane).....	AR-26	GRW-41	AR-22
		4TBT (1964 Ford Truck).....	AR-26		
		4TBU (1964 Ford Econoline).....	AR-32	HITACHI	
		4TBZ (1964/65 Mustang).....	AR-23	TM-816U.....	AR-37
		4TMF (C4GA-18806)(1964 Galaxie).....	AR-23	KM1001.....	AR-38
		4TMS (C4SA-18806-J).....	AR-23		
		4TMS(F)(C4SA-18806-H)(1964 Thunderbird)	AR- 5	HOFFMAN	
		5BF (FDH-18805-B1)(1955).....	AR- 5	769	AR-28
		5MF (FDH-18805-B2)(1955).....	AR- 5	769 (Revised).....	AR-31
		5MFS, 5MFS8 (FDH-18805-B)	AR- 5	HUDSON (Also See American Motors)	
		(1955 Thunderbird).....	AR- 5	236476 (SH759)(1953).....	AR- 4
		5MF8 (FDH-18805-A2)(1955).....	AR-28	236486, 238060 (SH758).....	AR- 4
		5TBF (1965 Galaxie).....	AR-28	4389027 (HN5AC-8)(1955).....	AR- 6
		5TBO (1965 Fairlane).....	AR-33	INLAND	
		5TBT (1965 Ford Truck).....	AR-33	X100	AR-27
		5TBU (1965 Ford Econoline).....	AR-33	INTERNATIONAL	
		5TMF (C5AA-18806-G1)(1965 Galaxie).....	AR-28	IL5TCA, IL5TCA-12(88065-R96)	
		5TMZ (C5Z1-18806-B)(1965 Mustang).....	AR-28	(1955 "R" Line Truck).....	AR- 6
		5TMS (C5SA-18806-B), 5TMSF (C5SA-18806-	AR-28	IL7TC, IL7TC-12(1957 "R" Line Truck)...	AR- 7
		A)(1965 Thunderbird).....	AR-28	04MI (1961 Scout and "C" Line Truck)....	AR-16
		5TPD (1965 Falcon).....	AR-28	04MI-RV (1961 "R" & "DC" Line Truck)...	AR-16
		5TPO (1965 Fairlane).....	AR-28	3TMI (244224-R91).....	AR-24
		5TPZ (1965 Mustang).....	AR- 6	5SMI (244-261-R92)(1965 Truck).....	AR-34
		6BF (FDR-18805-B)(1956).....	AR- 6	5SMI-RV (244-262-R92)(1965 Truck)....	AR-34
		6BFT (FDV-18805-A)(1956 Truck).....	AR-36	5SMI/T (244-224-R91)(1965 Truck).....	AR-34
		6TBB (1966 Bronco).....	AR-36	86MI (1958 "A" Line Truck).....	AR- 8
		6TBF (1966 Galaxie).....	AR-34	94MI (1959 "R" & "V" Line Truck).....	AR-11
		6TBT (1966 Ford Truck).....	AR-36	94MIM (1959 "A" Line Truck).....	AR-10
		6TBU (1966 Econoline).....	AR-36	JEEP	
		6TMF (C6AA-18806-C1) (1966 Galaxie)...	AR-36	3TBW (1963 Jeep).....	AR-22
		6TPD (1966 Falcon).....	AR-36	6BKJ (1966 Jeep).....	AR-39
		6TPF (1966 Galaxie).....	AR-36	12BW	AR-16
		6TPO (1966 Fairlane).....	AR-36	815395	AR- 9
		6TPZ (1966 Mustang).....	AR-36		
		12BD (CODF-18805-E2, CODF-18806-D)	AR-14		
		(1961 Falcon).....	AR-14		
		12BF (C1AF-18805-C2, C1AF-18806-K)(1961)	AR-14		
		12BT (C1TF-18805)(1961 Truck).....	AR-14		
		12BU (C1UF-18805)(1961 Econoline Truck)	AR-14		
		14BF (1961 Ford).....	AR-30		
		14BM (1961 Mercury).....	AR-30		
		22BD (C2DZ-18805-A)(1962 Falcon).....	AR-18		
		22BO (C2OZ-18805-A)(1962 Fairlane)....	AR-17		
		24MF (C2AZ-18805-A)(1962).....	AR- 6		
		66MF (FDR-18805-B1)(1956).....	AR- 6		
		66MFP (FDR-18805-B1)(1956).....	AR- 6		
		69MF (FDR-18806-F)(1956).....	AR- 6		
		69MS (FEG-18805-B)(1956).....	AR- 6		
		74BF (FEG-18805)(1957).....	AR- 8		
		74BT (FEM-18805-A)(1957 Truck).....	AR- 9		
		74MF (FEG-18805-A1)(1957).....	AR- 7		
		75BF (FEG-18805-B)(1957).....	AR- 7		
		75MF (FEG-18805-H)(1957).....	AR- 8		
		76MF (SR)(B7A-18805-B1)(1957).....	AR- 7		
		78MF (FEG-18805-G)(1957).....	AR- 7		
		79MS (FEJ-18806-C)(1957 Thunderbird)...	AR- 8		
		84BF (B8A-18805-B)(1958).....	AR- 9		
		84BT (FEM-18805-B)(1958 Truck).....	AR- 8		
		84MF (B8A-18805-B)(1958).....	AR- 8		
		84MS (FEV-18805-F)(1958 Thunderbird)...	AR- 8		
		86MF (B8A-18805-A)(1958).....	AR-10		
		94BF (B9A-18805-A, B9A-18806-D)(1959)...			
F3TBF (C3AA-18806)(1963 Galaxie).....	AR-20				
F3TBS (C3SA-18806)(1963 Thunderbird) ..	AR-20				
F4TBF (1964 Galaxie).....	AR-24				
F4TBS (1964 Thunderbird)	AR-24				
F5TBF (1965 Galaxie).....	AR-32				

