

GENERAL ELECTRIC SERVICE INFORMATION

MODEL
7-2885F
FM/AM
PORTABLE RADIO

FILE TAB 7

CAUTION: THIS MANUAL IS DESIGNED FOR USE BY QUALIFIED ELECTRONIC TECHNICIANS ONLY. CONSUMER USERS ARE URGED TO CONTACT QUALIFIED FACTORY AUTHORIZED SERVICE FACILITIES FOR REPAIRS.

FEATURES

- Air-gang tuning capacitor with tuned RF on FM and AM
- 976mm (38") swivel whip antenna
- 200mm (7-7/8") AM ferrite rod antenna
- External AM and FM antenna terminals
- Ceramic IF filter plus 3 IF tuned circuits on FM
- Four IF tuned circuits on AM
- AFC (Automatic Frequency Control) with AFC defeat switch for fine tuning of adjacent stations
- Precision vernier tuning
- Two-speaker performance: 6-1/2" high sensitivity speaker, plus piezo tweeter
- 700mw RMS audio output
- Separate Bass and Treble controls
- Loudness control boosts bass
- 6 "D" size batteries (not incl.) for up to 460 hours battery life
- Two-way Power: Automatic switching from batteries to AC when plugged in
- Separate power On/Off switch
- Earphone jack for optional earphone or headphone
- GE AM/FM Integrated Circuit (IC)
- Optional: Earphone 5-1082, Headphone 3-5750



SERVICE SPECIFICATIONS

ELECTRICAL	120 Volts AC, 60Hz 9 Volts DC	SENSITIVITY (Average)	AM - Better than 65uv/M for 20db quieting FM - Better than 8 uv for 30db quieting
BATTERIES	6 "D" Size	POWER OUTPUT @ 10% DISTORTION (Average)	900MW
TUNING RANGE	AM - 530 - 1630KHz FM - 87.5 - 109MHz	MINIMUM VOLUME HUM (Average)	1.1MV
INTERMEDIATE FREQUENCIES	AM - 455 KHz FM - 10.7 MHz	CURRENT DRAIN @ IDLE CURRENT (Average)	AM - 15mA FM - 21mA
SPEAKER IMPEDANCE	8 ohms - Woofer 140 ohms - Tweeter		

ALIGNMENT PROCEDURE

AM ALIGNMENT - FUNCTION SWITCH IN AM POSITION

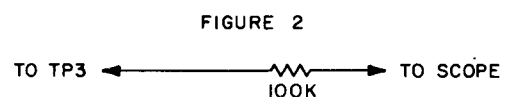
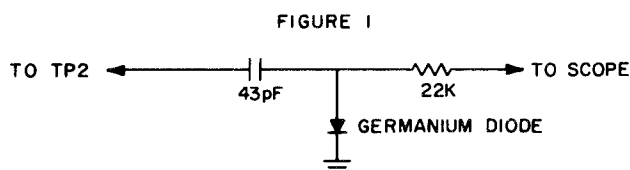
AM Generator - RF Radiated Signal Modulated 30% at 400Hz				
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. 455 KHz	Closed	Output Meter	T4, T5, T6, T9	Adjust for maximum. Repeat until no further improvement is noted.
2. 1630 KHz	Open		C1K	Adjust for maximum.
3. 510 KHz	Closed	Across Speaker	L5	Adjust for maximum. Repeat Steps 2 & 3 until set will tune to both band end frequencies.
4. 1400 KHz	Tune to Signal		C1G, C1I	Adjust for maximum.
5. 580 KHz	Tune to Signal		T10, L6	Adjust for maximum. Repeat Steps 4 and 5 until no further improvement is noted.

