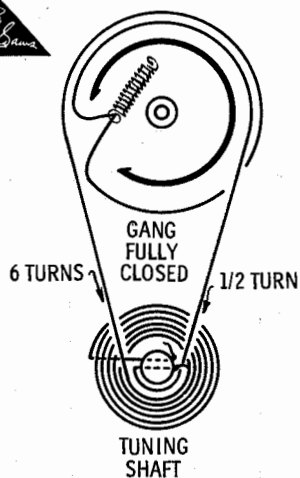
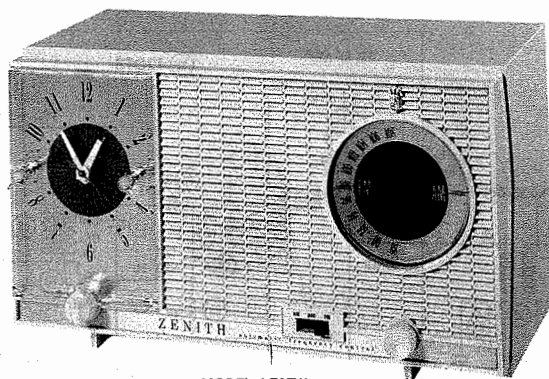


PHOTOFACT® Folder

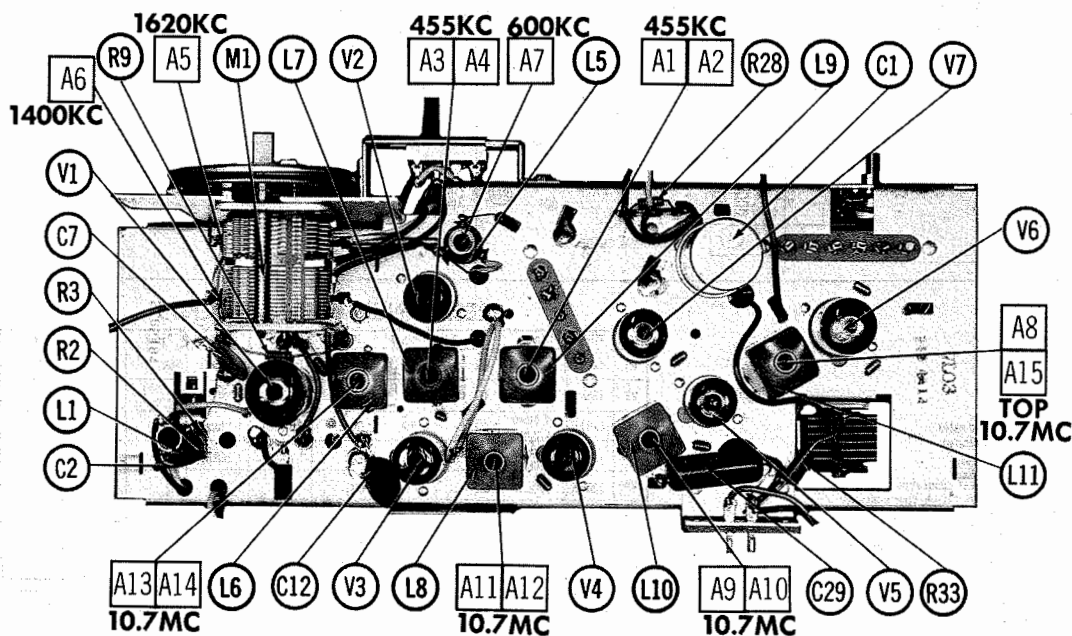
ZENITH MODELS
L727C/L/W (Ch. 7L03)

CAUTION

ONE SIDE OF AC LINE CONNECTED TO CHASSIS

DIAL CORD
STRINGING

TRADE NAME:	Zenith Models L727C/L/W (Ch. 7L03)		
SUPPLIER:	For Current Address, See Master Index.		
TYPE SET:	7 Tube AM-FM Receiver (Clock)		
POWER SUPPLY:	110-120 Volts AC-DC (Clock Version AC Only)	RATING:	30 Watts, .3 Amp. @ 117 Volts AC (Less Motor)
TUNING RANGE:	BROADCAST 540-1620KC	FREQ. MOD.	88-108MC