KARADIO	Vol.	METEOR (Also See Mercury)	Vol.	MOPAR (Continued)	Vol.
M80B.....	AR- 4	24ME (C2GY-18805-A)(1962 Comet)(See Ford 24ME).....	AR-17	314V (Export Version of Model 113).....	AR-16
KARMANN GHIA (See Volkswagen)		24MY (C2YY-18805-A2)(1962 Meteor)(See Ford 24ME).....	AR-17	317 (13BC 1961 Chrysler).....	AR-15
KENWORTH		77BM (FEK-18805-C)(1957).....	AR- 7	322 (SP1, SP2, 1962 Plymouth).....	AR-17
55MKW (K345-A-320)(Kenworth Truck)...	AR-39	78BM (FEK-18805-D)(1957).....	AR- 7	323 (SD1, SD2 1962 Dodge Dart).....	AR-17
KINEMATIX		84BM (FEW-18805-U)(1958).....	AR- 8	324 (Export SP1, SP2, 1962 Plymouth)...	AR-17
Verba-Matix.....	AR-27	85BM (FEW-18805-T)(1958).....	AR- 9	327 (SC1, SC2, SC3 1962 Chrysler).....	AR-17
LAFAYETTE		94PM (B9MF-18805-B)(1959).....	AR-12	330 (1963 Plymouth).....	AR-21
SP-172 (FM-100).....	AR-14	95PM (B9FM-18805-A)(1959).....	AR-11	331 (1963 Dodge).....	AR-21
LANCER (See MoPar)		METRAVOX		332 (1963 Dodge 880).....	AR-21
LARK (See Studebaker)		SUTTON RA144.....	AR-20	333 (1963 Chrysler).....	AR-21
LINCOLN		SUTTON RA155.....	AR-21	334 (4TBQ)(1964 Dodge 880).....	AR-24
05BH (COLF-18810, COLY-18805)(1960)...	AR-12	MG		335 (1964 Plymouth).....	AR-25
35H756 (FAG-18805-A)(1953).....	AR- 4	HAC700 (4TMB).....	AR-30	336 (1964 Dodge).....	AR-25
45H764 (FDD-18805-B)(1954).....	AR- 4	MIDLAND		337 (1963 Valiant).....	AR-22
45H766 (FDD-18805-A)(1954).....	AR- 4	65-200.....	AR-40	339 (1963 Dodge Dart).....	AR-22
5BH (FDL-18805-C,-D)(1955).....	AR- 5	65-210 (12 Transistor Version).....	AR-40	343 (R3BC)(1963 Chrysler TC1, TC2, TC3)...	AR-19
6BH (FDU-18805-C)(1956).....	AR- 6	65-210.....	AR-34	344 (1963 Dodge).....	AR-22
78BL (HHD-18805-A)(1957).....	AR- 7	MONITORADIO		345 (1963 Plymouth).....	AR-22
85BH (FFC-18805-C,-D)(1958).....	AR- 9	M-40.....	AR-12	347 (R23BDQ)(1962 Dodge 880, SD3).....	AR-19
85BHP (FFC-18805-C,-D)(Above Serial #5000)(1958).....	AR- 9	M-160.....	AR-12	348 (4TBC)(1964 Chrysler).....	AR-24
88BH (FFC-15491-B)(1958).....	AR- 8	MC-40.....	AR-12	350 (R3BD)(1963 Dodge 880).....	AR-19
95BH (B9FL-15801-A,-B, FFC-19061-B)(1959).....	AR- 9	MC-160.....	AR-12	351 (1964 Chrysler).....	AR-25
8TDC (1966 Lincoln).....	AR- 9	MONTGOMERY WARD (See Riverside)		352 (1964 Chrysler Imperial).....	AR-25
F6TDC (1966 Lincoln).....	AR-40	MOPAR		353 (1964 Dodge 880).....	AR-25
T6SMC (C6VA-18806-J)(1966 Lincoln Continental).....	AR-36	RV4C.....	AR-24	354 (1964 Dodge).....	AR-24
MACK		RV4CL.....	AR-24	360 (5FBP)(1965 Plymouth).....	AR-30
U3MMT (Truck).....	AR-32	RV5C (1965).....	AR-30	361 (5FBPD)(1965 Plymouth).....	AR-30
MERCURY		RV5CC (1965).....	AR-30	361 (6FBPD)(1966 Plymouth Deluxe).....	AR-36
E5TBM (1965 Mercury).....	AR-28	RV5CL (1965).....	AR-30	362 (5FBD)(1965 Dodge).....	AR-30
E6TMM (C6MA-18806-B2)(1966 Mercury)...	AR-35	101 (PP1, PP2, 1960 Plymouth).....	AR-13	363 (1965 Dodge 880).....	AR-28
E7FTBM (1965 Mercury).....	AR-34	102 (PD1, PD2, PD3, PD4, 1960 Dodge)...	AR-13	363S (1966 Polara, Custom 880, Monaco BD2).....	AR-35
E8FTBM (1966 Mercury).....	AR-38	104 (1960 Valiant).....	AR-13	364 (5FBDD)(1965 Dodge).....	AR-30
F3TBM (1963).....	AR-21	106 (1960 Dodge).....	AR-14	364 (6BDD)(1966 Dodge Deluxe).....	AR-36
F4TBE (1964 Comet).....	AR-24	107 (12B)(1961 Dodge Dart).....	AR-15	365 (1965 Chrysler).....	AR-28
F5TBE (1965 Comet).....	AR-34	109 (RP1, RP2, 1961 Plymouth).....	AR-15	365S (1966 Chrysler BC1, BC2, BC3).....	AR-35
F6TBE (1966 Comet).....	AR-38	110 (Export Version of Model 101).....	AR-13	366 (5FBC)(1965 Chrysler).....	AR-30
F4TBM (1964 Mercury).....	AR-24	111 (RP1, RP2, 1961 Plymouth).....	AR-15	366 (6FBC)(1966 Chrysler).....	AR-36
F5TBM (1965 Mercury).....	AR-34	112 (1960 Desoto).....	AR-14	367 (5FBI)(1965 Imperial).....	AR-30
F6TBM (1966 Mercury).....	AR-38	113 (RV1 1961 Valiant).....	AR-15	369 (6FBP, 6FBVE)(1966 Plymouth Standard).....	AR-36
M-5841 (1958).....	AR- 9	114 (RW1, 1961 Lancer).....	AR-15	372 (5FBVE)(See page 86)(1965 Plymouth)...	AR-30
T6SMM (C6AA-19A049-D)(1966 Mercury)...	AR-35	202 (1962 Lancer SL1).....	AR-18	373 (5FBL)(See page 86)(1965 Dodge Dart)...	AR-30
O4BM-1 (COMF-18805)(1960).....	AR-13	203 (1962 Valiant SV1).....	AR-18	379 (6FBL)(1966 Dart).....	AR-36
O4BM-2 (COMF-18806)(1960).....	AR-13	204 (1962 Plymouth SP1, SP2).....	AR-18	402 (O4BC)(1960 Chrysler).....	AR-13
2TBM (R2TBM)(C2MY-18805-B)(1962)....	AR-20	205 (1962 Dodge Dart SD1, SD2).....	AR-17	403 (O4BI)(1960 Imperial).....	AR-13
2TMY (C2YA-18806-E)(1962 Meteor).....	AR-18	206 (4TBL)(1964 Dart).....	AR-24	404 (14BI)(1961 Imperial).....	AR-15
3SMY757 (FAF-18805-A)(1953)(See Lincoln Model 35H756).....	AR- 4	214 (3BVD)(1963 Valiant TV1).....	AR-19	407 (14BC)(1961 Chrysler).....	AR-15
3TBM (C3MY-18805)(1963).....	AR-21	215 (3BLE)(1963 Dart TL1).....	AR-19	409 (24BI)(1962 Imperial SY1).....	AR-18
3TME (C3GA-18806)(1963 Comet).....	AR-23	216 (1963 Plymouth).....	AR-22	410 (24BC)(1962 Chrysler SC1, SC2, SC3)...	AR-18
3TMY (C3YA-18806)(1963 Meteor).....	AR-23	217 (1963 Dodge).....	AR-22	411 (34BCS)(1963 Chrysler).....	AR-20
4SM767 (FDC-18805-A)(1954)(See Lincoln Model 45H764).....	AR- 4	218 (4TBE)(1964 Valiant).....	AR-24	413 (34BI)(1963 Imperial TV1).....	AR-20
4TBM (C4MA-18805)(1964 Mercury).....	AR-23	219 (1964 Dodge VDI, VD2).....	AR-23	414 (44BI)(1964 Imperial).....	AR-24
4TME (C4AA-18806)(1964 Comet).....	AR-23	220 (1964 Plymouth VP1, VP2).....	AR-23	415 (44BCS)(1964 Chrysler).....	AR-24
5BM (1955)(See Lincoln Model 5BH).....	AR- 5	221 (4TBLH)(1964 Dart).....	AR-24	416 (1965 Chrysler).....	AR-31
5TBM (1965 Mercury).....	AR-28	222 (5BVE)(1965 Valiant).....	AR-28	416B (1966 Chrysler).....	AR-39
5TPE (1965 Comet).....	AR-28	223 (1965 Dodge Dart).....	AR-28	417 (1965 Imperial).....	AR-31
6BM (FDT-18805-C)(1956).....	AR- 6	224 (5BP)(1965 Plymouth Std.).....	AR-28	417B (1966 Imperial).....	AR-39
6BMS (FDT-18805-D)(1956).....	AR- 6	225 (5BPD)(1965 Plymouth Deluxe).....	AR-28	420 (1966 Imperial).....	AR-40
6TMM (C6MA-18806-A2)(1966 Mercury)...	AR-35	226 (1965 Dodge Coronet).....	AR-28	608 (1953 Plymouth P24).....	AR- 4
6TPG (1966 Mercury).....	AR-37	228 (6BVE)(1966 Valiant).....	AR-37	609 (1953 Dodge Model D-44, D-46, D-47, and D-48).....	AR- 4
22BM (C2MY-18805-A)(1962).....	AR-18	229 (6BL)(1966 Dart).....	AR-37	610T (1953 Dodge Truck, Series B-3, B-4)...	AR- 4
		230 (6BP)(1966 Plymouth).....	AR-37	611T (1954 Dodge Truck, Series C)(See Model 610T).....	AR- 4
		231 (6BPD)(1966 Fury).....	AR-37	612 (1954 Dodge Models D-40, D-51, D-52, and D-53)(See Model 609).....	AR- 4
		232 (1966 Coronet BW1, BW2).....	AR-35	613 (1955 Plymouth Models P-26, P-27)...	AR- 5
		233 (1966 Charger BW29).....	AR-35	614 (1955 Dodge Models D-55, D-56).....	AR- 5
		234 (6BVS)(1966 Valiant).....	AR-37	620 (1956 Plymouth Models P-28, P-29)...	AR- 7
		235S (1966 Polara, Custom 880, Monaco BD2).....	AR-35	621 (1956 Dodge Models D-62, D-63)...	AR- 7
		301 (PP1, PP2, 1960 Plymouth).....	AR-14	624 (1957 Dodge Models D-66, D-67, D-70, D-71, D-72).....	AR- 8
		302 (PD1, PD2, PD3, PD4, 1960 Dodge)...	AR-13	700 (1958 Dodge Truck).....	AR- 8
		303 (O3BC 1960 Chrysler).....	AR-13	700 (Revised)(1960 Dodge Truck).....	AR-14
		304 (O3BS 1960 Desoto).....	AR-13	701 (1959 Simca).....	AR-12
		305 (O3BD 1960 Dodge).....	AR-13	703 (R12BDT)(1961 Dodge Truck).....	AR-16
		306 (13BD 1961 Dodge).....	AR-16	706 (1964 Dodge Truck).....	AR-26
		309 (RP1, RP2, 1961 Plymouth).....	AR-16	706 (5TBDT)(Similar to page 64)(1965 Dodge Truck).....	AR-26
		310 (Export Version of Model 301).....	AR-14	819 (1953 Plymouth).....	AR- 4
		311 (Export Versions of Model 309).....	AR-16	820 (1953 Dodge).....	AR- 4
		312 (13BS 1961 Desoto).....	AR-16	821 (Desoto Models S-16, S-18).....	AR- 4
		313 (1960 Valiant).....	AR-14	824 (1953 Chrysler)(See Model 819).....	AR- 4
		314L (Export Version of Model 114).....	AR-16	828 (1954 Dodge Models D-50, D-51, D-52, D-53)(See Model 820).....	AR- 4
				829 (Desoto Models S-19 and S-20).....	AR- 4
				830 (1954 Chrysler Models G-62, G-63, G-64)...	AR- 4
				831 (See Model 830).....	AR- 4
				832 (1955 Plymouth).....	AR- 5
				833 (1955 Dodge Models D-55, D-56).....	AR- 5
				834 (1955 Desoto Models S-21, S-22).....	AR- 5
				835 (1955 Chrysler).....	AR- 5
				836 (1955 Plymouth Models P-25, P-27)...	AR- 5
				840 (1956 Plymouth).....	AR- 6
				841 (1956 Plymouth Models P-28, P-29)...	AR- 6
				842, 842HR (1956 Dodge Models D-62, D-63)...	AR- 6
				843 (1956 Desoto Models S-23, S-24).....	AR- 6
				844, 844HR (1956 Chrysler).....	AR- 6

