TOSHIBA MODEL 11L-855F

FM, RF ALIGNMENT

1.	FM signal generator to ant. directly. Fig. D	87 MC	FM	Tuning Gang fully closed	Across Voice Coil	L 5 FM Osc. Coil	Adjust for maximum
2.	Same	108.5 MC	Same	Tuning Gang fully opened	Same	C 4-b FM Osc. Trimmer	Same
3.	Repeat Step 1 and 2						
4.	Same	88 MC	Same	88 MC	Same	L 3 FM RF Coil	Same
5.	Same	108 MC	Same	108 MC	Same	C 1-a FM RF Trimmer	Same
6.	Repeat Step 4 and 5						

SWEEP RESPONSE CURVE

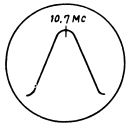


FIG. A

"S" CURVE

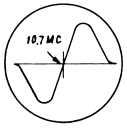


FIG. B

IF SWEEP TEST

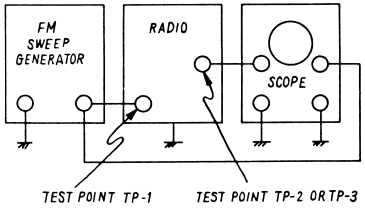


FIG. C

GENERATOR COUPLING HOOK-UP

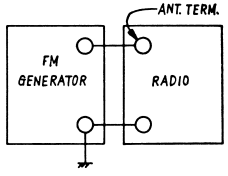
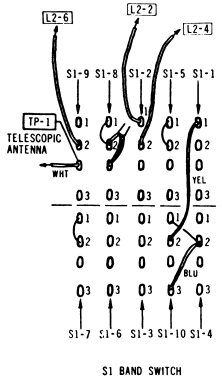
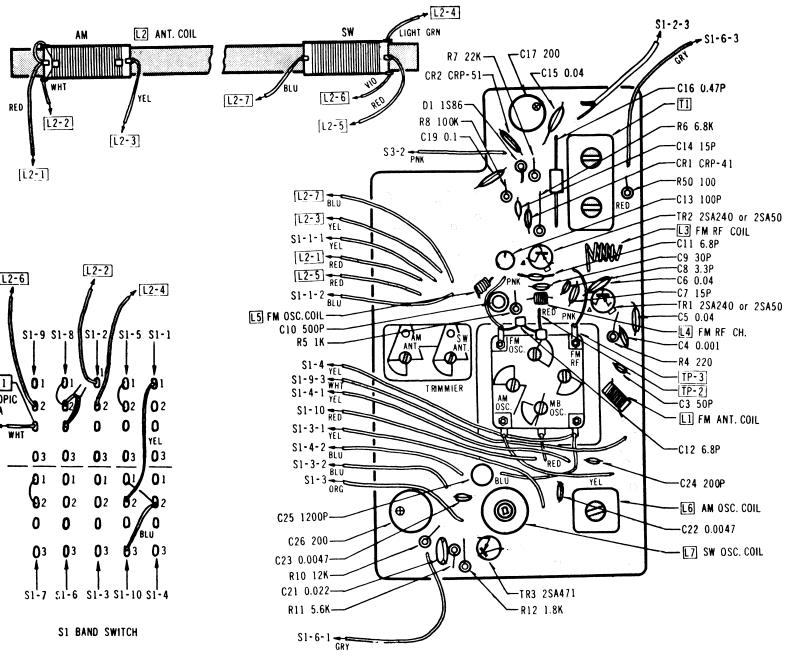


