

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA		REMARKS	ITEM No.	RATING	REPLACEMENT DATA		REMARKS
		IRC PART No.	WORKMAN TV PART No.				IRC PART No.	WORKMAN TV PART No.	
R1	100K				R20	100K			
R2	100K				R21	100K			
R3	2000K				R22	100K			
R4	10K				R23	50K			
R5	1000K				R24	50K			
R6	100K				R25	1meg			
R7	470K				R26	20K			
R8	3meg				R27	1000K			
R9	500K				R28	100K			
R10	100K				R29	100K			
R11	100K				R30	100K			
R12	1000K				R31	100K			
R13	100K				R32	50K			
R14	50K				R33	100K			
R15	15K				R34	2meg			
R16	15K				R35	100K			
R17	100K				R36	200K 1W			
R18	10K				R37	200K 1W			
R19	10K								

Note 1. Not used in some versions.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		REALISTIC PART No.	Miller PART No.	Stancor PART No.	
L1	FM Ant.				
L2	RF Choke(3uh)		4606	RTC-8517	T814
L3	FM RF				
L4	FM Osc.				
L5	RF Choke(3uh)		4606	RTC-8517	T814
L6	1st FM IF		FM-254	RTC-8599	T633
L7	2nd FM IF		FM-254	RTC-8599	T633
L8	3rd FM IF		FM-254	RTC-8599	T633
L9	4th FM IF		FM-254	RTC-8599	T633
L10	Discriminator		FM-253	RTC-8665	T634
L11	Loopstick		BC-419	705-A	T532
L12	AM RF				
L13	AM Osc.		BC-393	RTC-8847	T512
L14	1st AM IF		BC-352	RTC-8632	T607
L15	2nd AM IF		BC-353	RTC-8633	T608
L16	1st Choke(1.5uh)		BC-562	RTC-8516	T856
L17	1st Choke(1.5uh)		BC-562	RTC-8516	T856

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA			NOTES
		REALISTIC PART No.	Merit PART No.	Stancor PART No.	
T1	PRI. 117V @ 240VCT SEC. 1 .38A Tap @ .060A SEC. 2 @ 100V DC	TP-78			

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		REALISTIC PART No.	RAYTHEON PART No.	
M1	CA79		1N80	AM Detector (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	REALISTIC PART No.	NOTES
M2	Tuning Cap.		FM, 3 Gang
M3	Tuning Cap.		AM, 29-28mmf
M4	Switch		Function Selector, (Rotary Type)
M5	Switch		AFC (DFT Slide Type)
M6	Switch		Power On-Off (DFT Slide Type)
M7	Meter		FM Tuning
M8	Meter		AM Tuning

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in Ten Colors
Power Cord	8524 (Stranded) Available in Ten Colors
	1785-B (8 Ft. Length)
	1725-K (7 1/2 Ft. Length)