MOPAR (Continued)	Vol.	MOTOROLA (Continued)	Vol.	MOTOROLA (Continued)	Vol.
845 (1957 Dodge Models D-66, D-67, D-70, D-71, D-72).....	AR- 8	CTA61 (1961 Chevrolet).....	AR-15	VWM64 (1958-64 Volkswagen)	AR-25
846 (1957 Desoto Models S-25, S-26, S-27) ..	AR- 8	CTA62 (1962 Chevrolet).....	AR-18	03AR (See American Motors Model 8990811)	AR-12
847 (1957 Chrysler).....	AR- 8	CTA63 (1963 Chevrolet).....	AR-22	04MA (1960 Rambler)(See American Motors Model 8990706)	AR-11
848 (1957 Plymouth).....	AR- 8	CTA64 (1964 Chevrolet).....	AR-24	04MD, 04MF, 04MFM (See Ford Model 04MD)	AR-12
849 (1957 Plymouth Models P-30, P-31).....	AR- 8	CTM3 (1953 Chevrolet).....	AR- 5	2AT-1	AR-21
851 (84BC)(1958 Chrysler).....	AR- 8	CTM4, CTM4A (1954 Chevrolet).....	AR- 6	2MT	AR-20
852 (1958 Dodge Models LD-1, LD-2, LD-3) ..	AR- 8	CTM6 (1955-56 Chevrolet).....	AR- 6	2TMF (See Ford Model 2TMF).....	AR-18
854 (1958 Plymouth Models LP-1, LP-2) ..	AR- 9	CTM7X (1957 Chevrolet).....	AR- 7	2TMX (See Ford Model 2TMX).....	AR-18
855 (P-5901)(1959 Plymouth).....	AR-11	CTM8X (1958 Chevrolet).....	AR- 9	2TMXD (See Renault Model 55555).....	AR-17
856 (1959 Dodge Models MD1, MD2, MD3) ..	AR-10	CTM9X (1959 Chevrolet).....	AR-10	2TMY (See Mercury Model 2TMY).....	AR-18
857 (1959 Desoto Models MS1, MS2, MS3) ..	AR-10	CTM57X (1957 Chevrolet).....	AR- 9	3AT	AR-22
858 (84BC)(1959 Chrysler).....	AR-10	CTM61X, CTM61XA (1961 Chevrolet)	AR-16	3MT	AR-22
860 (1959 Plymouth, MP1, MP2)	AR-12	CTM62 (1961-62 Chevrolet).....	AR-19	4AT	AR-25
861 (1959 Chrysler Export).....	AR-12	CTM63 (1963 Chevrolet).....	AR-22	4MT	AR-25
900 (1955 Dodge Models D-55, D-56).....	AR- 5	CTM64 (1964 Chevrolet)	AR-25	5M, 5M-12	AR- 5
901 (1955 Desoto Models S-21, S-22).....	AR- 5	CY65A (1962-65 Chevy II).....	AR-32	6M	AR- 6
902 (1955 Chrysler).....	AR- 5	CY66A (1966 Chevy II).....	AR-38	6M-12	AR- 6
903 (1955 Chrysler).....	AR- 5	CY65M (1962-65 Chevy II).....	AR-33	6MA (1959 Hudson & Nash)(See American Motors Model 8990378)	AR- 6
910, 910HR (1956 Dodge Models D-62, D-63) ..	AR- 6	CYA62 (1962 Chevy II)	AR-20	6MR (1956 Rambler)(See American Motors Model 8990377).....	AR- 6
911 (1965 Desoto Models S-23, S-24).....	AR- 6	CYA63 (1961-63 Chevy II)	AR-22	6TA58	AR- 6
912, 912HR (1956 Chrysler).....	AR- 7	CYA64 (1962-64 Chevy II)	AR-25	7M (See Model 6M)	AR- 6
916, 916HR (1956 Plymouth Models P-28, P-29).....	AR- 7	CYM62 (1962 Chevy II).....	AR-19	7MR (1957 Rambler)(See American Motors Model 8990455)	AR- 6
917HR (1957 Plymouth).....	AR- 8	CYM63 (1962-63 Chevy II).....	AR-22	7MX	AR- 7
918 (1957 Dodge Models D-66, D-67, D-70, D-71, D-72).....	AR- 7	CYM64 (1962-64 Chevy II).....	AR-25	8M	AR- 8
919, 919HR (1957 Desoto Models S-25, S-26, S-27).....	AR- 7	FM65M	AR-35	8MX	AR- 9
920HR (1957 Chrysler).....	AR- 8	FM106M	AR-40	9AX	AR-10
921HR (1957 Imperial).....	AR- 8	FM200A	AR-34	10AX	AR-15
922 (85BC)(1958 Chrysler).....	AR- 9	FM-900	AR-14	10M	AR-13
923 (1958 Desoto Models L-51, L-52, L-53) ..	AR- 9	FMA-100	AR-26	10MX	AR-12
924HR	AR- 9	FMC62	AR-19	11MX	AR-16
925 (1958 Plymouth Models LP-1, LP-2) ..	AR- 9	GMT3A6 (1948-53 Chevrolet & GMC Truck) ..	AR-15	12AT-1/-2/-3	AR-21
927 (1959 Desoto Models MS-1, MS-2, MS-3) ..	AR-11	GMT53A6(1948-53 Chevrolet & GMC Truck) ..	AR- 5	13MA (1960 Rambler American)(See American Motors Model 8990832).....	AR-14
928 (R95BC-S)(1959 Chrysler).....	AR-10	GV-701	AR- 5	13MAM (1960 Rambler American)(See American Motors Model 8990831).....	AR-14
929 (C-5909)(1959 Imperial Model MY-1) ..	AR-11	GV-800	AR- 9	14AT	AR-25
		HN3A6 (1951-53 Henry J)	AR- 5	14MR (1961 Rambler)(See American Motors Model 8990833)	AR-15
		HN2A6 (1951-52 Hudson)	AR- 5	24ME, 24MF, 24MY(See Ford Model 24ME) ..	AR-17
		HN3A6 (1951-53 Hudson except Hudson Jet) ..	AR- 5	76MA (1957 Hudson & Nash)(See American Motors Model 8990378).....	AR- 6
		HN4A6 (1954 Hudson)	AR- 5	93MR (1959 Rambler)(See American Motors Model 8990582)	AR-10
		HN4M6 (1954 Hudson)	AR- 5	94MIM (1959 International)(See International Model 94MIM).....	AR-10
		HN53M6 (1951-53 Hudson).....	AR- 5	94MF (See Ford Model 94MF).....	AR-10
		HT3A6 (1953 Hudson Jet).....	AR- 5	95MF (See Ford Model 95MF).....	AR-10
		IL5TCA, -12 (1955 International)(See International IL5TCA).....	AR- 6	94MFM (See Ford Model 94MFM)	AR-10
		KR3A6 (1951-53 Kaiser).....	AR- 5	94MI (1959 "R" and "V" Line International Truck)(See International Model 94MI)	AR-11
		NH3C (1953 Nash Rambler)(See Nash, Model NH3C).....	AR- 4	94MS (1959 Thunderbird)(See Ford Model 94MS)	AR-11
		NH4AC (1954 Nash)(See Nash, Model AC-154)	AR- 5	101 (See MoPar Model 101).....	AR-13
		NH5AC (1955 Nash)(See Nash, Model AC-154)	AR- 5	102 (See MoPar Model 102).....	AR-13
		OE4FM (1964 Oldsmobile).....	AR-26	104 (See MoPar Model 104).....	AR-13
		OE4FMC (1964 Oldsmobile).....	AR-34	110 (See MoPar Model 110).....	AR-13
		OE65A (1965 Oldsmobile).....	AR-32	250X	AR-20
		OE66A (1965/66 Oldsmobile)	AR-40	290T	AR-22
		OEATX (1957 Oldsmobile).....	AR- 7	294	AR-25
		OEA9X (1959 Oldsmobile).....	AR-12	300X	AR-11
		OEA60X (1960 Oldsmobile).....	AR-14	301X	AR-13
		OEA61X (1961 Oldsmobile).....	AR-17	302 (See MoPar Model 302).....	AR-13
		OEA63 (1963 Oldsmobile).....	AR-22	310X (Negative Ground)	AR-13
		OEA64 (1964 Oldsmobile).....	AR-24	311X (Positive Ground)	AR-13
		OE2A6 (1951-52 Oldsmobile "Super 88" and "98").....	AR- 5	320T	AR-21
		PCA7X (1957 Pontiac).....	AR- 7	323T	AR-22
		PCA9X (1959 Pontiac).....	AR-10	324	AR-25
		PCA60X (1960 Pontiac)	AR-15	395, 395-12	AR- 5
		PCA61X (1961 Pontiac)	AR-17	396, 396-12	AR- 6
		PCA62 (1962 Pontiac).....	AR-20	397	AR- 7
		PCA63 (1963 Pontiac).....	AR-22	397X	AR- 7
		PCA64 (1964 Pontiac).....	AR-24	398X	AR- 9
		PCA2A6 (1949-52 Pontiac)	AR- 5	403	AR- 4
		PC4FM (1964 Pontiac).....	AR-26	404	AR- 5
		PC4FMC (1964 Pontiac).....	AR-34	406	AR-11
		PC65A (1965 Pontiac).....	AR-32	412	AR- 4
		PC66A (1966 Pontiac).....	AR-40	414	AR-25
		PD3A6 (1951-53 Packard).....	AR- 5	424	AR-25
		R200	AR-19	500X	AR-13
		SR2A6 (1950-52 Studebaker).....	AR- 5	503	AR- 4
		SR3A6 (1952 Studebaker).....	AR- 5	504	AR- 5
		SR52A6 (1950-52 Studebaker)	AR- 5	506, 506-12	AR- 7
		SR52M6 (1950-52 Studebaker)	AR- 5	520T	AR-21
		TM5A	AR-33	524	AR-26
		TM6A	AR-38	553	AR- 4
		TM5M	AR-32	555, 555-12	AR- 6
		TM6M	AR-39	556	AR- 6
		TM15A	AR-32	595, 595-12	AR- 6
		TM295M	AR-33	596, 596-12	AR- 6
		TM296M	AR-40	597X	AR- 7
		TM315M	AR-33	601X	AR-13
		TM316M	AR-40	611T (See MoPar Model 610T).....	AR- 4
		TM326M	AR-40	612 (See MoPar Model 609).....	AR- 4
		TM336M	AR-40	624 (See MoPar Model 624).....	AR- 8
		TM415M	AR-32	701 (See MoPar Model 701).....	AR-12
		TM525A	AR-33	829 (See MoPar Model 829).....	AR- 4
		U3MW (Autocar, Diamond T, Reo, White Trucks 891800)	AR-24	845 (See MoPar Model 845).....	AR- 8
		VWA7 (1953-57 Volkswagen).....	AR- 7		
		VWA8 (1958 Volkswagen).....	AR-12		
		VWA60 (1960 Volkswagen).....	AR-13		
		VWA63 (1963 Volkswagen).....	AR-22		
		VWA64 (1958-64 Volkswagen).....	AR-25		
		VWM60 (1960 Volkswagen).....	AR-22		
		VWM63 (1958-63 Volkswagen).....	AR-22		

