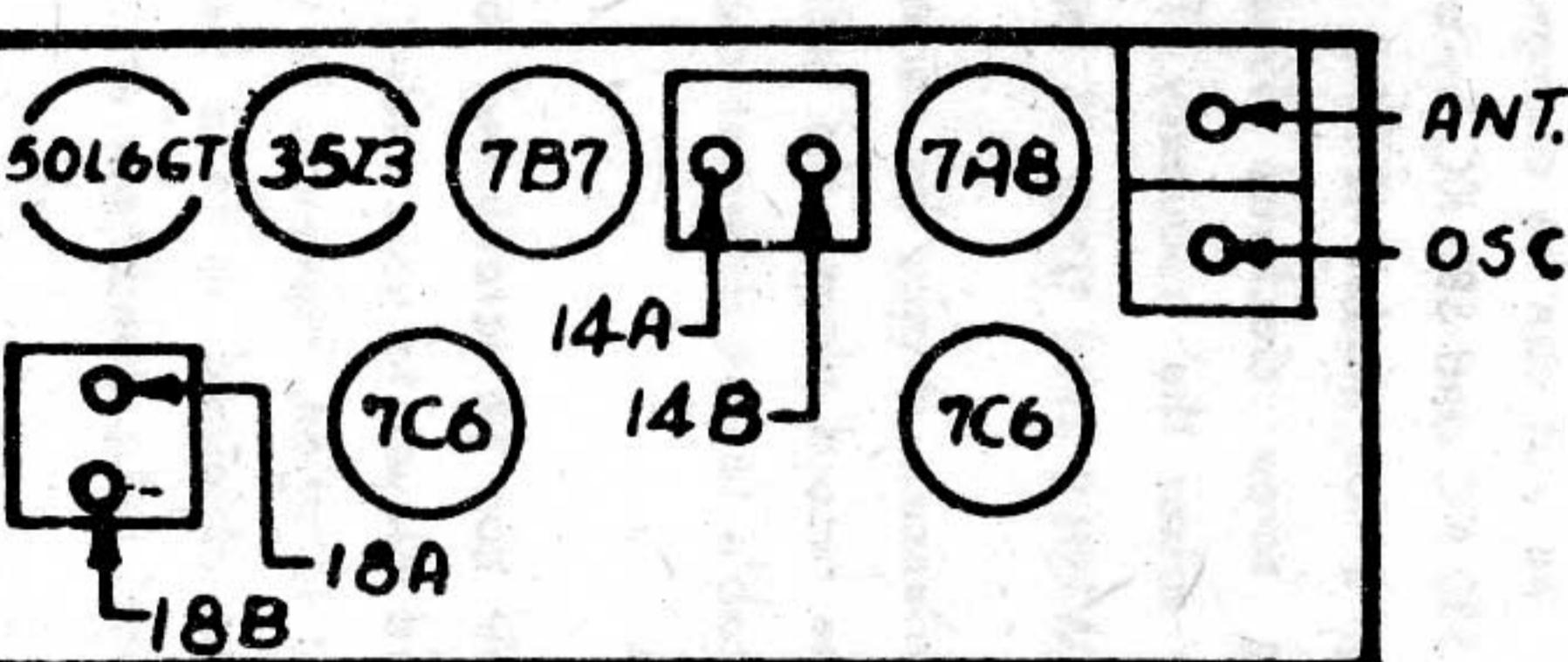
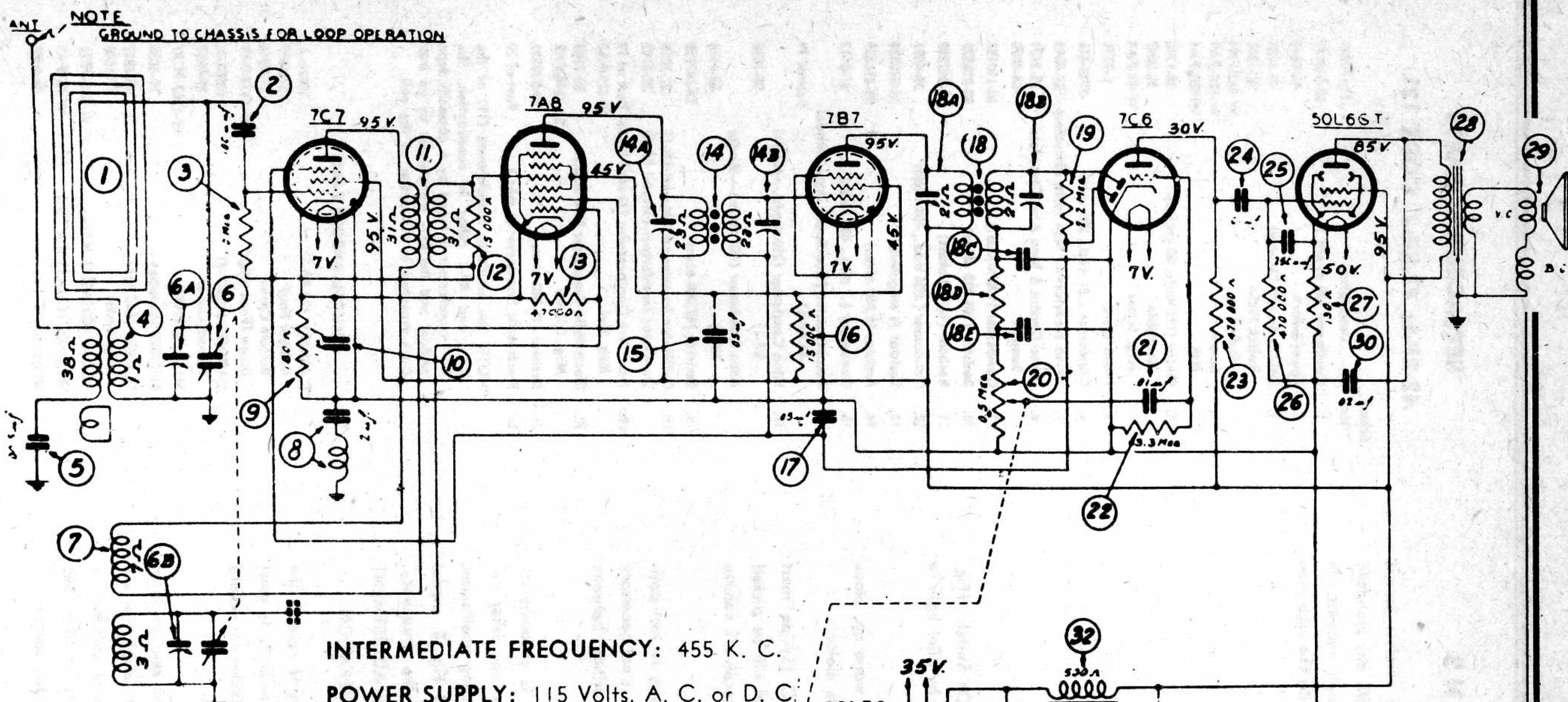