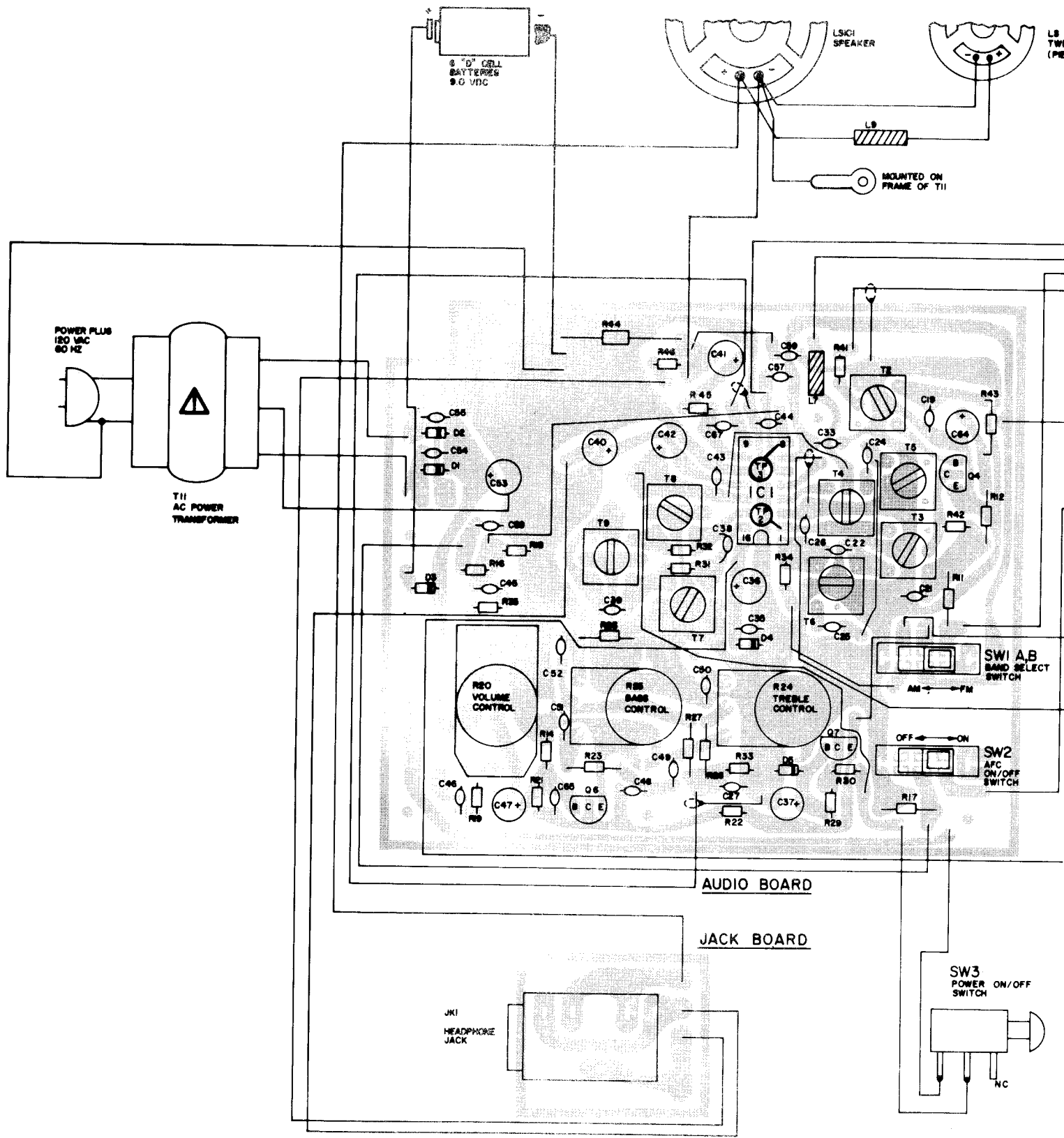
FM ALIGNMENT - FUNCTION SWITCH IN FM POSITION

High Side of FM Sweep Generator thru a .04MF capacitor to TP1. Use only enough Marker Signal for Indication.				
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. 10.7 MHz	Open	Scope at TP2 Use Pad (See Figure 1)	T1, T2, T3	Adjust for maximum gain and symmetry. Repeat as necessary.
2. 10.7 MHz	Open	Scope at TP3 Use Pad (See Figure 2)	T7, T8	Adjust for maximum gain and symmetrical S-Curve.
FM Generator - Modulated RF Radiated Signal				
3. 109.0 MHz	Open	Output Meter	C15	Adjust for maximum.
4. 87.5 MHz	Closed		L4	Spread or compress coil windings slightly to raise or lower frequency. Repeat Steps 3 & 4.
5. 108.0 MHz	Tune to Signal	Across Speaker	C1J, C1H	Adjust for maximum.
6. 88 MHz	Tune to Signal		L1, L2	Spread or compress coil windings slightly to obtain optimum alignment. Repeat Steps 5 & 6.

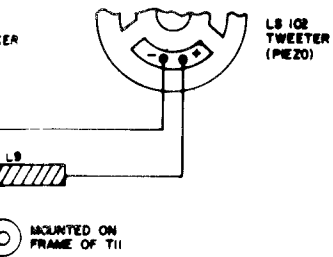
FM AFC ALIGNMENT (R17 TRIM POT)

1. Tune FM dial to a no signal area near the center of the FM Band (98 MHz).
2. With the AFC switch S2 in OFF position, connect a high impedance voltmeter (Triplet 630-NS or equivalent) to S2 pin A1 and measure the D.C. voltage. Note: Voltmeter chosen must not cause noise in FM Band which would cause incorrect alignment.
3. Next connect voltmeter to S2 pin A2 and adjust R17 trim pot to the same voltage as measured in Step 2. Accuracy of voltage adjustment to voltage measured in Step 2 should be better than $\pm 5\%$.

