

PHILCO RADIO & TELEVISION CORP. MODEL 40-81 (121, 122 MODEL 40-81T, CSL MODEL 40-82 (121) MODEL 40-83

Model 40-82, Code 121, is a 4-tube portable battery operated superheterodyne radio and covers the standard broadcast frequency range from 540 to 1550 K. C. This Model is similar to Philco Model 40-81, Code 122, with the exception of the cabinet, and several of the replacement parts.

The following service data listed for Model 40-81, Code 122, also applies to Model 40-82, Code 121. The parts used in 40-82 which differ from those shown for Model 40-81, Code 122, are as follows:

Knob	37-4876
Pointer	37-4891
Scale	37-4891
Tuning Condenser	31-4932
Grille Screen	86-1288
Cabinet	10450A

MODEL 40-83

Model 40-83 is similar to Model 40-81, Code 122, with the exception of the following parts:

Grille Screen	56-1539
Scale	27-6550
Pointer	56-1326
Cabinet	10450A

The service data listed for Model 40-81, Code 122, applies to Model 40-83.

MODEL 40-81, CODES 121-122

To improve the padding at 1500 K. C., condenser (2) 25 mmfd. Part No. 30-1137 changed to 16 mmfd. Part No. 61-0038.

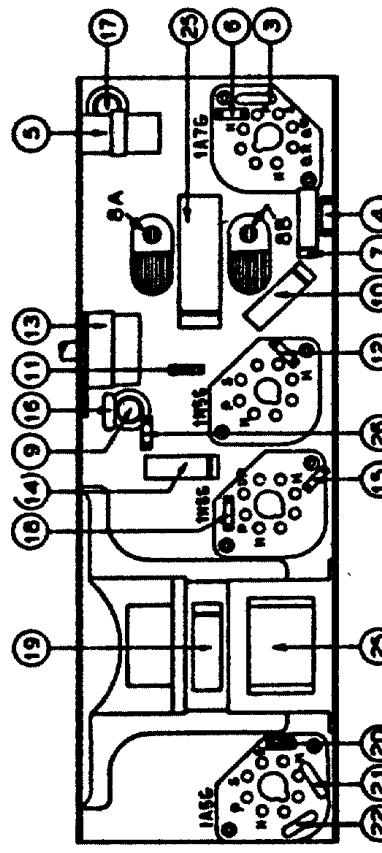
Tuning condenser, dial scale, and pointer changed on later production receivers. These changes are as follows:

Early Production	31-2102
Later Production	31-2322
Dial Scale	27-5538
Pointer	56-1326

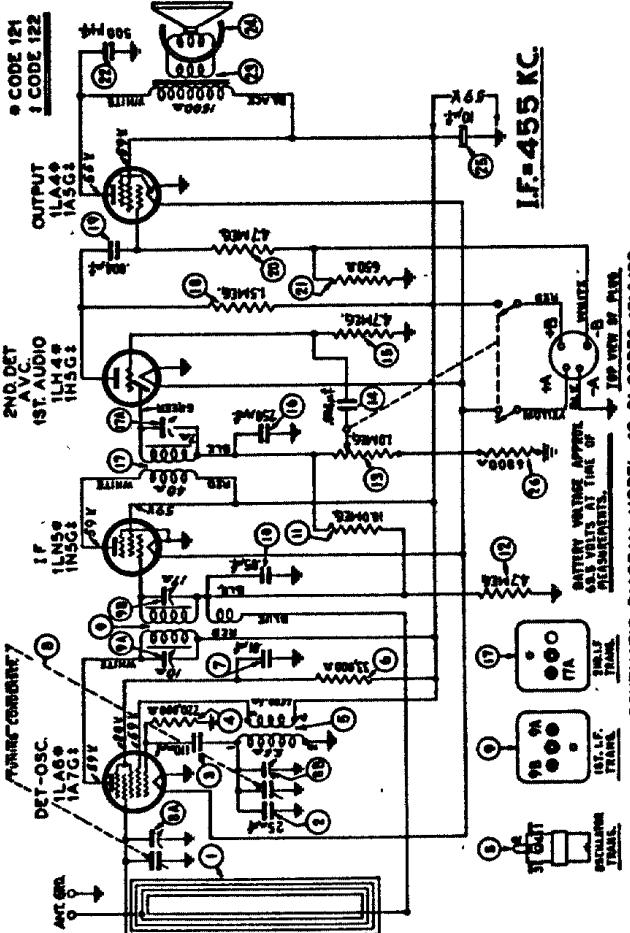
MODEL 40-81, CODE 122

To improve the operating characteristics of the receiver at 550 K. C. and prevent oscillation the following items should be observed:

1. The loop wire going to the 1A7 grid, the wire from the 1A7 grid to the wiring panel, and the wire from the tuning condenser antenna section lug to the wiring panel must be kept as far away from the 1A7 tube as is possible.
2. The second I. F. Shield must be tightly fastened to the sub-base so that no openings exist between the base and the bottom of the shield.



PART LOCATIONS, UNDERSIDE OF CHASSIS, MODEL 40-81



Models 40-81, Codes 121 and 122 are 4 tube portable battery operated superheterodyne receivers. These receivers are similar with the exception of the type tubes used. Incorporated in the receivers is a self-contained loop aerial and an extremely sensitive permanent magnet field speaker. In addition terminals are provided for connection an outside aerial and ground. The receiver is operated from a self-contained A-B battery pack.

TUNING RANGE: 540 to 1550 K. C.
INTERMEDIATE FREQUENCY: 455 K. C.

SCHEM. NO.	DESCRIPTION	PART NO.
1	Loop Assembly (part of cabinet)	30-1134
2	6A6 Condenser (15 mmfd.)	31-4934
3	6A6 Condenser (150 mmfd.)	30-1051
4	Speaker (250 ohm phone, 1/2 watt)	23-422220
5	Rectifier (250 2000 ohms, 1/2 watt)	23-32277
6	Rectifier (250 2000 ohms, 1/2 watt)	30-43720
7	Tubeular Condenser (6A6 mmfd.)	30-4372
8	Volume Control (Acetone)	30-3292
9	2st I. F. Transformer Assembly	30-3292
10	Power Generator (6A6 mmfd.)	30-43716
11	Rectifier (10.0 mmfd., 1/2 watt)	23-416220
12	Thiotone (6.7 mmfd., 1/2 watt)	23-407220
13	Volume Control and On-off Switch	32-32314
14	Tubeular Condenser (.004 mmfd.)	30-43716
15	Rectifier (4.7 mmfd., 1/2 watt)	23-347220
16	6X4 Condenser (250 mmfd.)	31-49323
17	2nd I. F. Transformer Assembly	32-3292
18	Rectifier (11.0 mmfd., 1/2 watt)	23-511920
19	Tubeular Condenser (.004 mmfd.)	30-43716
20	Rectifier (4.7 mmfd., 1/2 watt)	23-347220
21	Speaker (250 ohms, 1/2 watt)	23-322220
22	6A6 Condenser (150 mmfd.)	30-1114
23	Output Transformer	30-43600
24	Gene and Voice Coil Assembly (Speaker Part No. 20-1481-2)	30-4131
25	Electrolytic Condenser (10 mmf., 100 V.)	30-32924
26	Rectifier (2500 ohms, 1/2 watt)	23-322220

SCHEM. NO.	DESCRIPTION	PART NO.
1	Cabinet	10413C
2	Knee Assembly	27-5531

This model is the same as 40-81, Code 122, with the exception of the above.