MODELS 42-PT-10,  
42-PT-321

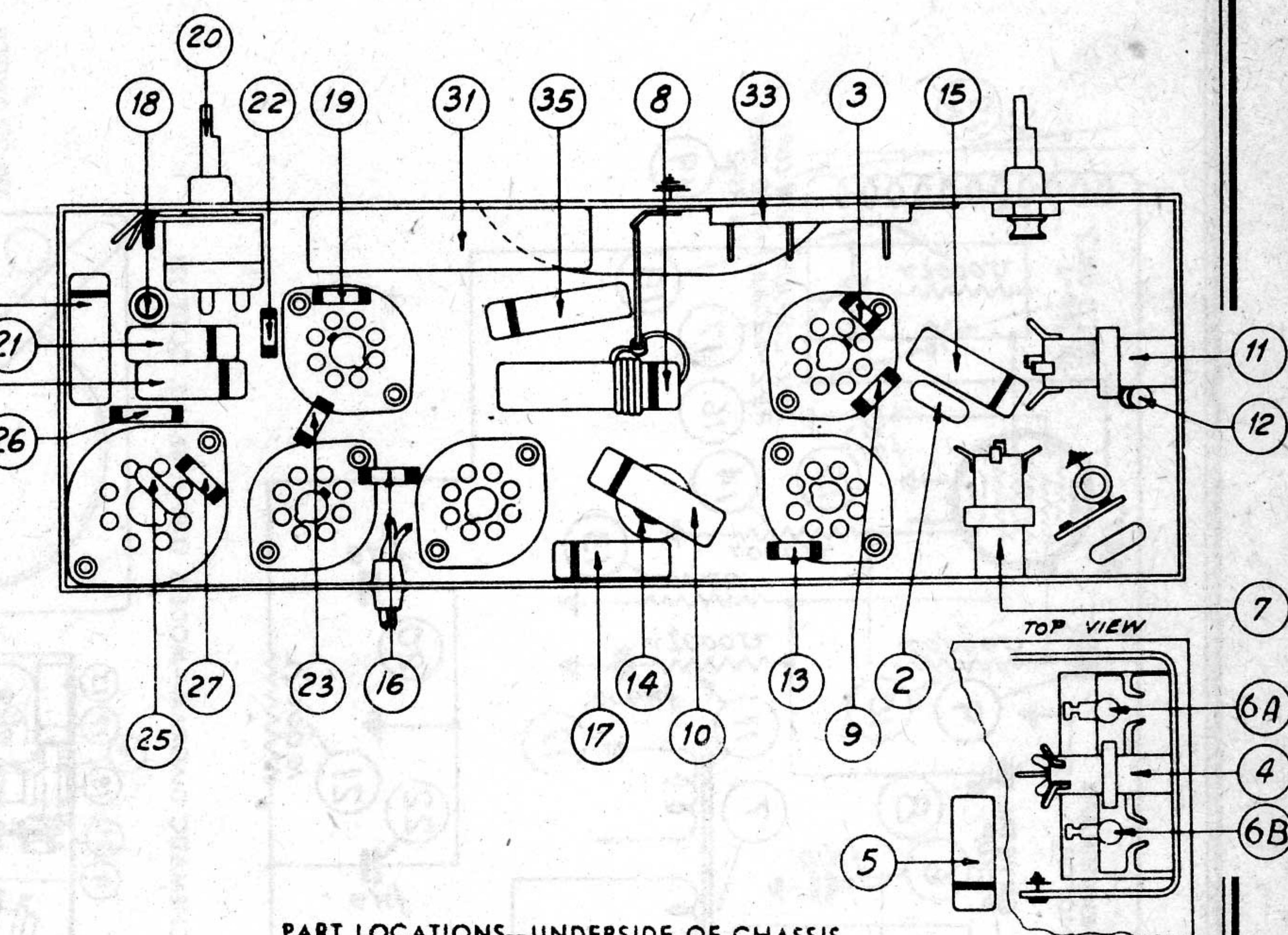
## PHILCO RADIO &amp; TELEVISION CORP.



