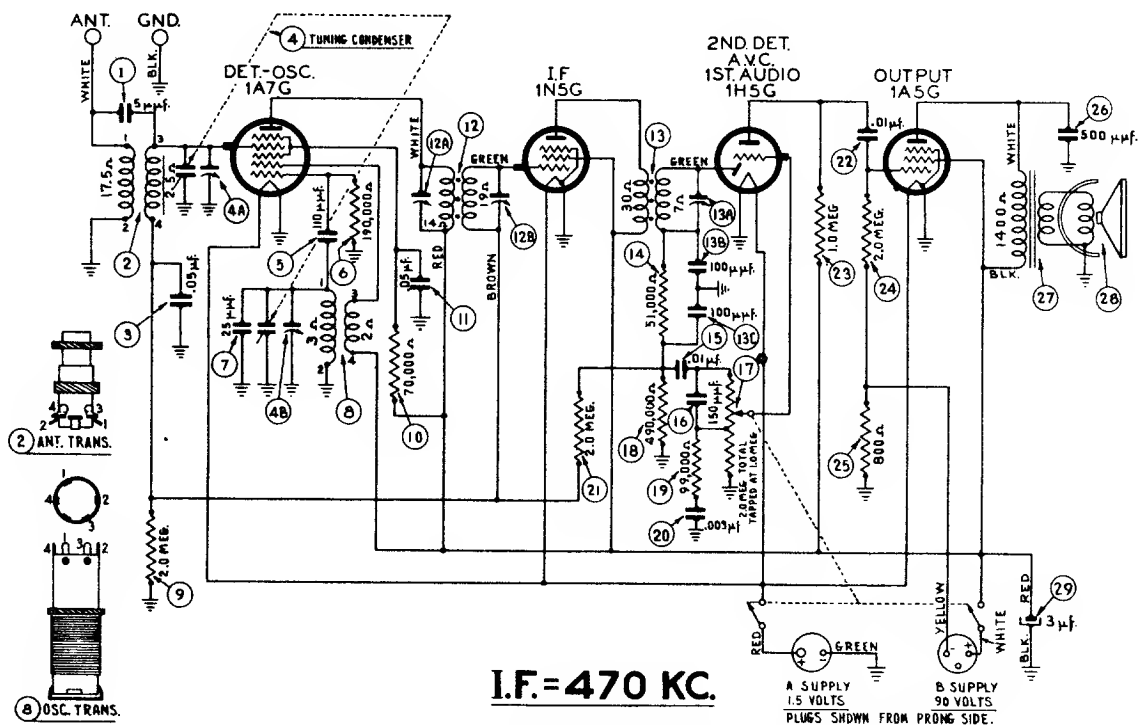
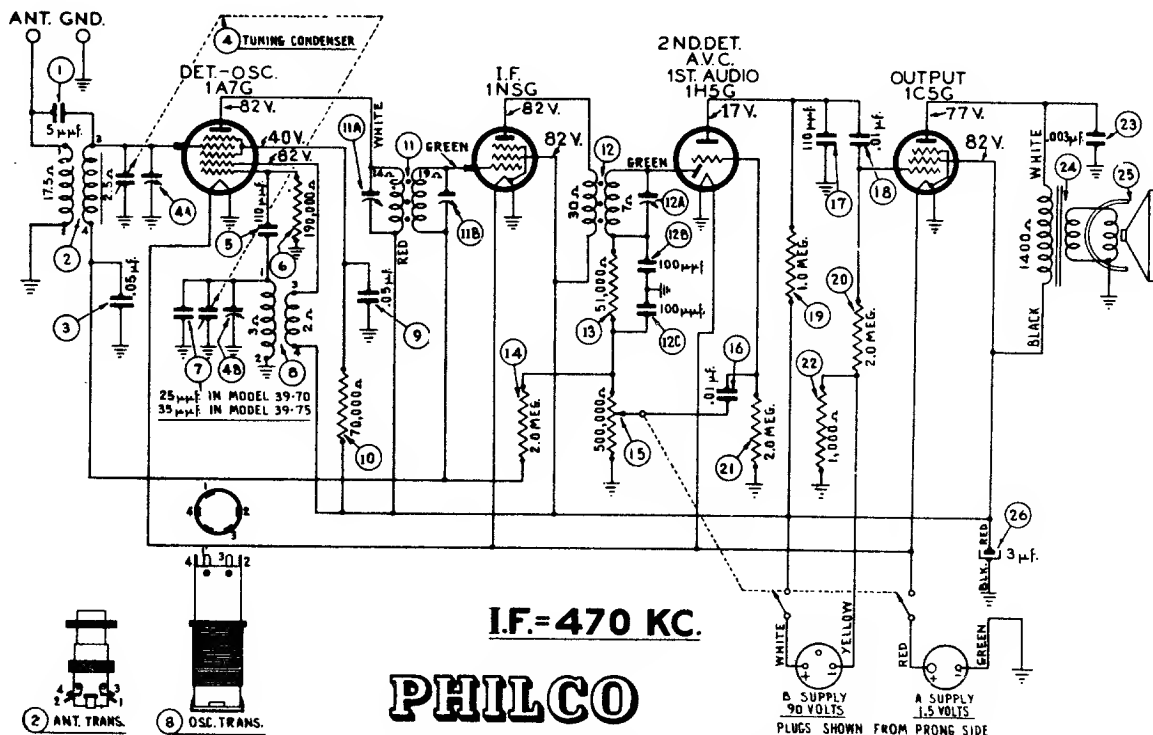




