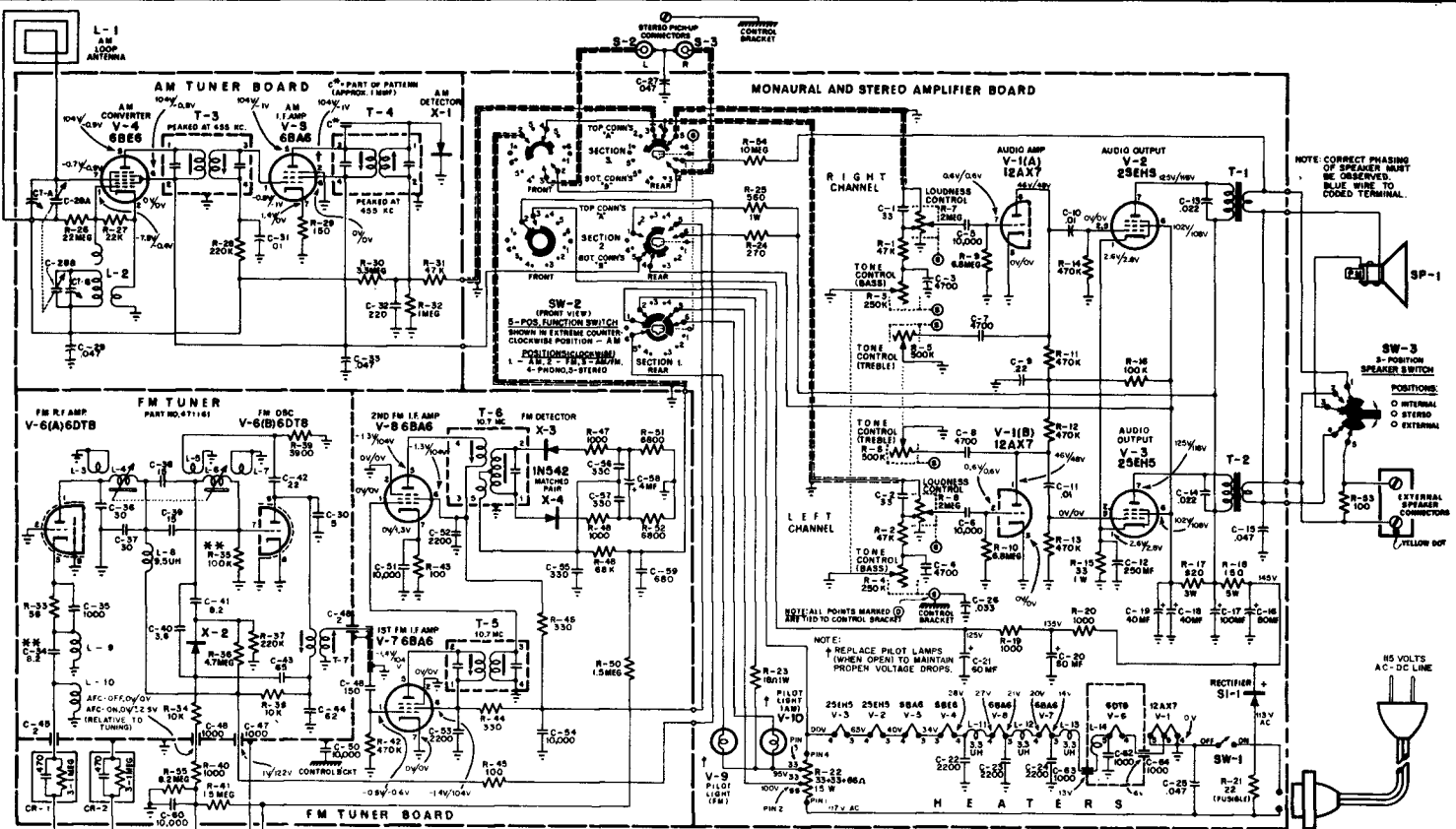


EMERSON RADIO Chassis 908-B, Chassis 120466B, material exact for this set.  
 Model 909-B, Chassis 120468B; Model 912-B, Chassis 120480B; and Model  
 921-D, Chassis 120495B, are all electrically similar to 908-B and the impor-  
 tant differences are explained on pages 38, 39, where material is continued.



