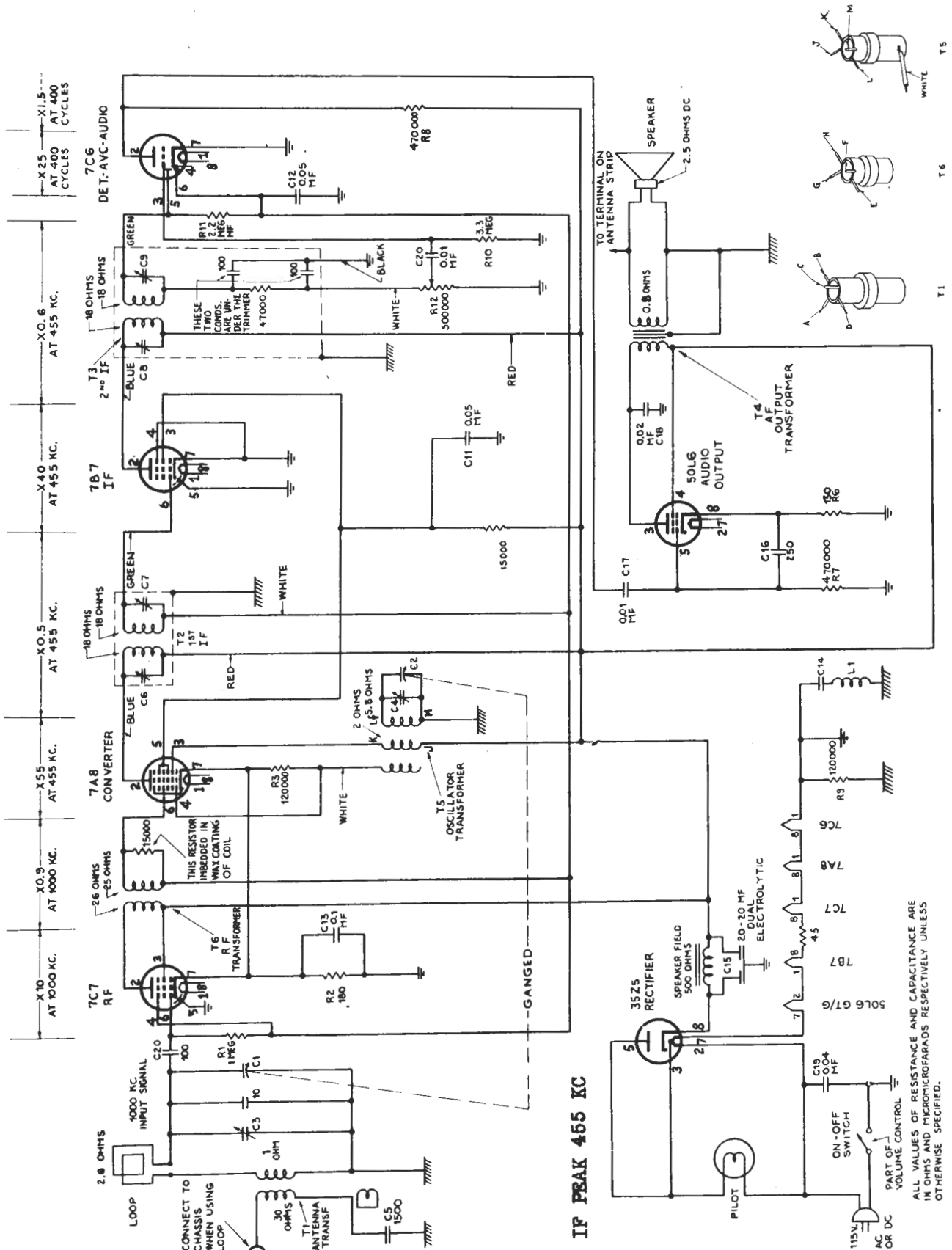


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T5

T6

T1

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T6

T7

PHILCO RADIO & TELEVISION CORP.