Philco Radio & Television Corp.

| | | | |
|----------------------------|---------------------|-----------------|------------------------------|
| | Model: 39-70 | Chassis: | Year: Pre August 1939 |
| | Power: | Circuit: | IF: |
| | Tubes: | | |
| | Bands: | | |
| Resources | | | |
| Beitmans 1939 105 | | | |
| Beitmans 1939 106 | | | |
| Riders 10 (X) PHILCO 10-25 | | | |
| Riders 10 (X) PHILCO 10-26 | | | |



PROCEDURE FOR MODELS 39-70 AND 39-75

| Operations in Order | SIGNAL GENERATOR | | | RECEIVER | | |
|------------------------|--------------------------------------|----------------------------|-----------------|-----------------|--------------------|------------------------|
| | Output Connections to Receiver | Dummy Antenna Note A | Dial Setting | Dial Setting | Control Setting | Adjust Compensators |
| 1 | 1A7G Grid | .1 mfd. | 470 K. C. | 580 K. C. | Vol. Max. | 13A, 12B, 12A |
| 2 | Ant. (White) | 225 mfd. | 1550 K. C. | 1550 K. C. | Vol. Max. | 4B, 4A |

PHILCO RADIO & TELEV. CORP.

MODELS 39-70, Code 121,
39-75, Code 121, 122
Schematic, Sockset, Trimmers
Chassis