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

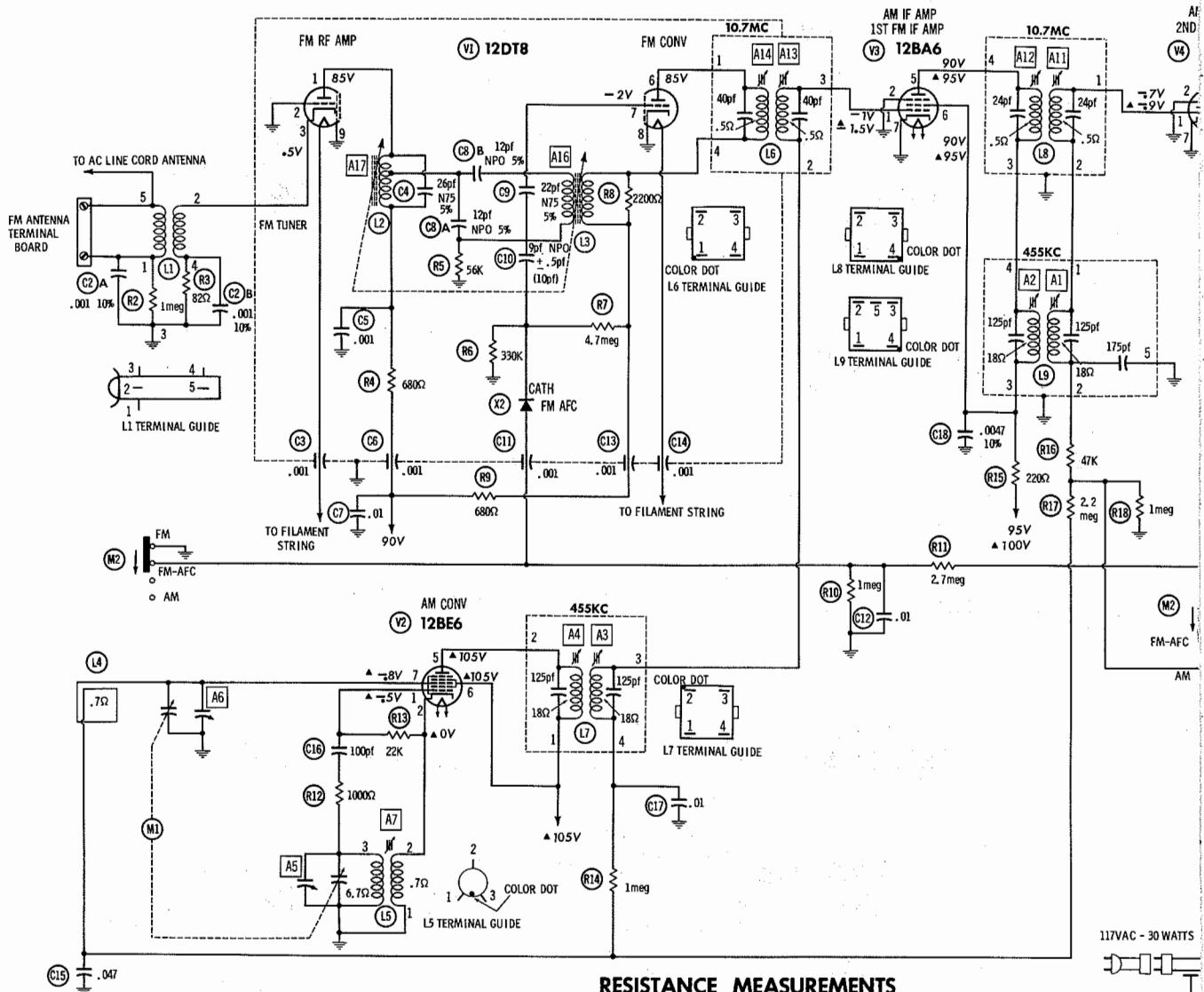
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. MK948

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DATE 2-65

SET 737 FOLDER 10





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

- See parts list for alternate value or application.
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.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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RESISTANCE MEASUREMENTS

