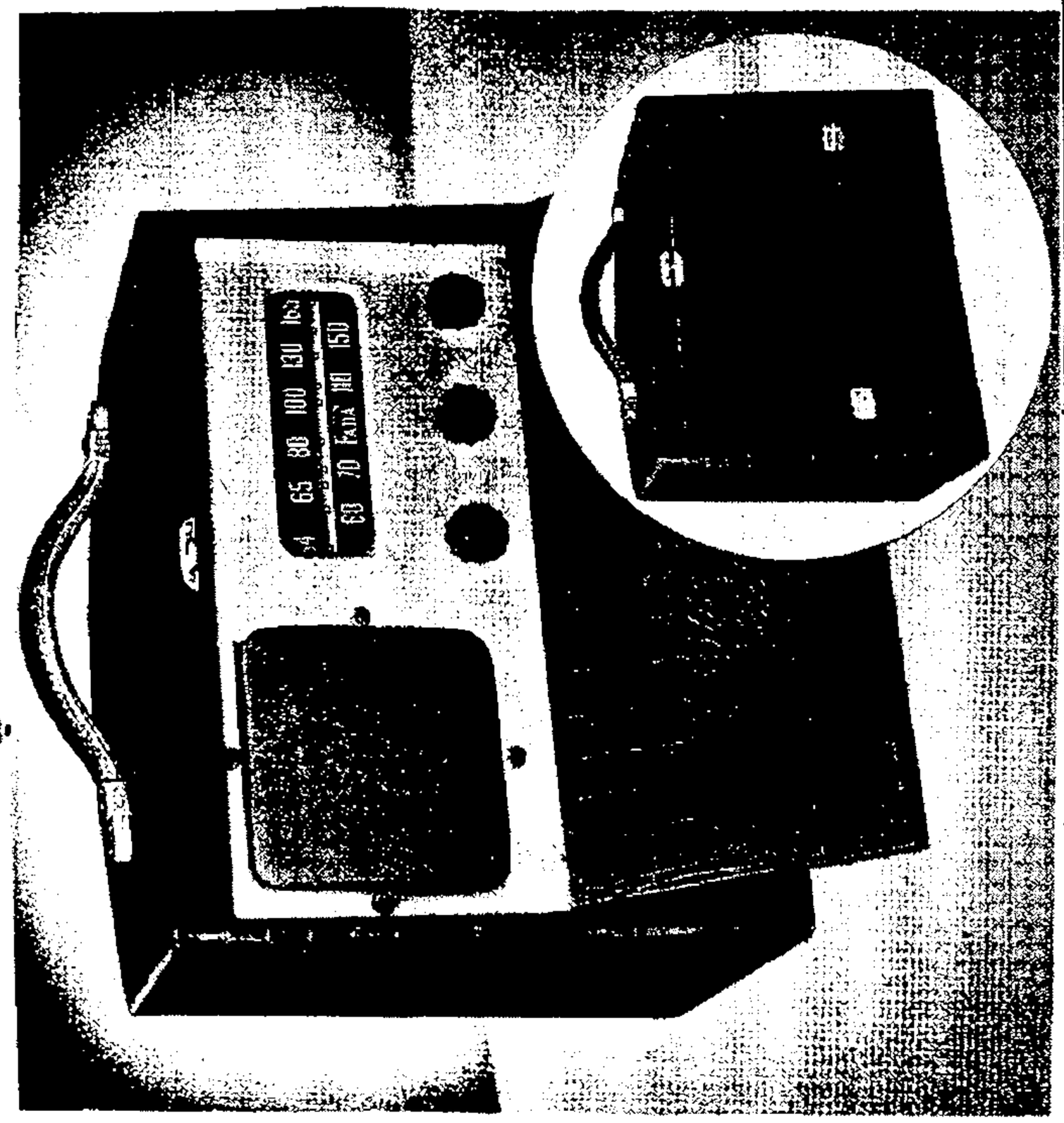
MODEL P100

FADA RADIO AND ELECTRIC CO., INC.