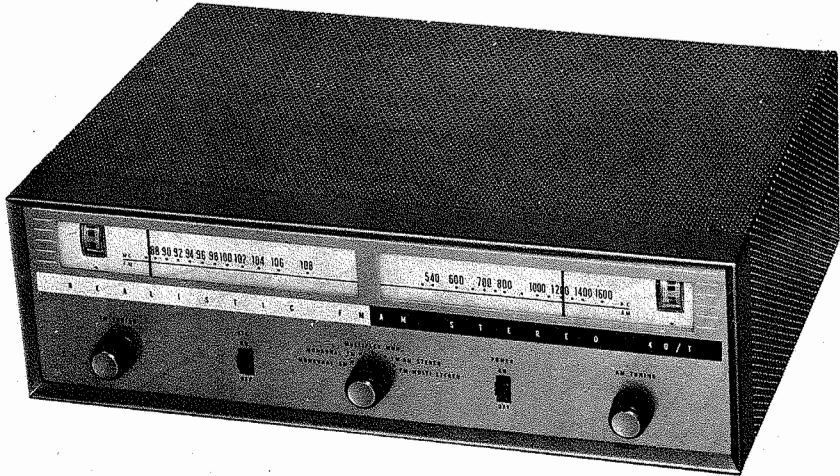
FOLDER 12  
SET 566

PHOTOFACT® Folder



REALISTIC MODEL  
40T

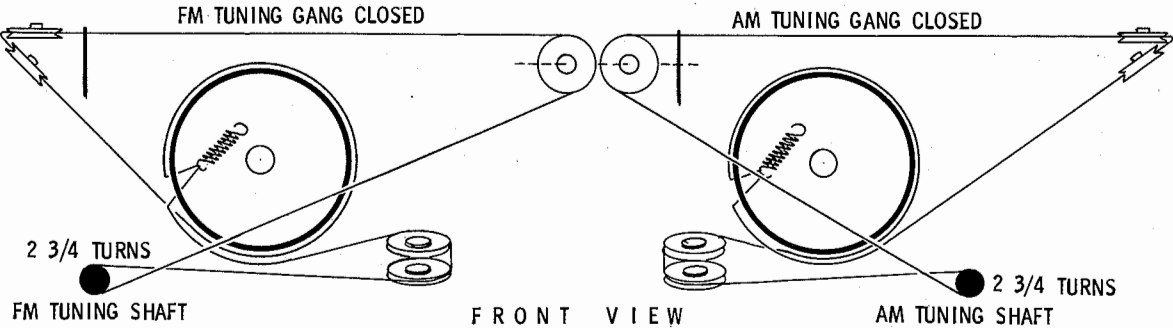
REALISTIC MODEL  
40T



REALISTIC MODEL  
40T

TRADE NAME	Realistic Model 40T
SUPPLIER	Radio Shack Corp., 730 Commonwealth Ave., Boston 17, Mass.
TYPE SET	AC Operated 11 Tube FM-AM Tuner
POWER SUPPLY	110 - 120 Volts AC, 60 Cycles
RATING	42 Watts, .38 Amp. @117 Volts AC
TUNING RANGE-BROADCAST	540 - 1600KC
FREQ. MOD.	88 - 108MC

