General Household Utilities Co.

	Model: 671	Chassis:	Year: Pre October 1934
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		

Resources
Riders Volume 5 - GRUNOW 5-11
Riders Volume 5 - GRUNOW 5-12

Courtesy Nostalgia Air

Courtesy Nostalgia Air

SEPTEMBER 1934

Grunow Radio

TEMPORARY SERVICE NOTES & PARTS LIST

CHASSIS TYPE 6D

RECEIVER MODELS 670 & 671

SPEAKER TYPES 8C6 10A5

GENERAL HOUSEHOLD UTILITIES CO.

CHICAGO U.S.A.

31561-1 LITHO. U.S.A.

ALIGNMENT PROCEDURE CHASSIS 6D

GENERAL

The Type 6D Chassis is used in conjunction with the 8C6 speaker in receiver model 670 and with the 10A5 speaker in the model 671 receiver.

This Chassis is a 6 tube all wave (550 to 21800 K.C.) superheterodyne, using 1 - 6D6 tube as an R.F. Amplifier, 1 - 6A7 tube as first Detector and Oscillator, 1 -6D6 tube as a Bi-Selector I.F. Amplifier, 1 - 75 tube acting as a second Detector, Automatic Volume Control and Audio Amplifier, 1 - 42 tube as the Audio Output and an 80 tube for the Rectifier.

The intermediate frequency is 455 K.C. An efficient range switch controls the four ranges in which the receiver operates.

ALIGNMENT

1. Equipment

A - Test Oscillator

A modulated Oscillator capable of producing signals at 455 K.C., 600 K.C., 1400 K.C., 4500 K.C., 12 M.C. and 21 M.C. is necessary for alignment of the Type 6D Chassis.

B - Output Meter

This may be any of the standard output meters on the market but should be sufficiently sensitive to provide a good deflection at low signal strength, and should also incorporate an adjustable shunt so that extremely strong signals may be read.

C - Coupling Means

Coupling Condensers of 200 Mmf., .25 Mfd., and a 400 Ohm resistor should be used when coupling oscillator to receiver during alignment as specified in following paragraphs.

2. Dial Setting

Turn dial knob until condensers are fully meshed. The dial pointer should be on the horizontal line of the dial.

3. I. F. Alignment

Connect signal lead of test Oscillator to grid of the 6A7 (1st Detector Tube) through .25 Mfd. Condenser. Connect the ground lead to the Chassis.

A - Set Dial pointer to 1400 K.C. and range switch on position "A". (Broadcast).

B - Place test Oscillator in operation at 455 K.C. Turn receiver volume control and tone control to maximum.

C - Attenuate test Oscillator output to lowest value consistent with obtaining a readable indication on output meter.

D - Adjust five I.F. Trimmers, (A1, A2, A3, A4, A5), located on the I.F. transformers on top of the Chassis, (2 Trimmers are on top of each transformer and the fifth is at the lower side of the 1st I.F. transformer, (this is the Bi-Selector I.F. stage), until maximum output is obtained. During alignment, maintain as low a value of signal as will allow obtaining of accurate adjustment.

4. 4500 K.C. Alignment

A - Connect signal lead of test Oscillator through 200 Mmf. Condenser to Antenna binding part.

B - Connect the test Oscillator ground lead to the ground post of Chassis.

C - Turn Range Switch to range "B" and set Dial Pointer to 4500 K.C.

D - Align the following "B" range trimmers: Oscillator (A6), Detector (A7) Antenna (A8).

5. 1400 K.C. Alignment

A - Place test Oscillator in operation at 1400 K.C.

B - Turn Dial to 1400 K.C.

C - Turn Range Switch to range "A".

D - Adjust the following "A" range trimmers: Oscillator (A9), Detector (A10) Antenna (A11).

6. 600 K.C. Alignment

A - Place test Oscillator in operation at 600 K.C.

B - Tune in signal to maximum (this point does not have to be exactly at 600 K.C. setting).

C - Adjust the 600 K.C. Padding Condenser, (A12) in direction of signal increase. At same time rock the tuning condenser back and forth through resonance while adjusting Padding Condenser until maximum output is obtained.

7. 12 M.C. Alignment

A - Connect signal lead of test Oscillator through 400 ohm resistor to Antenna binding post of Chassis.

B - Connect the ground lead to ground terminal of Chassis.

C - Set Range Switch to range "C".

D - Place test Oscillator in operation at 12 M.C.

E - Adjust the following "C" range trimmers: Oscillator (A13), Detector (A14), Antenna (A15).

F - When adjusting the Detector Trimmer (A14) on the "C" range it is necessary to rock the tuning condenser in a manner similar to that required when setting the 600 K.C. Padding Condenser.

G - When adjusting the Oscillator Trimmer on the "C" range with a 12 M.C. signal it will be noted that there are two settings at which the signal will be received. Use the higher frequency setting, that is, the setting at which the trimmer screw is farthest out. On the "A", "B" and "C" range the Oscillator operates at a higher frequency than the incoming signal, and consequently the trimmer capacity will be lower when adjustment is completed.