MOTOROLA (Continued)	Vol.	PENNY	Vol.	PONTIAC (Continued)	Vol.
846 (See MoPar Model 846).....	AR- 8	3104 (984-8227).....	AR-29	984961 (1955).....	AR- 5
849 (See MoPar Model 849).....	AR- 8	3108 (984-8219)(1958-63 Volkswagen).....	AR-29	988566 (1956)(See Model 984961).....	AR- 5
852 (See MoPar Model 852).....	AR- 8	3114 (984-1991)(1963 Ford).....	AR-29	988569 (1956).....	AR- 6
853 (See MoPar Model 853).....	AR- 8	3118 (982-0093).....	AR-30	988671 (1957).....	AR- 7
854 (See MoPar Model 854).....	AR- 9	3120 (982-1992)(1958-63 Volkswagen).....	AR-29	988672 (1957).....	AR- 7
856 (See MoPar Model 856).....	AR-10	3121 (981-4021).....	AR-30	988822 (1958).....	AR- 8
857 (See MoPar Model 857).....	AR-10	3122 (981-4031).....	AR-30	988823 (1958).....	AR- 8
860 (See MoPar Model 860).....	AR-12	3129 (985-6816).....	AR-30	988837 (1958).....	AR- 8
861 (See MoPar Model 861).....	AR-12	3138 (984-8243).....	AR-29	988976 (1959).....	AR-10
923 (See MoPar Model 923).....	AR- 9	3143 (985-8358).....	AR-29	988977 (1959).....	AR-11
927 (See MoPar Model 927).....	AR-11	3144 (985-8374).....	AR-30	988978 (1959).....	AR-11
980886 (1964 Opel Kadett).....	AR-26	3146 (985-8390).....	AR-30	989614 (1960).....	AR-12
Chassis		3151 (985-8341).....	AR-30	989615 (1960).....	AR-13
R15A6.....	AR- 5	3160 (985-8408)(1964 Chevelle).....	AR-29	989692 (1961).....	AR-14
R16M6.....	AR- 5	3161 (985-8416)(1963-64 Chevrolet).....	AR-29	989693 (1961).....	AR-15
R17A6.....	AR- 5	3162 (985-8424)(1963-64 Chevy II).....	AR-29	989792 (1961 Tempest).....	AR-15
NASH (Also see American Motors)		3163 (1964 Comet).....	AR-30	989831 (1961 Tempest).....	AR-15
AC-154 (1954-55).....	AR- 5	3168 (1964 Ford).....	AR-30	7284742.....	AR-22
NH3C (1953 Nash Rambler).....	AR- 4	3169 (1964 Falcon).....	AR-30	7284742A (1966 Pontiac)(Reverb. Unit)...	AR-36
NH5AC (1955)(See Model AC-154).....	AR- 5	3170 (1964 Falcon).....	AR-30	7289752 (1965 Pontiac).....	AR-29
NORDIC		3171 (985-8515)(1964 F-85).....	AR-29	7289772 (1965 Pontiac).....	AR-29
501F55 (1955 Ford).....	AR- 5	3172 (1964 Fairlane).....	AR-30	7291562 (1965 Tempest).....	AR-30
NORDMEDE		3173 (1964 Mercury).....	AR-30	7291582 (1965 Tempest).....	AR-29
Transita-Royal K-C (4/608K-C).....	AR-34	3174 (985-8549)(1964 Oldsmobile).....	AR-29	7292112 (1965 Tempest).....	AR-29
OLDSMOBILE		3176 (985-8564)(1963-64 Pontiac).....	AR-29	7293472 (1966 Tempest).....	AR-38
982029 (1962).....	AR-17	3179 (985-8275)(1964 Tempest).....	AR-29	7293492 (984595)(1966 Pontiac).....	AR-36
982030 (1962).....	AR-18	3180 (985-8291)(1964 Chevrolet).....	AR-29	7293502 (984594)(1966 Tempest).....	AR-38
982136 (1963).....	AR-19	3181 (985-8309)(1960-64 Corvair).....	AR-29	7293512 (984596)(1966 Pontiac).....	AR-35
982137 (1963).....	AR-20	3182 (985-8317)(1963-64 Chevy II).....	AR-29	7293632A (1966 Pontiac)(Reverb. Unit)...	AR-36
982149 (1963 F-85).....	AR-20			7294322 (1965 Pontiac).....	AR-33
982212 (1963).....	AR-21			7294332 (984587)(1966 Pontiac).....	AR-37
982249 (1964).....	AR-25			7294342 (984590)(1966 Pontiac).....	AR-38
982250 (1964).....	AR-25				
982251 (1964).....	AR-25				
982252 (1964 F-85).....	AR-25				
982990 (1953).....	AR- 4				
983004 (1953).....	AR- 4				
983090 (1954).....	AR- 5				
983091 (1954).....	AR- 5				
983204 (1955).....	AR- 5				
983205 (1955).....	AR- 5				
983334 (1956).....	AR- 6				
983336 (1956).....	AR- 6				
989001 (1957).....	AR- 7				
989002 (1957).....	AR- 7				
989127 (1958).....	AR- 8				
989129 (1958).....	AR- 8				
989131 (1958).....	AR- 8				
989170 (1959).....	AR-10				
989171 (1959).....	AR-11				
989172 (1959).....	AR-11				
989276 (1960).....	AR-13				
989277 (1960).....	AR-12				
989387 (1961 F-85).....	AR-15				
989392 (1961).....	AR-15				
989393.....	AR-14				
7284893.....	AR-22				
7289313 (1965 Oldsmobile).....	AR-30				
7289333 (1965).....	AR-31				
7289353 (1965).....	AR-31				
7289373 (982687)(1966 Oldsmobile F-85)...	AR-35				
7291063 (1965 F-85).....	AR-30				
7292643 (1966 Toronado).....	AR-37				
7292663 (1966 Oldsmobile).....	AR-39				
7293653 (982690)(1966 Oldsmobile).....	AR-38				
7294743 (982688)(1966 Oldsmobile).....	AR-37				
7294753 (982689)(1966 Oldsmobile).....	AR-36				
7297564 (1966 Oldsmobile)(Reverb. Unit)...	AR-36				
QPEL					
980886 (1964 Kadett).....	AR-26				
981946 (1958).....	AR-14				
981981 (1959-60).....	AR-14				
7294694 (1966 Chevrolet).....	AR-39				
PACKARD					
AC-2906 (1958).....	AR- 8				
AC-2907 (1958).....	AR- 8				
439338, 439339 (1953 Series 26).....	AR- 4				
439663 (1954)(See Model 439338).....	AR- 4				
439666 (1954)(See Model 439338).....	AR- 4				
472046 (1955).....	AR- 5				
472047, 472048 (1955).....	AR- 5				
480487 (1956 Packard Clipper).....	AR- 6				
484649 (1957).....	AR- 7				
484652 (1957)(See Model 7267427).....	AR- 6				
7267427 (480487)(1956 Packard Clipper)...	AR- 6				
		PHILCO			
		C-5209 (See MoPar Model 824).....	AR- 4		
		C-5409 (See MoPar Model 830).....	AR- 4		
		C-5509 (See MoPar Model 835).....	AR- 5		
		C-5595 (See MoPar Model 902).....	AR- 5		
		C-5596 (See MoPar Model 903).....	AR- 5		
		C-5609 (See MoPar Model 844).....	AR- 6		
		C-5609HR (See MoPar Model 844HR).....	AR- 6		
		C-5705 (See MoPar Model 847).....	AR- 8		
		C-5707 (See MoPar Model 920HR).....	AR- 8		
		C-5709 (See MoPar Model 921HR).....	AR- 8		
		C-5809 (See MoPar Model 924HR).....	AR- 9		
		D-5207 (See MoPar Model 819).....	AR- 4		
		D-5407 (See MoPar Model 820).....	AR- 4		
		P-5206 (See MoPar Model 819).....	AR- 4		
		P-5506 (See MoPar Model 832).....	AR- 5		
		P-5606 (See MoPar Model 840).....	AR- 6		
		P-5701 (See MoPar Model 848).....	AR- 8		
		P-5703 (See MoPar Model 917HR).....	AR- 8		
		P-5801 (See MoPar Model 848).....	AR- 8		
		P-5803 (See MoPar Model 925).....	AR- 9		
		P-5901 (See MoPar Model 855).....	AR-11		
		P-6234.....	AR-20		
		S-5323 (See Studebaker Model AC-2301)...	AR- 4		
		S-5327 (See Studebaker Model AC-2300)...	AR- 4		
		S-5524 (See Studebaker Model AC-2301)...	AR- 4		
		S-5528 (See Studebaker Model AC-2300)...	AR- 4		
		S-5529 (See Studebaker Model AC-2300)...	AR- 4		
		TAR-58 (See MoPar Model 700).....	AR- 8		
		94PM (See Mercury Model 94PM).....	AR-12		
		929 (See MoPar Model 929).....	AR-11		
		PHILLIPS			
		PTC-400-MR.....	AR-32		
		PLYMOUTH (See MoPar)			
		PONTIAC			
		983578 (1962).....	AR-17		
		983579 (1962).....	AR-18		
		983687 (1962).....	AR-20		
		983873 (1963).....	AR-20		
		983873A (Similar to page 105)(1963 Pontiac)...	AR-24		
		983874 (1963 Tempest).....	AR-19		
		983875 (1963).....	AR-21		
		983945 (1963).....	AR-21		
		984075 (1964 Tempest).....	AR-24		
		984076 (1964).....	AR-23		
		984077 (1964 Pontiac).....	AR-24		
		984078 (1964 Pontiac).....	AR-24		
		984817 (1953-54).....	AR- 4		
				REALISTIC	
				90LX697.....	AR-16
				REGAL	
				CR-871.....	AR- 4
				RENAULT	
				2TMXD (55555).....	AR-17
				3TMXD (55556)(1963).....	AR-21
				5SMXD (55566)(1966).....	AR-40