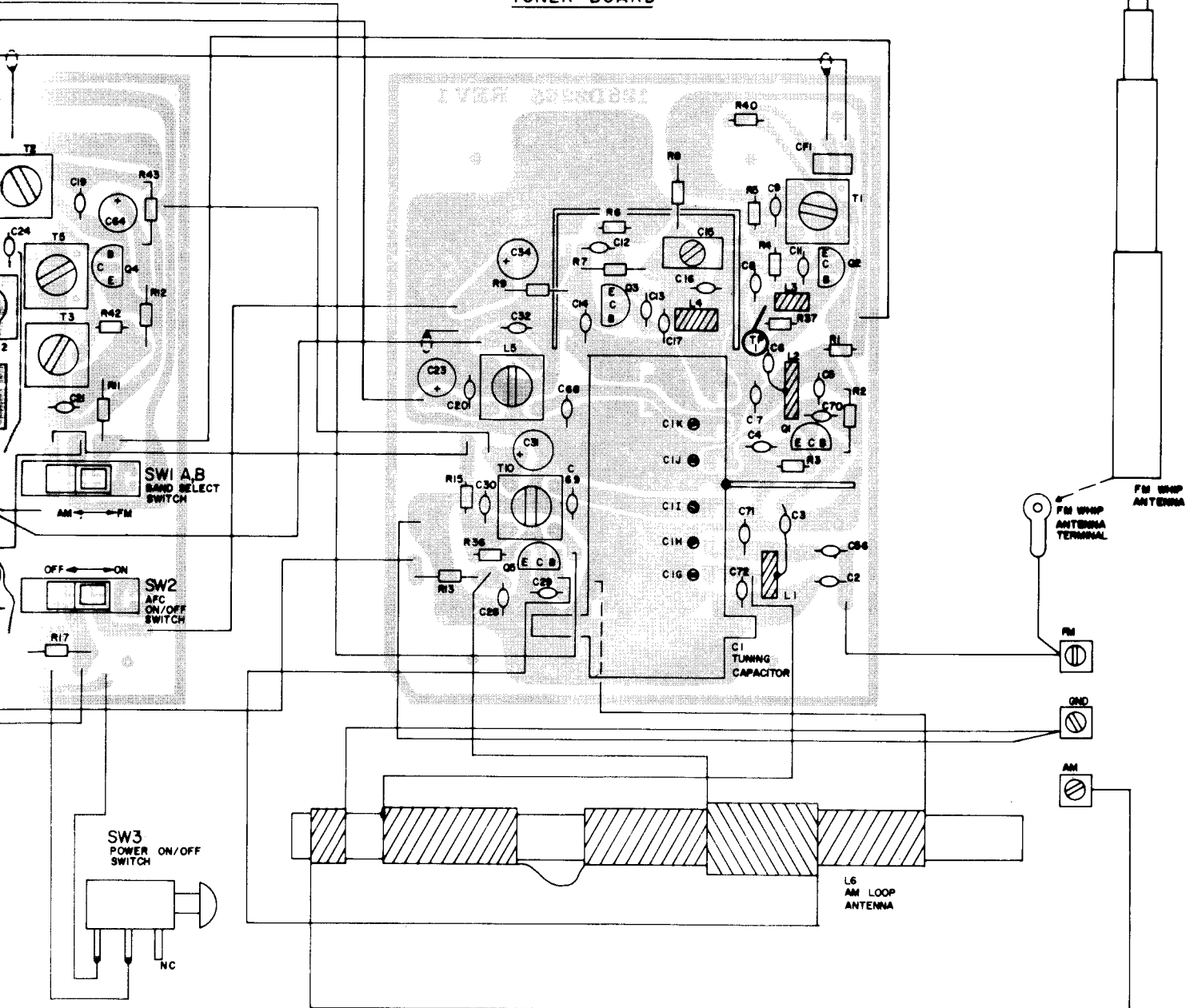


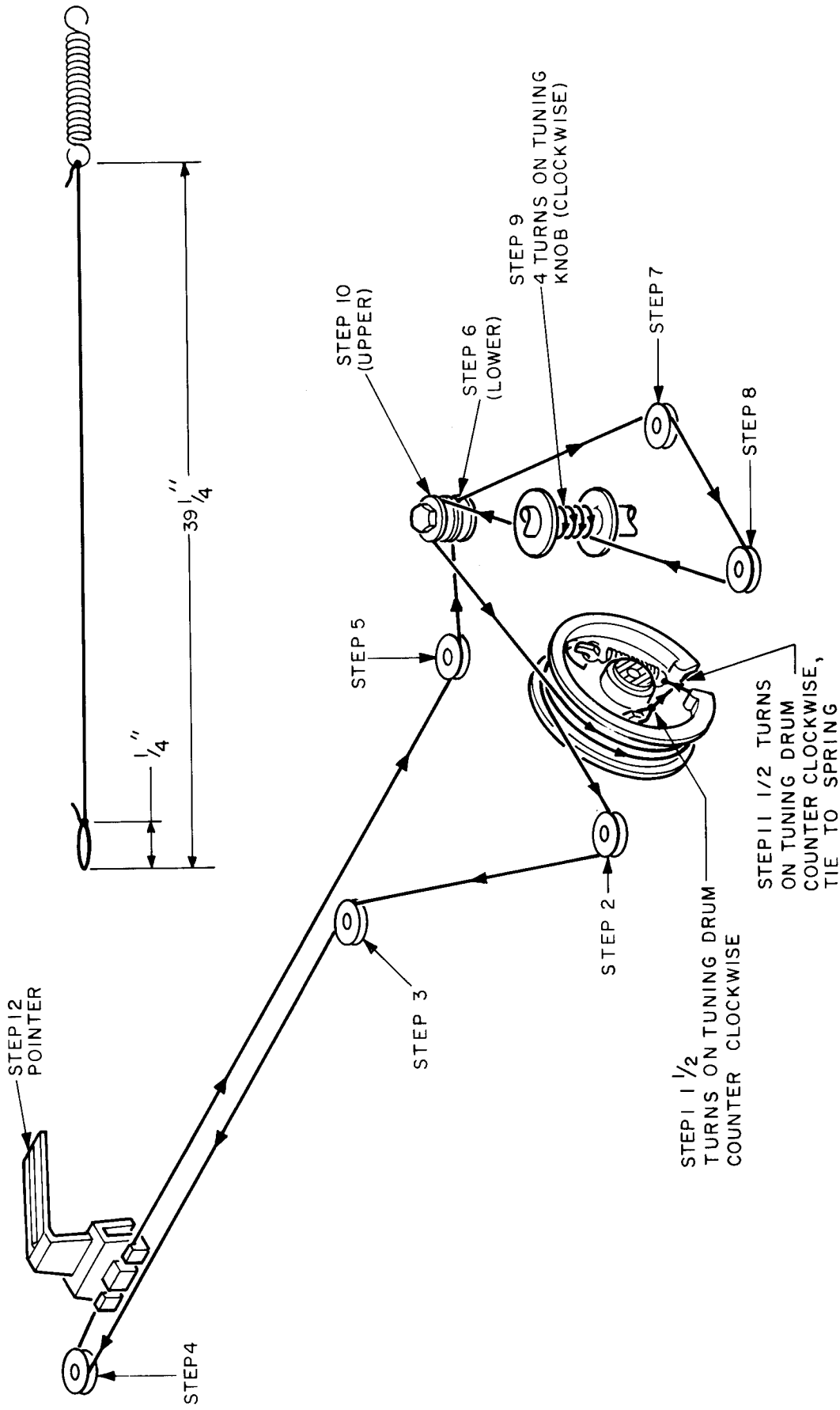


COMPONENT LAYOUT

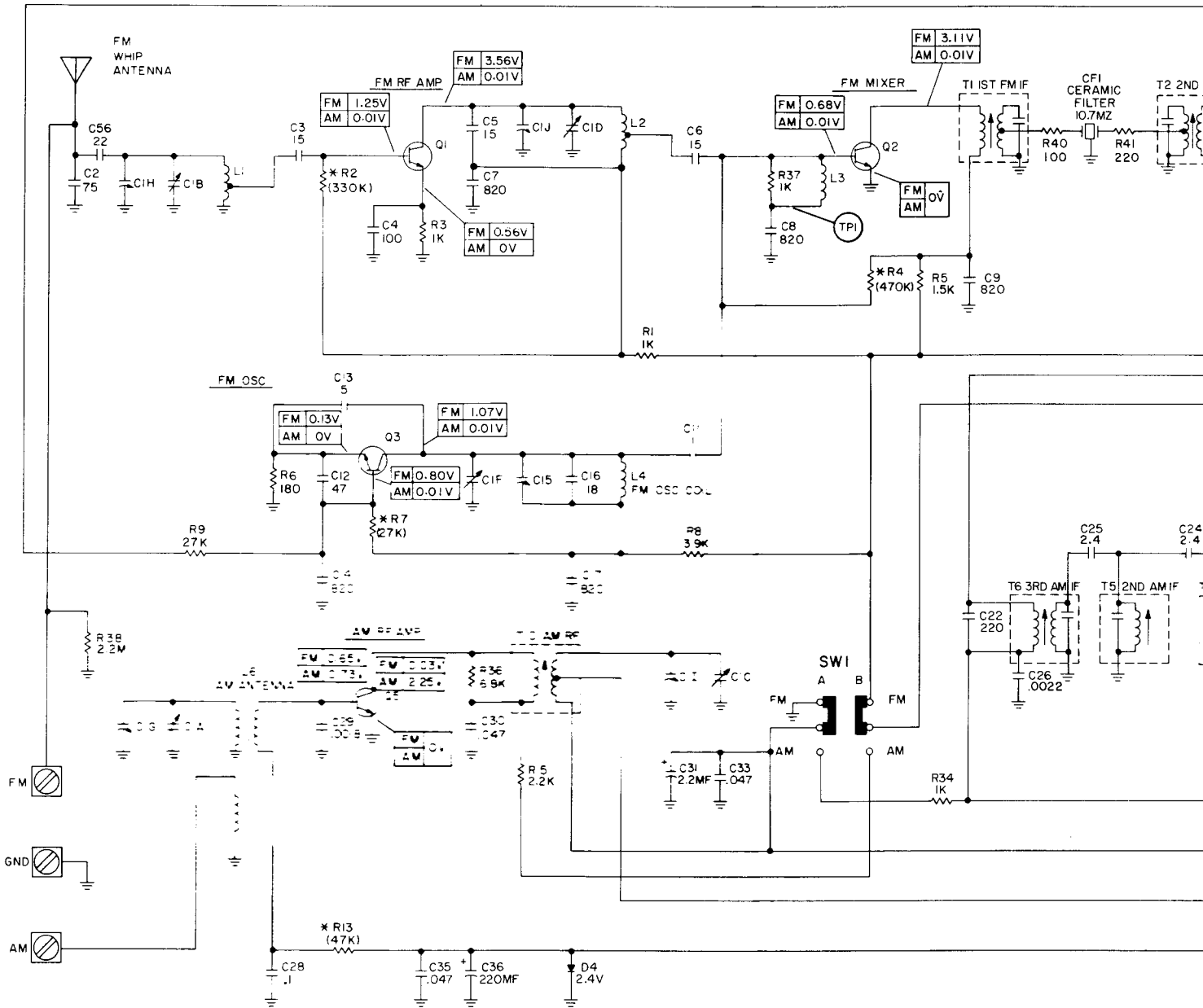