Ned. Ver. v. Historie v/d Radio



I.F. Circuits: 456 KC

ALL VOLTAGES MEASURED TO CHASSIS
VOLTAGE READINGS TAKEN WITH
20,000 OHMS PER VOLT METER
117 VOLT 60 CYCLE LINE.
TUNING RANGE 538-1650 Kc

NOTE:
K = 1000 OHMS. MEG = 1,000,000 OHMS

Model P82 Model P100

Power Supply: 105-125V., 40-60 cyles AC
Same Voltage DC, 15 Watts Power Consumption
Battery Operation: 9 V.A — 90 V.B
Frequency Range: 1650 - 540 KC
I.F. Circuits: 456 KC

Tubes:	1T4 R.F. Amplifier	1S5 Det Avc. A.F.
	1R5 Osc. Converter	3Q5 Power Output
	1T4 I.F. Amplifier	117z3 Rectifier

Speaker: 5" P.M., 1.47 oz. Alnico V Magnet
Speaker Transformer: 8500 ohms - 400 cycles
Speaker Voice Coil: 3.2 ohms

Part No.	Description
12.2	Tubular Condenser .002 mf 600 V
12.5	Tubular Condenser .01 mf 200 V
12.11	Tubular Condenser .05 mf 200 V
12.12	Tubular Condenser .05 mf 400 V
12.14	Tubular Condenser .1 mf 200 V
12.17	Tubular Condenser .25 mf 400 V
12.26	Tubular Condenser .005 mf 400 V
12.27	Tubular Condenser .15 mf 200 V
17.20	Mica Condenser 50 mmf ±10%
17.22	Mica Condenser 220 mmf ±10%
17.21	Mica Condenser 100 mmf ±10%
22.9	Electrolytic Condenser 150-150mf — 15 W.V.
22.11	Electrolytic Condenser 40-30-20 mf — 150 W.V.
27.10	3 Section Variable Condenser 397 mmf
37.26	Loop Antenna w Trimmer
37.27	Input I.F. Transformer
37.33	Diode I.F. Transformer
37.35	Oscillator Coil
37.30	R. F. Coil
52.9	Volume Control
47.5	Battery Electric Changeover Switch
77.54	Dial Pointer
77.50	Dial Scale (Calibrated)
97.92	Cabinet
42.3	Output Transformer
107.6	5" P. M. Speaker
117.9	1650 ohm 10-W W.W. Resistor
132.1	Padder Condenser
142.30	Tuning Knob
142.29	Volume Knob
142.28	Battery-Off-Electric Knob

The following apply to Model P82 only.

97.51	Cabinet
117.1	30 ohm 1 W — W.W. Resistor
142.12	Tuning Knob (wood)
142.13	Volume Knob (wood)
142.14	Battery-Off-Electric Knob (wood)

Models 711 and 740

Power supply: 40-60 cycles, 105-125V AC
Same Voltage DC
Power consumption: 30 Watts
Frequency Range: 530-1680 KC
I.F. Circuits: 456 KC

Tubes: Osc.-Converter	12BE6
I.F. Amplifier	12BA6
Det. Avc. A.F.	12AT6
Power Output	50B5
Rectifier	35W4

Speaker: 4" P.M. 1 oz. "Alnico V" Magnet
Speaker Transformer: 2500 ohms—400 cycles
Speaker Voice Coil: 3.2 ohms