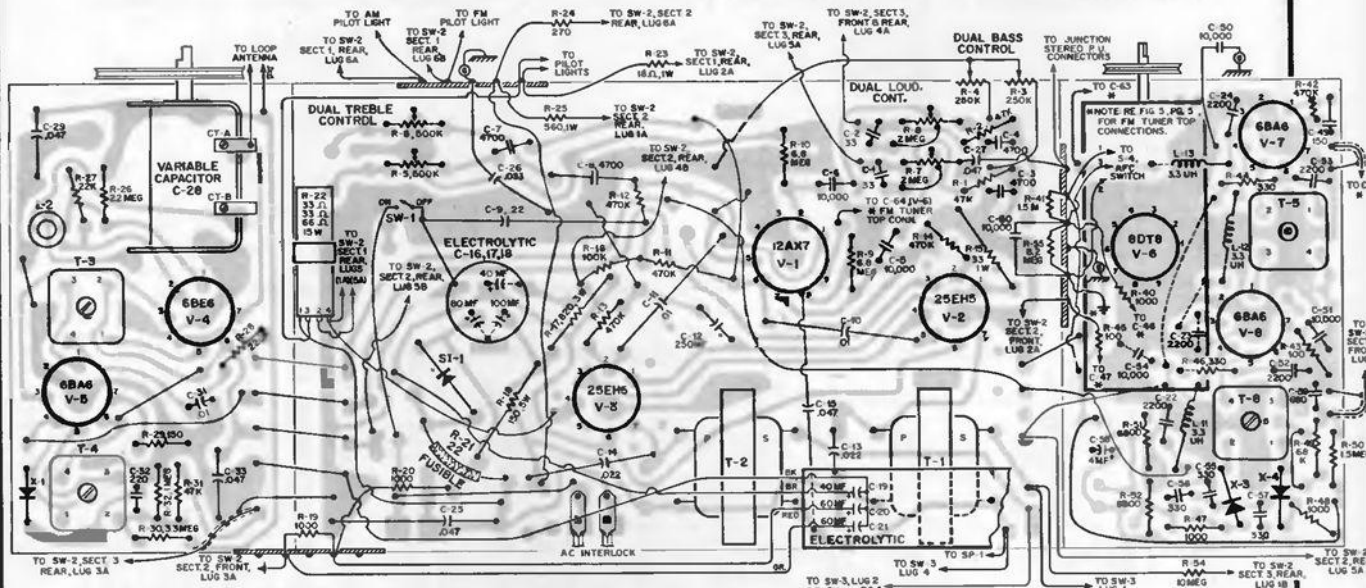
SCHMATIC DIAGRAM, CHASSIS 120466-B

CONDITIONS FOR VOLTAGE AND RESISTANCE MEASUREMENTS, CHASSIS 120466-B

1. Voltages are positive d.c., resistances are in ohms, unless otherwise indicated.
2. Measurements taken with VoltOhmyst or equivalent.
3. All measurements taken from tube pin to B minus (metal can of electrolytic filter) unless otherwise indicated.
4. Voltage measurements taken with:
  - (a) Line voltage maintained at 117 volts a.c.
  - (b) Loudness control set for minimum volume.
  - (c) No signal input AM or FM.
  - (d) SW-2 in both AM and FM positions.