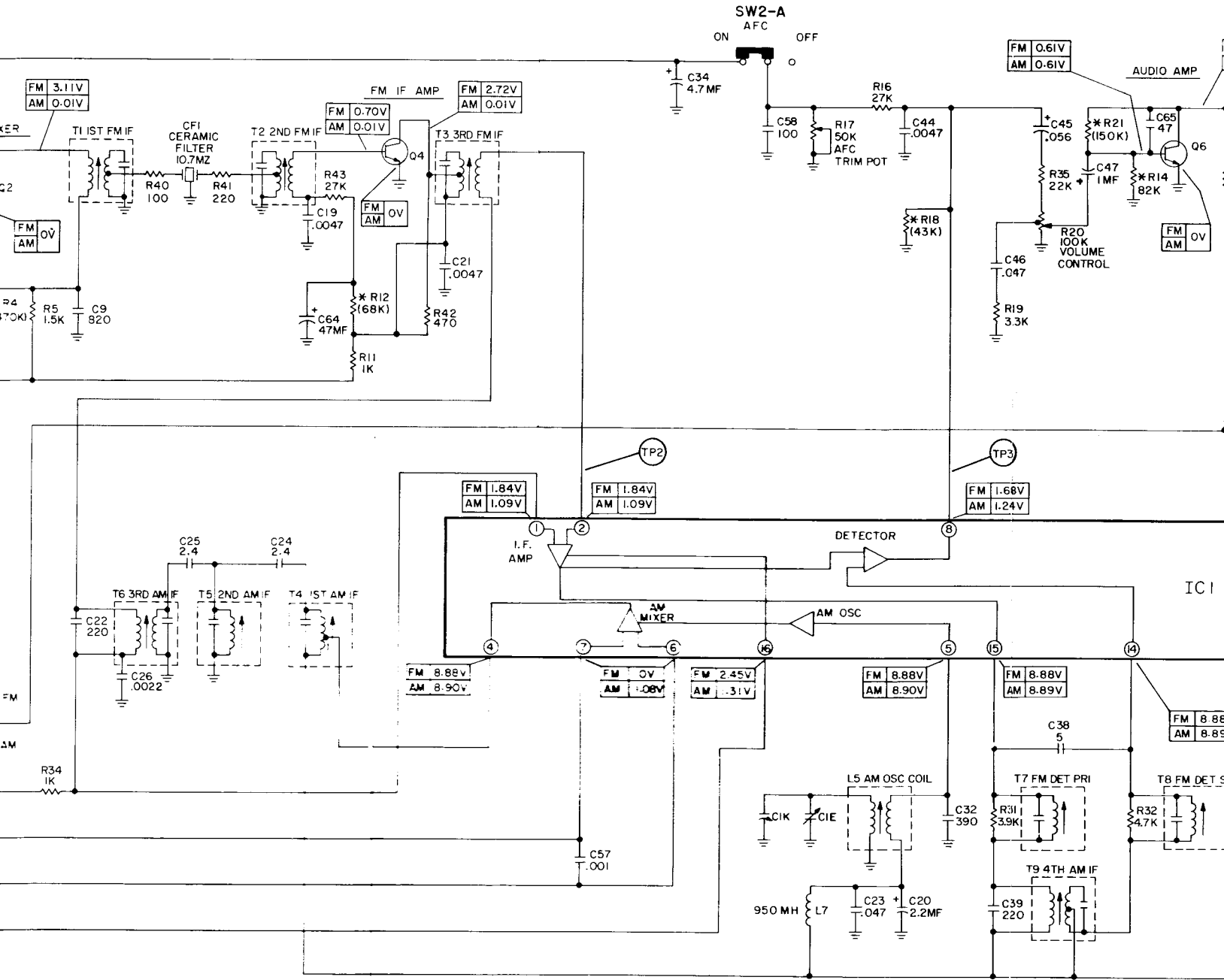
TUNER BOARD





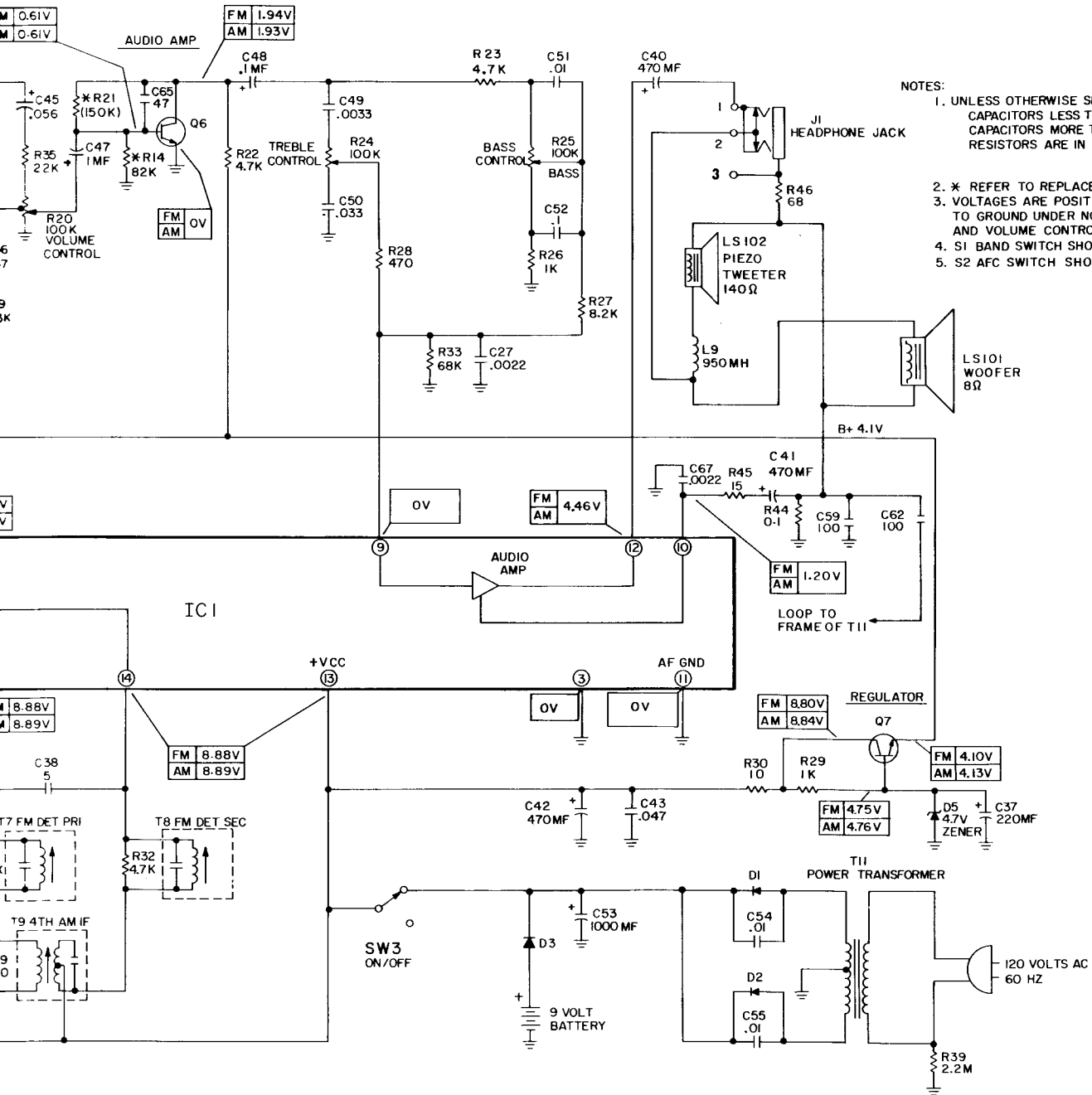
DIAL CORD STRINGING 7-2885F



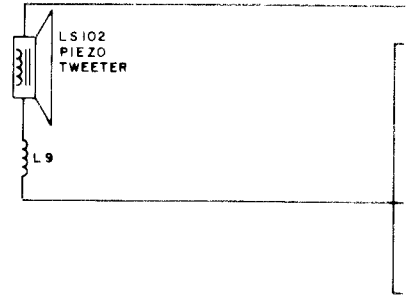


