COLOR CODE

Changes on this chassis have been made on several different occasions and to distinguish how one chassis differs from another, a location mark is placed on each one changed. This identification mark is a dot of paint found on the end rivet of the tube socket strip. Looking at the chassis from the back the mark is at the extreme left of the 226 tube socket.

If the chassis has no mark it is understood that it is an early set.

Yellow Mark The chassis having the first changes may be identified by the yellow indicating mark. This involves four changes.

1. A "dual volume control" in place of the single type. The new volume control is made in two sections, with five lugs. The section nearest the chassis, having two lugs, works exactly the same as the single volume control. The section behind the first, having three lugs, is placed in the first audio circuit to reduce the audio amplification and operates in tandem with the antenna volume control.

2. An interchange of position of the two audio transformers. The re-arrangement of the audio transformers has not altered their connections in the circuit.

3. An addition of a "dual half microfarad condenser" and two carbon resistors in the B circuit of the detector and first audio tubes. The 40,000 ohm black resistor with one section of the dual condenser is placed in the detector circuit (224) and the 15,000 ohm blue resistor with the other section of the dual condenser is placed in the first audio circuit (226). You will note that the yellow and blue leads in the cable connecting to the terminal strip have been interchanged.

4. A change in the location of the grounding of No. 1 lug on the condenser block. This lug is now grounded to the condenser case with a short piece of bare wire.

Red Mark (Serial Number 39,000-42,999)

All chassis having a red mark on the rivet of the tube socket strip have all of the changes mentioned above and in addition, have a one-tenth microfarad condenser connected from ground to one side of the 110 volt line.

A peculiarity that may be experienced by the addition of this condenser is a loud hum on the extreme tuning in only when the antenna wire coming from the set is connected to ground. This can be eliminated by reversing the plug in the socket. Also be sure your antenna is not grounded, either by some other set being connected to your aerial or through any other means.

Green Mark (Serial Number 43,000 and up)

All Chassis with a green mark on the rivet of the tube socket strip contain the above changes and in addition have a change in the "combination phonograph switch" circuit. This changed circuit makes use of only the audio system of the set for phonograph reproduction, whereas the original circuit included the detector tube. The Phonograph, Radio, On, and Off positions of the switch are the same as in the early sets. To obtain maximum volume and best tonal quality a pick-up coupling transformer should be used to match the pick-up used.
**FIXED CONDENSERS**

Condensers C1 to C9 inclusive are in the filter block. C1, C2, C3, C4, and C7 are in the main filter circuits. C8 by-passes R3, which is the 8,600 ohm resistor in the first audio plate circuit. C6 by-passes R11, the cathode bias resistor on the first audio stage. C8 by-passes the grid bias on the 2A7 tubes, (obtained through R4 and R12) and C9 by-passes the 10,000 ohm resistor R2 in the detector plate circuit.

C10 and C19 are located on the resistor-condenser terminal strip (See Fig. 4) and are both .006 mfd. moulded condensers. C10 is in the tone control circuit, while C19 is the coupling condenser in the resistance coupled amplifier.

C11 and C12 are .001 mfd. moulded condensers, and are used in the detector plate circuit filter. C11 and C14 are the two units in the dual ½ mfd. by-pass condenser.

C15, C16 and C18 are located in the triple 5 mfd. condenser case. C17 is a single .3 mfd. condenser, and is mounted alongside of the triple .3 mfd. condenser case.

<table>
<thead>
<tr>
<th>Code Fig.</th>
<th>Stock No.</th>
<th>C (mfd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 to C9 inclusive</td>
<td>00518</td>
<td>9 Mfd. total, Filter block.</td>
</tr>
<tr>
<td>C10 and C19</td>
<td>00222</td>
<td>.006 Mfd. White point cap.</td>
</tr>
<tr>
<td>C11 and C12</td>
<td>00211</td>
<td>.001 Mfd. Grey point cap.</td>
</tr>
<tr>
<td>C13 and C14</td>
<td>00266</td>
<td>Dual .3 Mfd. Metal case.</td>
</tr>
<tr>
<td>C15, C16, C18</td>
<td>00171</td>
<td>Triple .3 Mfd. Metal case.</td>
</tr>
<tr>
<td>C17</td>
<td>00170</td>
<td>.3 Mfd. Metal case.</td>
</tr>
</tbody>
</table>
NOTE -
THE STRAP BETWEEN THE + AND - BINDING POSTS ON BP2
SHOULD BE REMOVED ONLY WHEN THESE POSTS ARE CON-
NECTED TO A CONTROL UNIT FOR SUPPLYING CUR-
RENT TO OTHER APPARATUS.

