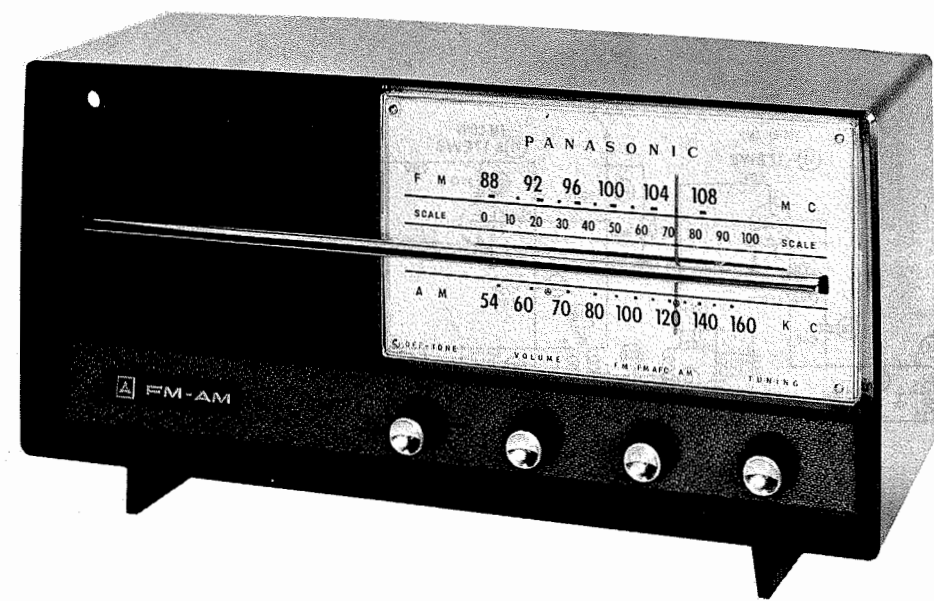


PHOTOFACT® Folder



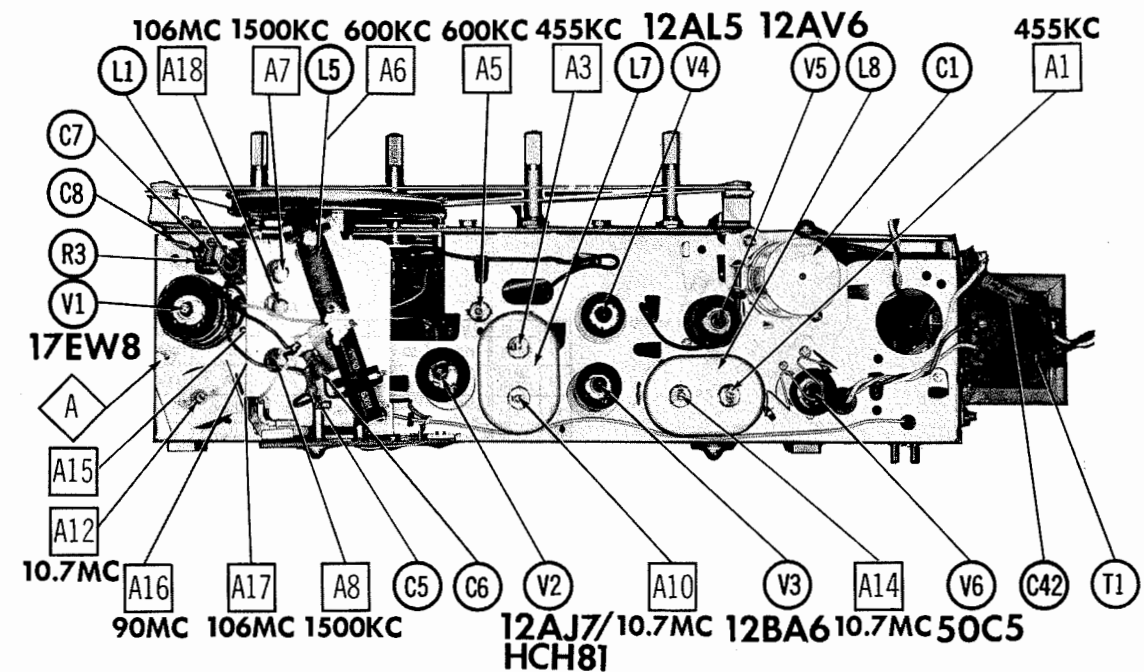
PANASONIC
MODEL 740

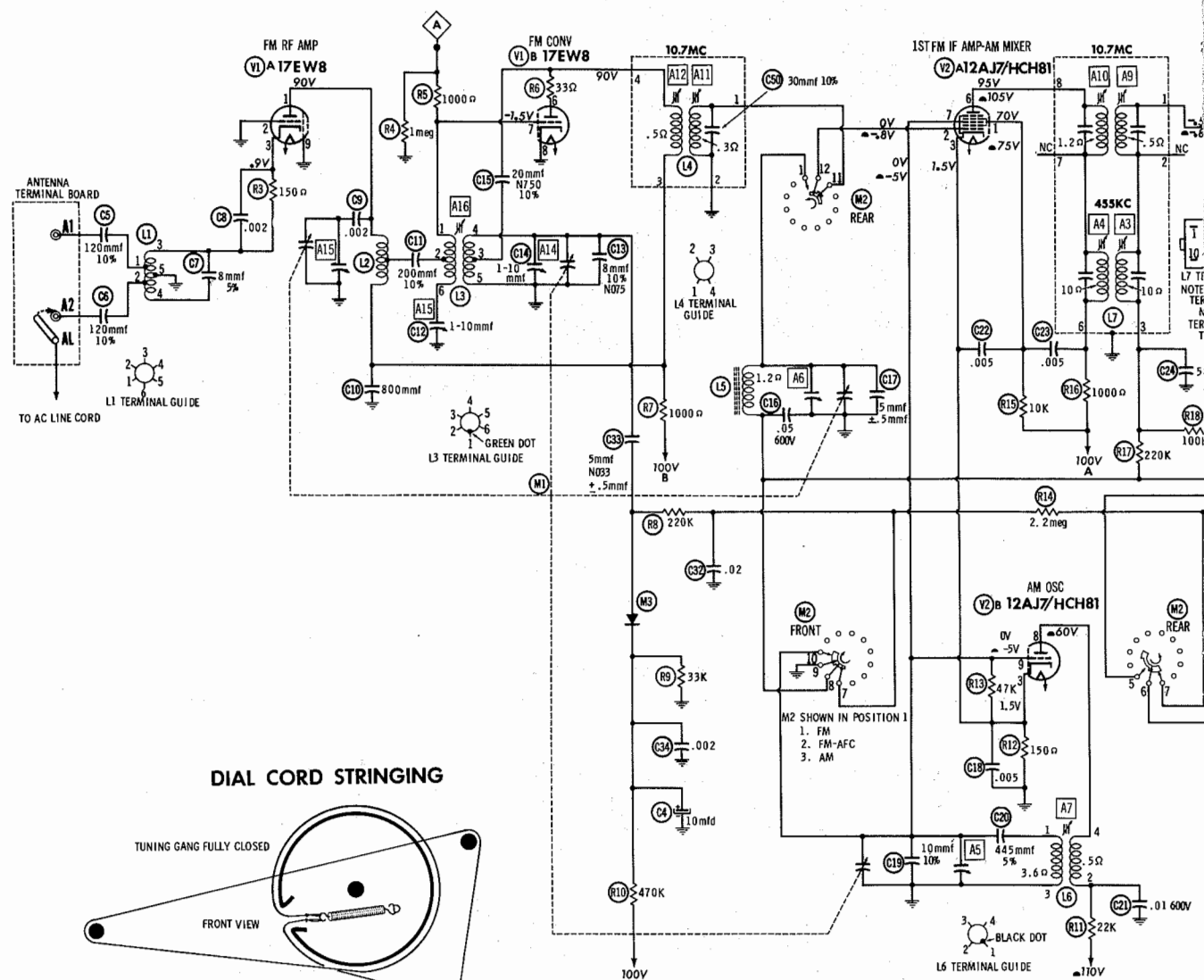
CAUTION
ONE SIDE OF AC LINE CONNECTED TO CHASSIS



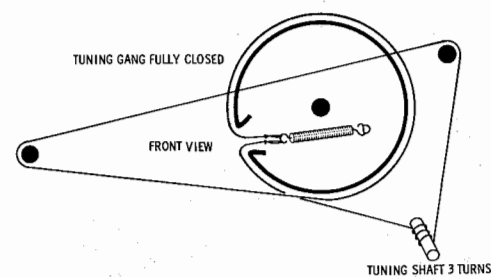
TRADE NAME: Panasonic Model 740
SUPPLIER: For Current Address, See Master Index.
TYPE SET: 6 Tube AM-FM Receiver
POWER SUPPLY: 110-117Volts AC-DC RATING: 32 Watts, .32 Amp. @ 117 Volts AC
TUNING RANGE: BROADCAST 535-1620KC FREQ. MOD. 88-108MC

PANASONIC
MODEL 740





DIAL CORD STRINGING



- See parts list for alternate value or application.
- Voltage measurements taken with vacuum tube voltmeter.
- All controls set for normal operation, no signal applied.
- Measured values are from socket pin or terminal to common ground.