SCHEMATIC DIAGRAM 7-2885F

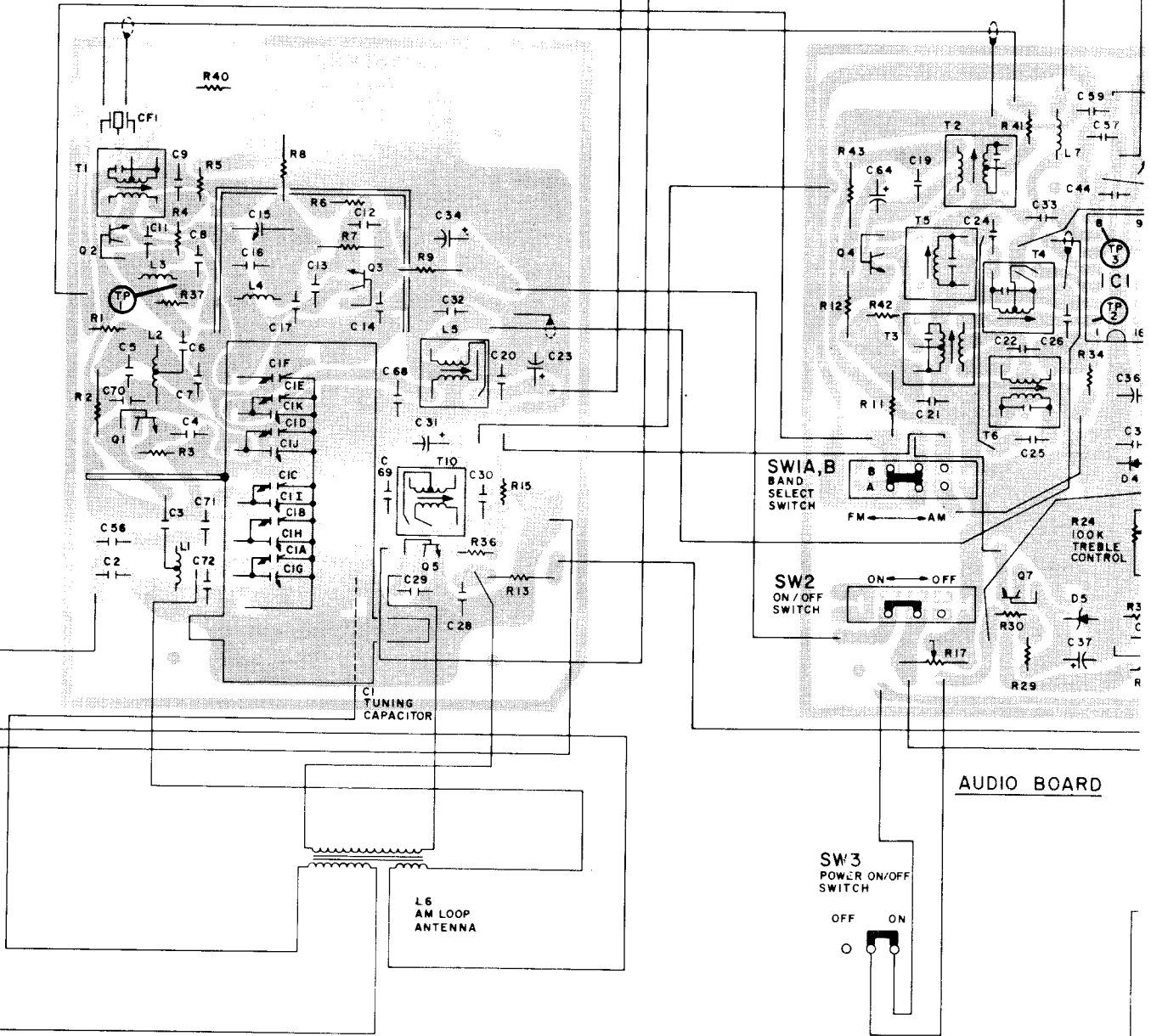
MODEL 7-2885F



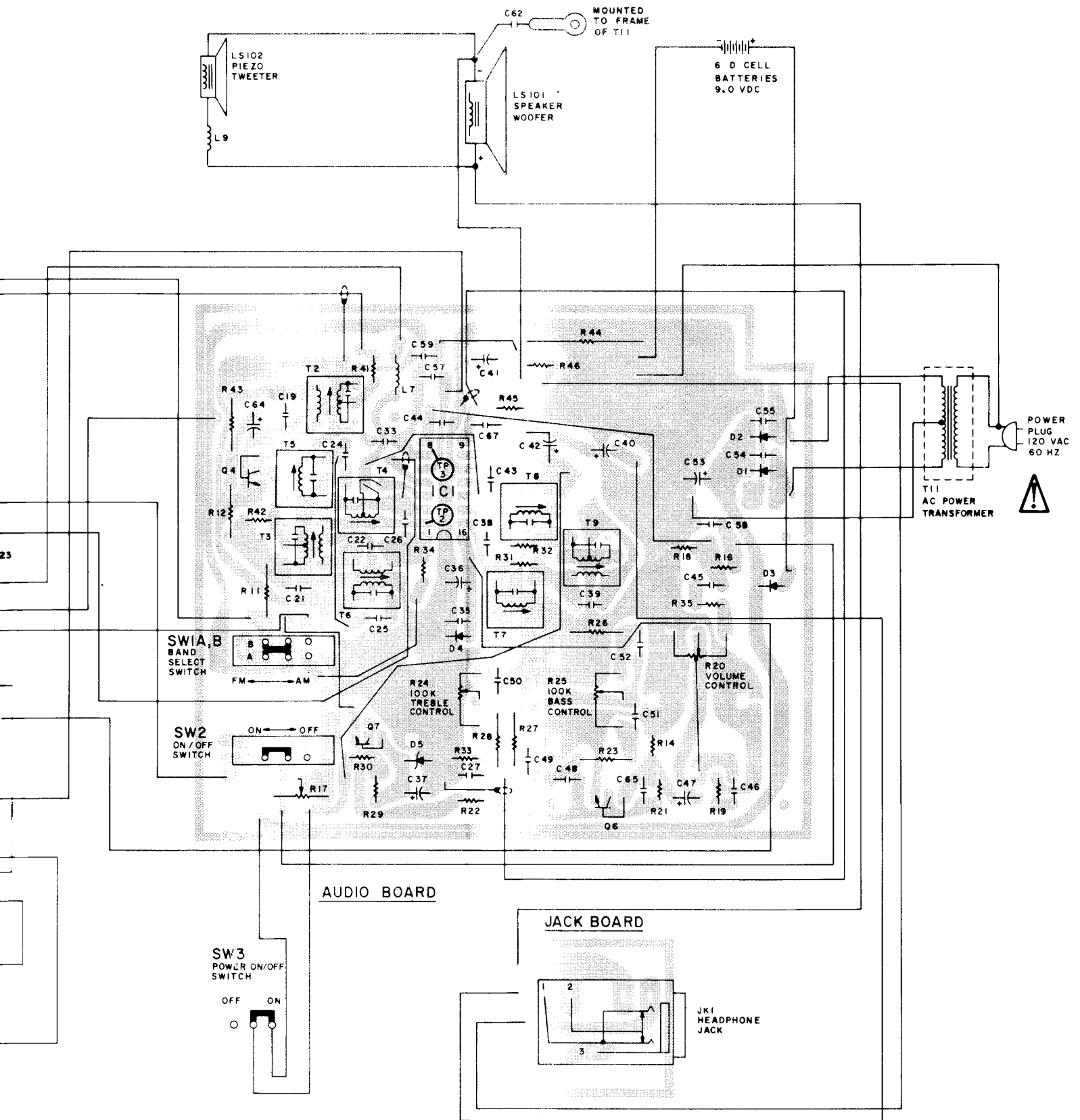
- NOTES:
1. UNLESS OTHERWISE SPECIFIED: CAPACITORS LESS THAN 1= MF CAPACITORS MORE THAN 1= PF RESISTORS ARE IN OHMS
K=1,000
M=1,000,000
 2. * REFER TO REPLACEMENT PARTS LIST
 3. VOLTAGES ARE POSITIVE WITH RESPECT TO GROUND UNDER NO SIGNAL CONDITIONS AND VOLUME CONTROL MINIMUM
 4. S1 BAND SWITCH SHOWN IN FM POSITION
 5. S2 AFC SWITCH SHOWN IN ON POSITION