MODELS D-95508, 8-B, 8-C

TRANSFORMERS, VACUUM TUBES, RETARDATION COILS, ADJUSTMENT FOR LINE VOLTAGE, AC LINE SWITCH, AND OUTPUT TRANSFORMERS.
MODEL Weston

WESTON ELECTRICAL INSTRUM'T CORP.

Adj Coil for 500 M.V.
8 Volt Res

- Mod 301 DC Voltmeter
- Mod 476 AC Volt

Res for 8 Volt Range

Toggle Switch

Binding Post for AC Voltmeter

600 MA Shunt - # 388 Spool

30 MA SHUNT - # 69 Spool

600 V Res

60 V Res

Mod 301 DC Voltmeter

"PRESS FOR 120 C" Push button opens
short switch - makes C voltrange = 120

LD Smit 6-15-28

Grid Pos

Cathode Pos

Cathode

Plate

Grid Post

Plate

Negative Filament

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MODEL Weston 555
MODEL Weston 564
WESTON ELECTRICAL INSTRUM'T CORP.

MODEL 555

MODEL 564 OHMMETER & VOLTOMETER

Schematic diagram of the Weston Model 564 Volt-Ohmmeter. Note the connections of the toggle switches in the center.

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Note:
Solid contacts on bi-polar switch next to panel.
WHOLESALE RADIO SERVICE CO., INC.

Duo-Symphonic Junior - 1931

Great Duo-Symphonic

Duo-Symphonic Junior - 1931

MODEL Duo-Symphonic
Junior 1931
MODEL Great Duo-
Symphonic

Line Vol-
tage
Vol. Ctrl.
Full

D S Jr 1931

Great Duo-Symphonic
Power Transformer and Terminal Plate Assembly.
**MODEL 11, 12, 14**

1st Type Receiver Schematic

**MODEL 12**

2nd Type Receiver Schematic

---

**ZENITH RADIO CORP.**

---

*Note: The image contains a detailed schematic diagram of the ZENITH Model 11, 12, and 14 receivers. The diagram includes various components and connections, indicating the electrical setup of the receivers.*

---

**Sets having serial numbers greater than 14776 have the switch at in the A+ wire.**
ZENITH—Models 33X-362X
Line Voltage 115

<table>
<thead>
<tr>
<th>TUBE</th>
<th>TYPE</th>
<th>CNS.</th>
<th>VOLTS</th>
<th>TUBE IN SOCKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>227</td>
<td>1st, 2nd, 3rd</td>
<td>2.65</td>
<td>105</td>
<td>6, 5, 6, 6, 6</td>
</tr>
<tr>
<td>227</td>
<td>4th, 5th, 6th</td>
<td>2.65</td>
<td>105</td>
<td>5, 6, 6, 6, 6</td>
</tr>
<tr>
<td>227</td>
<td>7th, 8th, 9th</td>
<td>2.65</td>
<td>105</td>
<td>5, 6, 6, 6, 6</td>
</tr>
<tr>
<td>227</td>
<td>10th, 11th</td>
<td>2.65</td>
<td>94</td>
<td>5, 6, 3, 6, 3</td>
</tr>
<tr>
<td>271A</td>
<td>2nd, 3rd, 4th</td>
<td>4.90</td>
<td>170</td>
<td>5, 6, 10, 4</td>
</tr>
<tr>
<td>280</td>
<td>Rectifier</td>
<td>4.00</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

CX-380 used in separate power unit.
Line Voltage 115—Volume Control Full for R. F. and Center for A. F. on All Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Line Voltage</th>
<th>Volume Control</th>
<th>Rectifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET</td>
<td>1 AF</td>
<td>1 RF</td>
<td>2 AF</td>
</tr>
<tr>
<td>PILOT</td>
<td>6.0 V.</td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

CX-380 used in separate power unit.
ZENITH RADIO CORP.