5. Resistance measurements taken with:
  - (a) Power line cord disconnected from outlet.
  - (b) Loudness control set for minimum volume.
  - (c) SW-2 selector switch in AM and FM positions.
6. AFC switch disconnected at all times.
7. V-8 resistance measurements taken directly at pins with tube removed.
8. Filament resistance values are cold readings.
9. Nominal tolerance an component values makes possible a variation of ± 15% in voltage and resistance readings.
10. N.C. denotes no connection, K is Kilohms, and Meg. is Megohms.
11. Resistance readings above 30 megohms are considered infinite.

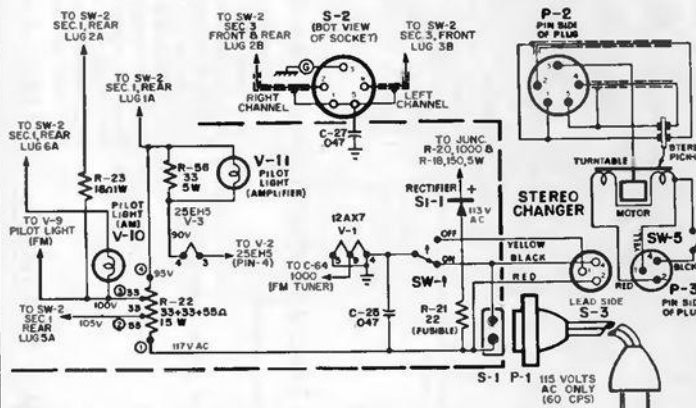
**EMERSON RADIO Model 908-B, Chassis 120466B; Model 909-B, Chassis 120468B; Model 912-B, Chassis 120480B; and Model 921-D, Chassis 120495B; continued from page 37, more material on page 39.**



**ETCHED PRINTED CIRCUIT CHASSIS 120466-B (Top View)**

**TUBE REPLACEMENT:**

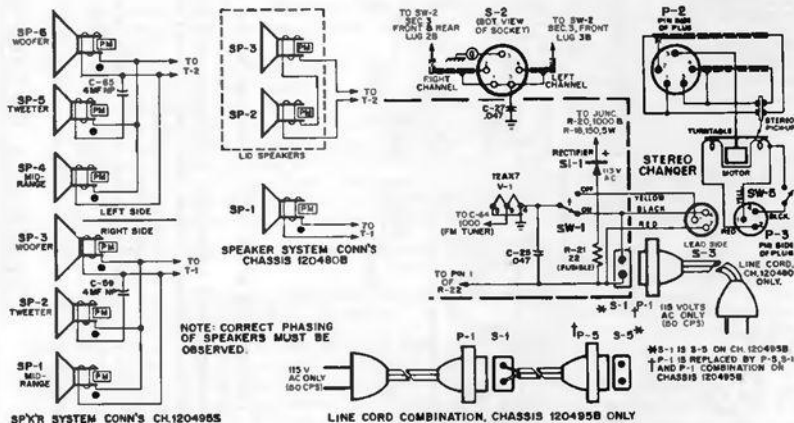
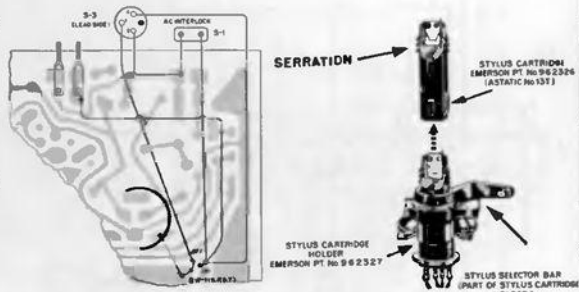
1. Remove line plug from wall outlet.
2. Remove retaining screws from back of cabinet.
3. Disconnect "built-in" FM antenna from antenna terminal strip.
4. Grasp back by "interlock" and pull free of chassis.
5. Refer to tube layout diagram inside cabinet.