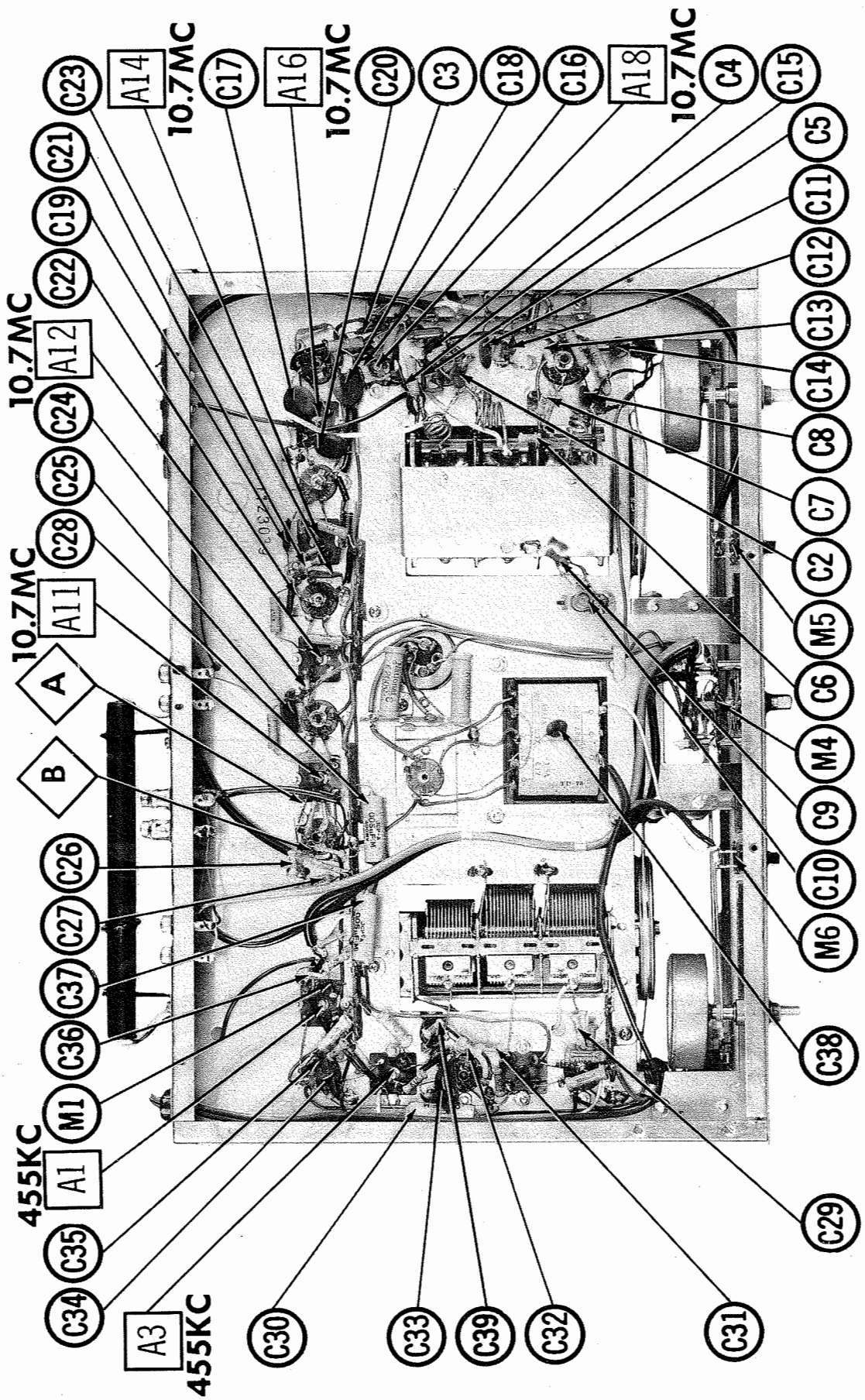
DIAL CORD STRINGING



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

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CHASSIS BOTTOM VIEW-ALIGN., CAPACITOR & MISC. IDENT.

PARTS LIST AND DESCRIPTIONS

TUBES															
• GENERAL ELECTRIC •				• RAYTHEON •				• SYLVANIA •							
ITEM No.		USE		TYPE		ITEM No.		USE		TYPE					
V1	FM RF Amp - FM Mixer	6AQ8	V7	Discriminator	6AL5										
V2	FM Osc. - FM AFC	6AQ8	V8	AM RF Amplifier	6BA6										
V3	1st FM IF Amplifier	6AU6	V9	AM Converter	6BE6										
V4	2nd FM IF Amplifier	6AU6	V10	AM IF Amplifier	6BA6										
V5	1st FM Limiter	6AU6	V11	Rectifier	6X4										
V6	2nd FM Limiter	6AU6													

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA	REMARKS	REPLACEMENT DATA
C1A	240 150		AFH3-10		AFH3-10
C1	340 150		AFH3-10		AFH3-10
C	340 150		AFH3-10		AFH3-10