MODELS 35-PX, 35-APX, 352-PX, 352-APX

MODEL ZE-18

Line Voltage 115

Wiring Diagram Model 37-A

6 C TUBE ELECTRIC SET

- Wiring diagrams and circuitry for Zenith radios and televisions.

- Technical specifications and part numbers for various Zenith models.

- Diagrams showing internal components and connections for model 37-A.

- Information on line voltage and circuit connections for Zenith products.

- Detailed electrical schematics for model ZE-18.

- Diagrams illustrating 6-tube electric sets.

- Technical drawings and illustrations for vintage Zenith products.

- Manuals and documentation for Zenith electronic devices.

- Historical references to Zenith Radios and Televisions.
ZENITH—Models 35P-35AP-37A-352P-352AP
Line Voltage 115
MODEL ZE-12 for 39, 39-A, 40-A
MODEL ZE-16 for 392, 392-A
MODEL ZE-16 Filter for above

For further data on Models 39, 39-A, 40-A see page 674.
Schematic

Model 52, 53
For Voltage and Resistance Data See Index.

Model 54
For Voltage and Resistance Data See Index.

ZENITH RADIO CORP.

Page 1-14 ZENITH

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MODEL 52,55,54,55
Voltage - Resistors
MODEL ZE-50
Power Unit

Color Code of Resistors in 50 Series

- Green: 5000 ohms
- Red: 10000 ohms
- Yellow: 400 ohms
- Black: 2000 ohms
- Blue: 4000 ohms
- White: 25000 ohms
- Pink: 100000 ohms

ZENITH - Models 52-55-54-55
Voltage Divider 63-105 has a total resistance of 6000 ohms.
A resistance of 350 ohms is used at one end and 850 ohms from the other.
The remaining section has a resistance of 2350 ohms.
Manganin filter units are used.

Screen grid voltage on the detector tube is adjusted by a 50 volt pot, an electrostatic voltmeter would be needed to show true voltage.
ZENITH—Models 60-61-62-64-67-602-613-622-642-672

Line Voltage 115
Set on 120 Volt Tap—Volume Control Position Full On
*The screen grid voltage on the detector tube is actually 50 volts but an electrostatic voltmeter would be needed to show true voltage

For wiring diagram of power supply ZE 60 used—
with the Series 60 receivers see index
Model ZE-70

ZE 70 FOR 50 TO 60 CYCLE USE
ZE 702 FOR 25 TO 40 CYCLE USE

Model ZE-60
For wiring diagram of the power pack ZE-70 and ZE-702 for series 70 receivers see Index


For wiring diagram of the power pack ZE-70 and ZE-702 for series 70 receivers see Index


For wiring diagram of the power pack ZE-70 and ZE-702 for series 70 receivers see Index

INSTALLATION OF TONE CONTROL ON MODEL TO SERIES

Remove variable condenser shield. Un solder lead from lower terminal on rocking stator and pull this lead through the base to under side of chassis.

Turn chassis up side down; remove the two machine screws from rear side of coil assembly base on the first R. F. coil can only.

With chassis inverted, multicord terminal strip facing the operator, remove the one machine screw from right hand end of chassis which is screwed through the chassis frame and into the R. F. coil assembly base.

Un solder the two remaining leads, coming from the first R. F. coil can; the one at the antenna choke terminal; the other at the S. A. tip jack; also the copper shielding on lead going through last R. F. coil can.

The R. F. coil assembly base may now be forced back about one-half inch and this will permit the last R. F. coil can and its base to be lifted upward from the chassis.

Measure off a point midway between the volume control shaft and the rocking stator shaft centers; and 15/16" from chassis bottom (base plate removed.)