FGJ16511A AR-27
 FJB-6471A (1962 Chevy II) AR-19
 FJB-6472A (1962 Chevy II) AR-19
 FJB-6537A (1958-59 Volkswagen) AR-14
 FJB-6538A (1958-59 Volkswagen) AR-14
 FJB-6540A AR-19
 FJB-6540C AR-27
 FJB-6550A AR-24
 FJB-6551A AR-22
 FJB-6551B AR-27
 FJB-6551C AR-34
 FJB-6560A (1962 Mercury) AR-19
 FJB-6561A (1962 Fairlane) AR-19
 FJB-6562A (1961-62 Chevrolet) AR-19
 FJB-6567M (1959 Plymouth) AR-13
 FJB-6571 (1960-61 Dart) AR-19
 FJB-6572A (1961-62 F-85, Special, Tempest) AR-19
 FJB-6576A AR-32
 FJB-6577A AR-32
 FJB-6579A (1961-62 F-85, Special, Tempest) AR-19
 FJB-6580A (1961-62 F-85, Special, Tempest) AR-19
 FJB-6581 (1960-62 Corvair) AR-19
 FJB-6583A (1960-62 Ford) AR-19
 FJB-6584A (1960-61 Valiant) AR-18
 FJB-6587 AR-20
 FJB-6591 AR-16
 FJB-6592 AR-16
 FJB-6593 AR-16
 FJB-6604B (1960-62 Corvair) AR-19
 FJB-6608A (1961 Lancer) AR-18
 FJB-6609 AR-19
 FJB-6609A AR-19
 FJB-6611 (1960-61 Rambler) AR-22
 FJB-6612 (61-6612) (1962 Chevrolet) AR-18
 FJB-6612A (1961-62 Chevrolet) AR-19
 FJB-6613, FJB-6613A (1960-61 Falcon or Comet) AR-18
 FJB-6615A AR-27
 FJB-6618A (61-6618A) (1961 Rambler) AR-17
 FJB-6619/A AR-21
 FJB-6643A (1960-62 Comet, Falcon) AR-19
 FJB-6649A (Tractor) AR-20
 FJB-6658 AR-21
 FJB-6679A AR-10
 FJB-6681A (1958 Plymouth) AR-10
 FJB-6682A, B AR-10
 FJB-6684 (1959 Ford) AR-11
 FJB-6686A (1959 Plymouth) AR-12
 FJB-6687 (1959 Ford) AR-11
 FJB-6688 (1959 Chevrolet) AR-11
 FJB-6689A (1959 Plymouth) AR-12
 FJB-6690A (1959 Buick) AR-13
 FJB-6691B (Renault Dauphine) AR-12
 FJB-6693B (Renault Dauphine) AR-12
 FJB-16509C AR-33
 FJB-16512A (1964 Volkswagen) AR-28
 FJB-16513A (1964 Volkswagen) AR-28
 FJB-16520A (1963 Chrysler) AR-23
 FJB-16521A (1963 Chevrolet) AR-23
 FJB-16522A (1963 Dodge) AR-23
 FJB-16523A (1963 Ford) AR-23
 FJB-16524A (1963 Mercury) AR-23
 FJB-16525A (1963 Oldsmobile) AR-23
 FJB-16526A (1963 Plymouth) AR-23
 FJB-16527A (1963 Pontiac) AR-23
 FJB-16563A AR-32
 FJB-16566A AR-20
 FJB-16567A AR-21
 FJB-16569A AR-28
 FJB-16574A (1963 Buick) AR-23
 FJB-16576A (1963 Corvair) AR-23
 FJB-16577A (1963 Dodge Dart) AR-22
 FJB-16578A (1963 Ford) AR-23
 FJB-16579A (1963 Falcon) AR-23
 FJB-16580A (1963 F-85) AR-23
 FJB-16581A (1963 Mercury) AR-23
 FJB-16582A (1962-63 Plymouth) AR-23
 FJB-16583A (1963 Tempest) AR-23
 FJB-16584A (1963 Rambler) AR-26
 FJB-16585A (1963 Chevrolet) AR-23
 FJB-16586A (1963 Corvair) AR-23
 FJB-16587A (1963 Falcon) AR-23
 FJB-16588A (1963 Ford) AR-23
 FJB-16589A AR-23
 FJB-16607A AR-32
 FLH-16518A (1964-65 Chevrolet & GMC Truck) AR-35
 FLH-16519A (1960 thru 1964 Dodge, 880) AR-34
 FLH-16528A (1963-64 Chevrolet) AR-34
 FLH-16529A (1965 Chevrolet) AR-35
 FLH-16530A (1960-64 Corvair) AR-34
 FLH-16531A (1965 Corvair) AR-35
 FLH-16533A (1962-65 Chevy II) AR-35
 FLH-16534A (1964 Chevelle) AR-34
 FLH-16535A (1965 Chevelle) AR-35
 FLH-16536A (1963-64 Galaxie) AR-34
 FLH-16537A (1965 Galaxie) AR-35

