

Hallicrafters, Inc.

Model: S21

Chassis:

Year: Pre 1948

Power:

Circuit:

IF:

Tubes:

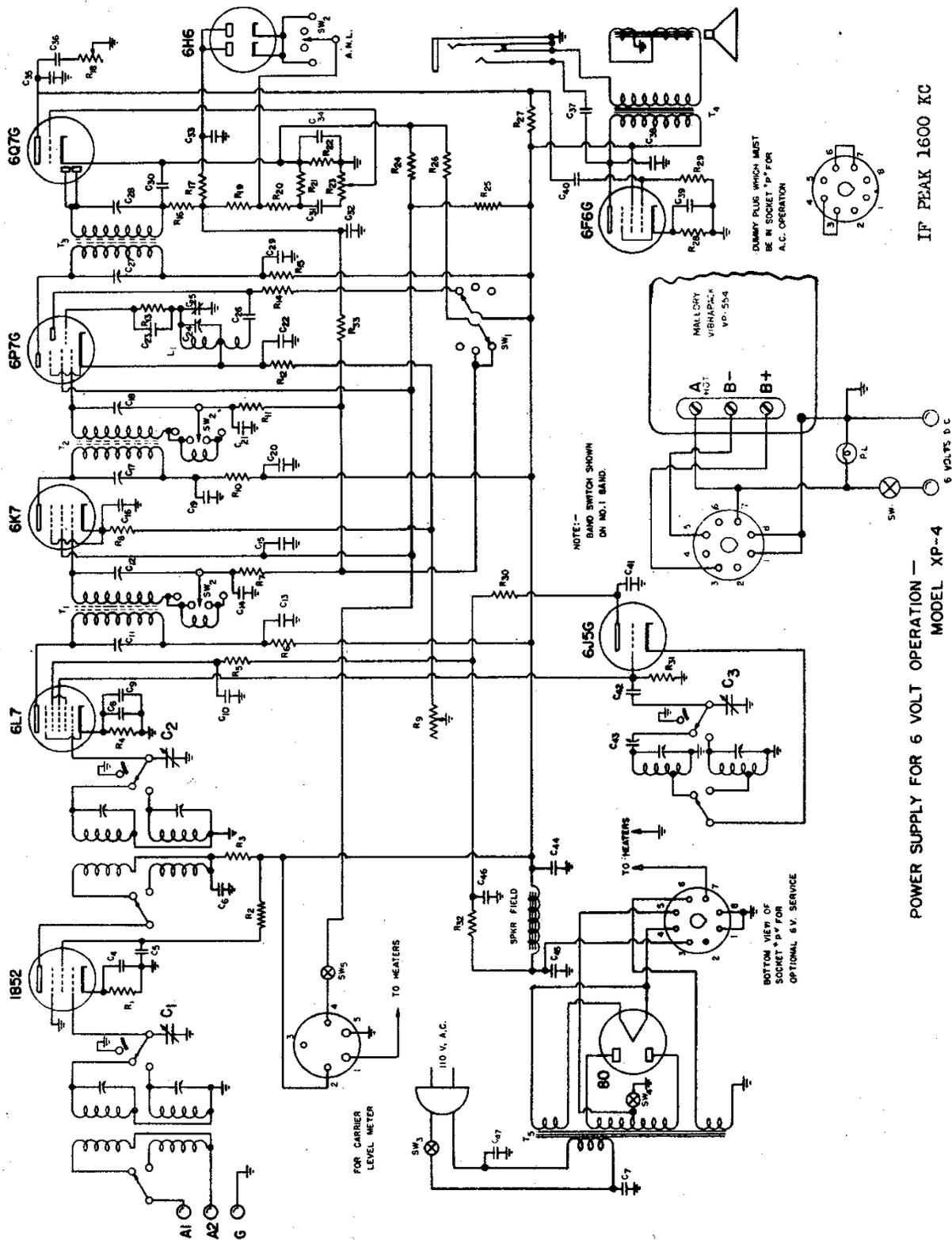
Bands:

Resources

[Riders Volume 15 - HALLICRAFTERS 15-4](#)

[Riders Volume 15 - HALLICRAFTERS 15-5](#)

[Riders Volume 15 - HALLICRAFTERS 15-6](#)