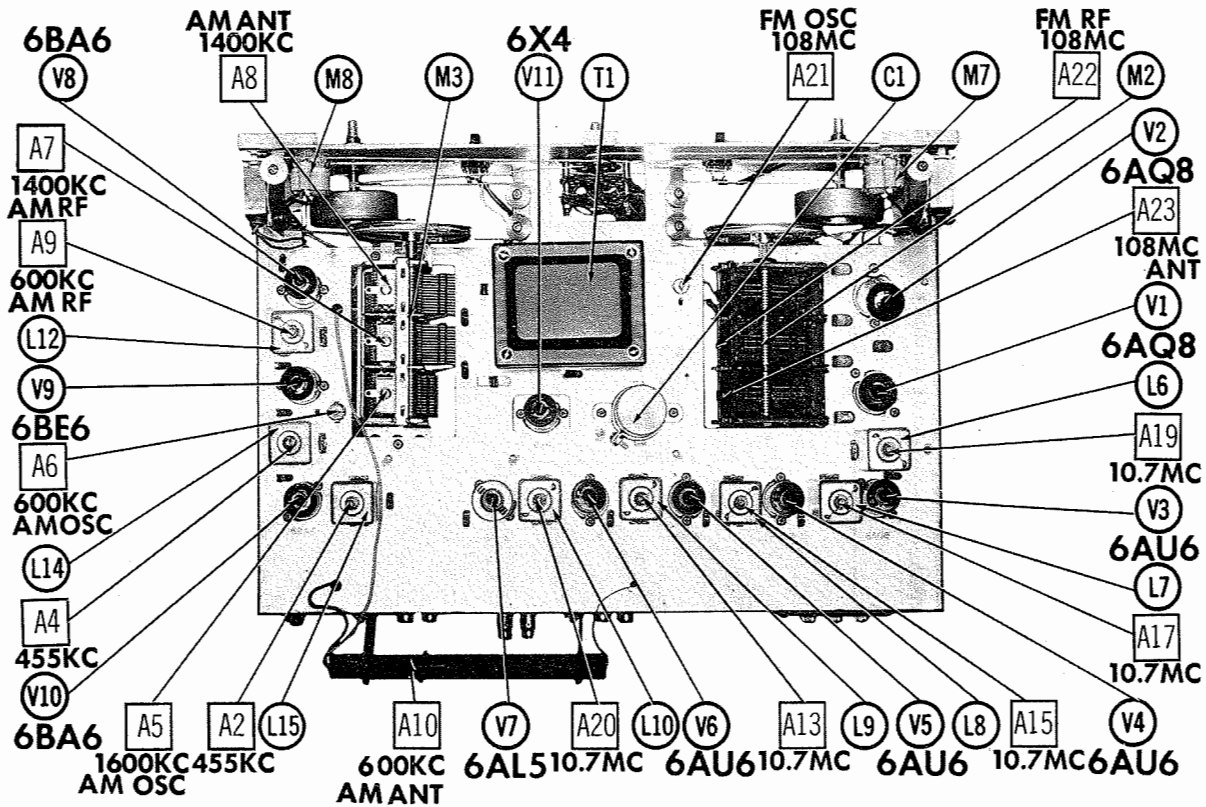
FIXED CAPACITORS

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	REMARKS	REPLACEMENT DATA
C2	.002		DD-202		DD-202
C3	.01		DD-103		DD-103
C4	10 10%		DD-103		DD-103
C5	.002		DD-103		DD-103
C6	2 + .5mmf		DD-103		DD-103
C7	100 5%		DD-103		DD-103
C8	10 N330 ± 1mmf		DD-103		DD-103
C9	.01		DD-103		DD-103
C10	.001		DD-103		DD-103
C11	5 + .5mmf		DD-103		DD-103
C12	.002		DD-103		DD-103
C13	.01		DD-103		DD-103
C14	1 + .5mmf		DD-103		DD-103
C15	.01		DD-103		DD-103
C16	.01		DD-103		DD-103
C17	.01		DD-103		DD-103
C18	.01		DD-103		DD-103
C19	.01		DD-103		DD-103
C20	.01		DD-103		DD-103
C21	.01		DD-103		DD-103
C22	.01		DD-103		DD-103
C23	.01		DD-103		DD-103
C24	.01		DD-103		DD-103
C25	.01		DD-103		DD-103
C26	.01		DD-103		DD-103
C27	.01		DD-103		DD-103
C28	.01		DD-103		DD-103
C29	.01		DD-103		DD-103
C30	.01		DD-103		DD-103
C31	.01		DD-103		DD-103
C32	.01		DD-103		DD-103
C33	.01		DD-103		DD-103
C34	.01		DD-103		DD-103
C35	.01		DD-103		DD-103
C36	.01		DD-103		DD-103
C37	.01		DD-103		DD-103
C38	.01		DD-103		DD-103
C39	.01		DD-103		DD-103

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

CHASSIS—TOP VIEW



ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

A1 thru A4, A6, A9, A11 thru A21.... GENERAL CEMENT #8721, 8722

WALSCO #2519

A5, A7, A8, A22, A23..... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291

WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538

AM ALIGNMENT — SELECTOR IN MON. AM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1.	High side thru .1mfd to pin 7 (grid) of AM Converter. Low side to chassis.	455KC (400v 30% AM)	(AM) Tuning gang fully open.	AC probe across Output R jack.	A1, A2, A3, A4	Adjust for maximum deflection.
2.	"	1600KC	1600KC	"	A5	"
3.	"	600KC	600KC	"	A6	"
4.	Fashion loop of several turns of wire and radiate signal in to loop of receiver.	1400KC	1400KC Signal.	"	A7, A8	"
5.	"	600KC	600KC Signal	"	A9, A10	Adjust for maximum deflection. A10 is adjusted by moving ring along Loop-stick until maximum is obtained. Repeat steps 2 thru 5.