FLH-16538A (1964 Fairlane) AR-34
 FLH-16539A (1965 Fairlane 500) AR-35
 FLH-16541A (1964/65 Falcon, 1964 Comet) AR-35
 FLH-16543A (1965 Comet) AR-35
 FLH-16544A (1963/64 Mercury) AR-34
 FLH-16545A (1965 Mercury) AR-35
 FLH-16546A (1963/64 Ambassador, Classic) AR-34
 FLH-16547A (1965 Ambassador, Classic) AR-34
 FLH-16549A (1964 Plymouth) AR-34
 FLH-16550A (1965 Belvedere) AR-39
 FLH-16551A (1965 Fury) AR-39
 FLH-16552A (1964 Valiant) AR-34
 FLH-16553A (1965 Valiant) AR-39
 FLH-16554A (1964 Polara, 330, 440) AR-34
 FLH-16555A (1965 Coronet) AR-39
 FLH-16556A (1964 Dart 270, GT) AR-34
 FLH-16557A (1965 Dart 270, GT) AR-39
 FLH-16558A (1964 Dart 170) AR-34
 FLH-16598A AR-31
 FLH-16650A (1965 Dodge Deluxe, Polara, Monaco, 880) AR-35
 FLH-16651A (1963/65 Econoline Truck) AR-35
 FLH-16652A (1964 Buick Special) AR-34
 FLH-16653A (1965 Oldsmobile) AR-35
 FLH-16654A (1964 Oldsmobile F-85) AR-34
 FLH-16658A (1964/65 Tempest) AR-35
 FLH-16662A (1965) AR-34
 FLH-16663A (1960/63 Chevrolet & GMC Trucks) AR-34
 FLH-16665A (1964/65 Dodge Truck) AR-35
 61-16509C AR-33
 61-16584A (1963 Rambler) AR-26

SAAB

4BH (1964) AR-30
 5BH (1965 Saab) AR-34
 6BSA (1966) AR-38

SAMPSON

55A AR-18

SEARS

833, 62820 AR-36
 833, 62830 AR-37
 833, 622810 (1966 Galaxie) AR-38
 837, 62220 AR-38

SIMCA

4TBJ (1000) (1964) AR-27
 5BJ (1000) (1965) AR-35
 6BSI (1966 Simca 1000) AR-39

SOUNDEX

CEP-764T (1964 Chevelle) AR-26
 CHP-164T (1964 Chevrolet) AR-26
 CHP-165T (1965 Chevrolet) AR-32
 CHP-166T (1966 Chevrolet) AR-40
 CHP-654T (1964 Chevy II) AR-26
 COM-60 (1960 Corvair) AR-16
 COP-60 (1960 Corvair) AR-16
 COP-066T (1966 Corvair) AR-40
 CTP-264T (1964 Comet) AR-26
 CTP-266T (1966 Comet) AR-39
 CTR-166T (1966 Chevrolet Truck) AR-40
 CYP-465T (1965 Chrysler) AR-32
 CYP-466T (1966 Chrysler) AR-39
 CYP-565T (1965 Chrysler) AR-39
 DAP-864T (1964 Dodge Dart) AR-26
 DAP-865T (1965 Dodge Dart) AR-32
 DAP-866T (1966 Dodge Dart) AR-39
 DOP-864T (1964 Dodge) AR-26
 DOP-865T (1965 Dodge) AR-32
 DOPP-465T (1965 Dodge Polara) AR-39
 DOPP-466T (1965 Dodge Polara) AR-39
 DPO-866T (1966 Dodge) AR-39
 FAP-264T (1964 Falcon) AR-26
 FAP-266T (1966 Falcon) AR-39
 FLP-264T (1964 Fairlane) AR-26
 FOP-264T (1964 Ford) AR-26
 FOP-265T (1965 Ford) AR-32
 FOP-266T (1966 Ford) AR-39
 MEP-264T (1963/64 Mercury) AR-26
 MEP-265T (1965 Mercury) AR-32
 MEP-266T (1966 Mercury) AR-39
 MUP-266T (1966 Mustang) AR-39
 PLP-464T (1964 Plymouth) AR-26
 PLP-465T (1965 Plymouth) AR-32
 PLP-466T (1966 Plymouth) AR-39

PLPF-465T (1965 Plymouth Fury) AR-32
 PLPF-466T (1966 Plymouth Fury) AR-39
 POP-666T (1966 Pontiac) AR-40
 RAAP-1065T (1965 Rambler American) AR-32
 RAP-364T AR-27
 RAP-365T (1965 Rambler) AR-32
 RAP-366T AR-39
 SM-130RPE AR-27
 STM-059 (1959 Studebaker Lark) AR-16
 STP-059 (1959 Studebaker Lark) AR-16
 UN-120RPT AR-39
 UP-220RPT AR-27
 VAP-464T (1964 Valiant) AR-26
 VAP-465T (1965 Valiant) AR-32
 VAP-466T (1966 Valiant) AR-39
 VWP-19T AR-27
 VWP-19T (1965 Prod.) AR-33
 4TBTR (V-350) (1964 Triumph) AR-26