## MODEL 42-PT-10

Volume control (20) Part No. 33-5469 list in the Service Bulletin is used on Model 42-321 only. The volume control for Model 42-PT-10 is Part No. 33-5434.

FOR ALIGNMENT SEE INDEX



## PART LOCATIONS—UNDERSIDE OF CHASSIS

SCHE. No.	DESCRIPTION	PART No.
1	Loop Aerial (42-321T1)	76-1196
2	Loop Aerial (PT-10) Part of Cabinet	60-110157
3	Mica Condenser (.100 mmfd.)	33-510154
4	Resistor (.1.0 megohms)	32-3394
5	Aerial Transformer	30-4621
6	Condenser (.0015 mfd., 600 volts)	31-2527
7	Tuning Condenser Pointer	56-2076
8	Spring (Drive Cord)	28-8954
9	Shaft Assembly (42-321)	31-2591
10	Shaft Assembly (PT-10)	31-2531
11	Drive Cord	31-2529
12	Oscillator Transformer	32-3613
13	Condenser and Choke Assembly	76-1198
14	Resistor (180 ohms)	33-118336
15	Condenser (.11 mfd., 200 volts)	30-4586
16	R. F. Transformer	32-3595
17	Resistor (15,000 ohms)	33-315339
18	Resistor (47,000 ohms)	33-347339
19	1st I. F. Transformer	32-3614
20	Condenser (.05 mfd., 200 volts)	30-4519
21	Resistor (15,000 ohms)	33-315339
22	Condenser (.05 mfd., 200 volts)	30-4519
23	2nd I. F. Transformer	32-3604
24	Resistor (2.2 megohms)	33-522339
25	Mica Condenser (250 mmfd.)	60-125157
26	Resistor (470,000 ohms)	33-447339
27	Resistor (130 ohms)	33-113336
28	Output Trans. (for Speaker 36-1533-9)	32-8154
29	Cone Assembly (for Speaker 36-1533-9)	36-4190
30	Condenser (.02 mfd., 400 volts)	30-4516
31	Condenser (.01 mfd., 400 volts)	30-2382
32	Electrolytic Condenser (20-20 mfd.)	30-2382
33	Field Coil (Replace Speaker 36-1533-9)	33-3408
34	Resistor (Wirewound, 40-80 ohms)	33-3408
35	Filament Lamp	34-2068
	Condenser (.04 mfd., 400 volts)	30-4119
	MISCELLANEOUS PARTS	
	Cabinet (42-321T1)	10568A
	Cabinet (42-321T1)	10568B
	Cabinet (PT-10)	76-1195
	Cardboard Back (PT-10)	27-9817

