

Philco Radio & Television Corp.

Model: 40-508

Chassis:

Year: Pre June 1940

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

[Riders Volume 12 - PHILCO 12-16](#)

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SEE MODELS
BELOW

PHILCO RADIO & TELEVISION CORP.

SETTING AND OPERATING ELECTRIC PUSH-BUTTON TUNING

In order to adjust the electric automatic tuning push-button accurately for reception of broadcast stations, a signal generator, such as Philco Model 077, and a padding screw driver, Philco Part No. 45-2610, are required. With this equipment at hand, proceed as follows:—

1—Select five (5); seven (7) or eight (8) of the most popular stations received in the locality (depending on the number of push-buttons on the model to be adjusted). Insert the station call letters into the windows above the buttons. The station with the lowest frequency is placed in the first button on the left and the highest frequency station in the extreme right button. Each push-button is adjusted by two set screws. These set screws are located on the rear of the chassis or push-button unit. Each set of screws is numbered and covers a frequency range as follows:—

FREQUENCY RANGES OF PUSH-BUTTONS

Models 40-100, 40-110		Models 40-195, 40-200		Models 40-160, 40-165	
Push-Button	Frequency Range	Push-Button	Frequency Range	Push-Button	Frequency Range
1	540-1030 K. C.	1, 2, 3	540-1030 K. C.	1	540-1000 K. C.
2	650-1100 K. C.	4, 5	670-1100 K. C.	2	650-1100 K. C.
3	650-1100 K. C.	6, 7, 8	900-1600 K. C.	3	740-1300 K. C.
4	740-1240 K. C.			4	900-1500 K. C.
5	1160-1600 K. C.			5	1100-1600 K. C.
6	Dial				

Models 40-124, 40-125, 40-135, 40-145, 40-303, 40-506, 40-507, 40-525 (121), 40-526 (121)		Models 40-150, 40-155, 40-180, 40-185, 40-190, 40-508, 40-509	
Push-Button	Frequency Range	Push-Button	Frequency Range
1	540-1030 K. C.	1, 2, 3	540-1060 K. C.
2	650-1100 K. C.	4, 5	650-1110 K. C.
3	740-1240 K. C.	6, 7	920-1600 K. C.
4	900-1470 K. C.		
5	1160-1600 K. C.		
6	Dial		

Looking at the front of the cabinet, the first button on the left is adjusted by "Osc." and "Ant." set screws No. 1; the next push-button by "Osc." and "Ant." set screws No. 2, and the remaining push-buttons in order.

2—Turn the receiver "on" and set the "Tuning Range Selector" or push-button for "Dial" tuning.

3—Set up the Model 077 signal generator about 3 feet from the receiver and connect a loop aerial (made from a few turns of wire 12 inches in diameter) to the "high" and "ground" output jacks of the signal generator. Turn the output controls to maximum and set the modulation control to "Mod. ON".

4—Manually tune in on the radio the first station to be set up; (usually No. 1 push-button first). After doing this, set the indicator of the 077 signal generator to the frequency of the station being received. As the indicator approaches the frequency of the station, a whistle will be heard; leave the indicator at this point.

5—Turn the receiver tuning range selector to "push-button" and press in No. 1 button. (Models without a tuning range selector, simply press in push-button to be set up). Using the insulated screw

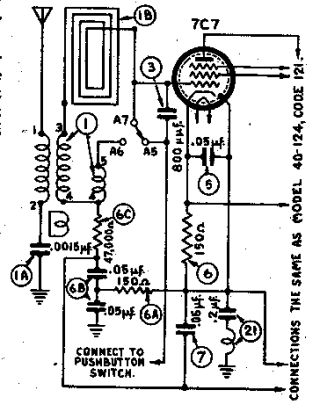
driver, turn the No. 1 "Osc." screw until the broadcast station identified by the signal generator is heard; then turn signal generator indicator off the frequency of the station.

6—Readjust No. 1 "Osc." and "Ant." screws until the station is heard clearly and distinctly. The adjustment of No. 1 push-button is then complete. After setting up the first station the same procedure as outlined above is used for the remaining stations.