STROMBERG-CARLSON

C.A.R. 7 AR-11
 C.A.R. 9 (1959 Ford & Edsel) AR-11
 CH-60-M (1960 Chevrolet) AR-14
 CH-60-PB (1960 Chevrolet) AR-14
 CH-61-M (1961 Chevrolet) AR-17
 CH-61-PB (1961 Chevrolet) AR-17
 DA-60-PB (1960 Dodge Dart) AR-14
 DE-60-PB (1960 DeSoto) AR-14
 DO-60-PB (1960 Dodge) AR-14
 DO-61-PB (1961 Dodge & Dodge Dart) AR-17
 FA-60-M (1960 Falcon) AR-14
 FA-60-PB (1960 Falcon) AR-14
 FO-60-M (1960 Ford) AR-14
 FO-60-PB (1960 Ford) AR-14
 FO-61-M (1961 Ford & Mercury) AR-17
 FO-61-PB (1961 Ford & Mercury) AR-17
 IM-60-M AR-15
 IM-60-MX AR-17
 IM-61-PB AR-17
 LA-61-PB (1961 Studebaker Lark) AR-17
 LR-61-PB (1961 Lancer) AR-18
 OF-61-PB (1961 Oldsmobile F-85) AR-17
 OL-61-PB (1961 Oldsmobile) AR-17
 PL-60-M (1960 Plymouth) AR-14
 PL-61-M (1961 Plymouth) AR-18
 PO-61-PB (1961 Pontiac) AR-17
 RA-61-PB (1961 Rambler) AR-17
 VA-60-M (1960 Valiant) AR-14
 VA-61-PB (1961 Valiant) AR-18

SPECIAL (See Buick)

STUDEBAKER

AC-2300 (S-5327) (1953) AR- 4
 AC-2301 (S-5323) (1953) AR- 4
 AC-2686 (S-5528) (1955) (See Model AC-2300) AR- 4
 AC-2687 (S-5524) (1955) (See Model AC-2301) AR- 4
 AC-2721 (S-5529) (1955) (See Model AC-2300) AR- 4
 AC-2745 (1956) AR- 6
 AC-2746 (1956) AR- 6
 AC-2747 (1956) AR- 6
 AC-2748 (1956) AR- 6
 AC-2905 (1958) AR- 9
 AC-2906 (1958) AR- 8
 AC-2907 (1958) AR- 8
 AC-2977 (1960) AR-12
 AC-2978 (1960) AR-13
 AC-3084 (1961) AR-17
 AC-3085 (1961) AR-15
 AC-3086 (1961) AR-17
 AC-3087 (1961) AR-15
 AC-3216 (1962) AR-17
 AC-3217 (1962) AR-18
 AC-3246 (1962) AR-18
 AC-3247 (1962) AR-17
 AC-3255 (1962) AR-18
 AC-3256 (1962) AR-17
 AC-3351 (1963) AR-19
 AC-3352 (1963) AR-21
 AC-3353 (1963) AR-19
 AC-3354 (1963) AR-21
 AC-3377 (1963) AR-21
 AC-3423 (SR2T) AR-22
 AC-3473 (1964 Studebaker) AR-24
 AC-3474 (1964 Hawk) AR-24
 AC-3498 (1964 Studebaker) AR-24
 AC-3499 (1964 Hawk) AR-24
 AC-3500 (1964 Avanti) AR-24
 AC-3506 (1964 Avanti) AR-24
 AC-3556 (1966 Studebaker) AR-36

TENATRONICS

SA-712.....	AR-40
SA-822.....	AR-36
SM-711.....	AR-22
SM-711 (Revised).....	AR-40
SM-751.....	AR-22
SM-751 (Revised).....	AR-40
SM-821.....	AR-36
TRM-701.....	AR-22
UA-702.....	AR-22
UM-701.....	AR-22
UA-702 (Late Prod.).....	AR-37
UM-701 (Late Prod.).....	AR-37
VWM-751.....	AR-40
VWA-702.....	AR-22
VWM-701.....	AR-22

TENNA

AM-63M/PB (1960-63 American).....	AR-26
AM-64PB (1963/64 American).....	AR-23
AM-66PB (1966 American).....	AR-36
BU-63PB (1963 Buick).....	AR-26
BU-64PB (1963/64 Buick).....	AR-23
BU-66PB (1966 Buick).....	AR-37
CH-63M/PB (1963 Chevrolet).....	AR-26
CH-64M (See page 136)(1963/64 Chevrolet).....	AR-23
CH-64PB/RS (1963/64 Chevrolet).....	AR-23
CH-65M (1965 Chevrolet).....	AR-34
CH-65PB (1965 Chevrolet).....	AR-34
CH-66PB (1966 Chevrolet).....	AR-37
CHT-63M (1963 Chevrolet Truck).....	AR-26
CHT-64M (See page 136)(1964 Chevrolet Truck).....	AR-23
CHT-65M (1965 Chevrolet Truck).....	AR-35
CHT-65PB (1965 Chevrolet Truck).....	AR-35
CHT-66M/PB (1966 Chevrolet Truck).....	AR-37
CL-64PB (1964 Chevelle).....	AR-23
CL-65PB (1965 Chevelle).....	AR-35
CL-66PB (1966 Chevelle).....	AR-37
CM-63PB (1963 Comet).....	AR-26
CM-64PB (1964 Comet).....	AR-23
CM-65PB (1965 Comet).....	AR-31
CM-66PB (1966 Comet).....	AR-36
CO-63M/PB (1960/63 Corvair).....	AR-26
CO-64PB (1960/64 Corvair).....	AR-23
CO-65PB (1965 Corvair).....	AR-34
CO-66PB (1966 Corvair).....	AR-37
CR-63PB (1963 Chrysler).....	AR-26
CR-64PB (1963/64 Chrysler).....	AR-23
CR-65PB (1965 Chrysler).....	AR-34
CR-66PB (1966 Chrysler).....	AR-36
CII-63M/PB (1962/63 Chevy II).....	AR-26
CII-64PB (1962/64 Chevy II).....	AR-23
CII-65M (1965 Chevy II).....	AR-35
CII-65PB (1965 Chevy II).....	AR-35
CII-66PB (1966 Chevy II).....	AR-37
DA-63PB (1963 Dodge Dart).....	AR-26
DA-64PB (1964 Dodge Dart).....	AR-23
DA-65PB (1965 Dart).....	AR-34
DA-66PB (1966 Dart).....	AR-36
DD-65PB (1965 Dodge).....	AR-34
DD-66PB (1966 Dodge).....	AR-36
DE-66PB (1966 Dodge).....	AR-36
DO-63PB (1963 Dodge).....	AR-26
DO-64PB (1964 Dodge).....	AR-23
DO-65PB (1965 Dodge).....	AR-34
DO-66PB (1966 Dodge).....	AR-36
DT-65M (1965 Dodge Truck).....	AR-34
EC-65M (1965 Econoline Truck).....	AR-35
EC-66M (1966 Econoline Truck).....	AR-36
FA-63M/PB (1960/63 Falcon).....	AR-26
FA-64M/PB (1964 Falcon).....	AR-23
FA-65PB (1965 Falcon).....	AR-35
FA-66PB (1966 Falcon).....	AR-36
FL-63M/PB (1962/63 Fairlane).....	AR-26
FL-64PB (1964 Fairlane).....	AR-23
FL-65PB (1965 Fairlane 500).....	AR-35
FL-66PB (1966 Fairlane).....	AR-36
FO-63M/PB (1963 Ford).....	AR-26
FO-64M (See page 136)(1963/64 Ford).....	AR-23
FO-64PB (1964 Ford).....	AR-23
FO-65PB (1965 Ford).....	AR-35
FO-65PB/RS (1965 Ford).....	AR-35
FO-66PB (1966 Ford).....	AR-36
FO-66PB/RS (1966 Ford).....	AR-36
FT-65M (1965 Ford).....	AR-36
FT-66M (1966 Ford).....	AR-36
IM-65M.....	AR-32
IM-65PB.....	AR-32
ME-63PB (1963 Mercury).....	AR-26
ME-64PB (1963/64 Mercury).....	AR-23
ME-65PB (1965 Mercury).....	AR-35