Center punch and drill a .375" dia. hole to take the 500,000 ohm variable resistor tone control shaft, and mount so soldering terminals on same point toward, and are next to the volume control.

Be sure the Textolite Insulating Strip is attached to the back of the tone control unit to prevent the terminals from shorting when the R. F. coil can is again installed.

Mount the .01 mfd. fixed condenser by soldering one of its terminals directly to one of the outside terminals of the six point audio transformer; be sure to get the secondary side, or grid of the 245 output tube.

This condenser will be self-supporting.

Wire from the remaining .01 fixed condenser terminal to any one of the two terminals on the variable resistance tone control unit.

Wire from the remaining terminal on this unit to the other side of the same secondary winding direct on six point audio transformer, or grid of the other 245 output tube.

Technically speaking this produces a series circuit consisting of a .01 mfd. fixed condenser and a 500,000 ohm variable resistor in shunt to the secondary circuit of the six point audio transformer, or from grid to grid of the 245 output tubes.

Run your two twisted leads through the slot in the R. F. coil assembly base, behind and to the right of the last R. F. socket (still viewing the chassis as before - inverted.)

Press the Textolite Insulating Strip on the back of the tone control unit into place and inspect to see that no terminals are shorted.

Replace the last R. F. coil can and base by first threading through the leads in the assembly base and work the coil can base into place.

Insert the two screws you removed from this point on the base. Force the coil assembly base back into position, and insert the machine screw into same through chassis end.

Resolder all leads previously removed and put condenser shield in place. Be sure to resolder the copper shielding on the lead from last R. F. coil can previously unsoldered.

Turning tone control knob clockwise produces the trough effect and counter-clockwise the bass.

A small tone control escutcheon plate will be included and should be mounted on the cabinet panel to read correctly, the cabinet panel having been drilled with a 5/32" hole 1 1/16" from base centrally located between the resonance and volume controls.

WIRING DIAGRAM

ZENITH RADIO CORP.
MODELS 82, 89 (60 cycle) and 822, 892 (25 cycle) ZENITH HYPER METRON RECEIVERS.

Models 82 and 89 Zenith Receivers operate on 105 to 125 volts, 50 to 60 cycle alternating current. Models 822 and 892 operate on 105 to 125 volts, 25 to 40 cycle alternating current (A.C.). The power supply ZE80 is used on 50 to 60 cycle current. The power supply ZE802 is used on 25 to 40 cycle current.
ZENITH RADIO CORP.

VIEW FACING OUTSIDE
OF POWER SUPPLY.

POWER SUPPLY - ZE 80

22-71  1 uF Condenser:  (Power Bias)  1.10
22-72  16 uF Condenser can be identified by Blue marking on anode  2.50
25-73  16 uF Condenser:  (Electrolytic)  5.50
Note: 16 uF Condenser can be identified by Blue marking on anode  1.60
65-124  10,400 Ohm Voltage Divider Resistor  1.04
57-226  Bias Plate  3.50
57-242  Bias Socket & Guide Plate  1.04

78-32  Four Prong Socket for Rectifier  9.00
95-79  Power Transformer:  (60 Cycle)  15.50
95-93  Power Transformer:  (25 Cycle)  7.00
136-2  2 Amp Fuse  7.00
S-696  Terminal Strip Assem.  (Five)  20.00
S-698  Terminal Strip Assem.  (Four)  3.50
S-700  Fuse Receptacle & A.C. Outlet Plate  3.50
MS-149  Power Choke  3.50

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## MODEL 80 Hypermetron

### ZENITH RADIO CORP.

### HYPERMETRON

#### Variable Condenser Assembly

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-79</td>
<td>Five Gang Variable Condenser</td>
<td>20.00</td>
</tr>
<tr>
<td>S-829</td>
<td>Dial Drum Assembly</td>
<td>1.50</td>
</tr>
<tr>
<td>26-21</td>
<td>Calibrated Dial Strip</td>
<td>2.20</td>
</tr>
<tr>
<td>S-703</td>
<td>Dial Lamp Bracket</td>
<td>4.50</td>
</tr>
<tr>
<td>100-18</td>
<td>2 1/2 Volt Dial Lamp</td>
<td>2.25</td>
</tr>
<tr>
<td>11-2</td>
<td>Dial Control Cable</td>
<td>0.05</td>
</tr>
<tr>
<td>80-70</td>
<td>Dial Control Cable Tension Spring</td>
<td>0.01</td>
</tr>
</tbody>
</table>

