ALIGNMENT INSTRUCTIONS

Top and bottom covers should be in place. Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.

1. **Dummy Antenna**
   - High side to antenna receptacle, low side to chassis.
   - **Output**
     - 202.5 KC (400° Mod)
     - High Freq. End Stop
     - Across Voltage Coils
     - Adjust for maximum output.

2. **Fig. 1**
   - Thru dummy to antenna receptacle.
   - **Output**
     - 160 KC
     - Adjust for maximum output.

3. **Fig. 1**
   - Thru dummy to antenna receptacle.
   - 1100 KC
   - **Output**
     - 1/8” from High Freq. End Stop
     - Across Voltage Coils
     - Adjust for maximum output.

4. ****
   - **Output**
     - 1510 KC
     - High Freq. End Stop

5. ****
   - **Output**
     - 6000 KC
     - 5 micro-volts
     - Tune for 6000 KC signal
     - Adjust for 1.79 volts output.

6. With radio installed in car and antenna fully extended, tune in a weak station near 1200 KC and adjust A7 for maximum output.

PUSHBUTTON ADJUSTMENT

1. Pull pushbutton out.
2. Tune manually to desired station.
3. Press pushbutton in firmly.
4. Repeat for remaining buttons.

HOWARD W. SAMS & CO., INC. · Indianapolis 5, Indiana

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guarantee by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of these parts.
PARTS LIST AND DESCRIPTIONS
TUBES (GENERAL ELECTRIC, SYLVANIA)

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>USE</th>
<th>TYPE</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>RF Amplifier</td>
<td>12A6</td>
<td></td>
</tr>
<tr>
<td>V2</td>
<td>Converter</td>
<td>12A6</td>
<td></td>
</tr>
<tr>
<td>V3</td>
<td>IF Amplifier</td>
<td>12R16</td>
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<tr>
<td>V4</td>
<td>Det.-AVC-AF Amp.</td>
<td>12DL8</td>
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TRANISTORS

<table>
<thead>
<tr>
<th>ITEM No.</th>
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<th>TYPE</th>
<th>USE</th>
<th>REPLACEMENT DATA</th>
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</thead>
<tbody>
<tr>
<td>X1</td>
<td>2N176</td>
<td></td>
<td>Output</td>
<td>CBS-21005</td>
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<tr>
<td>X2</td>
<td>2N176</td>
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<td>Output</td>
<td>CBS-21005</td>
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ELECTROLYTIC CAPACITORS

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<thead>
<tr>
<th>ITEM No.</th>
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<th>VOLT.</th>
<th>MOTOROLA PART No.</th>
<th>REPLACEMENT DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1A</td>
<td>200</td>
<td>500</td>
<td>250R04-007T</td>
<td>WP500, BI</td>
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<tr>
<td>C1B</td>
<td>200</td>
<td>500</td>
<td>250R04-007T</td>
<td>WP500, BI</td>
</tr>
</tbody>
</table>

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mfd. for Mica and Ceramic Capacitors.

C1     | 1000 | 500  | 210R07-001        | 200R07-001       |
C2     | 100  | 500  | 210R07-001        | 200R07-001       |
C3     | 100  | 500  | 210R07-001        | 200R07-001       |
C4     | 1000 | 500  | 210R07-001        | 200R07-001       |
C5     | 1000 | 500  | 210R07-001        | 200R07-001       |
C6     | 250  | 500  | 210R07-001        | 200R07-001       |
C7     | 250  | 500  | 210R07-001        | 200R07-001       |
C8     | 250  | 500  | 210R07-001        | 200R07-001       |
C9     | 250  | 500  | 210R07-001        | 200R07-001       |
C10    | 250  | 500  | 210R07-001        | 200R07-001       |

CONTROLS

<table>
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<tr>
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<th>USE</th>
<th>RESISTANCE (WATTS)</th>
<th>INSTALLATION NOTES</th>
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<tbody>
<tr>
<td>R1, R2</td>
<td>B</td>
<td>440</td>
<td></td>
</tr>
<tr>
<td>R3, R4</td>
<td>B</td>
<td>440</td>
<td></td>
</tr>
</tbody>
</table>

CHASSIS—TOP VIEW

* "RTA-LOC" Equivalent: F746L, G2045, RUS415, RUS207.
1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Battery voltage maintained at 1.2 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION.

DC COIL RESISTANCE VALUES UNDER 1 OHM NOT SHOWN ON SCHEMATIC DIAGRAM.

A PHOTOFAC SIMPLIFIED NOTATION SCHEMATIC

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