**WIRING & VOLTAGE DIFFERENCES (POWER MONITOR) CH. 120468-B (BALANCE OF WIRING, USE SCHEMATIC FOR CHASSIS 120466-B)**

**ETCHED PRINTED CIRCUIT SECTION (POWER MONITOR), CHASSIS 120466-B. BALANCE OF ETCHED CIRCUIT, RE. CHASSIS 120466-B)**

**REMOVAL OF STYLUS SECTION (POWER MONITOR), CHASSIS 120480, 120495 (Balance of Etched Circuit, Re. Chassis 120466-B).**



**Wiring and Voltage Differences (Power Monitor) Chassis 120480B, 120495B (Balance of Wiring, use Schematic for Chassis 120466-B)**

**Etched Printed Circuit Section (Power Monitor), Chassis 120480, 120495 (Balance of Etched Circuit, Re. Chassis 120466-B).**

# EMERSON RADIO

Models 908-B, 909-B, 912-B, and 921-D, Chassis 120466B, 120468B, 120495, continued from previous two pages.

## FM ALIGNMENT (Using RF Generator & VTVM) SW-2 in FM Pos.; AFC(SW-4) in "Off" Pos.

Step	SIGNAL GENERATOR			VTVM		FM RECEIVER		REMARKS
	Freq.	Coup.	Atten.	Connect.	Set.	Set.	Adjust	
1	10.7 MC (no sweep)	To FM Ant. Term.	Adjust for 1V indication on VTVM.	"Hot" lead to junction of R45, R50 & C59.	5 V DC Scale	Tune to a	Turn out top slug of ratio 1F x fmr (T-6) until greatest peak on VTVM is indicated.	Indication is obtainable without slug touching top of IF can.
2	10.7 MC (no sweep)	(as above)	Readjust for 1V indication	"G'n'd" lead to metal can of electrolytic filter.	(as above)	quiet spot on dial (no signal input).	Peak in following order: 1. Top & Bot, 2nd IF (T-5) 2. Top & Bot; 1st IF (T-7) (rear of tuner). 3. Bot. slug of Ratio IF (T-6)	Adjust for maximum output on VTVM
	10.7 MC (no sweep)	(as above)	(as above)		Adjust zero control for "0" center reading.		Carefully turn in top slug of Ratio IF x fmr (T-6) until VTVM reading passes thru zero reading & turn back for zero reading on VTVM.	Varying freq. above & below center results in equal & opposite voltage indications (Do not exceed 150 KC either side).

### PRELIMINARY ALIGNMENT INSTRUCTIONS

NOTE: Be sure that the dial pointer is physically aligned (Re. Fig. 4a & 4c). 1. Loudness control should be backed off approximately 20% from maximum volume position. 2. Speaker selector switch (SW-3) should be in "INT" position. 3. Use an insulated screwdriver and Hex alignment tool.

### AM ALIGNMENT PROCEDURE (Using AM Generator & Output Meter) Function Selector SW-2 in "AM" Position

Step	SIGNAL GENERATOR		TUNING CAPACITOR SETTING	OUTPUT METER or AC VTVM	ADJUST
	Freq.	Coupling			
1	455KC. 400 CPS AM Mod.	"High" side thru a .005 MFD capacitor to V-4 (Pin 7 of 6BE6). "Low" side to "B minus" (metal can of electrolytic filter).	Minimum Capacity (fully open)	Connect across speaker voice coil.	IF X' formers T4, T3 top & Bot. for max. output indication.
2	1638 KC. 400 CPS AM Mod.	Form "loop" of several turns of wire, connect across generator output and radiate into receiver.	(as above)	(as above)	Osc. Trimmer (CT-B) for max. output indication.
3	1425KC. 400 CPS AM Mod.	(as above)	Tune into strongest 1425KC Signal (Re. Fig. 4c).	(as above)	Ant. Trimmer (CT-A) for max. output indic. (Repeat steps 2 and 3 for best results)

CAUTION: GRASP TUNER FIRMLY IN HAND WHILE SLIDING OFF COVER.