Part No.	Description
12.4	Tubular Condenser, .005 mf, 600 V
12.6	Tubular Condenser, .01 mf, 400 V
12.9	Tubular Condenser, .03 mf, 400 V
12.11	Tubular Condenser, .05 mf, 200 V
12.12	Tubular Condenser, .05 mf, 400 V
17.5	Mica Condenser, 100 mmf, ±10%
17.8	Mica Condenser, 250 mmf, ±20%
22.16	3 Section Electrolytic Condenser 30-40-20 mf, 150 W.V.
27.17	Variable Condenser
37.57	Oscillator Coil
37.56	Loop Antenna
37.62	Input I.F. Transformer, complete
37.62	Output I.F. Transformer, complete
52.15	Volume Control with Switch
72.1	Power Cord (Approved)
77.86	Dial Scale (Calibrated)
77.87	Dial Pointer
77.85	Dial Crystal
97.73W	Cabinet, Bakelite-Walnut
97.73V	Cabinet, Bakelite-Ivory
142.27W	Cabinet Knobs—Walnut
142.27V	Cabinet Knobs—Ivory
107.16T	4" P.M. Speaker with Transformer
107.16	4" P.M. Speaker less Transformer
42.1	Speaker Transformer for above
117.1	30 ohm 1 W. Resistor

ALIGNMENT PROCEDURE

No attempt should be made to realign the various circuits until all other causes have been checked, unless the condition is so obvious as to indicate that realignment is necessary. Then proceed as follows:

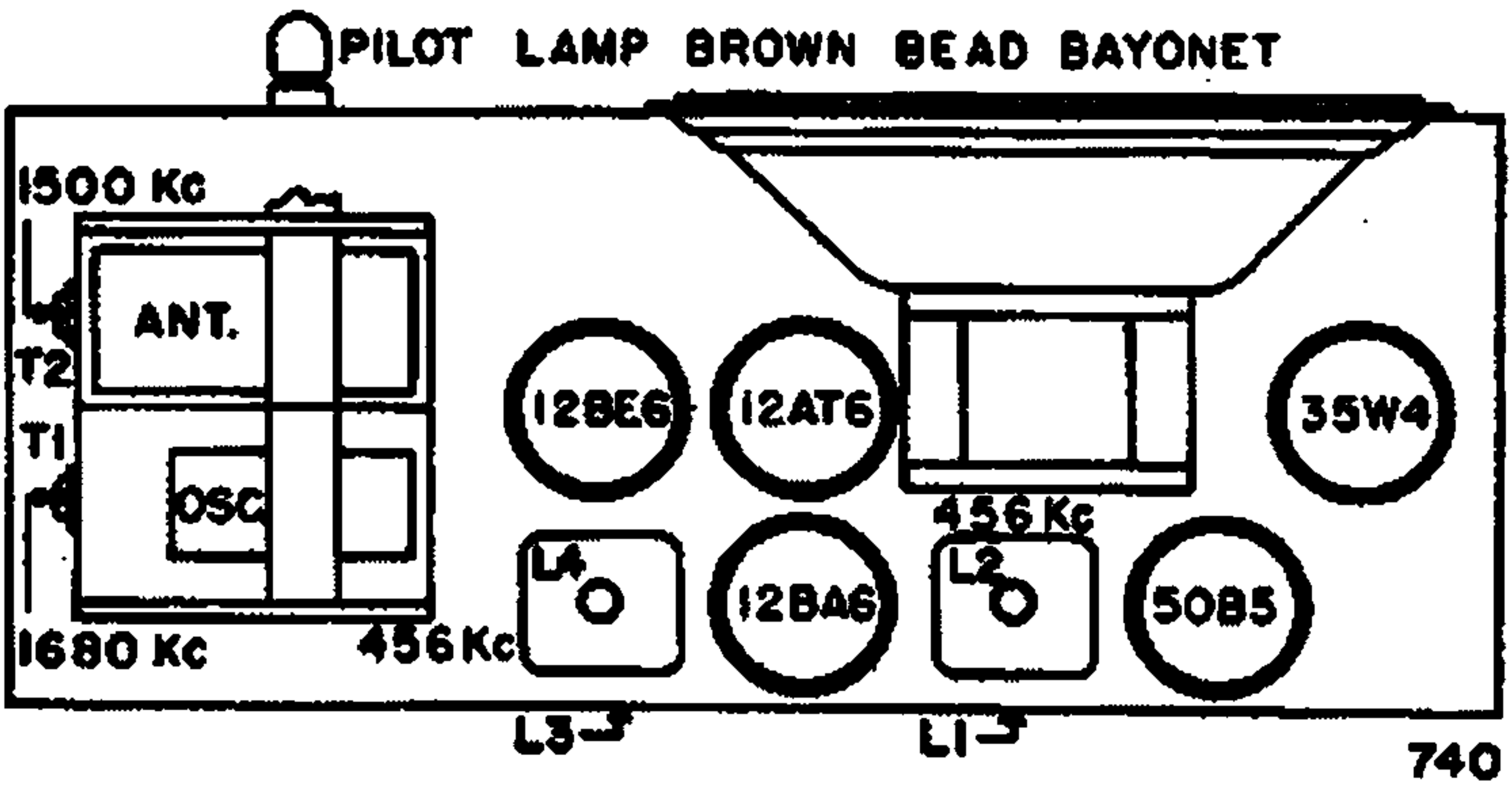
Volume Control full on.