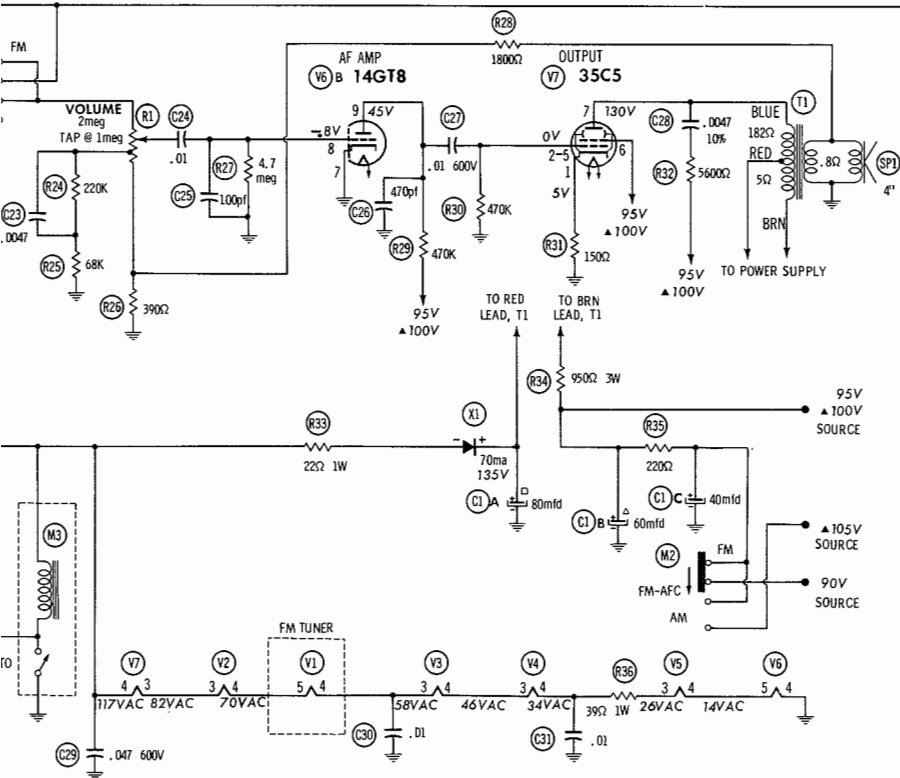
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	12DT8	† 2000Ω	0Ω	82Ω	115Ω	130Ω	† 2000Ω	56K	0Ω	0Ω
V2	12BE6	22K	1Ω	150Ω	130Ω	† 1200Ω	† 1200Ω	3.3meg		
V3	12BA6	4.6meg	0Ω	115Ω	100Ω	† 1200Ω	† 1200Ω	0Ω		
V4	12BA6	1meg	0Ω	100Ω	80Ω	† 1400Ω	† 1400Ω	0Ω		
V5	12AU6	100K	0Ω	36Ω	16Ω		† 16K	0Ω		
V6	14GT8	0Ω	150K	260K	0Ω	16Ω	150K	0Ω	4.7meg	† 470K
V7	35C5	150Ω	NC	150Ω	210Ω	470K	† 1000Ω	† 280Ω		
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9

ALL MEASUREMENTS TAKEN IN "FM" POSITION UNLESS OTHERWISE DESIGNATED. NC NO CONNECTION
 † MEASURED IN "AM" POSITION. † MEASURED FROM OUTPUT OF X1.