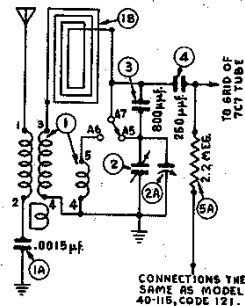
While the above procedure is satisfactory in setting up push-buttons for stations, a very accurate adjustment can be obtained with a vacuum tube voltmeter. The instructions for using a vacuum tube voltmeter will be found on page 10 under "Using Vacuum Tube Voltmeter for Aligning Compensators and Adjusting Push-Buttons."

When any of these models are to be set up to receive the sound of a television program, tuned in by special type Philco television sets, or if they are to be used in conjunction with a Philco Record Player, push-button No. 1 should be used. To adjust the push-button on these instruments, the same procedure as outlined above is used.

Further details for setting up this receiver for operation with Philco Television sets and Record Players are supplied with the instruments.



CONNECTIONS FOR MODEL 40-124 CODE 122



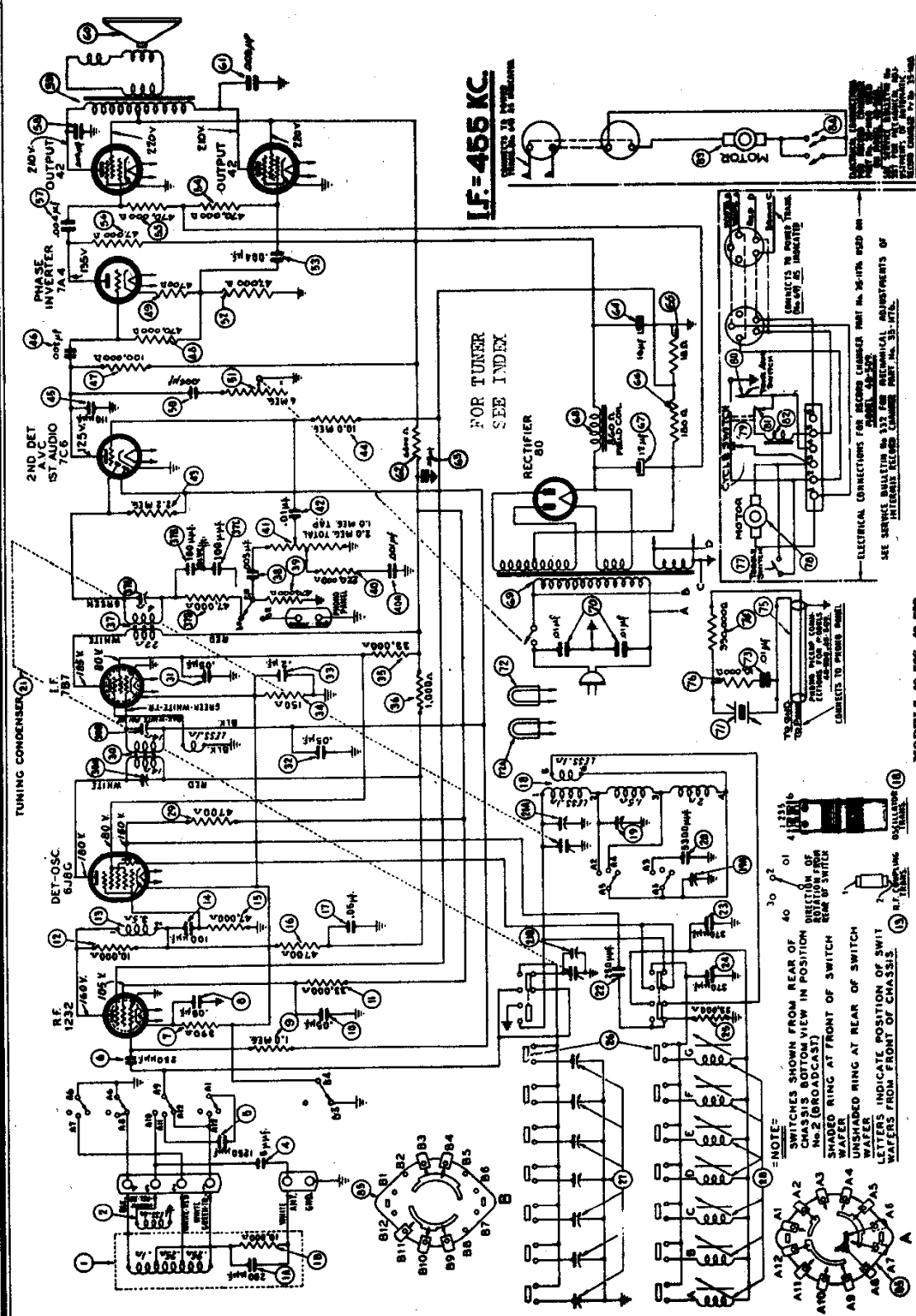
CONNECTIONS FOR MODEL 40-115 CODE 122

MODEL 40-124, CODE 122

Model 40-124, Code 122, is similar to Code 121 with the addition of a loop aerial mounted inside the cabinet and several part changes in the aerial circuit. These changes are shown in the following circuit diagram and parts list. The service information in RIDER'S VOLUME XI, for Model 40-124, Code 121, with these changes, applies to Model 40-124, Code 122.