- All terminals viewed from bottom unless otherwise designated.
- Numbers assigned to terminals may not be found on the unit.
- Supply voltage maintained at rated value for voltage readings.

RESISTANCE READINGS									
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V1	17EW8	11600Ω	0Ω	150Ω	25Ω	47Ω	11600Ω	1 meg	0Ω
V2	12AJ7/HCH81	110K	.3Ω	150Ω	47Ω	60Ω	11600Ω	0Ω	0Ω
V3	12BA6	220K	3 meg	60Ω	73Ω	11100Ω	11100Ω	0Ω	47K
V4	12AL5	10K	10K	25Ω	12Ω	2.2 meg	0Ω	2.2 meg	
V5	12AV6	4.7 meg	0Ω	0Ω	12Ω	520K	0Ω	130K	
V6	50C5	150Ω	470K	73Ω	12Ω	470K	1600Ω	1450Ω	

ALL MEASUREMENTS TAKEN IN "FM" POSITION UNLESS OTHERWISE NOTED.
 † MEASURED FROM OUTPUT OF X1. Resistors are 1/2 watt or less and rated
 ▲ MEASURED IN "AM" POSITION. 10% or 20% unless otherwise indicated.

PARTS LIST AND DESCRIPTION

TUBES

ITEM No.	• AMPEREX • GENERAL ELECTRIC • RCA • SYLVANIA •			TYPE
	USE	ITEM No.	USE	
V1	FM RF Amp-FM Cory.	17FW8		
V2	1st FM IF Amp-AM Mixer-	12AJ7	Ratio Det.	12AL5
V3	2nd FM IF Amp-AM Osc.	12BA6	V5 AM Det-AVC-AF Amp Output	12AV6
V3	AM IF Amp			50C5

POWER RECTIFIERS

ITEM No.	MEASURED CURRENT	ORIGINAL Port or Type No.	RECTIFIERS	
			MALLORY PART No.	RCA PART No.
X1	.080A	KC 0, 6C11/8	A300 or 1N539	1N1763 or 1N2882 or 1N3194
				40H or F-4

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA			
		CAP.	VOLT.	CORNELL-DUBIER PART No.	GENERAL ELECTRIC PART No.
C1A	60 150	60	150	AFH3-11-50	RA150V60T-8
C2	5 50	5	50	CRE754A	NCT-50V5
C3	20 25	20	25	PTT81	NCT-25V20
C4	10 50	10	50	PTT92	NCT50V10