MODELS 46-420,  
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Code 121

RESISTANCE VALUES

3525GT	VTVM	20,000 <sup>a</sup>	1,000 <sup>a</sup>	PER VOLT	PER VOLT	RES. TO CIRCUIT GND.
TERMINAL	VTVM	PER VOLT	PER VOLT	PER VOLT	TERMINAL	RES.
1	88	88	80	0	1	3,500,000
2	0	0	0	0	2	150
3	0	0	0	0	3	145
4	88	88	80	0	4	3,500,000
5	-0.6	-1.0	-1.0	0	5	145
6	0	0	0	0	6	INFINITE
7	-0.6	-1.0	-1.0	0	7	120
8	115	110	110	0	8	INFINITE
5016GT	VTVM	20,000 <sup>a</sup>	1,000 <sup>a</sup>	PER VOLT	TERMINAL	RES. TO CIRCUIT GND.
TERMINAL	VTVM	PER VOLT	PER VOLT	PER VOLT	TERMINAL	RES.
1	0	0	0	0	1	INFINITE
2	0	0	0	0	2	75
3	78	78	82	0	3	3,500,000
4	88	88	82	0	4	3,500,000
5	0	0	0	0	5	500,000
6	0	0	0	0	6	0
7	-0.6	-1.0	-1.0	0	7	120
8	5.6	5.4	5.6	0	8	125
7C6	VTVM	20,000 <sup>a</sup>	1,000 <sup>a</sup>	PER VOLT	TERMINAL	RES. TO CIRCUIT GND.
TERMINAL	VTVM	PER VOLT	PER VOLT	PER VOLT	TERMINAL	RES.
1	0	0	0	0	1	0
2	50	48	40	0	2	3,500,000
3	-0.8	-0.3	-0.3	0	3	3,500,000
4	0	0	0	0	4	0
5	-0.8	-0.4	-0.3	0	5	525,000
6	-1.0	-0.4	-0.3	0	6	2,600,000
7	0	0	0	0	7	0
8	0	0	0	0	8	20
7B7	VTVM	20,000 <sup>a</sup>	1,000 <sup>a</sup>	PER VOLT	TERMINAL	RES. TO CIRCUIT GND.
TERMINAL	VTVM	PER VOLT	PER VOLT	PER VOLT	TERMINAL	RES.
1	0	0	0	0	1	75
2	88	88	82	0	2	3,500,000
3	50	50	50	0	3	3,500,000
4	0	0	0	0	4 <sup>q</sup>	0
5	0	0	0	0	5	0
6	-1.0	-0.4	-0.3	0	6	0
7	0	0	0	0	7	0
8	0	0	0	0	8	70
7A8	VTVM	20,000 <sup>a</sup>	1,000 <sup>a</sup>	PER VOLT	TERMINAL	RES. TO CIRCUIT GND.
TERMINAL	VTVM	PER VOLT	PER VOLT	PER VOLT	TERMINAL	RES.
1	0	0	0	0	1	20
2	88	88	82	0	2	3,500,000
3	88	88	86	0	3	3,500,000
4	-12	-8	-2.6	0	4	120,000
5	50	50	48	0	5	3,500,000
6	-1.0	-0.4	-0.4	0	6	2,600,000
7	1.2	1.2	1.2	0	7	180
8	0	0	0	0	8	28
7C7	VTVM	20,000 <sup>a</sup>	1,000 <sup>a</sup>	PER VOLT	TERMINAL	RES. TO CIRCUIT GND.
TERMINAL	VTVM	PER VOLT	PER VOLT	PER VOLT	TERMINAL	RES.
1	0	0	0	0	1	28
2	38	32	84	0	2	3,500,000
3	86	92	84	0	3	3,500,000
4	-1.0	-0.4	-0.3	0	4	2,600,000
5	0	0	0	0	5	0
6	-1.0	-0.4	0	0	6	3,500,000
7	1.2	1.2	1.2	0	7	180
8	0	0	0	0	8	30

PLATE AND SCREEN VOLTAGES TAKEN WITH 1000 OHMS PER VOLT METER WERE TAKEN WITH THE 1000-VOLT RANGE. ALL CATHODE VOLTAGES WERE READ USING THE 10-VOLT SCALE OF THE 1000 OHMS PER VOLT METER.