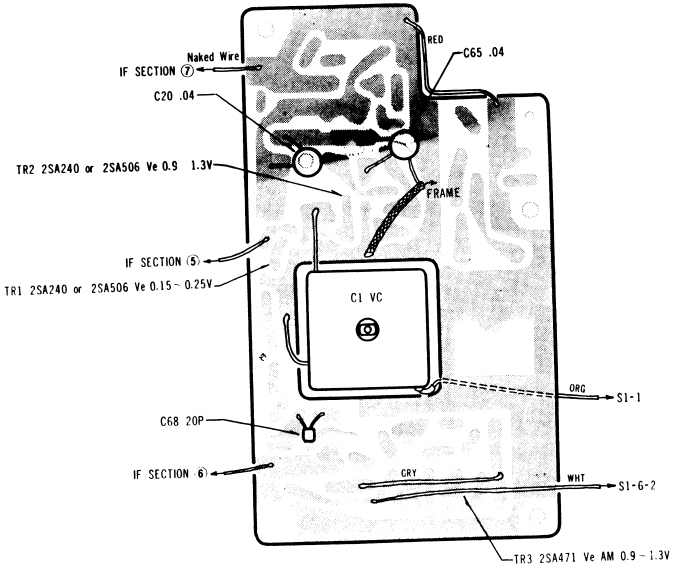
FIG. D



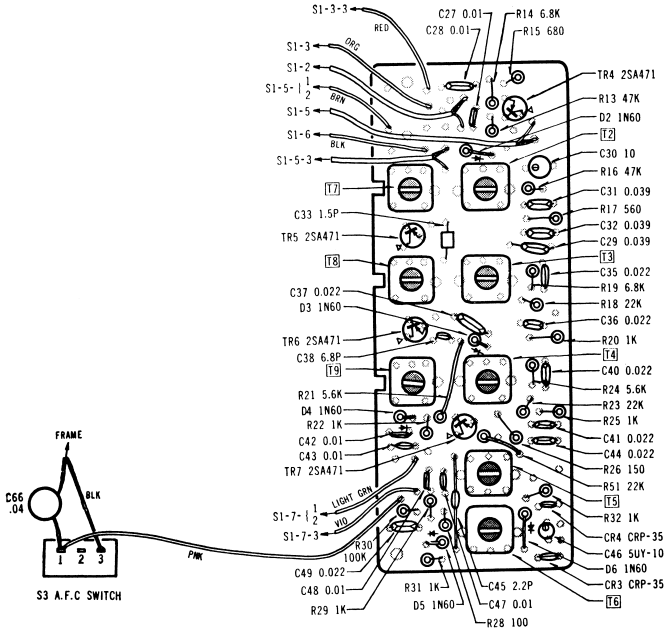
S1 BAND SWITCH



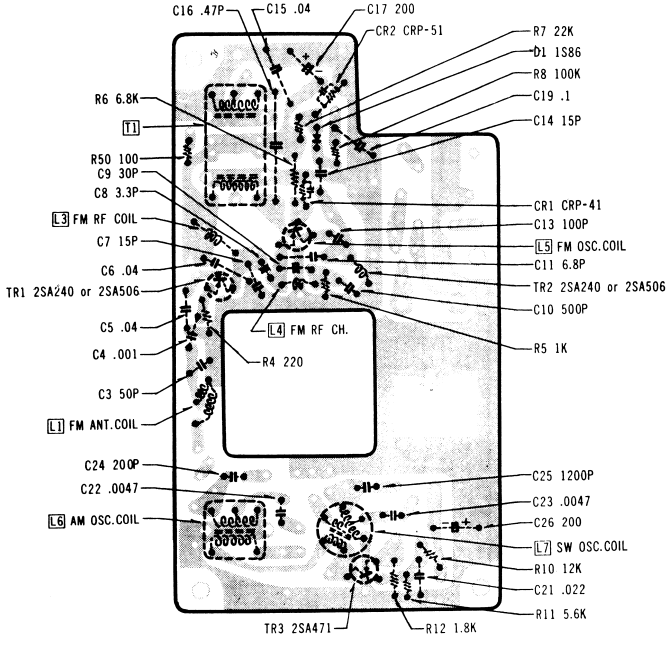
TOP VIEW OF TUNER SECTION



BOTTOM VIEW OF TUNER SECTION



TOP VIEW OF IF SECTION



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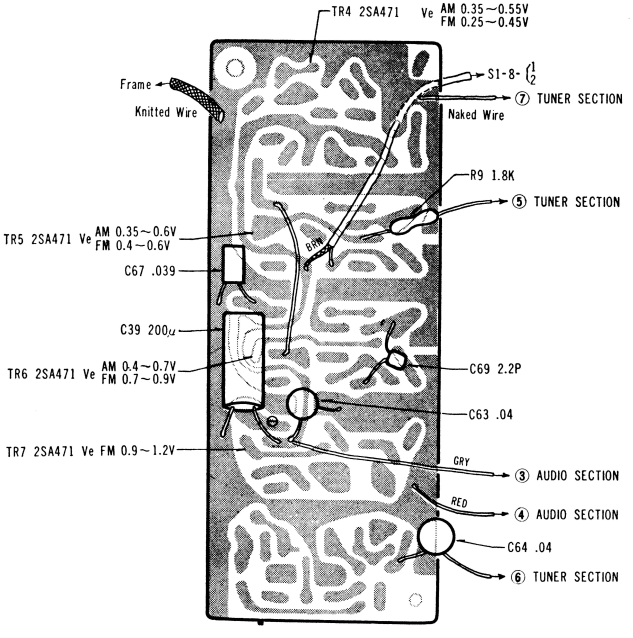

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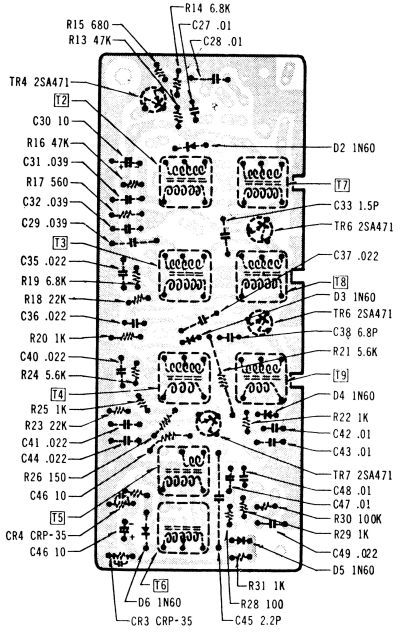

