

IF ALIGNMENT WITH OSCILLOSCOPE—"FM" CHANNEL


| Step | Input Signal Connected to | Input Frequency | Band and Pointer Setting | Trimmer Adjustment | Comments |
|------|--|------------------------|--------------------------|--------------------|--|
| 1 | 6SG7 converter grid in series with 22 mmf. | 4.3 MC & ±200 KC Sweep | "FM" Band 42 MC | C52 C53 | Connect high side of oscilloscope in series with 470,000 ohm resistor to R19 at point "B." Connect low side to chassis ground. Peak trimmers for resultant curve shown  |
| 2 | 6SG7 converter grid in series with 22 mmf. | 4.3 KC & ±200 KC Sweep | "FM" Band 42 MC | C35 C36 | |
| 3 | Repeat Step 1 | | | | |
| 4 | Repeat Step 2 | | | | |
| 5 | 6SG7 converter grid in series with 22 mmf. | 4.3 MC & ±200 KC Sweep | "FM" Band 42 MC | C60 C58 | |

Table II IF ALIGNMENT WITH METER—"FM" CHANNEL

| Step | Input Signal Connected to | Input Frequency | Band and Pointer Setting | Trimmer Adjustment | Comments |
|------|--|---------------------------|--------------------------|--------------------------|---|
| 1 | 6SG7 converter grid in series with 22 mmf. | Unmodulated 4.3 MC signal | "FM" Band 42 MC | C52 C53 C35 C36 | Connect the 10-volt scale of a 20,000 ohm per volt voltmeter in series with a 470,000 ohm resistor between point "B" and ground. Peak all trimmers for maximum output using just enough input signal to give a satisfactory output reading. |
| 2 | Repeat Step 1 | | | | |
| 3 | 6SG7 converter grid in series with 22 mmf. | Unmodulated 4.3 MC signal | "FM" Band 42 MC | C60 C58 | Connect the 10-volt scale of a 20,000 ohm per volt voltmeter in series with a 470,000-ohm resistor between points "A" and ground. <i>With C60 purposely detuned</i> , peak C58 for maximum meter reading. Align C60 for the 0 voltage point where the meter reading changes from a positive to negative value. Use as low a signal input as necessary to give a satisfactory meter reading. |

Table III RF ALIGNMENT—"FM" CHANNEL

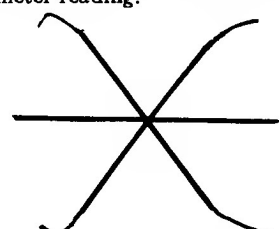
| Step | Input Signal Connected to | Input Frequency | Band and Pointer Setting | Trimmer Adjustment | Comments |
|------|-----------------------------|--------------------------|--------------------------|--------------------|--|
| 1 | Direct to "FM" Antenna Post | Unmodulated 49 MC signal | "FM" Band 49 MC | C4 (Osc.) | Connect the 10-volt range of a 20,000 ohm per volt voltmeter in series with a 470,000-ohm resistor to point "B." The other side of the voltmeter lead connects to chassis ground. Peak trimmers for maximum meter reading using just enough signal input to give satisfactory meter reading.  |
| 2 | Direct to "FM" Antenna Post | Unmodulated 49 MC Signal | "FM" Band 49 MC | C2 C30 | |
| 3 | Direct to "FM" Antenna Post | Unmodulated 43 MC Signal | "FM" Band 43 MC | C76 (Osc.) | |
| 4 | Direct to "FM" Antenna Post | Unmodulated 43 MC Signal | "FM" Band 43 MC | C75 C77 | |
| 5 | Direct to "FM" Antenna Post | Unmodulated 46 MC Signal | "FM" Band 46 MC | C1 | |
| 6 | Repeat Step 1 | | | | |
| 7 | Repeat Step 2 | | | | |

Fig. 4

Table IV IF, "BC," and "SW" ALIGNMENT—"AM" CHANNEL

| Step | Input Signal Connected to | Input Frequency | Band and Pointer Setting | Trimmer Adjustment | Comments |
|------|---|-------------------|--------------------------|--------------------------|---|
| 1 | 6SG7 converter grid in series with .05 mfd. | 455 KC Modulated | "BC" Band 550 KC | C50 C39 C34 C33 | Connect 5.0-volt AC voltmeter across the voice coil of the speaker. Peak all trimmers for maximum output. All RF alignments must be made with the chassis in the cabinet. *When aligning the SW oscillator trimmer, use maximum capacity peak. The image frequency should appear at 18,710 KC. **Rock gang condenser when making alignment. |
| 2 | Capacity Coupled | 17.8 MC Modulated | "SW" Band 17.8 MC | C23* | |
| 3 | Capacity Coupled | 17.8 MC Modulated | "SW" Band 17.8 MC | C19** C11 | |
| 4 | Capacity Coupled | 1500 KC Modulated | "BC" Band 1500 KC | C24 | |
| 5 | Capacity Coupled | 1500 KC Modulated | "BC" Band 1500 KC | C17 C8 | |
| 6 | Capacity Coupled | 580 KC Modulated | "BC" Band 580 KC | C25** | |
| 7 | Repeat Steps 4 and 5 | | | | |

A-FM COMBINATION RECEIVERS

Models LF-115 & LF-116

A-FM PHONOGRAPH COMBINATION RECEIVERS

Models LFC-1118, LFC-1128 & LFC-1228