AIRZONE RADIO

SERVICE INFORMATION

SHEET No. 23

RECEIVER MODEL 581

CHASSIS TYPE 507

TUBE VOLTAGE AND CURRENT READINGS

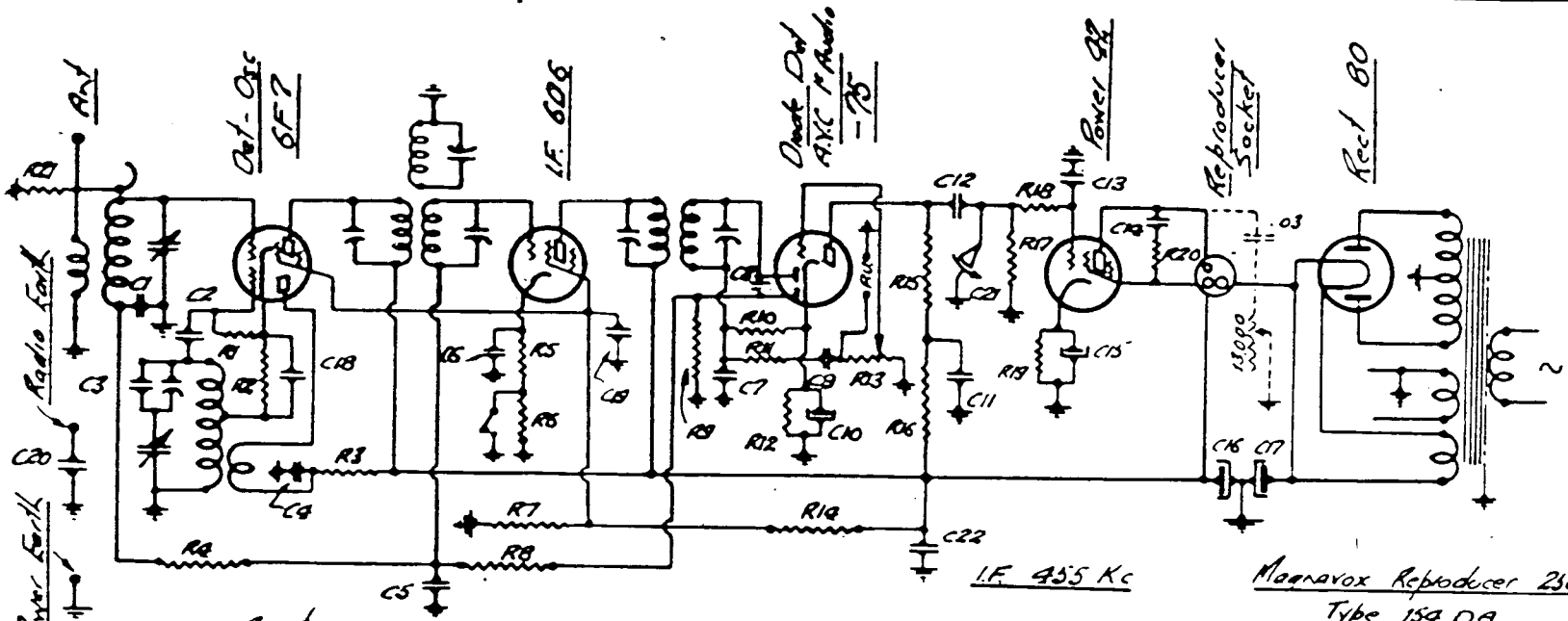
TUBE	POSITION	PLATE VOLTAGE	PLATE CURRENT	SCREEN VOLTAGE	SCREEN CURRENT	OSCILLATOR ANODE-GRID VOLTS	BIAS
6F7	Det.Osc.	235	3.0	90V	.8	100	5.9
6D6	I.F.	235	6.8	90V	1.5		2.5
75	Det.	100	.4				1.1
42	Power	222	30	235	5.5		14.5
80	Rectifier	365					

All measurements to be made with noise suppression switch in "off" position, and no signal tuned in so that AVC will not function and effect the voltages and currents.

The figures shown are measured when the mains voltage is 215 volts or 240 volts, which ever range is selected on the transformer tap.

Airzone receivers provide for two ranges of mains voltages from 200 to 230 and 230 to 250 volts. Tappings are provided at the power transformer terminal strip to cover these ranges, and are color coded as follows :

200 to 230 Black & Yellow 230 to 250 Black & Red.



Resistors

R1	100,000 ½ Watt	R12	3500		
R2	1000 "	R13	.5 Vol control		
R3	50,000 1 Watt	R14	30,000 1 Watt		
R4	.5 Meg ½ "	R15	.25 Meg ½ "		
R5	300	R16	50,000 ½ "		
R6	5000	R17	.5 Meg ½ "		
R7	30,000 1 Watt	R18	100,000 ½ "		
R8	1 Meg ½ "	R19	960		
R9	1 Meg ½ "	R20	10,000 ½ "		
R10	.5 " ½ "	R21	10,000 ½ "		
R11	100,000 ½ "				

Condensers

C1	.05 600V	C12	.02 400V
C2	.0001	C13	.0001
C3	.0004	C14	.08 400V
C4	.1 400V	C15	10
C5	.05 600V	C16	8
C6	.25 200V	C17	8
C7	.0001	C18	.0015
C8	.00005	C19	.1 400V
C9	.02	C20	.005
C10	10	C21	Tone Control
C11	.5 400V	C22	.1 400V

Airzone (1931) Ltd

Wiring Diagram for:- Chassis Type 507

Drawn [illegible]	Scale
Checked [illegible]	Date 20-2-35
Approved [illegible]	

ORG N° 195

ALIGNMENT OF CHASSIS

TYPE 507

I.F. FREQUENCY 455 K.C. When aligning the I.F. system of this receiver particular care is necessary, as being an inductive band pass system, misalignment can readily be brought about.

The output of the test oscillator should be connected to the control grid of the 6F7 and the frequency set to 455 KC., according to instructions in Service Sheets Nos. 16 and 17. The oscillator in the receiver is allowed to function in the normal way, but the tuning condenser must be turned to the full in position, 550 Kilocycles. Proceed to align the I.F. system as follows:-

First adjust the small trimming condenser located on the chassis just to the rear of the 6F7 valve, then the trimmer in the first I.F. unit which is normally the plate trimmer, but in the 507 receiver is the coupling coil trimmer. Next, the grid trimmer in the same I.F. unit and then adjust the plate trimmer in the second I.F. can, and then the diode trimmer which is normally the grid circuit trimmer. Should the I.F. system be badly out of alignment, repeat this procedure, following the same sequence of adjustment each time.

Remove test oscillator lead from the grid of the 6F7 and replace the grid clip. Then connect the test oscillator leads to the aerial and earth wires located at the rear of the chassis, the white being the aerial and black the earth. Be sure the "high" potential lead from the test oscillator connects to the white aerial wire.

Adjust test oscillator to 1400 K.C. (approx. 214 metres) and set the pointer of the receiver dial to 1400 K.C., and adjust the oscillator trimmer, (rear section of the gang) until the signal is heard, adjust the aerial trimmers until the maximum deflection is obtained on the output meter, return to the oscillator trimmer for final adjustments.

Adjust test oscillator to 600 K.C. and rotate dial of receiver to 600 K.C. (500 metres). Adjust padder, until maximum deflection is shown on the output meter. When taking the reading it will be necessary to remove the aligning tool from the padder screw otherwise incorrect readings will result. The maximum output should be obtained no more than 1/32" each side of the 600 KC marking on the scale providing the calibration of the test oscillator is correct.