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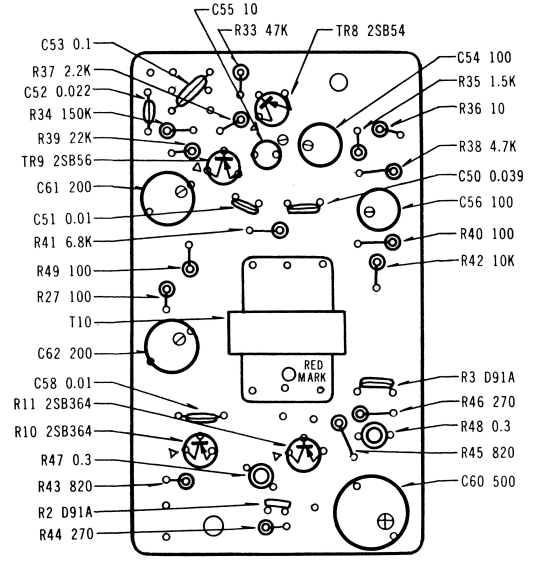
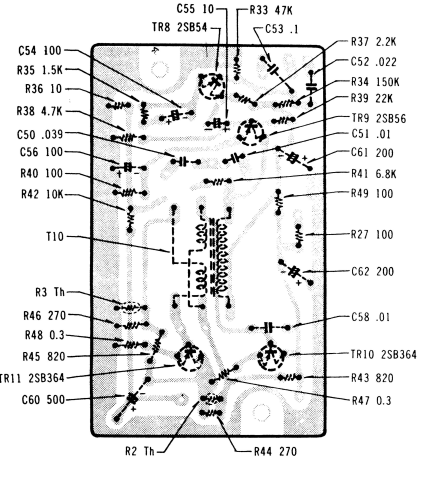
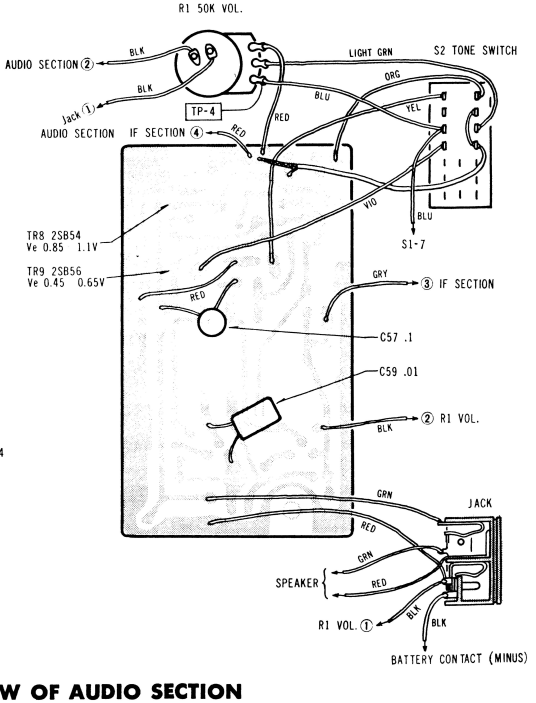
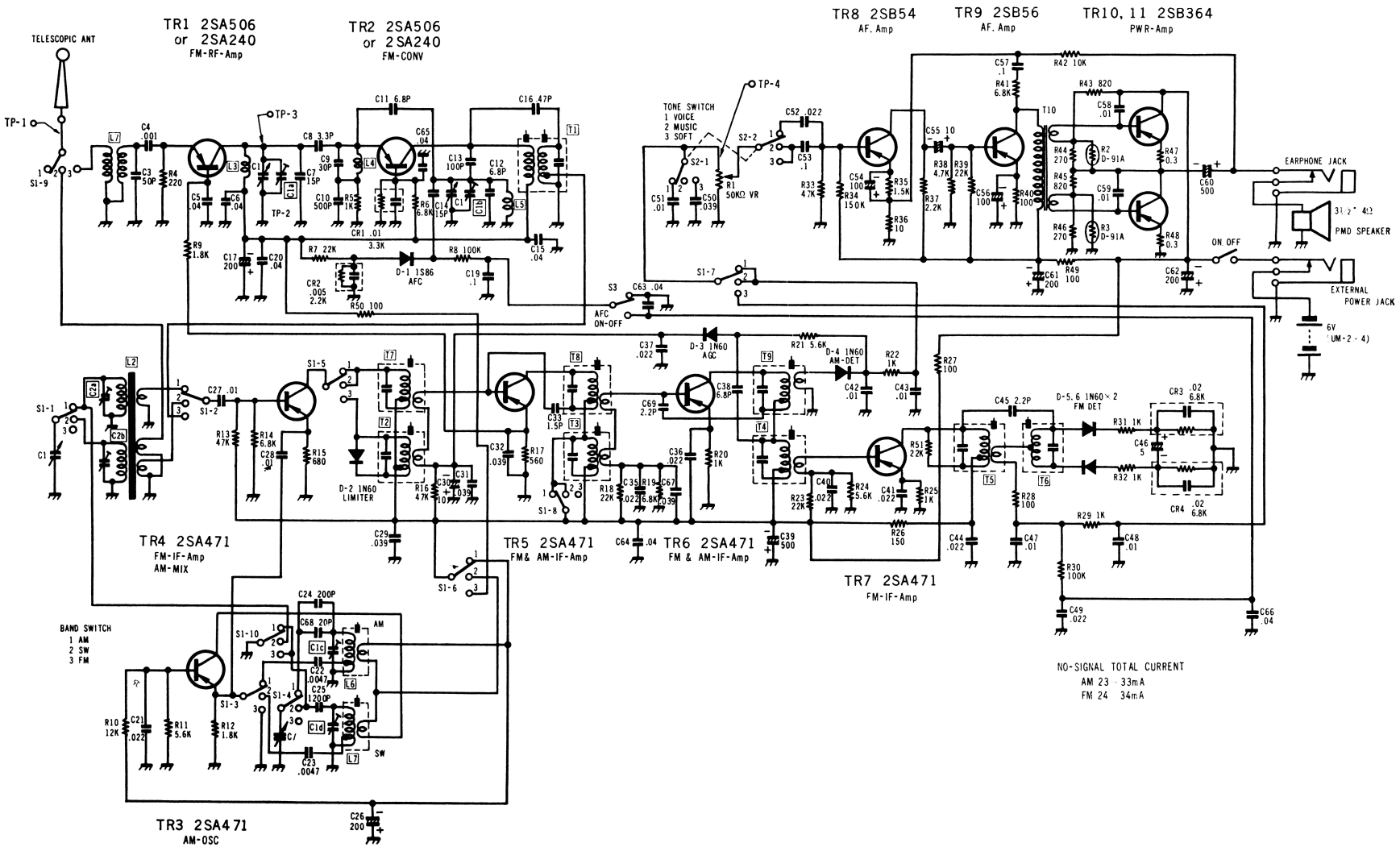


