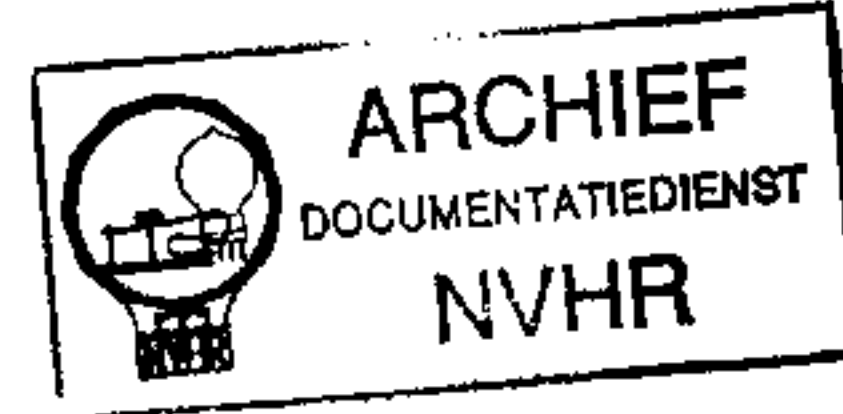
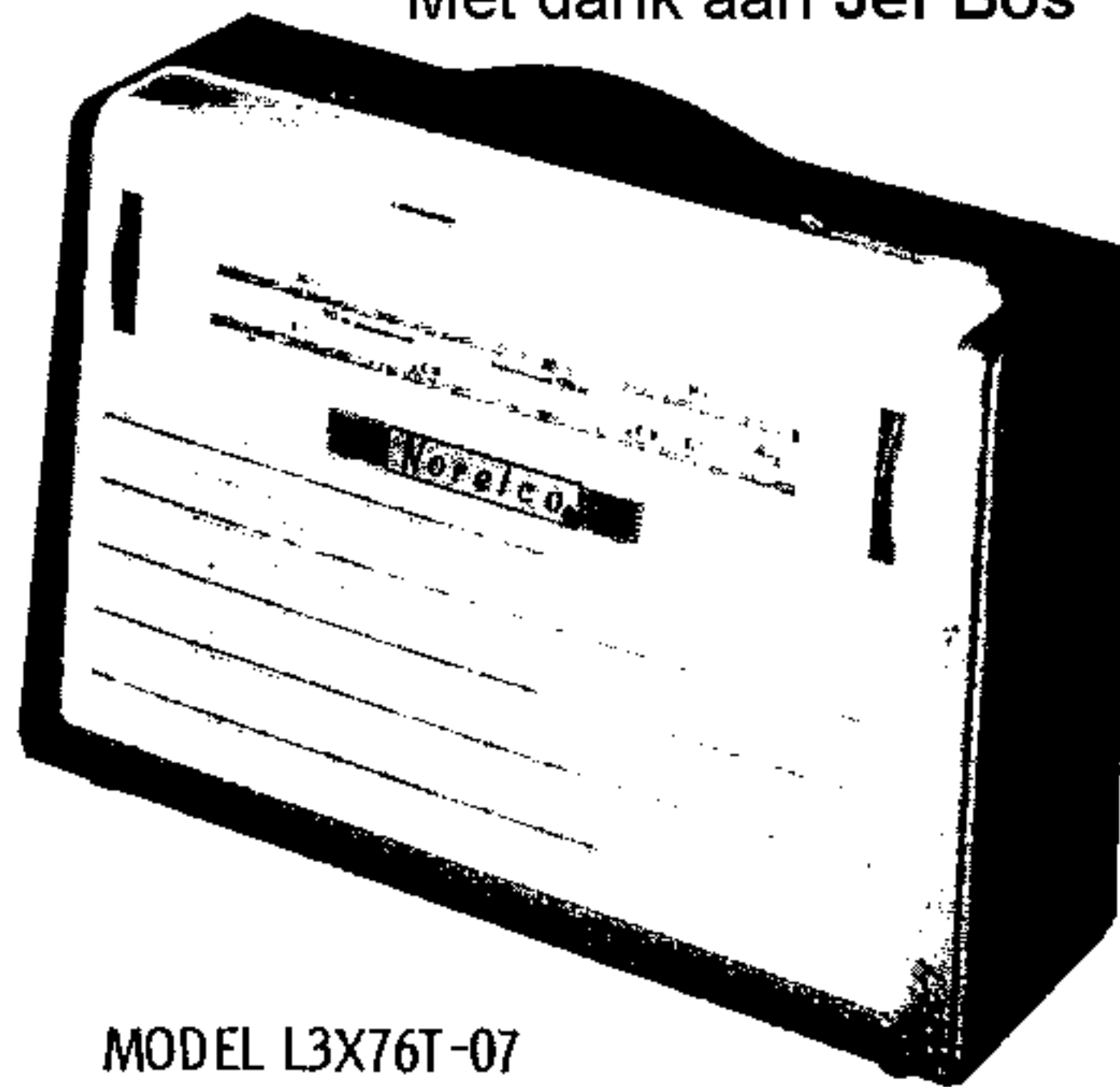


