

General Electric Co.

Model: F66

Chassis:

Year: Pre October 1937

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

Riders Volume 8 - GE 8-27

Riders Volume 8 - GE 8-28

MODELS F-63, F-65, F-66
Socket, Trimmers, Chassis
Alignment

GENERAL ELECTRIC CO.

I. F. ALIGNMENT WITH OSCILLOSCOPE

Band Switch Setting	Input Frequency	Point of Input	Trimmer	Comments
1. Band "B"	465 K.C. Sweep	I.F. Grid	2nd I.F. Sec. (C-10) 2nd I.F. Pri. (C-9)	Gang condenser plates wide open—connect audio input of oscilloscope to ground and to the junction of R-3 and R-4 of the 2nd I.F. transformer. Adjust all trimmers for maximum amplitude.
2. Band "B"	465 K.C. Sweep	Converter Grid	1st I.F. Sec. (C-7) 1st I.F. Pri. (C-6)	Gang condenser plates wide open—connect output meter to ground and to the junction of R-1 and R-2 of the 1st I.F. transformer. Adjust all trimmers for maximum output.
3. Band "B"	465 K.C. Sweep	Antenna Post	Wave Trap Trimmer (C-2)	Adjust trimmer for minimum amplitude.

I. F. ALIGNMENT WITH OUTPUT METER

1. Band "B"	465 K.C. with Modulation	I.F. Grid	2nd I.F. Sec. (C-10) 2nd I.F. Pri. (C-9)	Gang condenser plates wide open—connect output meter to ground and to the junction of R-1 and R-2 of the 1st I.F. transformer. Adjust all trimmers for maximum output.
2. Band "B"	465 K.C. with Modulation	Converter Grid	1st I.F. Sec. (C-7) 1st I.F. Pri. (C-6)	Gang condenser plates wide open—connect output meter to ground and to the junction of R-1 and R-2 of the 1st I.F. transformer. Adjust all trimmers for maximum output.
3. Band "B"	465 K.C. with Modulation	Antenna Post	Wave Trap Trimmer (C-2)	Adjust trimmer for minimum output.

R. F. ALIGNMENT

1. Band "B"	No adjustments necessary			Close gang plates—Adjust pointer to first line at left and of tuning scale.
2. Band "C"	No adjustments necessary			
3. Band "B"	1500 K.C. Antenna with Modulation	Antenna Post	One trimmer (Front sect. of gang cond.) One trimmer (Rear sect. of gang cond.) One padlock (C-3)	Connect output meter across voice coil—tone control on "base" position—peak trimmers for maximum output with a low input signal.
4. Band "B"	580 K.C. Antenna with Modulation	Antenna Post	One padlock (C-3)	Adjust padlock for a maximum output meter indication in vicinity of 580 K.C. while robbing the gang condenser.
5. Band "B"	Repeat operation No. 3			

L1, L2 and L3 are the components of the "B" band antenna coil and are wound on the same coil form. When operating in the "C" band, L3 and a part of L2 are shorted out by the wave change switch. L4-L6 and L6-L7 are the "B" and "C" band oscillator coils respectively and are wound on the same coil form. The "B" band oscillator grid coil is shorted out by a contact of S-1 when the set is operating on the "C" band.

The intermediate frequency amplifier consists of a 6K7 tube and two transformers, both of which have tuned primaries and secondaries. The output of this amplifier is applied to one plate of the 6H6 diode which is a combined detector, initial bias and automatic volume control tube.

Volume is controlled by the variable potentiometer R-5 in the grid circuit of the 6F5 1st audio amplifier tube. The output of the 6F5 tube is resistance coupled to the grid of the type-41 power amplifier pentode. The plate circuit of the 41 tube is suitably matched to the loudspeaker by means of a step-down output transformer.

Proper bias voltages for the various tubes are obtained by the use of a tapped bleeder circuit across the speaker field L14. One of the cathodes of the 6H6 diode is returned to -3.1 volts on this bleeder circuit in order to provide initial bias to all the tubes controlled by the A.V.C.

Tone Control

When the tone control switch is in the "normal" position, a portion of the output voltage of the reactor is fed back

Tubes

- Oscillator and Converter..... 6A8 Pentagrid converter
- I.F. Amplifier..... 6K7 Triode-grid Super-control Amplifier
- Detector and AVC..... 6H6 Twin Diode
- First Audio Amplifier..... 6F5 High-gain Triode
- Audio Power Amplifier..... 41 Power Amplifier Pentode
- Rectifier..... 80 Full-wave Rectifier
- Dial Lamp..... MADA No. 46

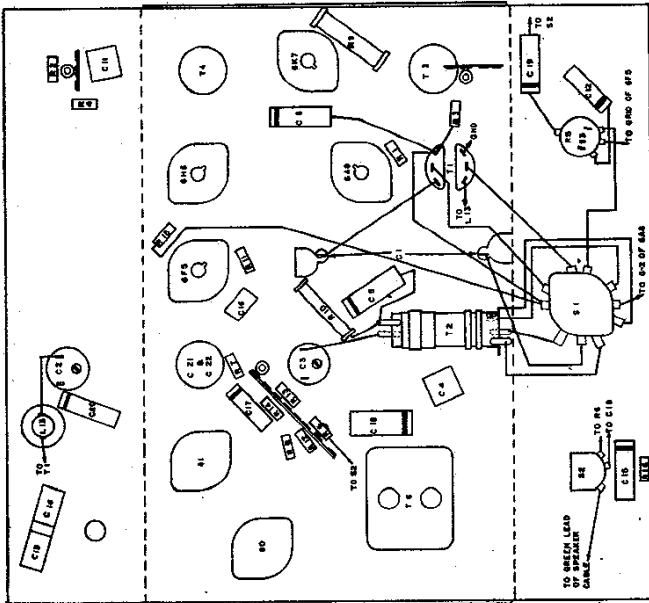


Fig. 2. Chassis Parts Layout

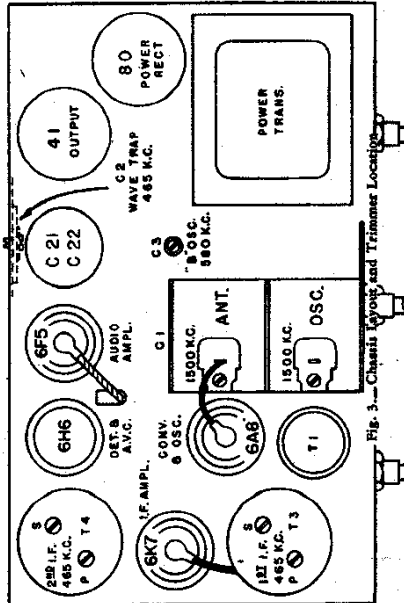


Fig. 3. Chassis Wiring and Trimmer Locations