TOP VIEW OF AUDIO SECTION



BOTTOM VIEW OF AUDIO SECTION

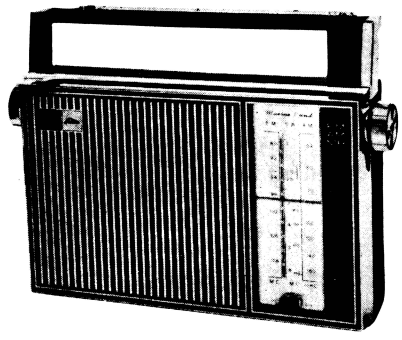



TELESCOPIC ANT
TP-1
TP-2
TP-3
TP-4
TR1 2SA506 or 2SA240 FM-RF-Amp
TR2 2SA506 or 2SA240 FM-CONV
TR3 2SA471 AM-OSC
TR4 2SA471 FM-IF-Amp AM-MIX
TR5 2SA471 FM& AM-IF-Amp
TR6 2SA471 FM & AM-IF-Amp
TR7 2SA471 FM-IF-Amp
TR8 2SB54 AF. Amp
TR9 2SB56 AF. Amp
TR10, 11 2SB364 PWR-Amp
TONE SWITCH 1 VOICE 2 MUSIC 3 SOFT
BAND SWITCH 1 AM 2 SW 3 FM
AFC ON-OFF
ON OFF
D-1 1S86 AFC
D-2 1N60 LIMITER
D-3 1N60 AGC
D-4 1N60 AM-DET
D-5,6 1N60×2 FM DET
EARPHONE JACK
PMD SPEAKER
EXTERNAL POWER JACK
6V (UM-2×4)
NO-SIGNAL TOTAL CURRENT
AM 23 33mA
FM 24 34mA

TOSHIBA TRANSISTOR RADIO
SERVICE DATA

SPECIFICATIONS

FREGUENCY RANGE :		AM 530～1650 KC SW 2～6 MC FM 87.5～108 MC
INTERMEDIATE FREQUENCY :		AM 455 KC FM 10.7 MC
POWER SOURCE :		UM-2A×4……6V
POWER OUTPUT :		1000 mW (max.)
SPEAKER :		3½″ P.M.D. Type
ANTENNAS :		Telescopic Rod Antenna for SW & FM Ferrite Core Antenna for AM
JACKS :		Earphone & External PWR Jack
TRANSISTORS & DIODES :		
TR 1	2SA506 or 2SA240	FM, RF Amplifier
TR 2	2SA506 or 2SA240	FM Converter
TR 3	2 SA 471	AM Oscillator
TR 4	2 SA 471	AM MIX, FM, IF Amplifier
TR 5	2 SA 471	AM and FM, IF Amplifier
TR 6	2 SA 471	AM and FM, IF Amplifier
TR 7	2 SA 471	FM, IF Amplifier
TR 8	2 SB 54	AF Amplifier
TR 9	2 SB 56	AF Amplifier
TR 10	2 SB 364	Power Amplifier
TR 11	2 SB 364	Power Amplifier
D 1	1 S 86	A.F.G.
D 2	1 N 60	Limiter
D 3	1 N 60	AGC
D 4	1 N 60	AM Detector
D 5	1 N 60	FM Detector
D 6	1 N 60	FM Detector
DIMENSIONS :		W…9¼″, H…7½″, D…2⅜″
WEIGHT :		3.5 Lbs (With Batteries)
ACCESSORY :		Earphone



CHASSIS REMOVAL

1. Remove the two knobs (Tone Switch and Band Switch)
2. Remove the four screws marked (＊) and separate the back lid shown in the Fig. 1.
3. Remove the five screws and a stud marked (※) shown in the Fig. 2.