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBIER PART No.	ELWENCO PART No.
C5	120 10%			D8-121	LA10T12-S3	CCD-121
C6	120 10%			D8-121	LA10T12-S3	CCD-121
C7	8 10%				LA10V8-SL	GF580
C8	.002		BPD-002	DD-202	BYA10D2	CCD-202
C9	.002		BPD-002	DD-202	BYA10D2	CCD-202
C10	800 250V			CPR-820J	CD8F82JL	DM-15-82J
C11	200 10%			D8-201	LA10T2-S3	CCD-201
C12	1-10	#PP-1B10C		828-10		
C13	8 N075 10%			TCN-20	C10Q2U	CCTN-220
C14	1-10	#PP-1B10C		DD-503	PM6S5	6DP-3-503
C15	20 N750 10%		P688N-05	D8-050	LA10V5-SL	CCD-050
C16	.05 600V			DD-502	BYA10D5	CCD-100
C17	±.5mmf		BPD-006	D8-100	LA10Q1-SL	GF410
C18	10 10%			DD-103	PM6S1	6DP-2-103
C19	45 5%			DD-502	BYA10D5	CCD-502
C20	01 600V		BPD-005	DD-502	LA10Q5-S3	CCD-502
C21	.005			DD-500	LA10Q5-S3	CCD-500
C22	.005		BPD-006	DD-502	LA10T25-S3	CCD-251
C23	50			DD-251	LA10T25-S3	CCD-251
C24	.005			DD-251	LA10T25-S3	CCD-251
C25	10%			DD-251	LA10T25-S3	CCD-251
C26	250 10%			DD-251	LA10T25-S3	CCD-251
C27	120 10%			DD-251	LA10T25-S3	CCD-251
C28	250 10%			DD-251	LA10T25-S3	CCD-251
C29	250 10%			DD-251	LA10T25-S3	CCD-251
C30	250 10%			DD-251	LA10T25-S3	CCD-251
C31	.002 800V		P688N-002	DD-202	PM6D2	6DP-1-202
C32	.02 250V			DD-203	DPMS452	6DP-2-203
C33	5 N083 ±.5mmf			DD-202	BYA10D2	CCD-202
C34	.002		BPD-002	DD-202	PM6S5	6DP-3-503
C35	.05 250V		P488N-05	DD-503	PM6S5	6DP-3-503
C36	.05 600V			DD-251	PM6S1	6DP-2-103
C37	250 10%			DD-103	PM6S5	6DP-3-503
C38	.01 600V		P688N-01	DD-503	PM6S5	6DP-3-503
C39	.05 500V		P688N-05	DD-251	LA10T25-S3	CCD-251
C40	250 10%			DD-502	PM6D5	6DP-1-502
C41	.005 600V		P688N-005	DD-502	PM6D5	6DP-1-502
C42	.005 600V			DD-502	BYA10D5	CCD-502
C43	.005		BPD-005	DD-502	BYA10D5	CCD-502
C44	.005			DD-502	BYA10D5	CCD-502
C45	.002		BPD-002	DD-502	BYA10D5	CCD-502
C46	.002		BPD-005	DD-502	BYA10D5	CCD-502
C47	.05 600V		P688N-005	DD-502	PM6S5	6DP-3-503
C48	.05 600V			DD-502	LA10T12-S3	CCD-121
C49	120 10%			DD-300	LA10Q3-SL	CCD-300
C50	30					

* Panasonic part number.

CONTROLS

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

ITEM No.	USE	REPLACEMENT DATA			
		RESIST-ANCE	PANASONIC PART No.	CENTRALAB PART No.	CLAROSTAT PART No.
R1	Volume	500K	NYH24C-140	F2-500K ①	A47-500K-Z ①
R2	Tone, Switch	500K	SNVH24C-140	F2-500K-Z ①	A47-500K-Z ①

* "SNAPTROL" ① Enlarge mounting hole.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PANASONIC PART No.	MERIT PART No.	STANCOR PART No.	WORKMAN PART No.
L1	FM Ant.	MA07-B			
L2	FM RF	RFCB-1010			
L3	FM Osc.	M007-J			
L4	1st FM IF	EF18-CBA-2A			
L5	Loopstick	AM1080-A			
L6	AM Osc.	A007-X			
L7	2nd FM-1st AM IF	AFT-1Q-A2			
L8	Ratio Detector-2nd AM IF	AFT-1P-B			
L9	FLI. Choke (20 Turns)	RFCB-25215			
L10	FLI. Choke (20 Turns)	RFCB-25145			
L11	Line Choke (20 Turns)	RFCB-2515			
L12	Line Choke (20 Turns)	RFCB-2515			

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES
		PANASONIC PART No.	MERIT PART No.	STANCOR PART No.	
T1	2350Ω 3-4Ω	TC-131C	A-2802	A-3848	2854
					S-50X

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		PANASONIC PART No.	QUAM PART No.	
SPI	8" PM	3-40	8A21	