IF PEAK 1600 KC

POWER SUPPLY FOR 6 VOLT OPERATION —
MODEL XP-4

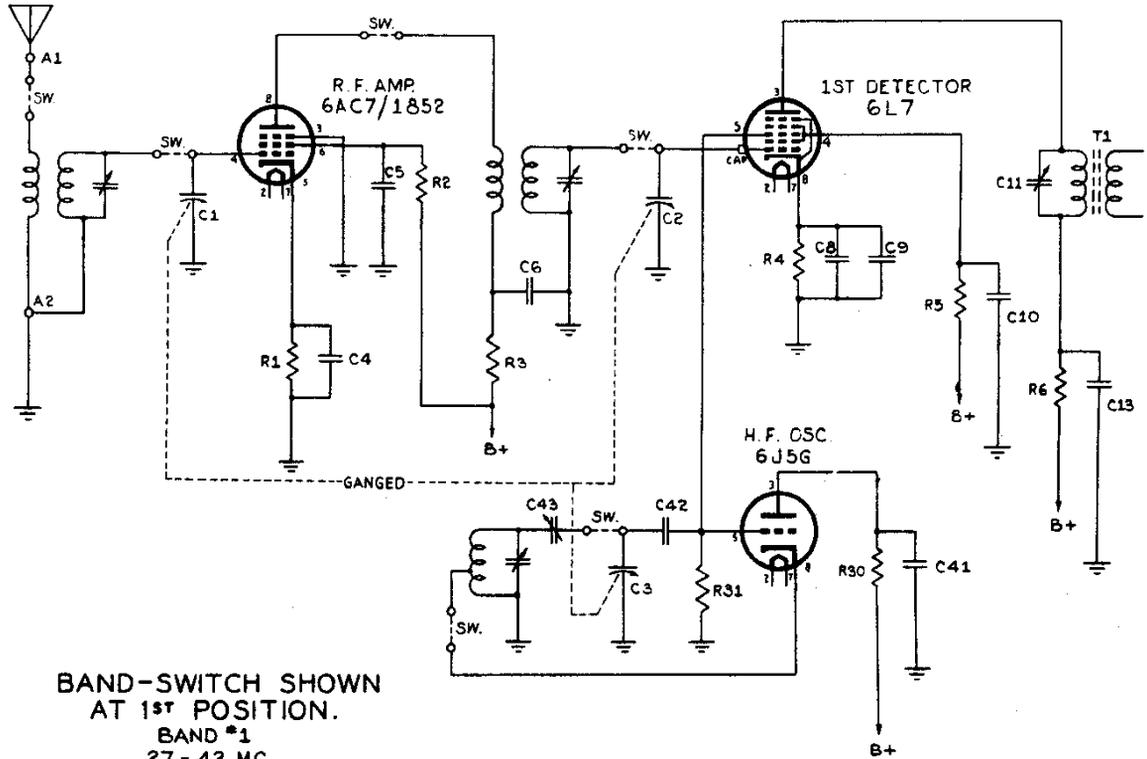
DUMMY PLUG WHICH MUST
BE IN SOCKET "B" FOR
A.C. OPERATION

NOTE:—
BAND SWITCH SHOWN
ON NO. 1 BAND.