FM IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM — SELECTOR IN FM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
6.	High side thru .01mfd to pin 2 (grid) of FM Mixer. Low side to chassis.	10.7MC (Unmod.)	(FM) Point of non-interference.	DC probe thru lmeq to point $\Delta$ Common to chassis.	A11, A12, A13, A14, A15, A16, A17, A18, A19	Adjust for maximum deflection.
7.	"	"	"	DC probe to point $\oplus$ . Common to chassis.	A20	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

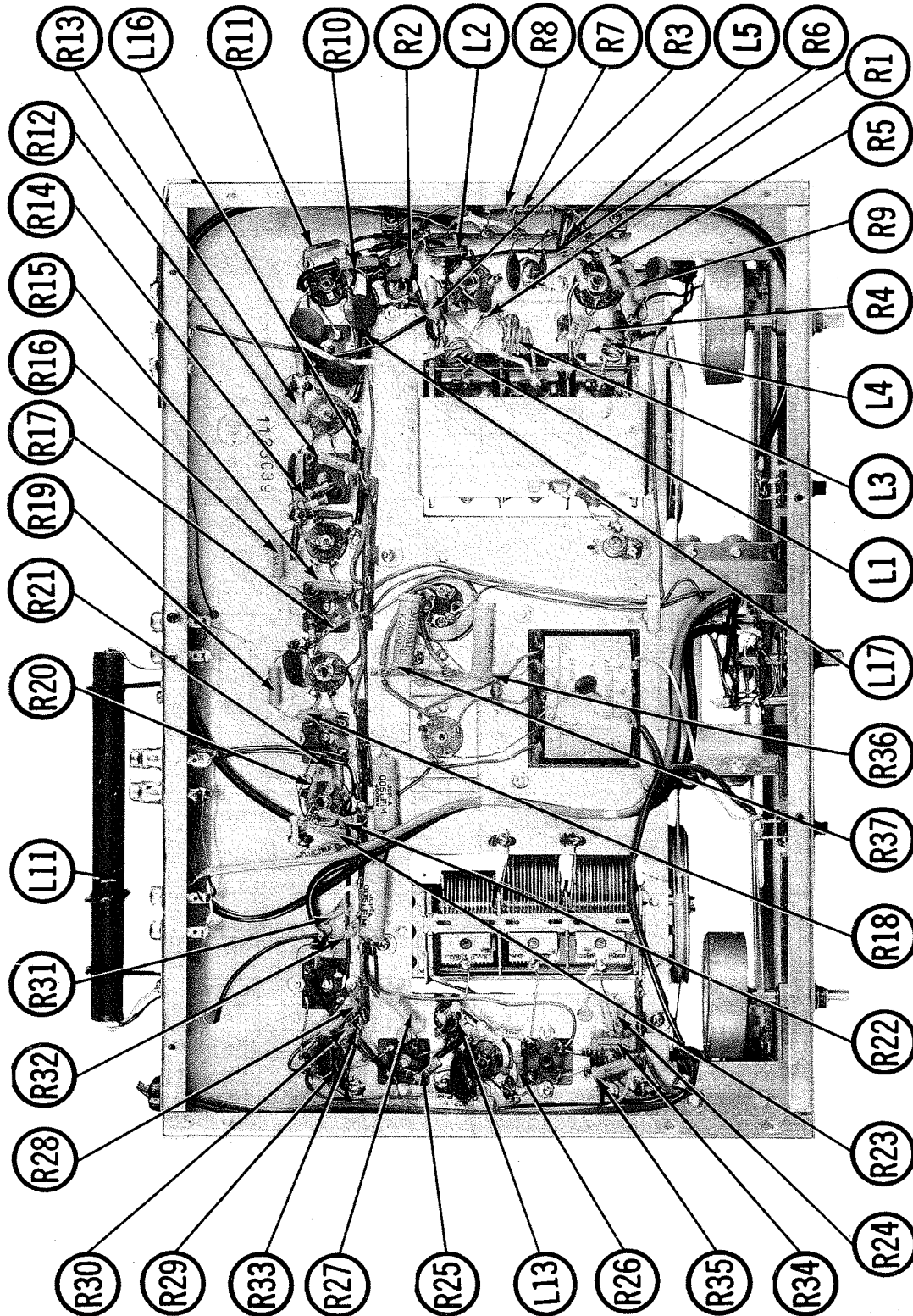
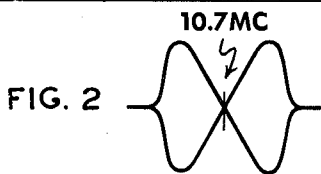
FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE — SELECTOR IN FM POSITION