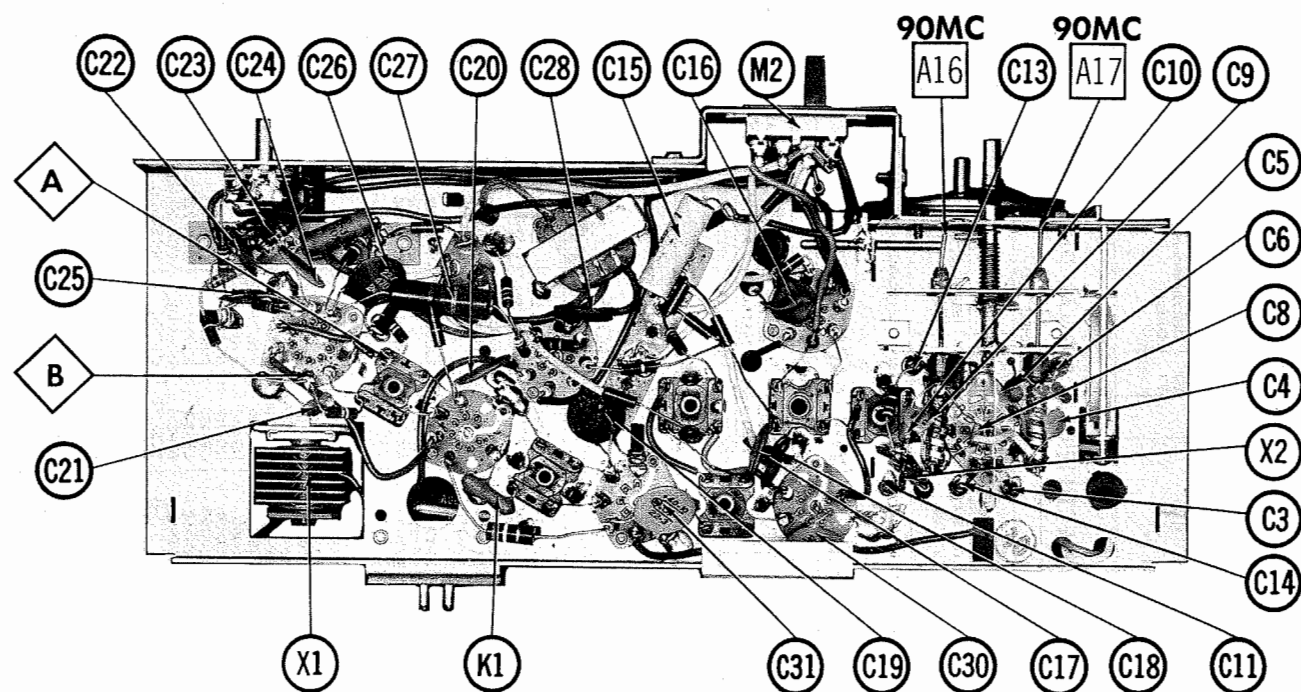
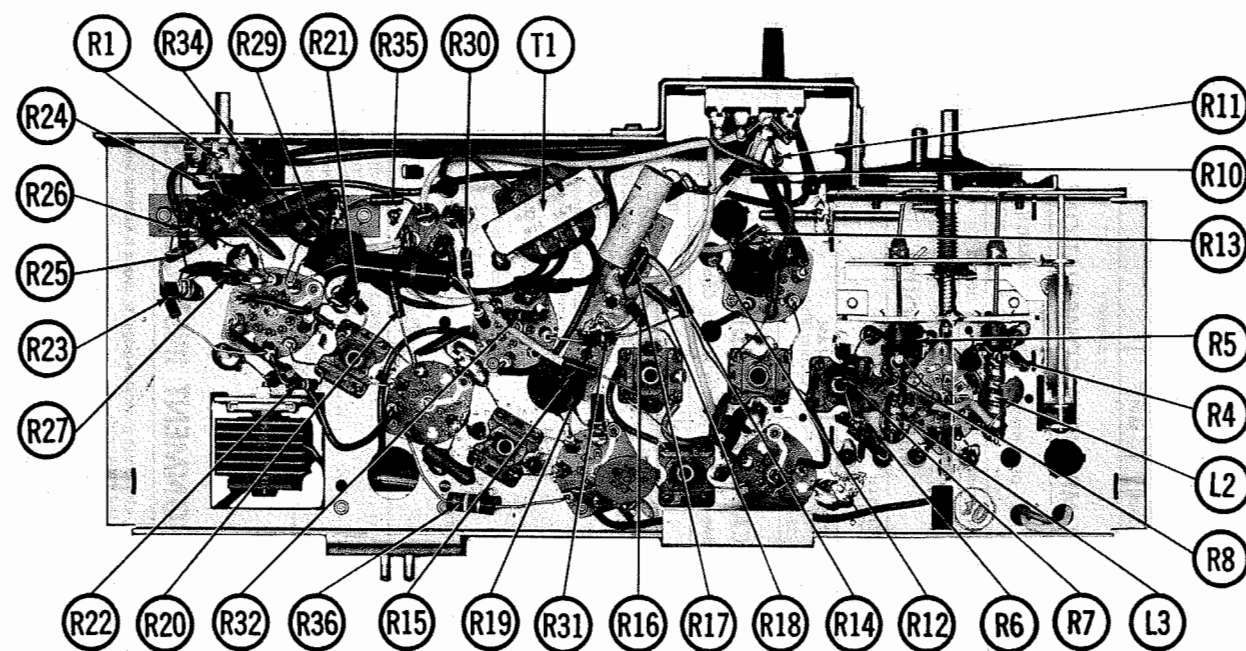
AC LINE CORD ANTENNA
(TO ANT INPUT COIL, L1)

CLOCK
ASSEMBLY

ON-OFF-A
& ALARM.