SCHEMATIC NUMBER	DESCRIPTION	PART No. CODE 122
1	Antenna Transformer	32-3404
1A	Tubular Condenser (.0015 mfd.)	30-4555
1B	Loop Assembly	32-3411
2	Tuning Condenser	31-2450
3	Mica Condenser (800 mmfd.)	30-1135
4	Not used.	
5	Tubular Condenser (.05 mfd.)	30-4519
6	Resistor (150 ohm, 1/2 watt)	33-115336
6A	Resistor (150 ohm, 1/2 watt)	33-115336
6B	Tubular Condenser (.05, .05 mfd.)	30-4522
6C	Resistor (47,000 ohms, 1/2 watt)	33-347339
7	Tubular Condenser (.05 mfd.)	30-4519
21	Choke and Condenser Assembly (2 mfd.)	76-1034

SCHEMATIC NUMBER	DESCRIPTION	PART No. CODE 122
1	Antenna Transformer	32-3404
1A	Tubular Condenser (.0015 mfd.)	30-4555
1B	Loop Assembly	32-3405
2	Tuning Condenser	31-2450
3	Mica Condenser (800 mmfd.)	30-1135
	Cabinet	10432B



IF-455 KC
TUNING IN WITH...

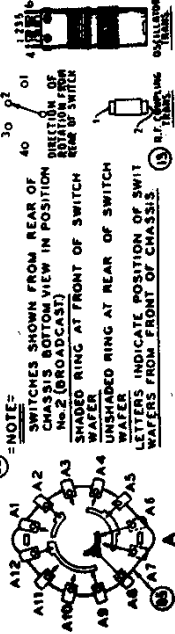
FOR TUNER
SEE INDEX

ELECTRICAL CONNECTIONS FOR SECOND LAMP...
SEE SERVICE BULLETIN No. 332 FOR MECHANICAL ADJUSTMENTS OF
INTEREST-RELEASE LAMP... PART No. 35-101.

MODELS 40-508, 40-509

Beginning with Run "5" receivers, the converter tube is changed from a type 6J8C octal to a 7J7 loktal. The tube sockets are changed from Part No. 27-6120 to Part No. 27-6129.