#### Fixed Condensers

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
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<tbody>
<tr>
<td>22-81</td>
<td>Single .01 mf Condenser</td>
<td></td>
</tr>
<tr>
<td>22-82</td>
<td>Single .01 mf Condenser</td>
<td></td>
</tr>
<tr>
<td>22-91</td>
<td>Single .03 mf Condenser</td>
<td></td>
</tr>
<tr>
<td>22-92</td>
<td>Single .5 mf Condenser</td>
<td></td>
</tr>
<tr>
<td>22-99</td>
<td>Dual .1 Audio Coupling</td>
<td></td>
</tr>
<tr>
<td>S-392</td>
<td>Antenna Series Condenser</td>
<td></td>
</tr>
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</table>

#### Resistor Values

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>63-113</td>
<td>250M Ohm Resistor</td>
<td>0.35</td>
</tr>
<tr>
<td>63-121</td>
<td>100M &quot;</td>
<td>0.35</td>
</tr>
<tr>
<td>63-131</td>
<td>400 &quot;</td>
<td>0.35</td>
</tr>
<tr>
<td>63-136</td>
<td>50M &quot;</td>
<td>0.35</td>
</tr>
<tr>
<td>63-143</td>
<td>4M &quot;</td>
<td>0.35</td>
</tr>
<tr>
<td>63-145</td>
<td>800 &quot;</td>
<td>0.35</td>
</tr>
<tr>
<td>63-146</td>
<td>2000 &quot;</td>
<td>0.35</td>
</tr>
</tbody>
</table>

#### R.F. Coils

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-441</td>
<td>R. F. Coupling Coil</td>
<td>1.00</td>
</tr>
<tr>
<td>S-836</td>
<td>Preselector Coil</td>
<td>1.40</td>
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<tr>
<td>S-837</td>
<td>1st R. F. Coil</td>
<td>1.00</td>
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<tr>
<td>S-838</td>
<td>2nd, 3rd R. F. &amp; Det. Coils</td>
<td>1.00</td>
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<tr>
<td>20-7</td>
<td>Detector Choke</td>
<td>0.50</td>
</tr>
<tr>
<td>20-8</td>
<td>R. F. Choke</td>
<td>0.50</td>
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#### Shields & Bases

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<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-87</td>
<td>Tube Shield Can Base</td>
<td>0.05</td>
</tr>
<tr>
<td>126-62</td>
<td>Coils</td>
<td>0.05</td>
</tr>
<tr>
<td>126-59</td>
<td>R. F. Coil Shield Can</td>
<td>0.25</td>
</tr>
<tr>
<td>126-61</td>
<td>Tube Shield Can</td>
<td>0.20</td>
</tr>
<tr>
<td>MS-153</td>
<td>Variable Condenser Shield</td>
<td>0.75</td>
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#### Miscellaneous