8. 21 M.C. Alignment

A - Set Range Switch on range "D".

B - Place test Oscillator in operation at 21 M.C.

C - Turn Dial Pointer to 21 M.C.

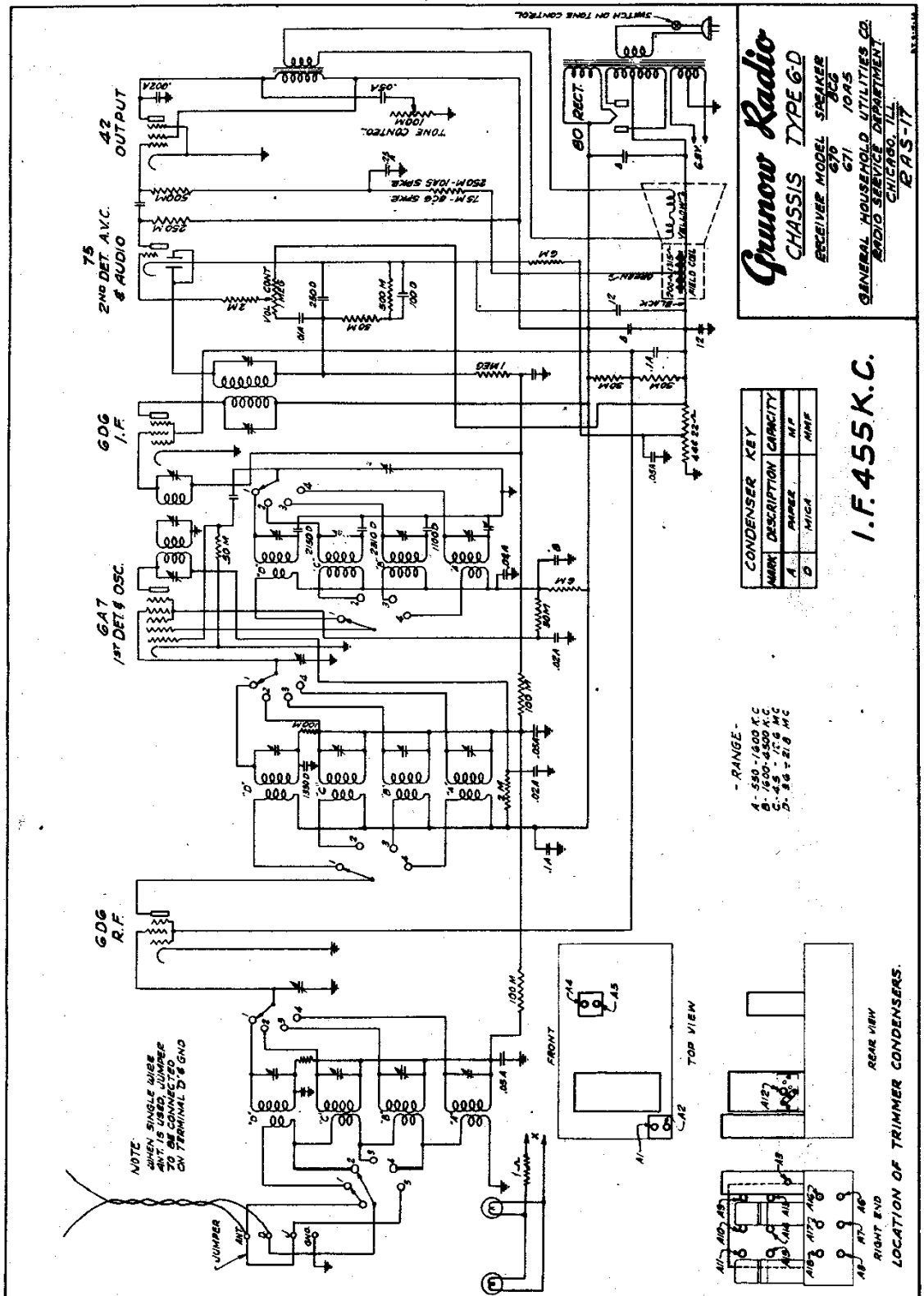
D - Adjust the following "D" range trimmers: Oscillator (A16), Detector (A17), Antenna (A18).

E - When adjusting the Detector Trimmer (A17) on the "D" range it is necessary to rock the tuning condenser back and forth through resonance in the same manner as required when setting the 600 K.C. Padding Condenser.

F - When adjusting the Oscillator trimmer on the "D" range with a 21 M.C. signal it will be noted that there are two settings at which the signal will be received. Use the lower frequency setting, that is, the setting at which the trimmer screw is farthest in. On the "D" range the Oscillator operates at a lower frequency than the incoming signal, and consequently the trimmer capacity will be higher when adjustment is completed.

MODEL 670,671 (6D)
Temporary
Schematic

GENERAL HOUSEHOLD UTILITIES CO.



Courtesy Nostalgia Air