ZENITH MODELS
L727C/L/W (Ch. 7L03)



PARTS LIST AND DESCRIPTION

TUBES

• AMPEREX • GENERAL ELECTRIC • RCA • SYLVANIA •				
ITEM No.	USE	TYPE	ITEM No.	USE
V1	FM RF Amp. -FM Conv.	12D78	V5	Limiter
V2	AM Conv.	12B66	V6	Discriminator-AF Amp.
V3	AM-1st FM IF Amp.	12BA6	V7	Output
V4	2nd FM IF Amp. -AM Det. - AVC	12BA6		

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS			DIODES
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RCA PART No.	GENERAL ELECTRIC PART No.
X1	.07A	212-23	GE-504 or 1N1895	A300 or D300	1N1783 or 1N2862	Model 100A or F-4
X2		108-47				1N344S

When replacing selenium rectifier with silicon type, add series resistance to obtain original output voltage.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		ZENITH PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.
C1A	80 150	22-3717	PWH3-13-70	CCO120	XC3-45.1	TMT-3148
C1B	40 150			BR40-150		TD-40-150
C1C	150 150					

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

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMCO PART No.	MALLORY PART No.
C2A	.001 10%		DE-1000	DD-102	JB6D1	CCD-102	GP210
C2B	.001 10%		DE-1000	DD-102	JB6D1	CCD-102	GP210
C3	.001 5%	#22-3839	EF-001	MFT-1000		CCF-102	CT280A
C4	26 N75						
C5	.001		SE-1000	D6-102	LA10DR-C4	CCD-102	B210
C6	.001		EF-001	DD-103		CCF-102	CT280A
C7	.01		BPD-01	DD-103	BYA10S1	CCQ-103	B110
C8A	12 NPO 5%			TC2-12		CNO412	CNO412
C8B	12 NPO 5%			TC2-12		CNO412	CNO412
C9	22 N75 5%	#22-3821					
C10	9 NPO ±.5mmf	(10) †	NPO-D110	DFT-10	C10Q1C	CCF-102	CNO410
C11	.001		EF-001	MFT-1000		CCD-103	CT280A
C12	.001		BPD-01	DD-103	BYA10S1	CCF-102	B110
C13	.001		EF-001	MFT-1000		CCF-102	CT280A
C14	.001		EF-001	MFT-1000		CCF-102	CT280A
C15	.047 100V		P288N-047	DD-503	WMFIS47	IDP-2-473	PVCL147
C16	100		DE-100	DD-101	LA10T-S3	CCD-101	GP310
C17	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110
C18	.0047 10%		DE-4700	CF-472	JB6D47	CCD-103	GP310
C19	.0022 10%		DE-2200	CF-222	JB6D22	CCD-103	GP310
C20	100 NPO 10%		BPD-01	DD-103	BYA10S1	CCD-103	GP310
C21	.001		BPD-01	DD-103	BYA10S1	CCD-103	GP310
C22	.001		BPD-01	DD-103	BYA10S1	CCD-103	GP310
C23	.0047		BPD-0047	DD-471	WMF681	6DP-2-103	GEM611
C24	.01		BPD-01	DD-103	BYA10S1	CCD-103	GP310
C25	100		BPD-0047	DD-471	WMF681	6DP-2-103	GEM611
C26	470		P688N-01	DD-103	JB6D47	CCD-472	GEM6147
C27	.01 600V		BPD-01	DD-103	BYA10S1	CCD-103	B110
C28	.0047 600V		BPD-01	DD-103	BYA10S1	CCD-103	B110
C29	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110
C30	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110
C31	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110

† Alternate Value.

Zenith Part Number.

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA			REPLACEMENT DATA	MALLORY PART No.
			ZENITH PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	
R1	Volume	2meg 1meg Tap	63-4902	F16-2meg, SF010 or (BT-82)	A47F3-2meg, FS-3	B18-139X, TM5 or (BUIL, CF57T, SS14, DC1)*	TA26T16 or SF1000 or (UA26T95, SF1000)

* "SNAPTROL"

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			REPLACEMENT DATA	ZENITH PART No.
		IRC PART No.	WORKMAN PART No.	ZENITH PART No.	IRC PART No.	WORKMAN PART No.
R34	9500 3W	PW5-1000	3G1000	63-4819		

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			REPLACEMENT DATA	NOTES
		ZENITH PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	
L1	FM Ant.	S-52362				
L2	FM RF	S-62887				
L3	FM Osc.	S-62889				
L4	Loop Ant.	S-54587				
L5	AM Osc.	S-50127	BC-394A* 70-00cA*		RTC-8647A	TS536
L6	1st FM IF	95-2120	FM-256 1463-PC		RTC-9046	T654
L7	1st AM IF	95-1718	BC-356 16-PC9		RTC-8683	TC681
L8	2nd FM IF	95-1864	FM-256 1463-PC		RTC-9046	T654
L9	2nd AM IF	95-1505	BC-641 16-PC8		RTC-8301	TC608
L10	3rd FM IF	95-1864	FM-256 1463-PC		RTC-9046	T654
L11	Discriminator	95-1866				