Met dank aan Jef Bos

Ned. Ver. v. Historie v



MODEL L3X76T-07

TRADE NAME	Norelco Models L3X76T-01, L3X76T-02, L3X76T-04, L3X76T-05, L3X76T-07, L3X76T-10		
SUPPLIER	North American Philips Co., Inc., 230 Duffy Ave., Hicksville, N. Y.		
TYPE SET	Battery Operated Transistorized Portable BC-SW Receiver		
POWER SUPPLY	9 Volts DC	RATING	14MA@9 Volts DC (No Signal, Min. Volume) 20MA@9 Volts DC (Signal, Normal Volume)
TUNING RANGE—BROADCAST	517-1623KC	SHORT WAVE	1.622 - 4MC

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading.

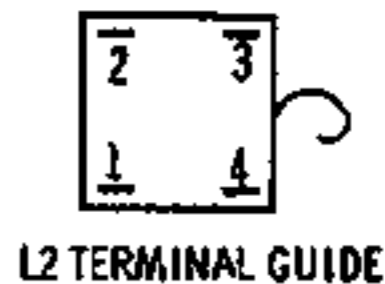
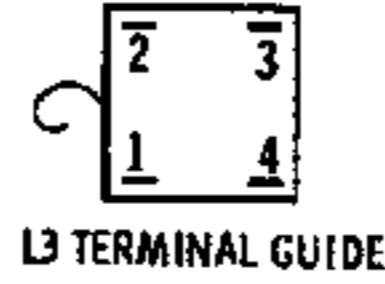
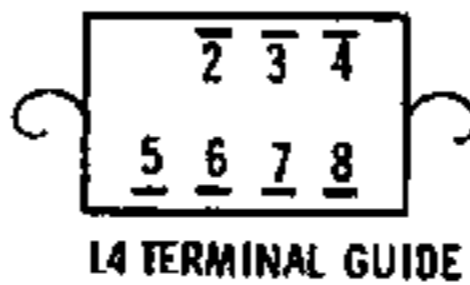
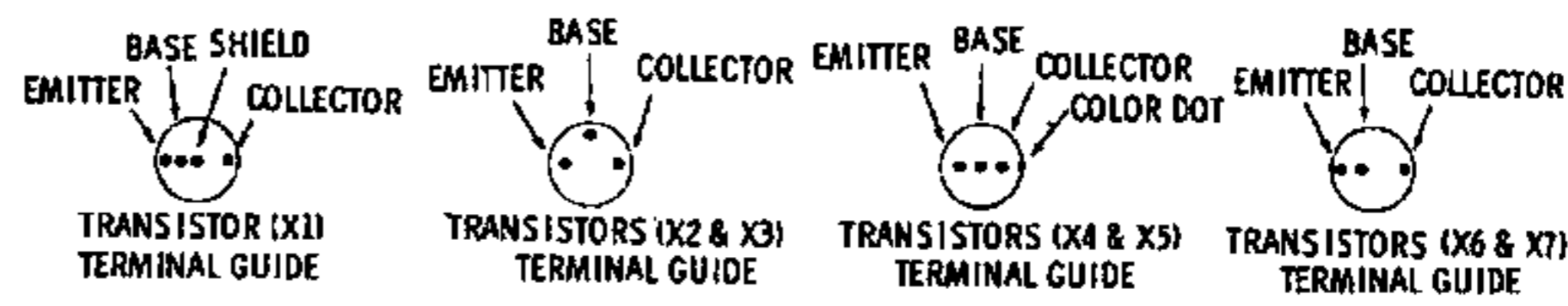
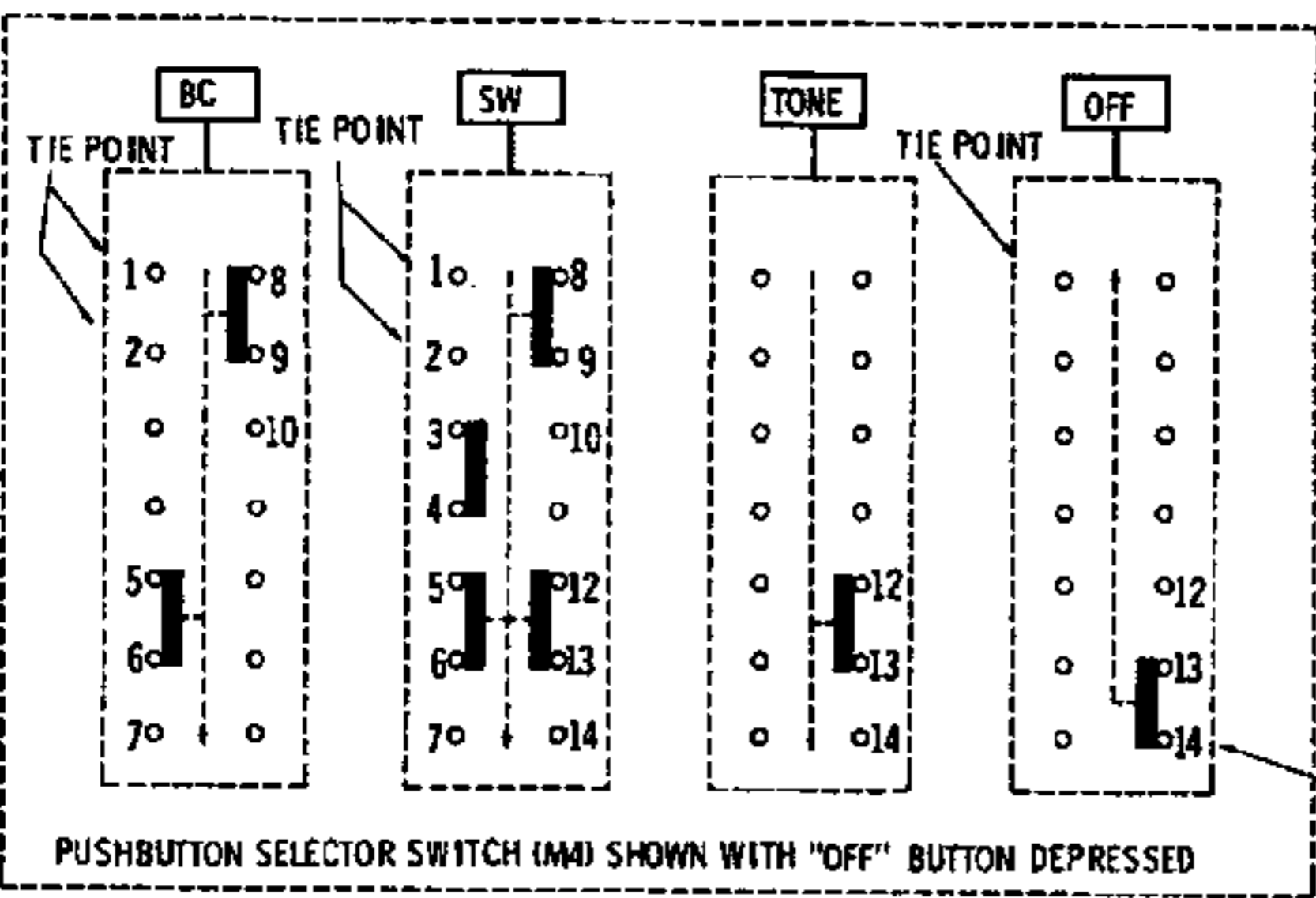
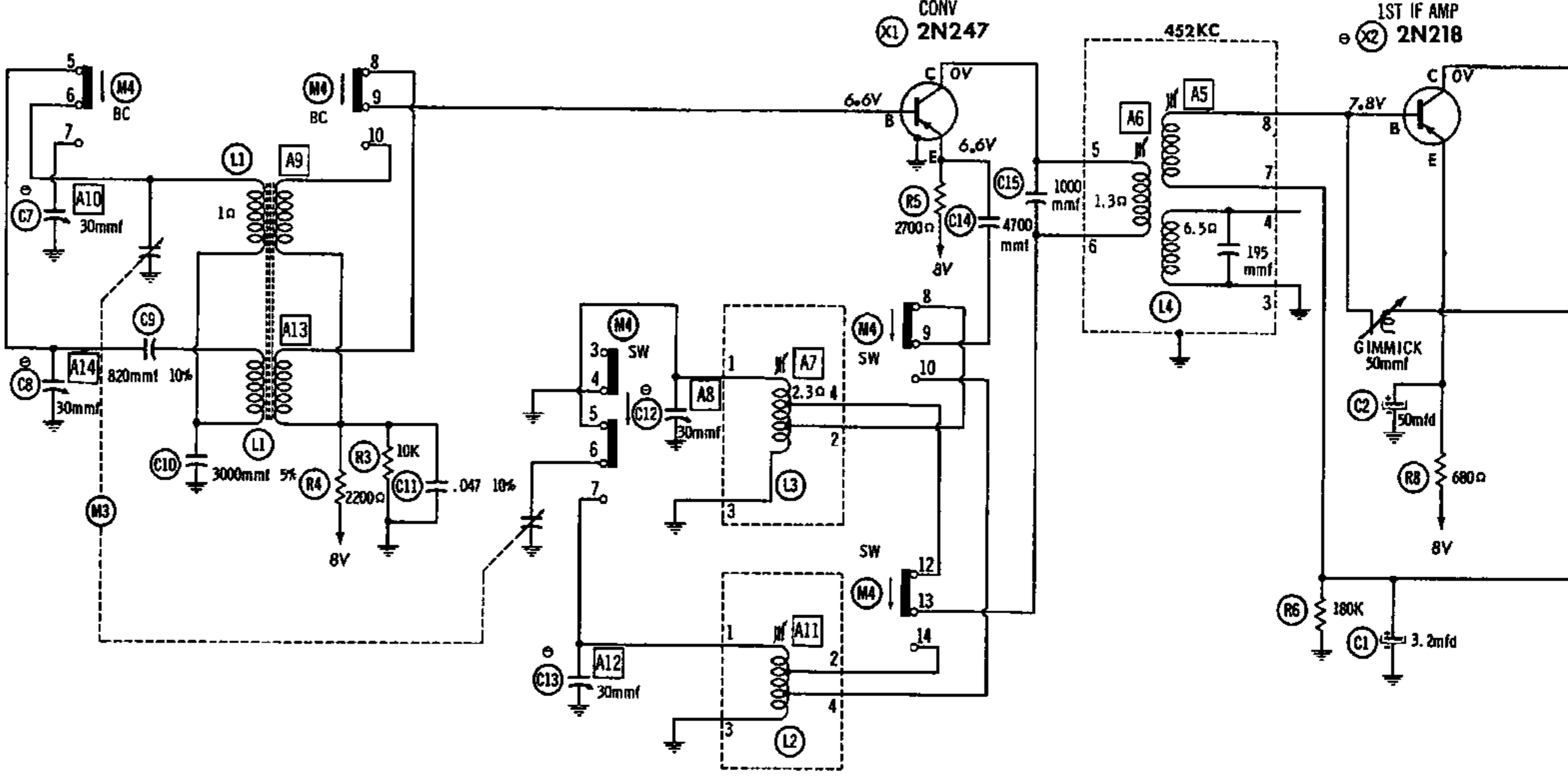
Suggested Alignment Tools: A1 thru A7, All. GENERAL CEMENT #8721, 8722
WALSCO #2519