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>44-4</td>
<td>Phono Connector Base</td>
<td>0.30</td>
</tr>
<tr>
<td>78-30</td>
<td>Five Prong Floating Socket</td>
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</tr>
<tr>
<td>78-31</td>
<td>Five Prong Stationary Socket</td>
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</tr>
<tr>
<td>78-32</td>
<td>Four Prong Stationary Socket</td>
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</tr>
<tr>
<td>57-161</td>
<td>UY Socket Guide Plate</td>
<td>0.01</td>
</tr>
<tr>
<td>57-242</td>
<td>Four &amp; Five Prong Socket Guide Plates</td>
<td>0.03</td>
</tr>
<tr>
<td>63-128</td>
<td>Volume Control</td>
<td>1.50</td>
</tr>
<tr>
<td>63-147</td>
<td>Tone Control</td>
<td>1.25</td>
</tr>
<tr>
<td>85-26</td>
<td>Three Point Switch Base Less Shaft</td>
<td>0.45</td>
</tr>
<tr>
<td>143-9</td>
<td>Three Point Switch Bushing with Contact Arm</td>
<td>0.35</td>
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<tr>
<td>117-31</td>
<td>Three Point Switch Lever Arm</td>
<td>0.01</td>
</tr>
<tr>
<td>S-695</td>
<td>Multicord &amp; Terminal Plate Assembly</td>
<td>2.00</td>
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<tr>
<td>S-715</td>
<td>Multicord Terminal Plate Only</td>
<td>0.50</td>
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<tr>
<td>52-23</td>
<td>Multicord only</td>
<td>1.25</td>
</tr>
<tr>
<td>MS-147</td>
<td>1st Stage Push Pull Transformer... (5 Lead)</td>
<td>5.50</td>
</tr>
<tr>
<td>MS-148</td>
<td>2nd Stage Push Pull Transformer... (6 Lead)</td>
<td>5.50</td>
</tr>
</tbody>
</table>
ZENITH PAGE 1-23

ZENITH RADIO CORP.

MODEL AH, CH, RH
Schematic
Voltage - Chassis

Models AH, CH, RH, 90 (1932)

Schematic Voltage - Chassis

Voltage readings taken with Western type 166 meter. Manual volume control in maximum position and antenna and ground disconnect. Line voltage 112.
BALANCING CHASSIS

Every Zenette Superhetedryne is carefully balanced on laboratory equipment before the set leaves the factory and should not require further attention. However, in the event that some part of the receiver has been changed or the adjustments shifted by mishandling it may be done as follows: Procure an oscillator which is calibrated to 1500 and 550 kilocycles. It is necessary that it be accurate, otherwise the receiver dial cannot be set properly. It will be best to remove the chassis from the cabinet for this operation in order to reach the oscillator padding condenser adjustment. (See figure 4) The test oscillator should be coupled to the antenna and ground posts of the receiver by the two leads now being furnished by the manufacturers of commercial oscillators. Although very good results may be had simply by judging audible response from the speaker, a more accurate method is to employ an output meter attached to the speaker transformer.

Before balancing any Zenette Superhetedryne the tuning condenser gang should be turned to maximum mesh position, namely the 550 kilocycle position as far as possible. When the condenser is turned as far as it will go in this direction the dial index light must point to a position one division or channel beyond the 550 kilocycle line on the dial. If this condition does not already exist the index bracket should be adjusted up or down as the case may be.

The test oscillator should first be set to exactly 1500 kilocycles and attached to the antenna and ground posts, after which the receiver dial is also set to the 1500 kilocycle marking. With the manual volume control set to maximum volume, the oscillator trimmer (see figure 3) is adjusted to give maximum response in the speaker. The first detector section is next (see figure 3). This is the right hand section from the front. Its trimmer must also be varied for maximum response.

It will be noted that the center section of the condenser gang does not have a vernier adjustment. It is thus provided by the antenna compensating condenser. This section will automatically resonate by adjusting the antenna compensator after the set is connected to the aerial to which it is permanently employed. It is done by tuning to a very weak station at between 1500 and 1300 kilocycles on the dial and turning the volume control to the position of maximum volume. The trimmer knob varies the capacity of a small series condenser and should be turned for greatest signal strength by turning first to the right and then to the left and allowed to sit at a point giving maximum output.

After making the above adjustment at 1500 kilocycles it will be necessary to then set the oscillator at 550 kilocycles. Tune the set to 550 kilocycles and rock the receiver dial back and forth over the test oscillator signal at the same time adjusting the oscillator padding condenser (see figure 4). An adjustment of the padding will be found which gives maximum output. When this has been done it is necessary to go back to 1500 kilocycles on both the test oscillator and dial and readjust the vernier if necessary.

In case a test oscillator is not available the service man may use a weak station on the low frequency end and another station on the high frequency end with the manual volume control in the maximum position.