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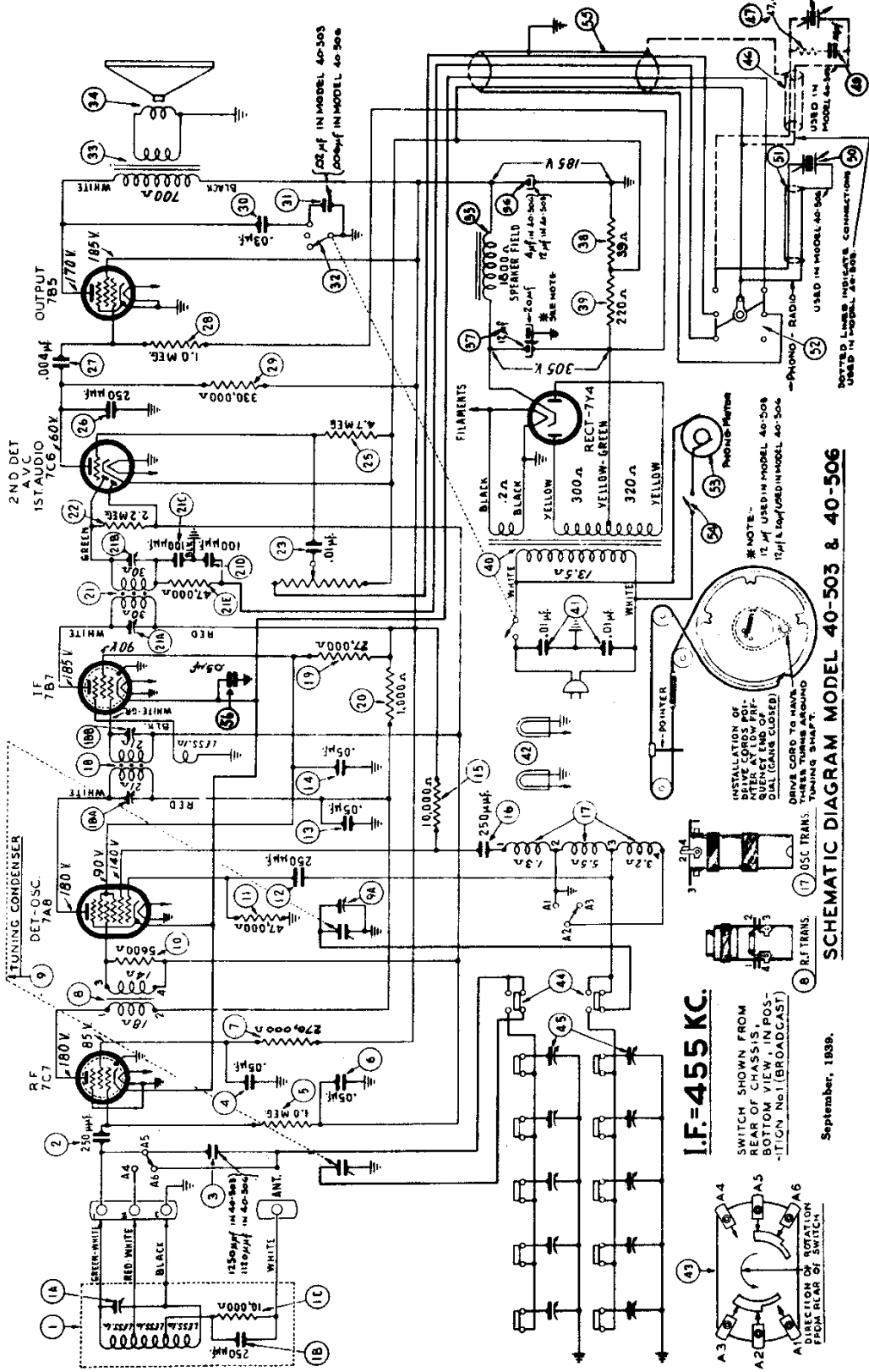


NOTE: - PINCHES SHOWN FROM REAR OF CHASSIS, BOTTOM VIEW IN POSITION OF SHADOWED RING AT FRONT OF SWITCH WAFER UNSHADOWED RING AT REAR OF SWITCH WAFER LETTERS INDICATE POSITION OF SWITCH WAFERS FROM FRONT OF CHASSIS

PHILCO RADIO & TELEV. CORP.

MODELS 40-503, 40-506

Voltage Schematic



FOR OTHER DATA, SEE INDEX
 POWER CONSUMPTION:
 Model 40-503—65 watts.
 Model 40-506—65 watts.

SCHEMATIC DIAGRAM MODEL 40-503 & 40-506

September, 1939.

Model 40-503 is assembled in a table model cabinet and consists of a semi-automatic crystal pickup mechanism which will play 10" or 12" records. The pickup is placed on the record automatically when the lid is closed.

Model 40-506 is assembled in a console type cabinet and consists of a manually operated crystal pickup and will play 10" or 12" records. An automatic switch is provided on this model that starts the phonograph motor when the pickup is lifted from the mounting.

I.F.=455 KC.

SWITCH SHOWN FROM REAR OF CHASSIS, BOTTOM VIEW, IN POSITION 'NO.1' (BROADCAST)