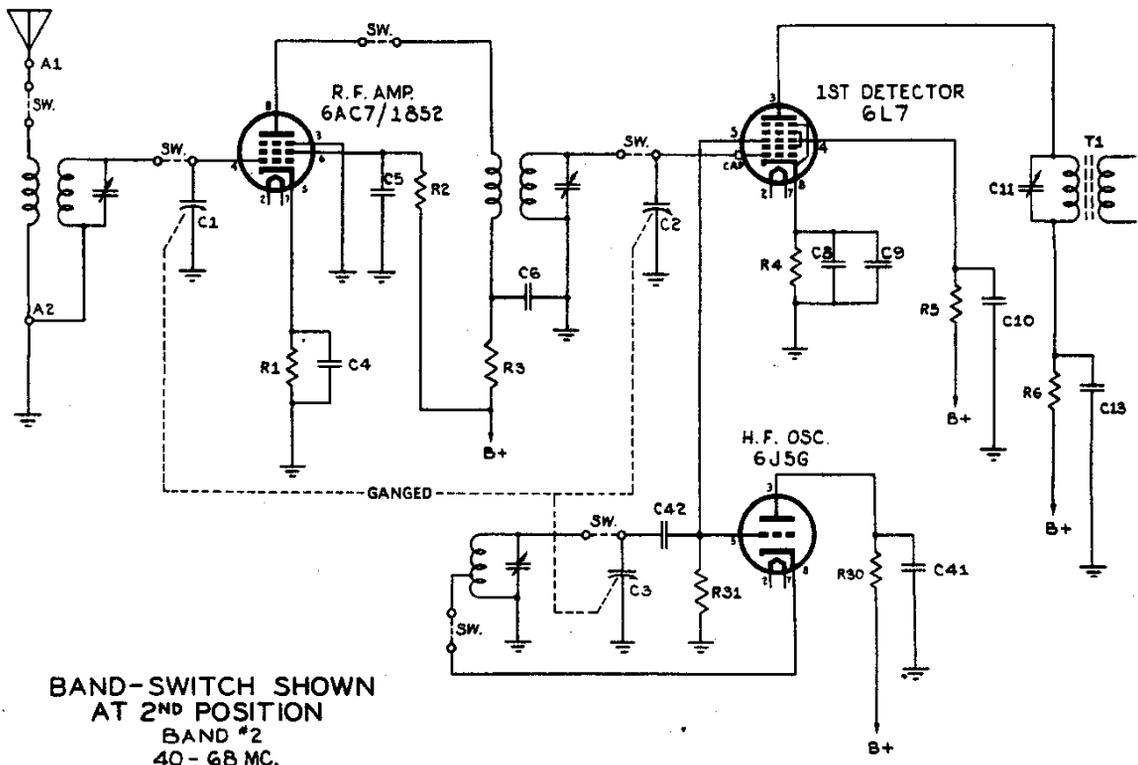
BOTTOM VIEW OF
SOCKET "B" FOR
OPTIONAL 6 V. SERVICE

THE HALLICRAFTERS CO.

MODEL Skyrider 5-10
S21



BAND-SWITCH SHOWN
AT 1ST POSITION.
BAND #1
27 - 42 MC.



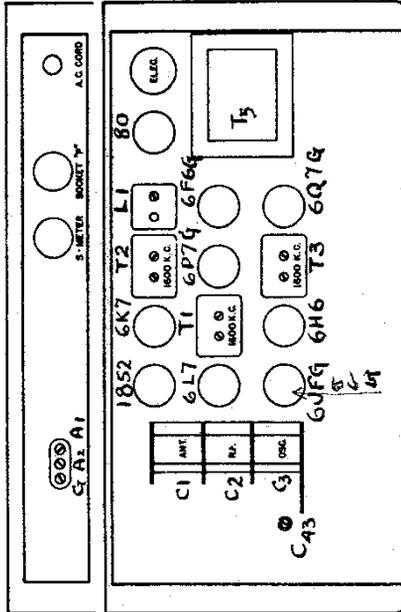
BAND-SWITCH SHOWN
AT 2ND POSITION
BAND #2
40 - 68 MC.

- Band 1 - 27 MC to 42 MC
- Band 2 - 40 MC to 68 MC
- 1852 - R. F. Amplifier
- 6L7 - First Detector
- 6J5 - High Frequency Oscillator
- 6K7 - 1st I. F. Amplifier
- 6P7G - 2nd I. F. Amplifier, B.F.O.
- 6Q7G - 2nd Detector, A.V.C., 1st Stage of Audio
- 6P6G - Audio Output tube
- 80 - Rectifier



1 BANDS :

- C_A ⊗ OSC. C_D ⊗
- C_B ⊗ MIXER C_E ⊗
- C_C ⊗ R.F. C_F ⊗



ALIGNMENT PROCEDURE FOR SKYRIDER "5-10" Model S21

Intermediate Frequency Alignment

Have the controls set as follows:

- Broad-sharp switch to sharp position.
- A.V.C. - B.F.O. switch in "off" position.
- Set R. F. and A. F. gain controls at maximum.
- Set band switch on Band #1.
- Adjust main dial to minimum capacity or #24 on the Vernier scale.
- Remove the 6L7 grid cap - connect the signal generator to this tube, through an .01 mfd condenser.
- Now set the signal generator for 1600 KC output.
- Adjust trimmers on T1, T2, T3 transformer for exact resonance which will be indicated by maximum output.

For adjustment of the Beat Frequency Oscillator turn the knob on the "pitch control" unit until the dot is straight up. Remove modulation from the 1600 KC signal being fed into the I. F. amplifier and then adjust T4 for zero beat.

R. F. Alignment

Replace the 0.1 mfd condenser in series with the generator to the receiver with a 400 ohm resistor. Connect the generator to the A1 terminal on the antenna terminal strip to be found on the rear apron of the chassis. Leave the jumper connected between A2 and G. There is only one pad adjustment on the "5-10" receiver and that is for the low frequency end of Band #1. This pad is adjusted from the top of the chassis.

Band #1

Place the band switch on Band #1. Set the generator and tuning dial to 28 mc and adjust pad C43 for maximum signal. Reset tuning dial and generator to 40 mc and set oscillator trimmer CA. Now recheck pad C43 and trimmer CA until no change in frequency calibration is noted. When this is accomplished adjust trimmers CB, CC for maximum gain. When making these latter adjustments it is advisable to "rock" the tuning control slightly until the point of exact resonance and maximum output is obtained.

Band #2

Set signal generator and tuning dial to 60 mc and adjust oscillator trimmer CD to signal. Then adjust CE, CF for maximum gain, slightly rocking the tuning gang while making the adjustment.

There is no pad on Band #2.

NOTE: Should the noise picked up by the receiver interfere seriously with the alignment, increase the signal generator output and reduce the R. F. gain. The noise limiter may also be left on during alignment.

The SKYRIDER "5-10" draws 74 watts at 117 volts 60 cycle A.C.