ME-66PB (1966 Mercury).....	AR-36
MR-63PB (1962/63 Meteor).....	AR-26
MU-66PB (1965/66 Mustang).....	AR-36
OF-63PB (1961/63 F-85).....	AR-26
OF-64PB (1964 F-85).....	AR-23
OF-65PB (1965 Oldsmobile).....	AR-35
OF-66PB (1966 F-85).....	AR-37
OL-63PB (1963 Oldsmobile).....	AR-26
OL-64PB (1963/64 Oldsmobile).....	AR-23
OL-65PB (1965 Oldsmobile).....	AR-34
OL-66PB (1966 Oldsmobile).....	AR-37
PD-65PB (1965 Fury).....	AR-34
PD-66PB (1966 Fury).....	AR-36
PL-63PB (1962/63 Plymouth).....	AR-26
PL-64PB (1964 Plymouth).....	AR-23
PL-65PB (1965 Plymouth).....	AR-34
PL-66PB (1966 Plymouth).....	AR-36
PO-63PB (1963 Pontiac).....	AR-26
PO-64PB (1963/64 Pontiac).....	AR-23
PO-65PB (1965 Pontiac).....	AR-35
PO-65PB/A (1965 Pontiac W/Air Conditioning).....	AR-35
RA-63PB (1963 Rambler).....	AR-26
RA-64PB (1964 Rambler).....	AR-23
RA-65PB (1965 Rambler).....	AR-32
RU-101T.....	AR-24
RU-111TC (5-004).....	AR-40
RU-112TC (5-014).....	AR-40
RU-113TC (5-016).....	AR-40
RU-114TC (5-008).....	AR-39
RU-115TC (5-010).....	AR-39
RU-116TC (5-012).....	AR-39
SA-65M (1965 Simca).....	AR-39
SA-65PB (1965 Simca).....	AR-39
SP-63PB (1963 Buick Special).....	AR-26
SP-66PB (1966 Buick Special).....	AR-37
TC-100M.....	AR-23
TC-110M.....	AR-32
TC-110MD.....	AR-32
TC-200PB.....	AR-23
TC-210PB.....	AR-32
TC-300M (1964 Volkswagen).....	AR-23
TC-300M (5-041)(1965 Prod.).....	AR-36
TC-300MD (5-072).....	AR-36
TC-310M/MD.....	AR-35
TC-400PB (1964 Volkswagen).....	AR-23
TC-400PB (5-045)(1965 Prod.).....	AR-36
TC-410PB (Similar to page 144).....	AR-23
TC-410PB (5-045).....	AR-36
TE-63PB (1963 Tempest).....	AR-26
TE-64PB (1964 Tempest).....	AR-23
TE-65PB (1965 Tempest).....	AR-31
TE-66PB (1966 Pontiac).....	AR-37
TRM-64M.....	AR-23
VA-63PB (1961/63 Valiant).....	AR-26
VA-64PB (1964 Valiant).....	AR-23
VA-65PB (1965 Valiant).....	AR-34
VA-66PB (1966 Valiant).....	AR-36
VW-64PB (1964 Volkswagen).....	AR-23
VW-65PB (1965 Volkswagen).....	AR-35
VW-65PB/15 (1965 Volkswagen).....	AR-35
VW-66PB (1958-1966 Volkswagen).....	AR-36
170-64PB (See page 136)(1964 Dart).....	AR-23
880-63PB (1962/63 Dodge 880).....	AR-26
880-64PB (1963/64 Dodge 880).....	AR-23

TITAN

ETB-1600.....	AR-40
FMC-4.....	AR-27
RV-66.....	AR-40
SP-22.....	AR-28
TMA-39.....	AR-28
TMA-40.....	AR-28
TMA-1500.....	AR-40
TPB-60.....	AR-28

TOKAI

CR-105.....	AR-33
MR-65.....	AR-34

TRIUMPH

R2BT4 (0-01000)(1962).....	AR-19
4BTBR (V-350).....	AR-26
5BTR (V-350)(1965 Triumph).....	AR-33
5BTRP (V-350DP)(1965 Triumph).....	AR-33
5SMTR (V-350)(1965 Triumph).....	AR-34
6BTR (1966 Triumph).....	AR-39

D4118, B.....	AR-4
C4320.....	AR-4
D4320B.....	AR-4
D4321, A.....	AR-4
D4425B.....	AR-5
D4426A.....	AR-5
D4623A.....	AR-7
D4624A.....	AR-7
D4625A.....	AR-7
D4626A.....	AR-7
D4826A.....	AR-7
DC4200.....	AR-18
DC4203.....	AR-26
DC4203B.....	AR-31
DC4203C.....	AR-35
DC4205B.....	AR-18
DC4206B.....	AR-18
DC4208.....	AR-23
DC4603.....	AR-39
DC4606.....	AR-39

VALIANT (See MoPar)

VAUXHALL

988946 (1958).....	AR-10
--------------------	-------

VISTA

875.....	AR-36
----------	-------

VOLKSWAGEN

R2BT (1962 Transporter).....	AR-18
R2BV (1962 Sedan).....	AR-18
OBG.....	AR-13
0BT (1960 Transporter).....	AR-13
0BV (1960 Sedan).....	AR-13
1BG (1961).....	AR-16
1BT (1961 Transporter).....	AR-16
1BV (1961 Sedan).....	AR-16
2BG (R2BG).....	AR-18
2BT (1962 Transporter).....	AR-18
2BV (1962 Sedan).....	AR-18
2FMBG (1962 Karmann Ghia).....	AR-22
2FMBT (1962 Transporter).....	AR-22
2FMBV (1962 Sedan).....	AR-22
3TBV (1963 Sedan).....	AR-20
3TBVG.....	AR-20
3TBVT (1963 Transporter).....	AR-20
4FMBG (1964 Karmann Ghia).....	AR-27
4FMBT (1964 Transporter).....	AR-27
4FMBV (1964 Sedan).....	AR-27
4TBV (1964 Sedan).....	AR-27
4TBVG (1964 Karmann Ghia).....	AR-27
4TBVT (1964 Transporter).....	AR-27
4TMVG (1964 Karmann Ghia).....	AR-26
4TMVG (1964 Karmann Ghia)(Serial #50, 001 and Higher).....	AR-29
4TMVT (1964 Transporter).....	AR-26
4TMVT (1964 Transporter)(Serial #50, 001 and Higher).....	AR-29
4TMVW (1964 Sedan).....	AR-26
4TMVW (1964 Sedan)(Serial #50, 001 and Higher).....	AR-29
5FMBG (1965 Karmann Ghia).....	AR-30
5FMBT (1965 Volkswagen Transporter).....	AR-30
5FMBV (1965 Volkswagen Sedan).....	AR-30
6BVG (1966 Karmann Ghia).....	AR-37
6BVT (1966 Transporter).....	AR-37
6BVW (1966 Sedan).....	AR-37
6BV3 (1966 Type 3 Vehicles).....	AR-37
6FBVG (1966 Karmann Ghia).....	AR-40
6FBVT (1966 Transporter).....	AR-40
6FBVW (1966 Sedan).....	AR-40
6FBV3 (Type 3).....	AR-40
6TMVG (1966 Karmann Ghia).....	AR-39
6TMVT (1966 Transporter).....	AR-39
6TMVW (1966 Sedan).....	AR-39

VOLVO

3BN (1963).....	AR-20
4TBN (279958/959/960/961)(1964 Volvo).....	AR-23
6BVO (1966 Volvo).....	AR-39

VOXMOBILE

TR-241.....	AR-27
-------------	-------

VOXSON

Vanguard 736.....	AR-15
-------------------	-------

WHITE

W-6234 (Truck).....	AR-20
---------------------	-------

HOWARD W. SAMS

PHOTOFACT® SPECIALIZED SERIES

TAPE RECORDER SERIES



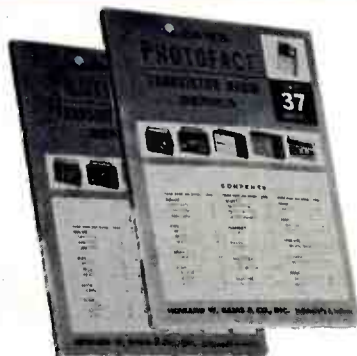
Complete PHOTOFACT® coverage of all important, late-model Tape Recorders now in easy-to-use volumes. Regular price, \$4.95 per volume—**only \$4.65 when purchased on a Standing Order Subscription! Sign up and save 30¢ per volume!**

CB RADIO SERIES



Two to three volumes issued yearly for complete PHOTOFACT® coverage of all popular CB Radio models. Regular price, \$2.95 per volume—**only \$2.65 when purchased on a Standing Order Subscription! Sign up and save 30¢ per volume!**

TRANSISTOR RADIO SERIES



Twelve to fifteen volumes issued each year provide complete PHOTOFACT® coverage of Transistor Radios. Each volume covers 40 to 50 popular late models. Regular price per volume, \$2.95—**only \$2.65 when purchased on a Standing Order Subscription! Sign up and save 30¢ per volume!**



HOWARD W. SAMS & CO., INC.

PHOTOFACT® SPECIALIZED SERIES

are available from your local parts distributor

\$2.95
\$3.75 IN CANADA
AR-40