FM_TUNER_E_7792

ECC85/6AQ8

6BA6

IF 10.7 MC

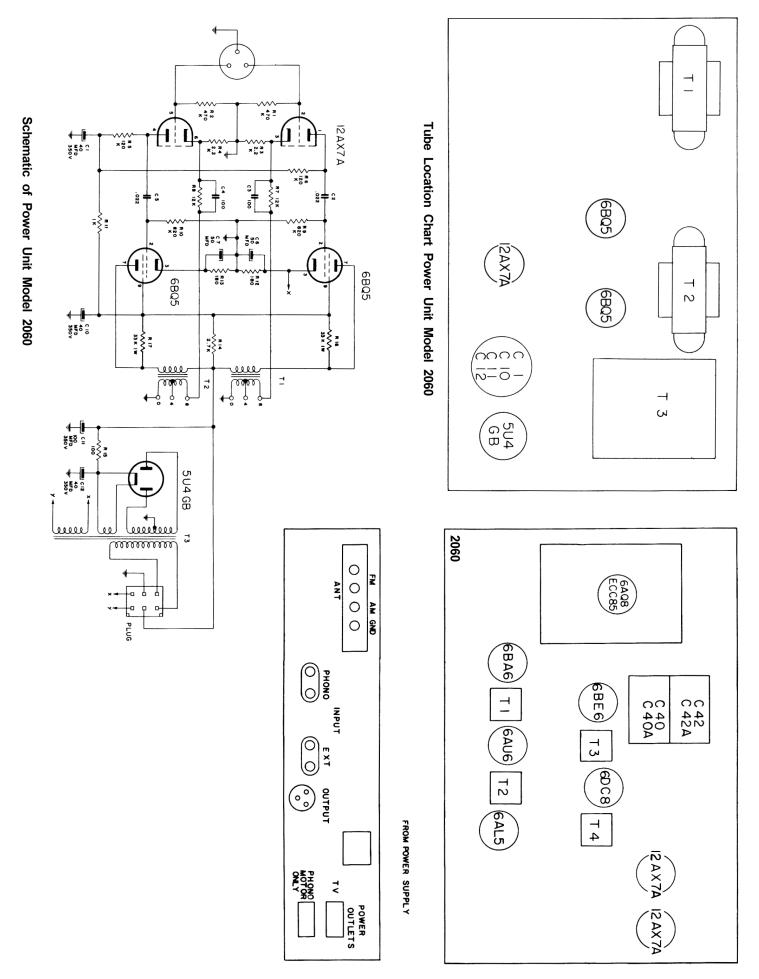
6AU6

T 2
RATIO DETECTOR
10.7 MC

6AL5

9.7 2.2 X

Main & Power Unit Chassis & Power Amplifier Schematic



ALIGNMENT PROCEDURE

Alignment is an exacting procedure and should be undertaken only when necessary. If alignment of both AM and FM is required, the AM section should be done first. The following equipment is required for alignment:
1. Signal generator with a frequency range of at least 455 kc. to 1650 kc. (AM).
2. Signal generator with a frequency range of at least 10.7 mc. to 109 mc. (FM).
3. Output meter.
4. V.T.V.M. PRELIMINARY

Allow at least five minutes for set to warm up before proceding with alignment NOTES:

During alignment keep signal generator output as low as possible. Keep volume controls in full clockwise position.

Keep tone control in mid-range position.

Connect ground side of signal generator to chassis base.

Generator modulation at 400 cy. 30% and 400 cy. 22.5 kc. deviation on AM and FM respectively.

WARNING:

When output meter or loudspeaker is not connected across amplifier output terminals, terminate output with a five to ten ohms resistor capable of dissipating at least five watts.

PM .				AM					
4	ယ	ю	۲	σı	4	8	19	1	Step
Same	300 Ohms	Same	Direct	Loop	Repeat step	Same	Same	.1 mfd	Dummy Antenna
Same	Replace shield on 6AQ8 tube. Connect signal generator output to FM antenna terminals. (Observe polarity).	Same	Disconnect shield on 6AQ8 Tube from ground and connect high side of generator to shield. Connect low side to chassis.	Loose	2 and 3	Same	Same	High side to pin No. 7 of 6BE6 tube.	Signal Generator Coupling
108 mc. Mod.	88 mc. Mod.	Same Mod.	10.7 mc. No mod.	1400 kc.	until no further change occurs.	535 kc.	1630 kc.	455 kc.	Sig. Gen. Freq.
Same	Same	Same	FM	МУ	ccurs.	АМ	АМ	AM	Function Switch Setting
108 mc.	88 mc.	Same	108 mc.	1400 kc.		535 kc.	1630 kc.	Gang fully open	Dial Setting
Same	Output meter across output transformer terminals.	Connect V. T. V. M. between junction of two 100K resistors 2 point "B". (See Note No. 2 below).	Connect V.T.V.M. D.C. probe to junction of two 100K Resistors. (See note No. 2 below). Connect Neg. lead to chassis.	Same		Same	Same	Output meter across audio output transformer terminals.	Meter Connection
		T2 top	I.F. transformer in tuner, top and bot- tom. T1 top and bottom T2 bottom	C40A			C42A	T3 & T4 Top and Bottom.	Adjust
Check calibration.	Check calibration.	Turn signal generator to a higher output level to allow for a zero reading. A positive and negative reading will be obtained on either side of the correct setting.	Adjust for maximum. Input level must be kept low enough that output does not exceed 2 volts.	Adjust for maximum. (Keep Loop Antenna in proper relation to chassis).		Check frequency limit.	Adjust for maximum output.	Adjust for maximum output.	Remarks

NOTE: 1) Do not attempt realigning FM tuner. In case of difficulty replace 6AQ8 tube.

2) Connect two 100K ohm matched resistors in series between point "A" and chassis ground. Connect negative lead of V.T.V.M. to the junction of the two resistors and positive lead to point "B"