Carefully pull the chassis from the cabinet.

Remarks :

When separating the chassis, do not loosen any screw except the ones painted with white enamel.

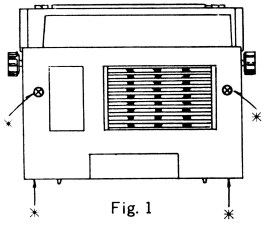


Fig. 1

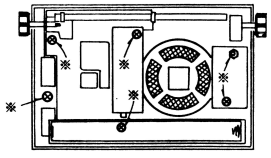
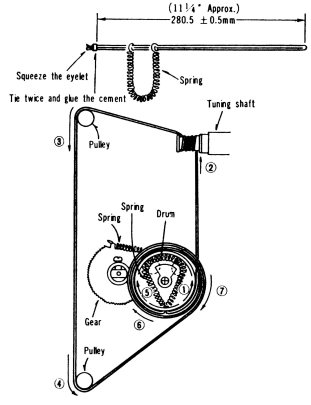


Fig. 2

DIAL CORD STRINGING

1. Set the variable capacitor to the minimum capacitance.
2. Set the cord as number in the diagram.



ALIGNMENT PROCEDURE

The following equipment is required for alignment :

1. Signal generator with a frequency range of at least from 455 KC to 6.5 MC, AM.
2. Signal generator with a frequency range of at least from 10.7 MC to 109 MC, FM.
3. Vacuum tube volt meter.
4. Sweep signal generator with a sweep range of at least 455 KC and center frequency of 10.7 MC marker (Ext. marker may be used.)
5. Oscilloscope with a wide range amplifier of approximately 100 KC.
6. Test loop, a coil of any size wire, one turn or more.
7. For alignment points, see schematic.

NOTES :

During alignment keep the signal generator outputs at the lowest level that will [illegible]

Ground connection of signal generator ……

Generator modulation (FM) (other than IF. alignment) ……30%, 400~

Generator modulation (AM) ……30%, 400~

Step	Generator Connection	Generator Frequency	Band Setting	Position of Tuning Gang	Meter or Oscilloscope Connection	Adjustment	Remarks

AM ALIGNMENT

1.	Test loop	455 KC	AM	Tuning Gang fully closed	Across Voice Coil	T7, T8, T9	Adjust for maximum
2.	Same	525 KC	Same	Tuning gang fully closed	Same	L6 AM Osc. Coil	Same
3.	Same	1660 KC	Same	Tuning Gang fully opened	Same	C1-c AM Osc. Trimmer	Same
4.	Repeat Step 2 and 3						
5.	Same	600 KC	Same	600 KC	Same	L2 AM Ant. Coil	Same
6.	Same	1400 KC	Same	1400 KC	Same	C2-a AM Ant. Trimmer	Same
7.	Repeat Step 5 and 6						

SW 1 ALIGNMENT

1.	Test Loop	1.95 MC	SW 1	Tuning Gang fully closed	Across Voice Coil	L7 SW Osc. Coil	Adjust for maximum
2.	Same	6.1 MC	Same	Tuning Gang fully opened	Same	C1-d SW Osc. Trimmer	Same
3.	Repeat step 1 and 2						
4.	Same	2.5 MC	Same	2.5 MC	Same	L2 SW Ant. Coil	Same
5.	Same	5.5 MC	Same	5.5 MC	Same	C2-b SW Ant. Trimmer	Same
6.	Repeat step 4 and 5						

FM, RF ALIGNMENT

1.	Sweep generator to test point TP-1 thru .05μF, Fig. C	10.7 MC center freq. sweep with 10.7 MC Marker	FM	Tuning gang fully open	Set scope for external sweep point TP-2, Fig. C	T1, T2, T3, T4, T5	Adjust for scope pattern illustrated bellow with 10.7MC marker in center, Fig. A
2.	Same	Same	Same	Same	Set scope for external sweep point TP-3 directly	T6	Adjust for ratio detector "S" curve as illustrated below Fig. B