Use frequency modulated signal with 60v modulation and 450KC sweep. Use 120v sawtooth voltage in scope for horizontal deflection.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
6.	High side thru .01mfd to pin 2 (grid) of FM Mixer. Low side to chassis.	10.7MC (450KC Swp)	(FM) Point of non-interference.	Vert. amp. thru 47K to point $\Delta$ . Low side to chassis.	A11, A12, A13, A14, A15, A16, A17, A18, A19	Adjust for maximum gain and symmetry of response similar to Fig. 1 with markers as shown.
7.	"	"	"	Vert. amp. to point $\oplus$ . Low side to chassis.	A20	Adjust to place marker at the center of crossover lines similar to Fig. 2. SLIGHTLY retouch A11 for maximum amplitude and straightness of cross-over lines.

FM RF ALIGNMENT — SELECTOR IN FM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
8.	High side thru 270 $\Omega$ to FM antenna terminal. Low side to chassis.	108MC (Unmod.)	(FM) 108MC	DC probe thru lmeq to point $\Delta$ Common to chassis.	A21, A22, A23	Adjust for maximum deflection.
9.	"	88MC	88MC	"	L4, L3, L1	Adjust for maximum deflection by expanding or compressing coil turns. Repeat Steps 8 and 9.

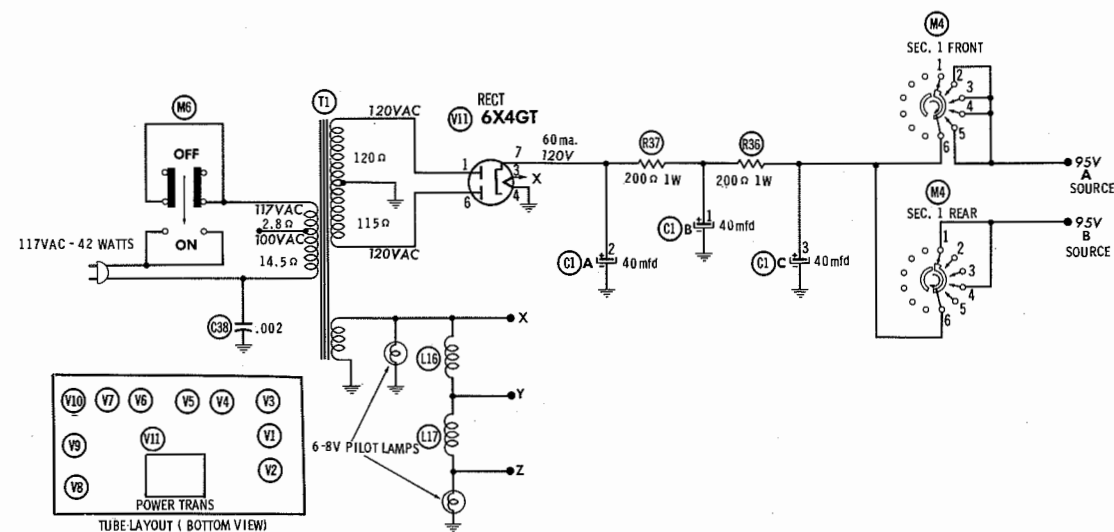


CHASSIS BOTTOM VIEW-RESISTOR & INDUCTOR IDENT.

REALISTIC MODEL  
40T

FOLDER 12





ALL MEASUREMENTS MADE IN "AM-FM" POSITION WITH AFC OFF UNLESS OTHERWISE DESIGNATED.  
 † THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.  
 ‡ MEASURED WITH AFC ON.  
 ■ MEASURED FROM PIN 7 OF V11.

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.

### REALISTIC MODEL 40T