DESCRIPTION	PART No.	DESCRIPTION	PART No.
Cable (Power)	L-3199	Screw (Chassis Mounting) (42-321)	W-2065
Clip (R. F. Coil Mtg.)	28-5002	Screw (Chassis Mounting) (PT-10)	W-1921
Dial Scale (42-321)	76-1192	Socket (Lokal Tubes)	27-6177
Dial Scale (PT-10)	27-5696	Socket (Output Tube)	27-6174
Knob Assembly (42-321T1)	54-4105	Socket Assembly (Pilot Lamp)	76-1177
Knob (42-321T1)	54-4143	Speaker	36-1533-9
Knob (42-PT10)	54-4052	Washer Chassis Mounting	W-410

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MODELS 42-PT-2, 42-PT-4,

42-PT-7

MODELS 42-PT-10, 42-321

MODEL 42-1004

## PHILCO RADIO &amp; TELEVISION CORP.

## ALIGNMENT FOR MODELS

42-PT-2, 42-PT-4, 42-PT-7

42-321, 42-PT-10

When aligning the R. F. padders a loop is made from a few turns of wire and connected to the signal generator output terminals; the signal generator is then placed close to the loop of the radio.

The receiver can be adjusted in the cabinet or removed from the cabinet.

When adjusting the radio outside the cabinet the loop aerial should be placed in approximately the same position around or near the

chassis as when assembled. The aligning points on scale plate should also be used.

After connecting the aligning instruments adjust the compensators as shown in the tabulation below. Compensator locations are shown on the Schematic.

If the indicating meter pointer goes off scale when adjusting the compensators, reduce the strength of the signal from the generator.

Operations in Order	SIGNAL GENERATOR		RECEIVER				SPECIAL INSTRUCTIONS
	Output Connections to Receiver	Dial Setting	Dial Setting	Control Setting	Adjust Compensators in Order		
1	Ant. Section of tuning	455 K.C.	540 K.C. Tuning Cond. Closed	Vol. Max.	18A, 18B, 14A, 14B	13B, 13A, 10A, 10B	Note B
2	Loop see above instructions	1600 K.C.	1600 K.C.	Vol. Max.	(6B, Note C)	(1B, Note C)	Note A
3	Loop see above instructions	1500 K.C.	1500 K.C.	Vol. Max.	(6A, Note D)	(1A, Note D)	

NOTE A: DIAL POINTER CALIBRATION—In order to adjust the receiver correctly, the pointer must be adjusted to track properly with the tuning condenser. To do this, turn the tuning condenser to the maximum capacity (plates fully meshed.) With the condenser in this position, set the tuning pointer on the first small line stamped in the scale plate on the left side.

## NOTES FOR MODELS 42-321, -PT-10

NOTE B—Before adjusting compensators, turn down (14B) to tight position. Then adjust the compensators for maximum output in the following order: 18A, 18B, 14A and 14B.

NOTE C—Turn tuning condenser until dial pointer is on the first small line stamped in the scale plate from right side of chassis. Adjust padder (6B) to maximum at this point.

NOTE D—Turn tuning condenser until dial pointer is on the second small line stamped in the scale plate from right side of chassis. Adjust padder (6A) to maximum at this point.

## NOTES FOR MODELS 42-PT-2, -PT-4, -PT-7

NOTE B—Before adjusting compensators, turn down (10B) to tight position. Then adjust the compensators for maximum output in the following order: 12A, 12B, 10A and 10B.

NOTE C—When adjusting padder outside of cabinet, turn tuning condenser until dial pointer is on the first small line stamped in the scale plate from right side of chassis. Adjust padder (1B) to maximum at this point.

NOTE D—When adjusting padder outside of cabinet, turn tuning condenser until dial pointer is on the second small line stamped in the scale plate from right side of chassis. Adjust padder (1A) to maximum at this point.