TUNER BOARD



WIRING DIAGRAM BOTTOM VIEW 7-2885F



WIRING DIAGRAM BOTTOM VIEW 7-2885F

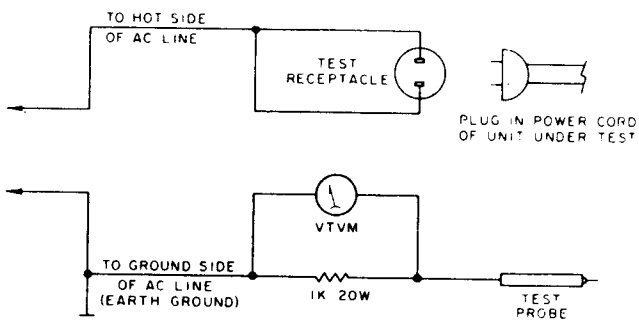
IMPORTANT

PERFORM THE FOLLOWING SAFETY CHECKS AFTER SERVICING THIS UNIT :

1. Remove all externally connected test equipment and wires before safety testing this unit.
2. Use RT6440 Safety Test Box or construct circuit as shown.
3. Plug power cord of unit to be tested into Test Receptacle.
4. Switch unit being tested to ON position.
5. Connect VTVM across 1K resistor in test circuit. Set meter on high (140V AC) scale to avoid meter damage and touch the following points with Test Probe.
 - a) Earphone Jack
 - b) Positive Battery Contact
 - c) Negative Battery Spring
 - d) Three (3) External Antenna Screws

If meter reading indicates less than 3 volts on all test points, set meter to low (3V AC) scale and repeat test.

6. Any reading greater than two tenths (.2) volt, indicates a potential shock hazard. If this occurs, determine the cause of the leakage, correct the problem, and repeat safety test.



REPLACEMENT PARTS LIST MODEL 7-2885F

CAT.NO.	REF.NO.	DESCRIPTION	CAT.NO.	REF.NO.	DESCRIPTION
EA 95X227	LS101	Woofers Speaker	EA 39X254	S3	Power Switch
EA 95X226	LS102	Tweeter Speaker	EA 9X700	MS1	Battery Door
EA 49X881	R20	Volume Control	EA 78X92	MS2	Handle
EA 49X882	R24	Bass/Treb. Control	EA 4X798	MS3	End Cap Handle
EA 57X14	D1,2	Diode	EA 98X1029	MS4	Cabinet Front Asm.
EA 16X492	D3	Diode	EA 43X1634	MS5	Tuning Knob
EA 16X193	D4	Diode	EA 43X960	MS6	On/Off Knob
EA 16X144	D5	Diode	EA 43X1373	MS7	Vol., Bass., Treb., Knob
EA 33X8546	IC1	I.C.	EA 4X799	MS8	Monogram Insert
EA 15X2024	Q1,2,5	Transistor	EA 89X301	MS9	Grille
EA 15X596	Q3	Transistor	EA 4X799	MS10	Control Insert
EA 15X7174	Q4	Transistor	△-EA 66X56	MS11	Power Cord
EA 15X1150	Q6,7	Transistor	EA 82X107	MS12	Whip Antenna
EA 39X579	S1,2	Switch	EA 98X1406	MS13	Cabinet Back Asm.

NOTE: When replacing transistors and integrated circuits with the type specified below, corresponding changes must also be made.

NOTE: "MS" reference is for factory use only.

Parts not listed are non-stocked items.

Parts marked with △ are important for maintaining the safety of the set. Be sure to replace these with only specified ones for maintaining the safety and performance of the unit.

All capacitors should be replaced with same type, size and voltage rating as original.

Replacement Parts may be ordered from: General Electric CEBO Parts Dist. Center, 13900 West 101st. Street, Lenexa Kansas 66215 or in CANADA - Canadian General Electric, Audio Product Service, 1420 Dupont St., Toronto, Ontario M6H2B2.



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