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES
		ZENITH PART No.	MERIT PART No.	STANCOR PART No.	
T1	3300Ω TAP @ 2.6%	3-42	95-1929		

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		ZENITH PART No.	QUAM PART No.	
SP1	4" PM 3-40	49-1013	4A07	

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ZENITH PART No.	REPLACEMENT DATA
K1	Grid Bias Network	100K, 25mmf	105-42	Sprague PRC-11

MISCELLANEOUS

ITEM No.	PART NAME	ZENITH PART No.	NOTES
M1	Tuning Capacitor	22-3829	
M2	Switch Assembly	S-63741	2 Gang AM Function (Slide Type)
M3	Clock	172-33	

CABINETS & CABINET PARTS
(When Ordering Specify Model, Chassis & Color)

ITEM No.	ITEM	PART No.	ITEM	PART No.
	Clock Dial Scale-Model L727C	26-864	Knob-Tuning-Model L727C	46-3781
	Clock Dial Scale-Model L727L, W	26-863	Knob-Tuning-Model L727L	46-2833
	Radio Dial Scale-Model L727C	26-867	Knob-Tuning-Model L727W	46-2831
	Radio Dial Scale-Model L727L, W	26-866	Indicator-Tuning-Model L727C	46-3775
	Emblem Plate-Model L727C	57-3760	Indicator-Tuning-Model L727L, W	46-3774
	Emblem Plate-Model L727L, W	57-3763	Cabinet-Includes Dial Scale and Trim Strip	S-63507
	Clock Crystal	192-314	Model L727C	
	Knob-Clock Switch-Model L727C	46-2333	Cabinet-Includes Dial Scale and Trim Strip	S-63505
	Knob-Clock Switch-Model L727L, W	46-2335	Model L727L	
	Knob-Volume-Model L727C	46-3820	Cabinet-Includes Dial Scale and Trim Strip	S-63503
	Knob-Volume-Model L727L	46-3822	Model L727W	
	Knob-Volume-Model L727W	46-3820		

① 2 Required.

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. 1706 (Plastic) or 1726 (Rubber) - 6 Ft.
Power Cord (Interlock Type) Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)

ALIGNMENT INSTRUCTIONS

Maintain line voltage at 117 volts. Use only enough generator output to obtain a suitable indication. Allow a 15 minute warmup for receiver and equipment. When adjusting, observe polarity when connecting test equipment. Suggested test equipment: Signal Generator: General Cement: 8606, 8609, 8689 WALSCO: 2543, 2544, 2588 A5, A6, A7 thru A15 GENERAL CEMENT: 8688, 9087, 9089 WALSCO: 2528, 2541, 2587 A15, A17 Special Zenith Alignment Tool Required

AM ALIGNMENT - SELECTOR IN AM POSITION

Fashion loop of several turns of wire and connect generator across loop. Set volume control at maximum.

GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
455KC (400% Mod.)	Tuning gang fully open.	Output Meter across Voice coil.	A1, A2, A3, A4	Adjust for maximum. Repeat until no further improvement can be made.
1620KC	"	"	A5	Adjust for maximum.
1400KC	Tune to signal.	"	A6	"
600KC	"	"	A7	Rock tuning gang and adjust for maximum. Repeat steps 2 thru 4 until no further improvement can be made.

FM ALIGNMENT USING AM SIGNAL GENERATOR - SELECTOR IN FM POSITION

High side to ungrounded shield over FM converter tube, low side to ground.

GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point of common to ground.	A8, A9, A10, A11, A12, A13, A14	Adjust for maximum.
"	"	DC probe to point of common to ground.	A15	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 to ungrounded shield over FM converter, low side to ground. Use only enough marker signal to obtain indication. Use 60% frequency modulated signal with 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.

GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point of low side to ground.	A8, A9, A10, A11, A12, A13, A14	Adjust for maximum gain and symmetry of response similar to Fig. 1 with marker as shown.
"	"	Vert. amp. to point of low side to ground.	A15	Adjust A15 (Secondary) to place marker at center of crossover lines similar to Fig. 2. Adjust A8 (Primary) for maximum amplitude and straightness of crossover lines.

10.7MC



FIG. 1

10.7MC



FIG. 2