Alignment Notes

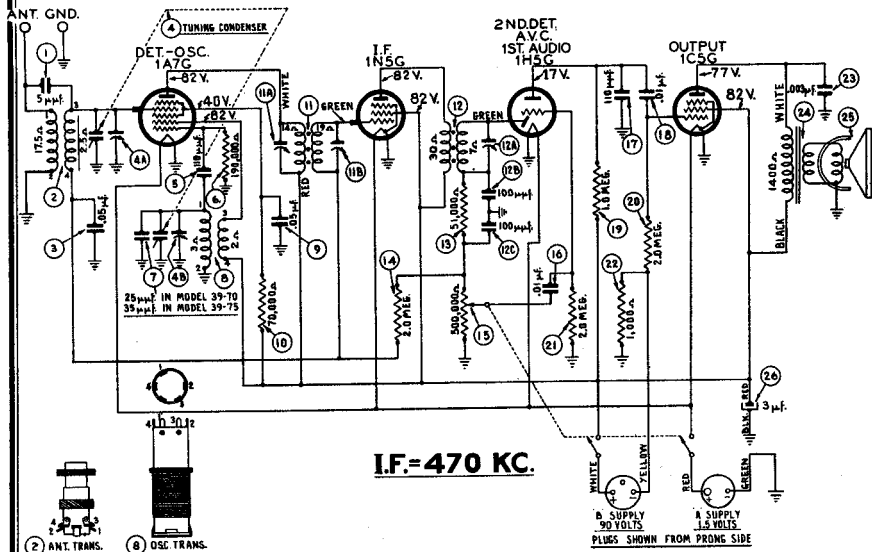
NOTE A—The "Dummy Antenna" consists of a condenser or resistor connected in series with the signal generator output lead (high side). Use the capacity or resistance as specified in each step of the above procedure.

NOTE B—DIAL CALIBRATION: In order to adjust the receiver correctly, the dial must be aligned to track properly with the tuning condenser.

Model 39-70 and 39-80—To adjust the dial proceed as follows: Turn the tuning condenser to maximum capacity (plates fully meshed). With the tuning condenser in this position, set the pointer horizontally across the dial.

Model 39-75—With the tuning condenser in the maximum capacity position (plates fully meshed), loosen the coupling screws connecting the push-button unit to the condenser. The pointer is then set on the extreme left edge of the index line (low frequency end of the scale) with the tuning condenser fully closed. The gang is then opened until the pointer is at the right edge of the index line. The push-button shaft is then turned counter-clockwise to its "stop." With the tuning condenser and push-button shaft in these positions tighten the coupling set screws.

NOTE C—The locations of the compensators in Models 39-70, 39-75 and 39-80 are shown in Figs. (1), (2) and (3) respectively.



SCHEMATIC DIAGRAM MODEL 39-70 & 39-75

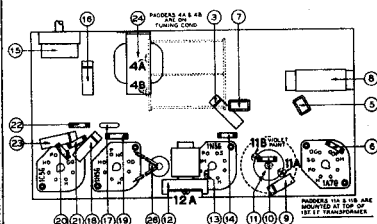


Fig. 1. Compensator and Part Locations
Model 39-70, Code 121
Underside of Chassis

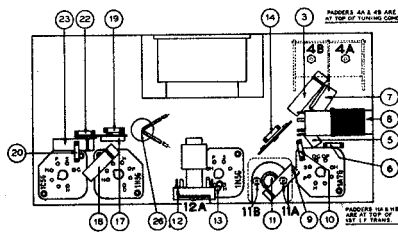


Fig. 2. Compensator and Part Locations
Model 39-75, Code 121-122
Underside of Chassis

MODELS 39-70, Code 121,
39-75, Code 121, 122
Alignment, Parts List
MODEL 39-80, Code 121
Alignment

PHILCO RADIO & TELEV. CORP.

REPLACEMENT PARTS

Models 39-70, Code 121, and 39-75, Codes 121-122

| Sl. No. | Description | Part No. |
|---------|--|------------|
| 1 | Condenser (5 mmf. mica) (Part of No. 3). | 10-1067 |
| 2 | Autotransformer (Condens. No. 2). | 32-3080 |
| 3 | Condenser (.05 mf. tubular). | 10-4131 |
| 4 | Resistor (500 ohms, 1/2 watt). | 10-1068 |
| 5 | Tuning Condenser Assembly, 39-75. | 11-2245 |
| 6 | Condenser (5 mmf. mica). | 10-1067 |
| 7 | Resistor (100,000 ohms, 1/2 watt). | 33-419-139 |
| 8 | Condenser (25 mf. mica). | 30-70 |
| 9 | Condenser (15 mmf. silver plated mica, 39-75). | 10-1067 |
| 10 | Oscillator Transformer, 35-70. | 10-1113 |
| 11 | Condenser (500 ohms, 1/2 watt). | 12-1019 |
| 12 | Condenser (500 ohms, 1/2 watt). | 10-1067 |
| 13 | Condenser (.05 mf. tubular). | 10-4444 |
| 14 | Resistor (700 ohms, 1/2 watt). | 11-270-139 |
| 15 | Resistor (30,000 ohms, 1/2 watt). | 12-2841 |
| 16 | 1st. P. Transformer Assembly, 39-75. | 12-1078 |
| 17 | Resistor (500 ohms, 1/2 watt). | 12-1078 |
| 18 | Resistor (51,000 ohms, 1/2 watt). | 33-131-139 |

