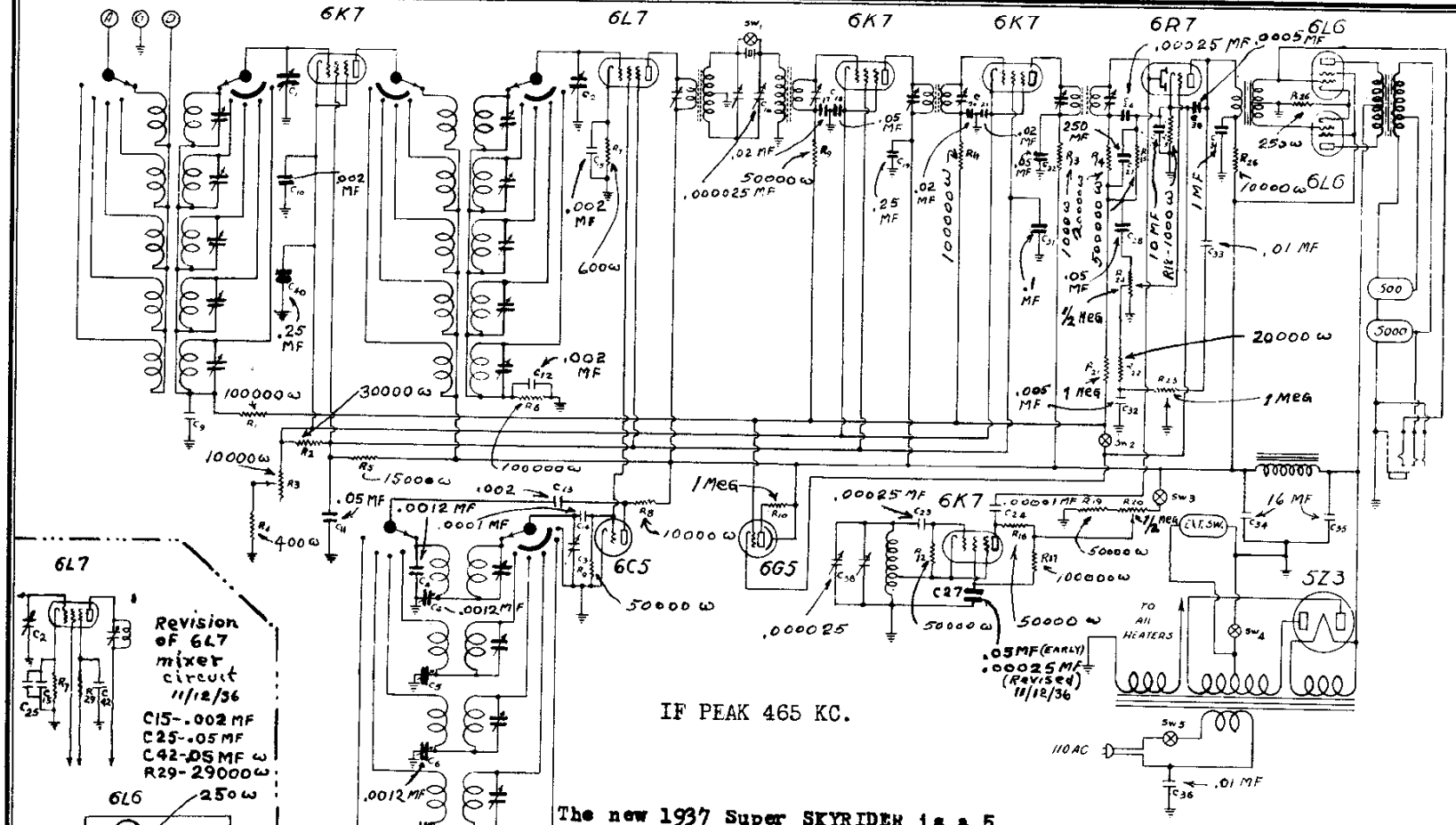
HALLICRAFTERS, INC.

MODEL S11, Super Sky Rider 1937

Early and Late



The new 1937 Super SKYRIDER is a 5 band 11 tube superheterodyne receiver covering the following frequency ranges.

No. 1 Band	—	545 KC to 1230 KC
No. 2 "	—	1.18 MC to 2.85 MC
No. 3 "	—	2.75 MC to 6.82 MC
No. 4 "	—	6.75 MC to 16.40 MC
No. 5 "	—	15.40 MC to 38.10 MC

the HALLICRAFTERS inc.
CHICAGO ILL.

Schematic Model "S11" Super-Skyrider

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ALIGNMENT FOR MODELS S11 (SUPER-SKY-RIDER 1937) and MODEL S15 (SKY CHALLENGER)

INTERMEDIATE FREQUENCY ALIGNMENT

If the receiver is equipped with a crystal, use the crystal in a separate oscillator.

If the receiver is used without a crystal set the signal generator at 465 KC

Before alignment, turn off the AVC, BFO, and Crystal switches. Set the RF and Audio gain controls at maximum. Set Crystal phasing condenser for maximum noise level. Do not remove bottom plate from the chassis.

Remove 6C5 Oscillator tube from socket, and connect the signal generator out put directly to grid of 6L7 1st detector.

Adjust all IF transformers for maximum output.

RF ALIGNMENT

Check dial- at maximum capacity of gang condenser the dial should stop so that "0" on the main tuning dial should be opposite "0" on the vernier scale.

Set band spread condenser at minimum capacity or so that it reads 200 degrees.