Low range A.C. meter connected across voice coil to indicate output.

Keep signal generator attenuated so as to maintain 1/2 scale reading on output meter.

Make certain that dial pointer is exactly horizontal when variable condenser is fully meshed.

Receiver Dial at:	Signal Generator	Dummy Antenna	Connect Signal Generator to:	Refer to Chassis Layout for Location of Trimmers
1 Full Open	Exactly 456 KC	.1 MF	Control Grid 12BE6 Tube (Top) Front Section Variable Condenser	Adjust for Maximum Output L1, L2, L3 & L4
2 Full Open	Exactly 1680 KC		Radiating Loop (½ meter) 20" from Receiver Loop	Adjust for Maximum Output T1
3 Approx. 1500 KC	Approx. 1500 KC		Radiating Loop (½ meter) 20" from Receiver Loop	Adjust for Maximum Output T2
4 Approx. 600 KC	Approx. 600 KC		Radiating Loop (½ meter) 20" from Receiver Loop	Check tracking and bend slotted end plate (front section) of variable, if necessary.
5				



740

TUNING RANGE 530- 1680 Kc

TUBE LAYOUT

ALIGNMENT PROCEDURE Model P 100

No attempt should be made to realign the various circuits until all other causes have been checked, unless the condition is so obvious as to indicate that realignment is necessary. Then proceed as follows:

Volume Control full on.

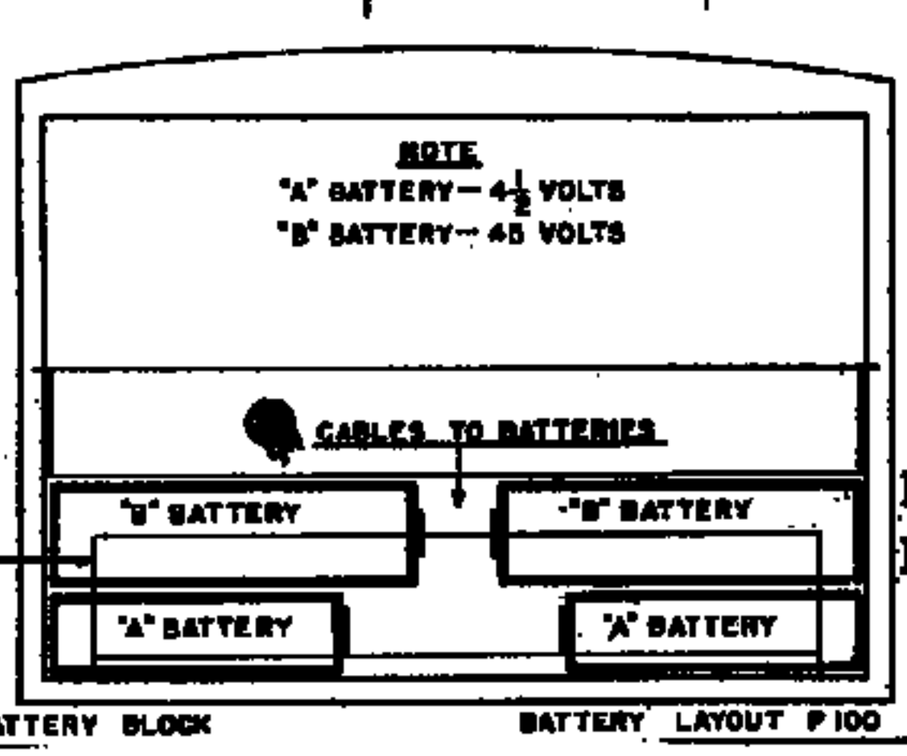
Low range A.C. meter connected across voice coil to indicate output.