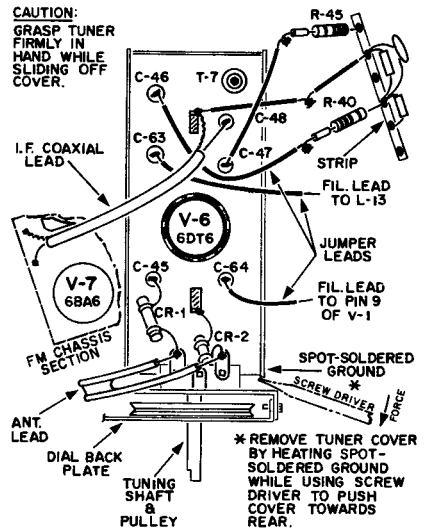


FIGURE 5 - FM TUNER 471161 - TOP CONNECTIONS FOR LIGHT SERVICING

### DIAL CORD STRINGING-

- FORM LOOP WITH DIAL CORD TO THE SPECIFICATION SHOWN AND ATTACH TENSION SPRING AT KNOTTED END.
- ATTACH SPRING TO DRUM AND STRING AS SHOWN IN (A) (FM) OR (B) (AM). AT START, FEED DIAL CORD UNDER AND BEHIND DIAL BACKPLATE.
- ATTACH DIAL POINTER (RE. DIAL POINTER ALIGNMENT, PG. 5).

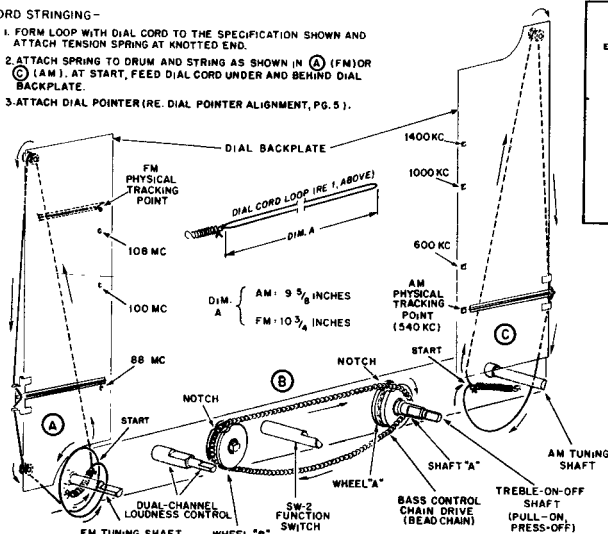
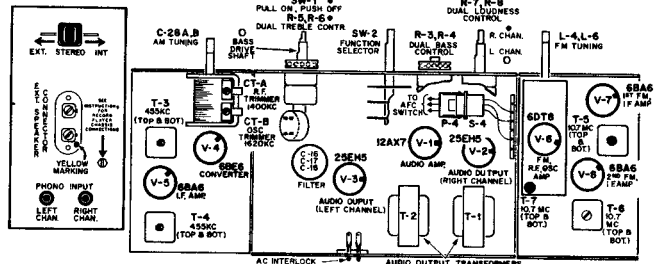


FIGURE 4 A, B, C - DIAL CORD, BEAD CHAIN STRINGING



TUBE LOCATIONS AND ALIGNMENT POINTS

### PARTIAL REMOVAL OF FM TUNER FOR LIGHT FIELD SERVICING (Re. Fig. 5)

- Remove the tube adjacent to the front of the tuner housing.
- Unsolder the ground side of the disc capacitor and the tuner ground strip (left front of tuner).
- Unsolder wires and components with the exception of the two "Capristors" and the coaxial lead.
- Remove the two hexagonal screws which mount the FM tuner to the front of the chassis. Finally, unsolder the spot-soldered ground on the bracket to completely disengage the tuner from the chassis.
- Extend connections with jumper wire.
- The tuner shield cover slides off the rear.