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	452KC (400% Mod.)	(BC) Tuning gang fully open.	Across voice coil.	A1, A2, A3, A4, A5, A6	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	512KC	(BC) Tuning gang fully closed.	"	A7	"
3.	"	1635KC	(BC) Tuning gang fully open.	"	A8	"
4.	"	600KC	(BC) 600KC Signal.	"	A9	"
5.	"	1500KC	(BC) 1500KC Signal.	"	A10	Adjust for maximum output. Repeat Steps 2 thru 5.
6.	"	1.6MC	(SW) Tuning gang fully closed.	"	All	Adjust for maximum output.
7.	"	4.1MC	(SW) Tuning gang fully open.	"	A12	"
8.	"	1.8MC	(SW) 1.8MC Signal.	"	A13	"
9.	"	3.8MC	(SW) 3.8MC Signal.	"	A14	Adjust for maximum output. Repeat Steps 6 thru 9.

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

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of KF162

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1961 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



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

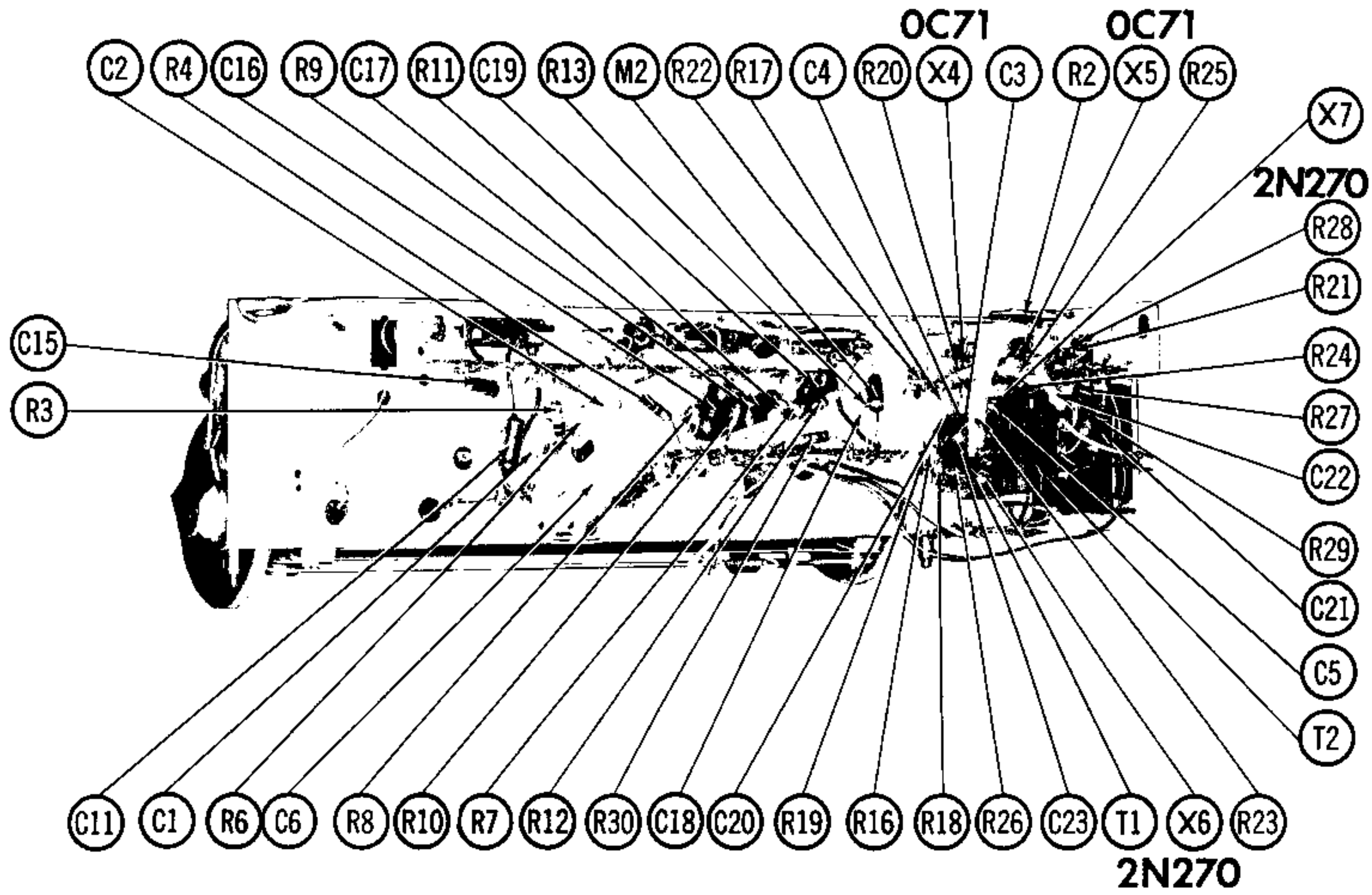
SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