## MODEL 42-1004

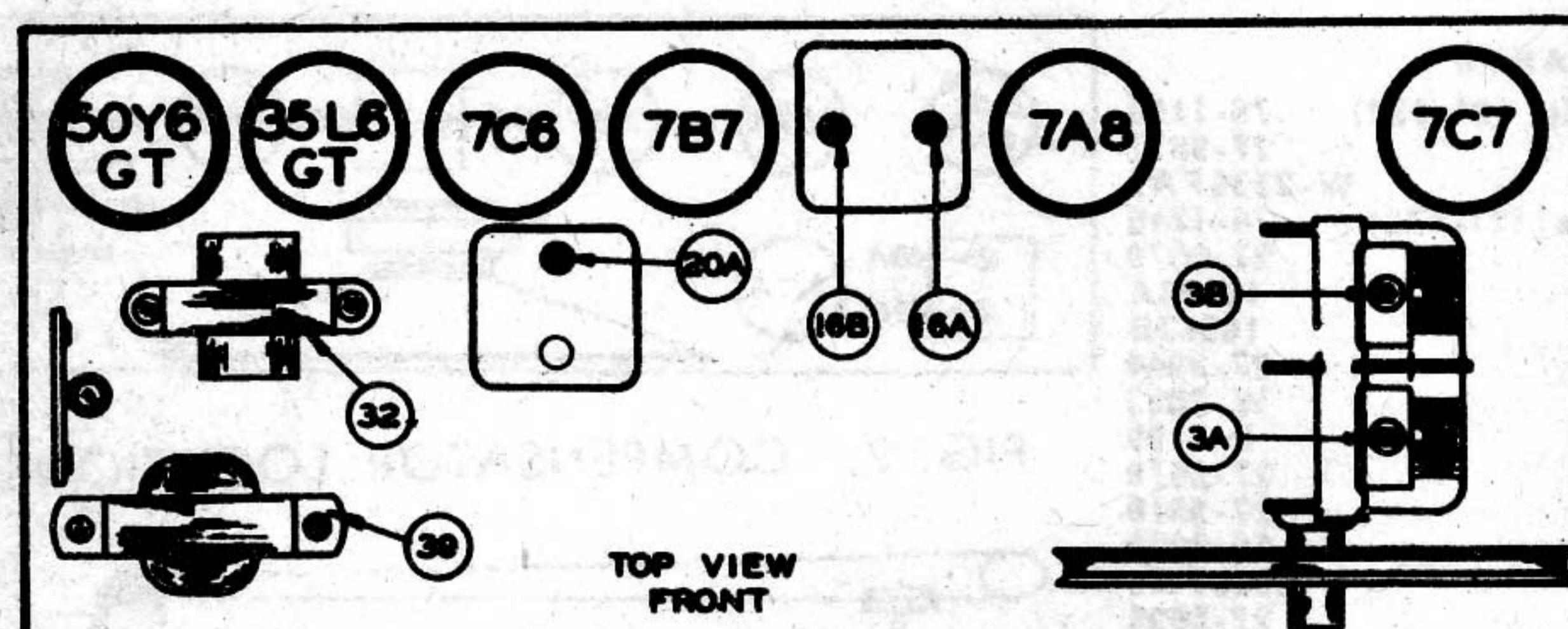


FIG. 1. LOCATIONS OF COMPENSATORS

When aligning the R. F. padders a loop is made from a few turns of wire and connected to the signal generator output terminals; the signal generator is then placed close to the loop of the radio.

The receiver can be adjusted in the cabinet or removed from the cabinet.

When adjusting the radio outside the cabinet the loop aerial should be placed in approximately the same position around or near the chassis as when assembled. A paper aligning scale, Part No. 27-9985, is also attached to the metal dial plate for adjusting the radio outside of the cabinet. The scale is marked with three lines indicating from left to right—"Dial Calibration Point," "580 K.C." and "1500 K.C." After connecting the aligning instruments adjust the compensators as shown in the tabulation below. Locations of the compensators are shown in fig. 1.

If the indicating meter pointer goes off scale when adjusting the compensators, reduce the strength of the signal from the generator.

Operations in Order	SIGNAL GENERATOR		RECEIVER			SPECIAL INSTRUCTIONS
	Output Connections to Receiver	Dial Setting	Dial Setting	Control Setting	Adjust Compensators in Order	
1	Ant. Section of tuning	455 K.C.	540 K.C. Tuning Cond. Closed	Vol. Max.	20A, 16B, 16A	
2	Loop see above instructions	1600 K.C.	1600 K.C.	Vol. Max.	3B, 3A	Note A

Operations in Order	SIGNAL GENERATOR MODEL 42-1006 CODE 122 RECEIVER			Special Instructions		
	Output Connections to Receiver	Dial Setting	Dial Setting	Control Setting	Adjust Compensators in Order	
1	Ant. Section of tuning	455 K.C.	540 K.C. Tuning Cond. Closed	Vol. Max. Switch-Radio	22A, 21B, 21A	
2	Loop see above instructions	1600 K.C.	1600 K.C.	Vol. Max. Switch-Radio	3B, 3A	Note A

NOTE A:—Dial Calibration: In order to adjust the receiver correctly, the dial must be aligned to track properly with the tuning condenser. To do this, proceed as follows: Turn the tuning condenser to the maximum capacity position (plates fully meshed). With the condenser in this position, set the tuning pointer on the small dot below 540 K.C.