| Qty. | Description | Part No. | Price |
|-------|--|----------|----------|
| 14 | Resistor (20 megohms, 1/2 watt) | 31-62033 | 31-62033 |
| 14 | Volume Control and On-Off Switch, 50-70 | 31-5289 | 31-5289 |
| 14 | Volume Control and On-Off Switch, 50-70 | 31-5289 | 31-5289 |
| 14 | Condenser (.05 mfd. tubular) | 30-4372 | 30-4372 |
| 14 | Condenser (.05 mfd. tubular) | 30-4372 | 30-4372 |
| 14 | Resistor (10 mfd. mini. watt) | 30-4372 | 30-4372 |
| 14 | Resistor (10 megohm, 1/2 watt) | 31-52033 | 31-52033 |
| 14 | Resistor (10 megohm, 1/2 watt) | 31-52033 | 31-52033 |
| 14 | Resistor (20 megohms, 1/2 watt) | 31-20333 | 31-20333 |
| 14 | Resistor (20 megohms, 1/2 watt) | 31-20333 | 31-20333 |
| 14 | Condenser (.005 mfd. tubular) | 30-4409 | 30-4409 |
| 14 | Condenser (.005 mfd. tubular) | 30-4409 | 30-4409 |
| 24 | Output Transformer and Voice Coil Assembly | 12-7795 | 12-7795 |
| 30-70 | 30-70 S.P.R. Pin No. 26-1435 | 16-4090 | 16-4090 |
| 30-70 | 30-70 S.P.R. Pin No. 26-1435 | 16-4092 | 16-4092 |
| 30-70 | 30-70 S.P.R. Pin No. 26-1442 | 16-4090 | 16-4090 |
| 30-70 | 30-70 S.P.R. Pin No. 26-1442 | 16-4092 | 16-4092 |
| 30-70 | 30-70 S.P.R. Pin No. 26-1442 | 30-2146 | 30-2146 |
| 30-70 | 30-70 S.P.R. Pin No. 26-1442 | 30-2146 | 30-2146 |

MISCELLANEOUS PARTS

Model 39-70, Code 121

| | |
|-------------------|---------|
| Bezel Window | 27-5417 |
| Cable (Battery) | 41-3427 |
| Dial | 27-5416 |
| Dial Drive Cord | 31-2317 |
| Dial Drive Spring | 28-8751 |
| Dial Pointer | 28-5468 |
| Knob | 27-4132 |

| | |
|--------------------------------------|---------|
| On-Off Indicator Parts— | |
| Hub and Lever | 38-9658 |
| Toggle Link and Brkt. Assy. | 38-9700 |
| Spring (Toggle Link and Brkt. Assy.) | 28-8925 |
| Snap Fastener | 56-1156 |
| Pulley (Tuning Condenser) | 28-6662 |
| Pulley Screw (Tuning Condenser) | W-1400 |
| Shaft Assy. (Tuning) | 11-2390 |
| *Speaker ("B" Cabinet) | 36-1435 |
| *Speaker ("F" Cabinet) | 36-1447 |