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

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



CHASSIS BOTTOM VIEW

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N247	Converter	2N247		2N247	PNP
X2	2N218 *	1st IF Amplifier	2N218	2N483	2N218	PNP
X3	2N218 *	2nd IF Amplifier	2N218	2N483	2N218	PNP
X4	OC71	AF Amplifier	2N408	2N362		PNP
X5	OC71	Driver	2N408	2N362		PNP
X6	2N270 †	Output	2N270	2N360	2N270	PNP
X7	2N270 †	Output	2N270	2N360	2N270	PNP } Matched Pair

* Alternate Types 2N410 or OC45 may be used in this application.

† Alternate Type 20C72 may be used in this application.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	NORELCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	3.2	70	909/ E3, 2	PRS1400	NLW3-100	TT80X4	TD-4-150	TE-1403	
C2	50	12.5	909/ B50	XPP-15050	BBR50-25	TT15X50	ML50-15	TE-1160	
C3	16	12.5	AC5703/16	XPP-25015	NLW15-25	TT25X15	ML15-25	TE-1205	
C4	16	12.5	AC5703/16	XPP-25015	NLW15-25	TT25X15	ML15-25	TE-1205	
C5	100	12.5	909/ B100	PRS1270	BBR100-25	TT15X100	ML100-25	TE-1211	
C6	250	12.5	910/ B250	PRS1210	BR2502	TC50025	TD-250-15	TE-1138	

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C7	30	Note 1						
C8	30	Note 1						
C9	820 10%						VCM-20-821F	
C10	3000 5%						CM-20B-302J	MCE461
C11	.047 125V 10%		V84C2S47-10%			IR5D3 PM2S47	4DP-3-473	
C12	30	Note 1						
C13	30	Note 1						
C14	4700		SI 4700	D6-472	BYA10D47M	CCD-472		B-247
C15	1000		SI 1000	D6-102	BYA10D1	CCD-102		B-210
C16	.1 125V 10%		V84C2P1-10%		PM2P1	2DP-3-104		GEM-201
C17	.22 125V 10%		V84C2P22-10%		PM2P22	2DP-4-224		GEM-2022
C18	2200		SI 2200	D6-222	BYA10D22	CCD-222		B-222
C19	.1 125V 10%		V84C2P1-10%		PM2P1	2DP-3-104		GEM-201
C20	.1 125V 10%		V84C2P1-10%		PM2P1	2DP-3-104		GEM-201
C21	.033 125V 10%		V84C2S33-10%		PM6S33	4DP-2-223		
C22	330 N750		N750-SI 330	TCN-330	C10T33U			CN7-333
C23	.047 125V 10%		V84C2S47-10%		PM2S47	4DP-3-473		

Note 1. Nominal Value.

D DESCRIPTIONS

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	NORELCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	20K	$\frac{1}{2}$	B163965					Volume
R2	4000 Ω Tap 2000 Ω	$\frac{1}{2}$	WE39597					Bias

RESISTORS (IRC or EQUIVALENT)

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R3	10K		R13	15K		R23	1500 Ω	
R4	2200 Ω		R14	1500 Ω		R24	56 Ω	
R5	2700 Ω		R15	2200 Ω		R25	15 Ω	
R6	180K		R16	18K		R26	330 Ω	
R7	10K		R17	33K		R27	10K	
R8	680 Ω		R18	1200 Ω		R28	10K	
R9	3900 Ω		R19	220 Ω		R29	4700 Ω	
R10	22K		R20	1800 Ω		R30	22K	
R11	1000 Ω		R21	6800 Ω				
R12	390 Ω		R22	1500 Ω				

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		NORELCO PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	
L1A B	SW Loopstick BC Loopstick	A380395				
L2	SW Osc. Coil	A312882				
L3	BC Osc. Coil	A312881				
L4	1st IF Trans.	A312884				
L5	2nd IF Trans.	A312842				
L6	3rd IF Trans.	A312841				

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	NORELCO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.3	1	A316206					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	NORELCO PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	36 Ω CT	3-4 Ω	918/08			TA-48①		① Mounting Difference