### RESISTORS

<table>
<thead>
<tr>
<th>No.</th>
<th>PART</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>63-121</td>
<td>100M ohm</td>
<td>Detector Plate</td>
</tr>
<tr>
<td>63-131</td>
<td>400 ohm</td>
<td>1st Det. Cathode</td>
</tr>
<tr>
<td>63-135</td>
<td>25M ohm</td>
<td>Power Tube Grid</td>
</tr>
<tr>
<td>63-136</td>
<td>50M ohm</td>
<td>A. V. C. Plate</td>
</tr>
<tr>
<td>63-139</td>
<td>500M ohm</td>
<td>Os. Grid.</td>
</tr>
<tr>
<td>63-140</td>
<td>1 meg ohm</td>
<td>A. V. C. Grid</td>
</tr>
<tr>
<td>63-151</td>
<td>15M ohm</td>
<td>Voltage Divider</td>
</tr>
<tr>
<td>63-155</td>
<td>1M ohm</td>
<td>R. F. 1st Det. I. F.</td>
</tr>
<tr>
<td>63-160</td>
<td>100M ohm</td>
<td>Power Tube Bias</td>
</tr>
</tbody>
</table>

### CAPACITORS

<table>
<thead>
<tr>
<th>No.</th>
<th>PART</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-82</td>
<td>.001 mf</td>
<td></td>
</tr>
<tr>
<td>22-92</td>
<td>.5 mf</td>
<td></td>
</tr>
<tr>
<td>22-99</td>
<td>.1 mf</td>
<td>(Dual)</td>
</tr>
<tr>
<td>22-104</td>
<td>.0001 mf</td>
<td></td>
</tr>
<tr>
<td>22-107</td>
<td>.5 mf</td>
<td></td>
</tr>
<tr>
<td>22-108</td>
<td>.001 mf</td>
<td></td>
</tr>
<tr>
<td>22-110</td>
<td>.1 mf</td>
<td></td>
</tr>
<tr>
<td>22-111</td>
<td>.03 mf</td>
<td></td>
</tr>
<tr>
<td>22-112</td>
<td>.1 mf</td>
<td></td>
</tr>
<tr>
<td>22-115</td>
<td>.1 mf</td>
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</tr>
<tr>
<td>22-118</td>
<td>6. mf Electolytic</td>
<td>C.V.</td>
</tr>
<tr>
<td>22-119</td>
<td>6. mf Electolytic</td>
<td>H.V.</td>
</tr>
<tr>
<td>22-121</td>
<td>8. mf</td>
<td></td>
</tr>
</tbody>
</table>
Resistors

63-135  25M ohm resistor (Red, Green end, Orange Dot)
63-127  250M  "  "  "  "  "  Yellow  "  "
63-151  15M  "  "  "  "  Brown  "  "  Orange  "
63-152  43M  "  "  "  "  Yellow Orange  "  "
63-159  4K  "  "  "  "  Black and Red  "
63-162  100  "  "  "  "  Flat wire wound black  "
63-163  320  "  "  "  "  "  Red  "

Fixed Condensers

22-91  .03 mfd. condenser
S-392  Antenna series condenser
22-103  Five section bypass condenser
22-108  .002 mfd. condenser
22-117  .5  "  "  "  bypass"
22-118  6.  "  "  "  (electrolytic low voltage)
22-119  6.  "  "  "  (high)
Resistors

63-135 25M Ohm Resistor.......................... (Red, Green, End, Orange Dot).
63-136 50M " " (Green, Black " " " )
63-137 250M " " (Red, Green " Yellow ")
63-140 1 Meg" " (Brown, Black " Green )
63-149 400 " " (Metal Mounting-Large)
63-150 10M " " (Brown, Black End, Orange Dot)
63-151 15M " " (Brown, Green " )
63-152 43M " " (Yellow, Orange End"
63-155 10M Volume Control

Fixed Condensers

- 0.01 mf Condenser.......................... (Detector Plate) (Electrolytic High Voltage).
- 0.02 mf Condenser.......................... (Audio Coupling) (Filter Condenser).
- 0.05 mf Condenser.......................... (Electrolytic Low Voltage) (Bypass Condenser).

Note: High voltage condenser identified by red dot on anode.