Keep signal generator attenuated so as to maintain ½ scale reading on output meter.

Make certain that dial pointer is exactly on index line (top left side of dial plate) when variable condenser is fully meshed.

REMOVE CHASSIS BOTTOM PLATE

	RECEIVER DIAL AT:	SIGNAL GENERATOR	DUMMY ANTENNA	CONNECT SIGNAL GENERATOR TO:	REFER TO CHASSIS LAYOUT FOR LOCATION OF TRIMMERS
1	Fully closed	Exactly 456 KC	.1 MF	Common Ground and Control Grid 1R5 top front section var. cond.	Adjust for maximum output T1, T2, T3, and T4.
2	Fully closed	Approx. 538 KC	.1 MF	Control Grid 1T4 top rear section var. condenser	Adjust for maximum output T8
3	Fully open	Exactly 1650 KC	.1 MF	Control Grid 1T4 top rear section var. cond.	Adjust for maximum output T5
REPEAT OPERATIONS 2 and 3.					
4	Approx. 1500 KC	Approx. 1500 KC	.1 MF	Control Grid 1T4 same as No. 3	Adjust for maximum output T6
The next two operations are performed with the bottom plate on and the chassis in the cabinet — with lid closed					
5	Approx. 1500 KC	Approx. 1500 KC	.1 MF	Radiating Loop 20" from Receiver	Adjust T7 for maximum output
6	Approx. 600 KC	Approx. 600 KC		Radiating Loop 20" from Receiver	Adjust T8 for maximum while rocking variable condenser



For trimmer locations for Model P100 see page 17-14
For parts list for Model P100 see page 17-15

FADA RADIO AND ELECTRIC CO., INC.

Alignment Procedure for Model P82

ALIGNMENT PROCEDURE

No attempt should be made to realign the various circuits until all other causes have been checked, unless the condition is so obvious as to indicate that realignment is necessary. Then proceed as follows:

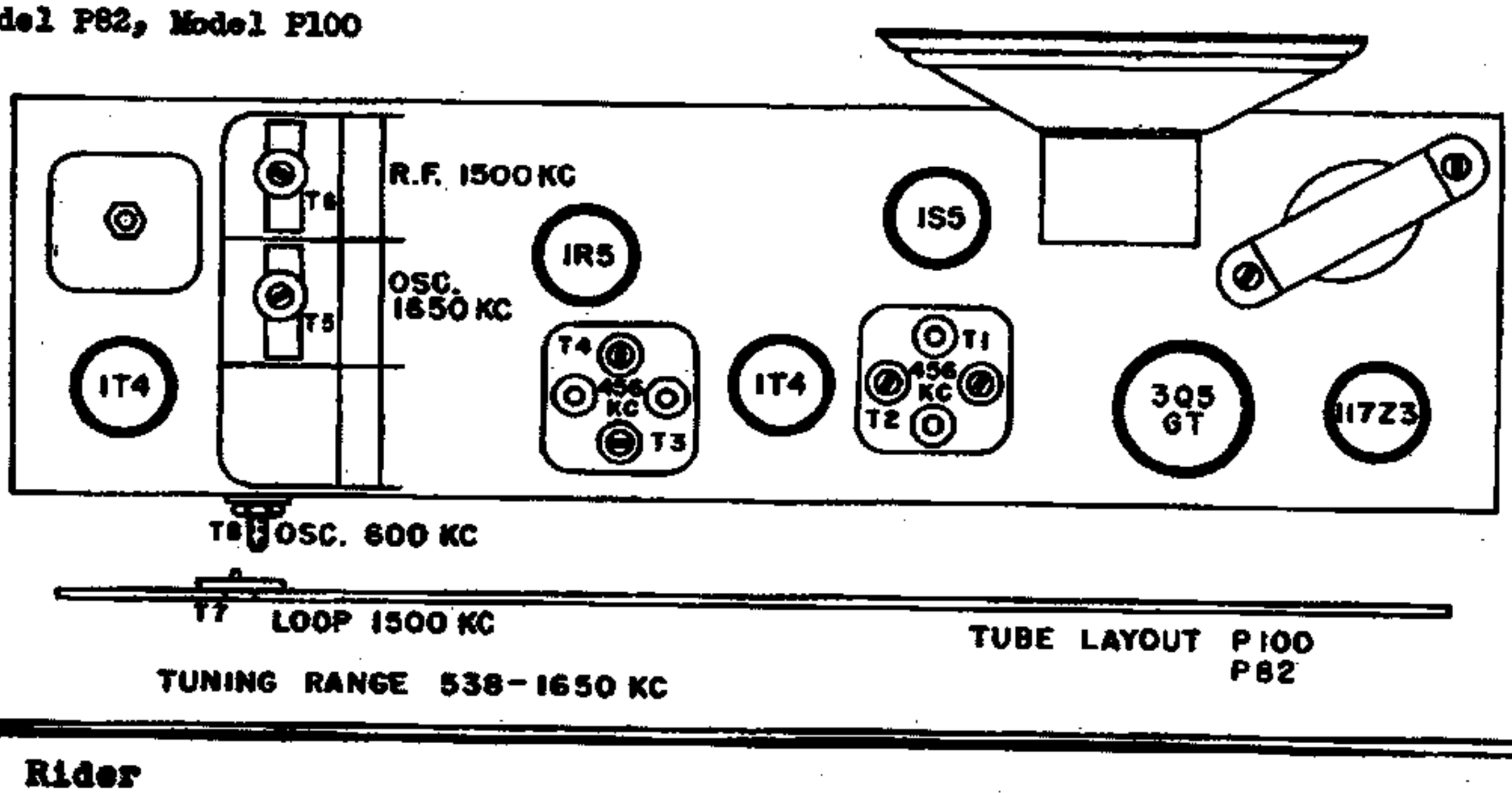
Volume Control full on.
Low range A.C. meter connected across voice coil to indicate output.
Keep signal generator attenuated so as to maintain ½ scale reading on output meter.

Make certain that dial pointer is exactly on index line (top left side of dial plate) when variable condenser is fully meshed.

REMOVE CHASSIS BOTTOM PLATE

RECEIVER DIAL AT:	SIGNAL GENERATOR	DUMMY ANTENNA	CONNECT SIGNAL GENERATOR TO:	REFER TO CHASSIS LAYOUT FOR LOCATION OF TRIMMERS
1 Fully closed	Exactly 456 KC	1. MF	Common Ground and Control Grid 1R5 top front section vari. cond.	Adjust for maximum output T1, T2, T3, and T4
2 Fully closed	Approx. 538 KC	1. MF	Control Grid 1T4 top rear section vari. condenser	Adjust for maximum output T6
3 Fully open	Exactly 1650 KC	1. MF	Control Grid 1T4 top rear section vari. cond.	Adjust for maximum output T5
REPEAT OPERATIONS 2 and 3.				
4 Approx. 1500 KC	Approx. 1500 KC	1. MF	Control Grid 1T4 same as N. 3	Adjust for maximum output T6
The next two operations are performed with the bottom plate on and the chassis in the cabinet — with lid closed				
5 Approx. 1500 KC	Approx. 1500 KC		Radiating Loop 20" from receiver	Adjust T7 for maximum output
6 Approx. 600 KC	Approx. 600 KC		Radiating Loop 20" from receiver	Adjust T8 for maximum while rocking variable condenser

Model P82, Model P100



TUNING RANGE 538-1650 KC

TUBE LAYOUT P100 P82