MISCELLANEOUS

ITEM No.	PART NAME	Panasonic PART No.	NOTES
M1	Tuning Capacitor	2FC-49B21	4 Gang AM-FM Function FM AFC
M2	Switch	B8SC10403PY-GG40	
M3	Diode	MA-301	

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	ITEM	PART No.	ITEM	
			Knob-4 used (Tone, Volume, Selector and Tuning)	PART No.
Dial Scale		RKD-520		RBN-42
Dial Book Plate		RUC-45		RKA-440
Guide, Dial Pointer		RUC-3		RKD-340
Dial Pointer		RDP-42		

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 3524 (Stranded) Available in 12 Colors 1706 (Plastic) or 1128 (Rubber) - 8 Ft. 1708 (Plastic) or 1128 (Rubber) - 8 Ft. Power Cord
Power Cord	Use BELDEN No. 8530 (Solid) Available in 12 Colors 3524 (Stranded) Available in 12 Colors 1706 (Plastic) or 1128 (Rubber) - 8 Ft. 1708 (Plastic) or 1128 (Rubber) - 8 Ft. Power Cord
Power Cord (Interlock Type)	Use BELDEN No. 8874 (Rubber) or 8885 (Plastic)

ALIGNMENT INSTRUCTIONS

Maintain line voltage at 117 volts. Use only enough generator output to obtain a suitable indication. CAUTION: Use isolation transformer for receiver and generator. If available, use isolation transformer for test equipment. Suggested Alignment Tools: ALI A4 use GENERAL CEMENT: 5280, 6688, 8089 WALSCO: 2525, 2526, 2567

AM ALIGNMENT - SELECTOR IN AM POSITION

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

AM Alignment

Set Band Switch to AM position. Set Volume and Tone controls to maximum. Output of signal generator should be no higher than necessary to obtain an output reading.

1.	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	455KC	Point of non-interference, (400% Mod.)	Connect output meter across A3, A4	A1, A2	Adjust for maximum output.
2.	600KC	(400% Mod.)	"	A5, A6	Adjust for maximum output. Adjust A6 by moving antenna coil (L5) along ferrite core.
3.	1500KC	(400% Mod.)	"	A7, A8	Adjust for maximum output.

FM IF Alignment Using AM Signal Generator and VTVM

Set Band Switch to FM position. Set Volume control to minimum.

4.	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7 MC (450KC Swp)	Point of non-interference, (Unmod.)	DC probe of VTVM to point of common to chassis.	A9, A10, A11, A12, A13	Adjust for maximum deflection.
5.	"	"	DC probe of VTVM to point of common to chassis.	A14	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

Set sweep selector of scope to "Internal Sweep". Apply 60-cycle sweep signal from generator to horizontal input terminals of scope.

Set Band Switch to FM position. Set Volume control to minimum.

4.	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
4.	10.7 MC (450KC Swp)	Point of non-interference, (Unmod.)	Connect vert. amp of scope to point of common to chassis.	A9, A10, A11, A12, A13	Disconnect one end of stabilizing capacitor C2. Adjust for maximum amplitude and symmetry of response similar to Fig. 1. Reconnect C2.
5.	"	"	Vert. amp to point of common to chassis.	A14	Adjust to place marker at center of "u" curve as shown in Fig. 2. SLIGHTLY retouch A9 for maximum amplitude and symmetry of curve.

FM RF Alignment

Set Band Switch to FM position. Set Volume control to maximum.

6.	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
6.	10.7 MC (450KC Swp)	Point of non-interference, (Unmod.)	Connect AC lead of VTVM to point of common to tuning gang frame.	A15	Adjust for MINIMUM deflection to minimize oscillator radiation.
7.	80 MC (Unmod.)	80 MC	Connect DC probe of VTVM to point of common to chassis.	A16, L2	Adjust for maximum output. To adjust L2, expand or compress coil turns.
8.	106 MC (Unmod.)	106 MC	"	A17, A18	Adjust for maximum output.

10.7MC



Fig. 1.



Fig. 2.

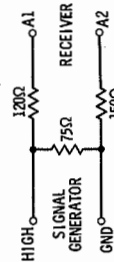


Fig. 3.