PARTS LIST AND DESCRIPTIONS (Continued)

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				NORELCO PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	4"x 6"	PM	3-4Ω	AD3460Z	46A15Z 3 8	

BATTERIES

ITEM No.	VOLTAGE	NORELCO PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V			230 *		A100 *		M-13R *	* 6 Required

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		NORELCO PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	OA79		IN295	IN295	Detector (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	NORELCO PART No.	NOTES
M3	Tuning Cap.	4900204	2 Gang (Ant. 8-533mmf, Osc. 7-181mmf)
M4	Switch	A379058	Pushbutton Assembly, Includes Battery & Tone Switches

CABINETS & CABINET PARTS

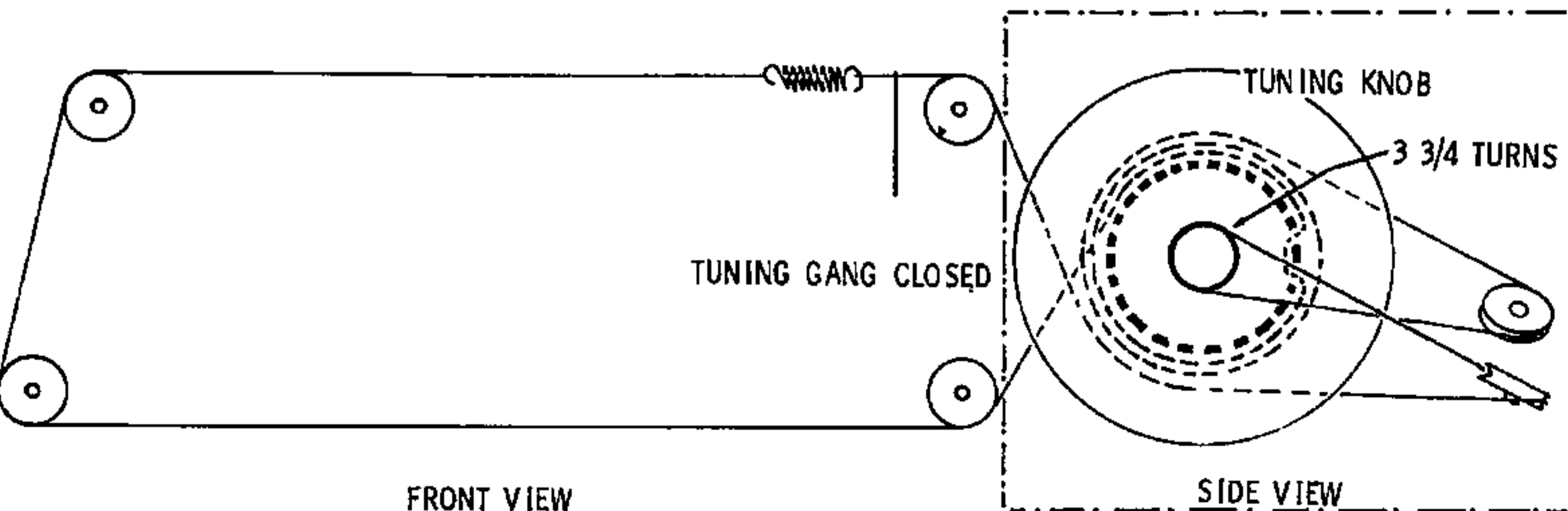
(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Knob	P407771/ 417	Tuning, Models L3X76T-01, -02, -07
Knob	A378253	Tuning, Models L3X76T-04, -05, -10
Knob	P407740/ 417	Volume, Models L3X76T-01, -02, -07
Knob	A377289	Volume, Models L3X76T-04, -05, -10
Dial	A392655	Canada, Models L3X76T-01, -02, -10
Dial	A392671	Canada, Models L3X76T-04, -05
Dial	A392613	Overseas, Models L3X76T-01, -02, -10
Pushbutton	A902349	
Cabinet	A300517	Models L3X76T-01, -02
Cabinet	A300658	Models L3X76T-04, -05, -10
Cabinet	A300634	Models L3X76T-07
Handle	A375590	

WIRING DATA

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

TUNING DRIVE CORD STRINGING



CHASSIS—TOP VIEW