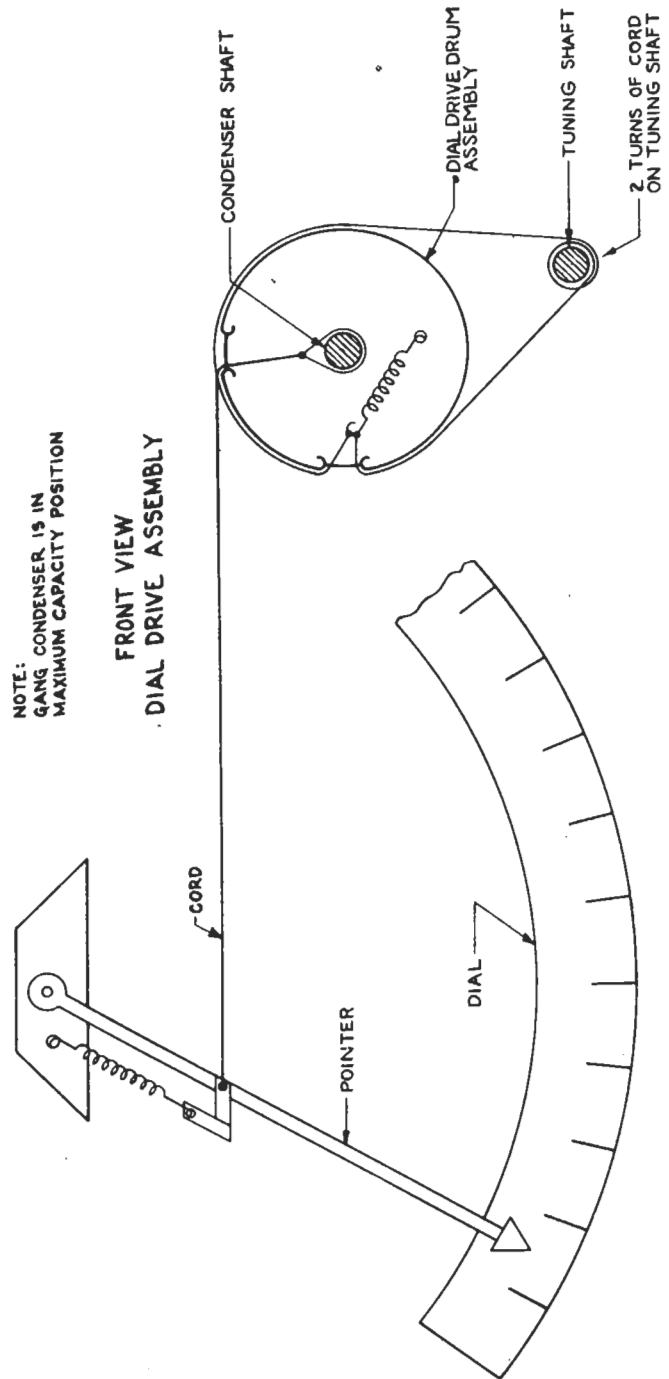
ALL VOLTAGE READINGS ARE POSITIVE EXCEPT THOSE MARKED NEGATIVE.