Model 39-75, Code 121-122

| | |
|---|---------|
| Automatic Tuning Unit Complete..... | 31-2282 |
| Bezel (Dial)..... | 40-166 |
| Bezel Gasket (Dial)..... | 27-9174 |
| Bezel (Push-Button)..... | 28-5929 |
| Bezel Gasket (Push-Button)..... | 27-9218 |
| Dial..... | 27-5420 |
| Dial Pointer..... | 28-5934 |
| Dial Drive Cord..... | 31-2275 |
| Dial Drive Cord Spring..... | 28-8919 |
| Dial Drive Drum (Tuning Condenser)..... | 31-2281 |

| | |
|--|---------|
| Knob (Volume)..... | 27-4753 |
| Knob (Tuning)..... | 27-4750 |
| Knob Screw (Tuning)..... | 28-6882 |
| Push-Button..... | 27-4749 |
| Push-Button Spring..... | 28-8918 |
| Sleeve-Short (Tuning Shaft, Code 121-122)..... | 28-6887 |
| *Speaker (T Cabinet)..... | 36-1442 |
| Socket (1A7G)..... | 27-6099 |
| Socket (6 prong)..... | 27-6086 |
| Socket (7 prong)..... | 27-6087 |

Model 39-75, Code 122

| | |
|---|---------|
| Extension Shaft (Volume)..... | 18-8641 |
| Extension Shaft (Tuning)..... | 18-8928 |
| Extension Sleeve—Long (Tuning Shaft)..... | 18-6935 |

| | |
|-------------------------------|---------|
| *Speaker (Speaker) | 27-6115 |
| *Speaker (Code 122) | 36-1447 |
| *Spring (Retaining Vol. Knob) | 28-8915 |

Specifications

[illegible]

Alignment of Compensators

EQUIPMENT REQUIRED:

- (1) Signal Generator: Philco Model 97 Signal Generator which has a fundamental frequency range from 115 to 36,000 kHz.
- (2) Oscilloscope: Philco Model 97 Oscilloscope.
- (3) Counter: Philco Model 97 Circuit Tester, incorporates a sensitive output meter and is recommended.
- (3) Philco Free Handle Screw Driver, Part No. 27-7039.

OUTPUT METER: The Philco 97 Output Meter is connected to the plate and screen terminals of the type IC35 tube in Models 10 and 30-75 (145G Model 30-80) and adjusted for the 0 to 30 V and 0 to 250 mA scale.

COMPENSATORS: The compensators in the tabulation below, in the locations of the compensators are shown on page 2. If the output meter pointer goes off scale, adjust the compensators.

PROCEDURE FOR MODELS 39-70 AND 39-75

| OPERATIONS | | SIGNAL GENERATOR | | | RECEIVER | | | |
|------------|---------------------|--------------------------------|----------------------|--------------|--------------|-----------------|----------------------|----------------------|
| 1 | Operations in Order | Output Connections to Receiver | Dummy Antenna Note A | Dial Setting | Dial Setting | Control Setting | Adjust Compensators | Special Instructions |
| 2 | | 1A/7 Grid Ant. (White) | 1 mid. 25 mid. | 470 K. C. | 580 K. C. | Vol. Max. | 12A, 11B, 11A 4B, 4A | Note B Note C |

| PROCEDURE FOR MODEL 34-40 | | | | | | | | |
|---------------------------|---------------------|--------------------------------|----------------------|--------------|--------------|-----------------|----------------------|----------------------|
| OPERATIONS | | SIGNAL GENERATOR | | | RECEIVER | | | |
| 1 | Operations in Order | Output Connections to Receiver | Dummy Antenna Note A | Dial Setting | Dial Setting | Control Setting | Adjust Compensators | Special Instructions |
| 2 | | 1A/7 Grid Ant. (White) | 1 mid. 25 mid. | 470 K. C. | 580 K. C. | Vol. Max. | 13A, 12B, 12A 4B, 4A | Note B Note C |

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