0 CIRCUIT GND. REFERENCE POINT  
0 CIRCUIT GND. REFERENCE POINT

## ALIGNMENT

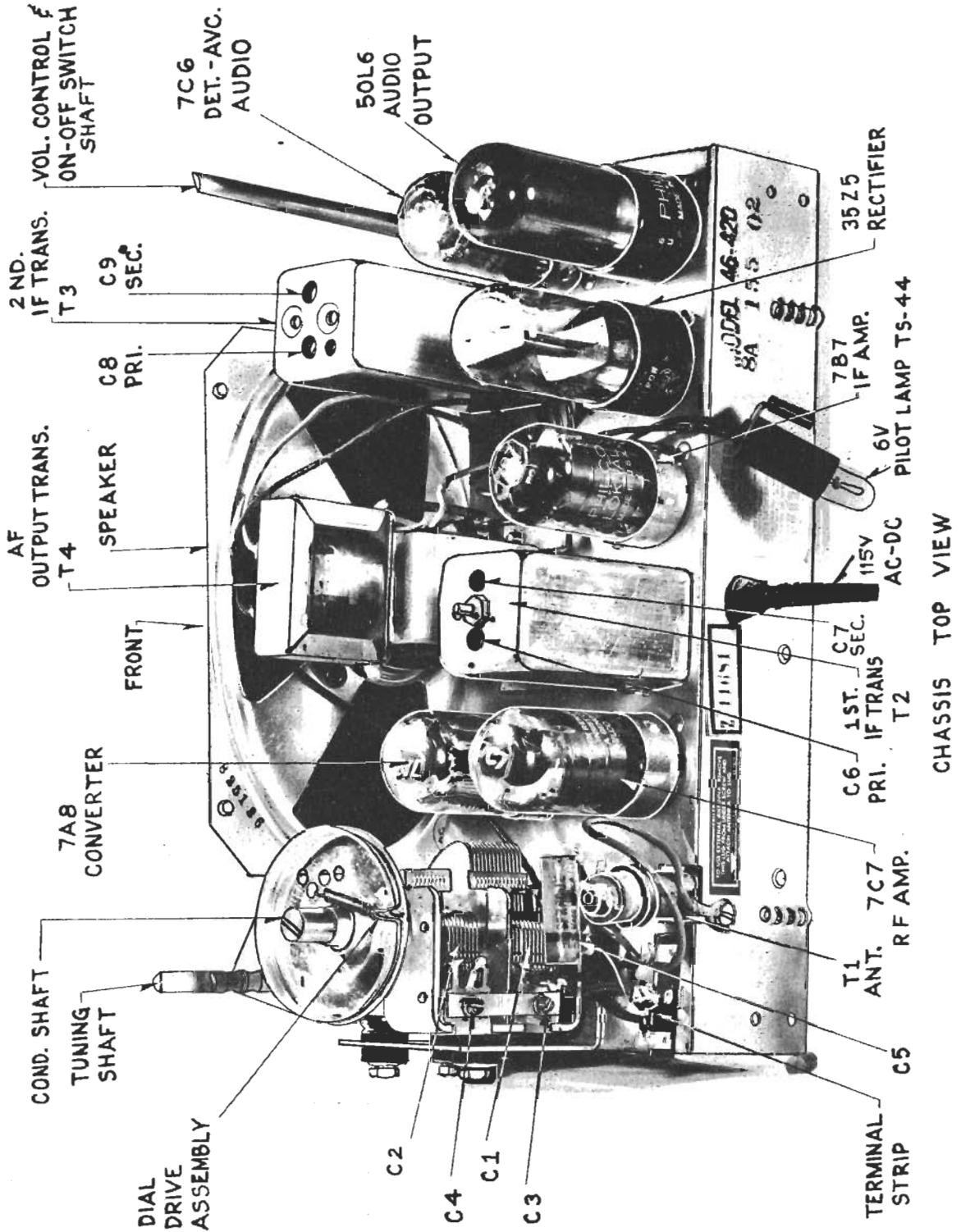
PHILCO 46-420

Alignment may be accomplished with the chassis in the cabinet if a small alignment screwdriver is used. Connect the output meter between the left hand terminal (high) and center terminal (low) of the chassis antenna terminal strip. Connect the signal generator to the standard Hazeltine loop Model 1150 and couple it loosely to the receiver loop. The volume control should be set at maximum. The tuning condenser plates should be fully meshed when the dial pointer is at the index mark at the low frequency end of the dial. The generator output should always be just sufficient to obtain a minimum deflection on the output meter. Set the signal generator to 455 kc. and adjust the i-f trimmers for maximum meter deflection in the following sequence: C9, C8, C7, C6. Set the generator and receiver to 1600 kc. and adjust the oscillator trimmer C4 for maximum output. Set the generator and receiver to 1500 kc. and adjust the r-f trimmer C3 for maximum output.



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CHASSIS TOP VIEW



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