Replace 6C5 oscillator tube and connect signal generator output through 400 ohm resistor to antenna and ground posts on receiver.(Leave Jumper connected.)

Set dial of receiver to 600 KC of Band #1, and set signal generator to 600 KC. Now adjust .6 MC pad on top of chassis until signal is resonated.

Reset dial and signal generator to 1100 KC. Adjust 1.1 MC Osc. trimmer condenser beneath the chassis until this signal is properly resonated. Now adjust RF and Detector trimmers for maximum gain. Now reset dial and signal generator to 600 KC and re-pad. It may be necessary to pad and trim at 600 KC and 1100 KC a few times as a change of capacity at one end will affect the other end. Re-check on RF and Detector trimmers and peak for maximum gain.

BAND #2

Follow same procedure as on Band #1 except pad (above chassis) at 1.3 MC. Trim at 2.6 MC

BAND #3

Same procedure as before except pad oscillator at 3 MC. Trim at 6 MC. Rock the gang condenser when making these adjustments.

BAND #4

Pad oscillator at 7 MC. Trim at 14 MC. Rock gang condenser during adjustment

BAND #5

Pad oscillator at 17 MC and Trim at 34 MC. Rock gang condenser as before.

It may be necessary to go through the above procedure several times before maximum performance is secured. A small change at each end of each Band will affect the other end.

When making adjustments on this receiver back off on RF gain leaving the AF gain at maximum at all times.

Be sure and turn the trimmers all the way in (clock-wise) except as noted below, and back off to find the signal. On air-dielectric trimmers, capacity is reduced when turning the screws in a clock-wise direction.

Detector trimmers on Band #4 and #5 should be backed out all the way and screwed clockwise to find the signal. This will assist in eliminating phasing in the wrong direction or side.

Be sure to check images on Bands #3,#4, and #5. These Images will fall approximately 1.0 MC lower in frequency on all Bands.

ALIGNMENT FOR MODEL S12 (COMMERCIAL-SKY-RIDER)

INTERMEDIATE FREQUENCY ALIGNMENT

If the receiver is equipped with a crystal, use the crystal in a separate oscillator. If the receiver is not an SX12 model, set the generator for 1600 KC.

Before alignment, turn off the AVC, BFO, and Crystal Switches. Set the RF and Audio controls at maximum. Set crystal phasing condenser for maximum noise level. Do not remove the bottom plate from the chassis.

Remove 6C5 oscillator tube from the chassis, and connect the signal generator output directly to the grid of the 6L7 1st detector.

Adjust all IF transformers for maximum output.

RF ALIGNMENT -BAND #1

Check dial- at maximum capacity of gang condenser the dial should stop so that "0" on the main tuning dial should be opposite "0" on the vernier scale.

Set Band Spread condenser at minimum capacity or so that it reads 200 degrees.

Replace 6C5 oscillator tube in receiver, and connect signal generator output through 400 ohm resistance to antenna and ground posts on receiver. (Jumper should remain connected.)

Set signal generator for 115 KC, put receiver on Band #1 and set dial to a reading of 115 KC.

Adjust the 115 KC pad on top of chassis until signal is resonated.

NOTE: On Band #1 and #2 it is necessary to adjust detector and RF trimmers each time oscillator trimmer is changed.

Reset dial to 230 KC and reset signal generator to same frequency.

Adjust 230 KC Osc. trimmer condenser beneath the chassis until the signal is properly resonated. Now adjust RF and detector trimmers for maximum gain. Now reset dial and signal generator to 115 KC and re-pad above chassis.

It may be necessary to pad and trim at 115 KC and 230 KC a few times as a change of capacity at one end will affect the other end. Re-check on RF and the detector trimmers and peak for maximum gain.

Rock main tuning condenser during the course of these adjustments.

BAND #2

Follow same procedure as on Band #1 except pad (above chassis) at 275 KC and set signal generator at 275 KC. Peak RF and trim at 550 KC. Rock main condenser.

BAND #3

Same procedure as before except pad oscillator at 700 KC, trim at 1400 KC, with signal generator set at 700 KC. Rock main tuning condenser during procedure.

BAND #4

Same procedure as before except pad oscillator at 1.9 MC, with signal generator set at 1.9 MC. Peak RF and detector trimmers for maximum gain. Trim at 3.8 MC. Rock main tuning condenser when making the adjustments.

BAND #5

Same procedure as before. Pad oscillator at 5 MC with signal generator set at 5 MC. Adjust RF and detector trimmers for maximum gain, rocking the gang condenser while adjusting. Trim at 10 MC

It may be necessary to repeat the above adjustments several times before maximum performance is obtained. When making adjustments on this receiver back off on RF gain leaving AF gain at maximum at all times.

Be sure and turn trimmers all the way in (clockwise) (except as noted below) and back out to find the signal. On these air-dielectric trimmers, capacity is reduced in clockwise direction. Check for Images on Band #5, 3600 KC lower.

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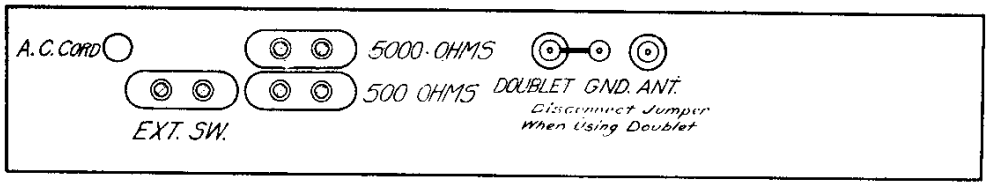
Socket, Trimmers



MODEL S-11

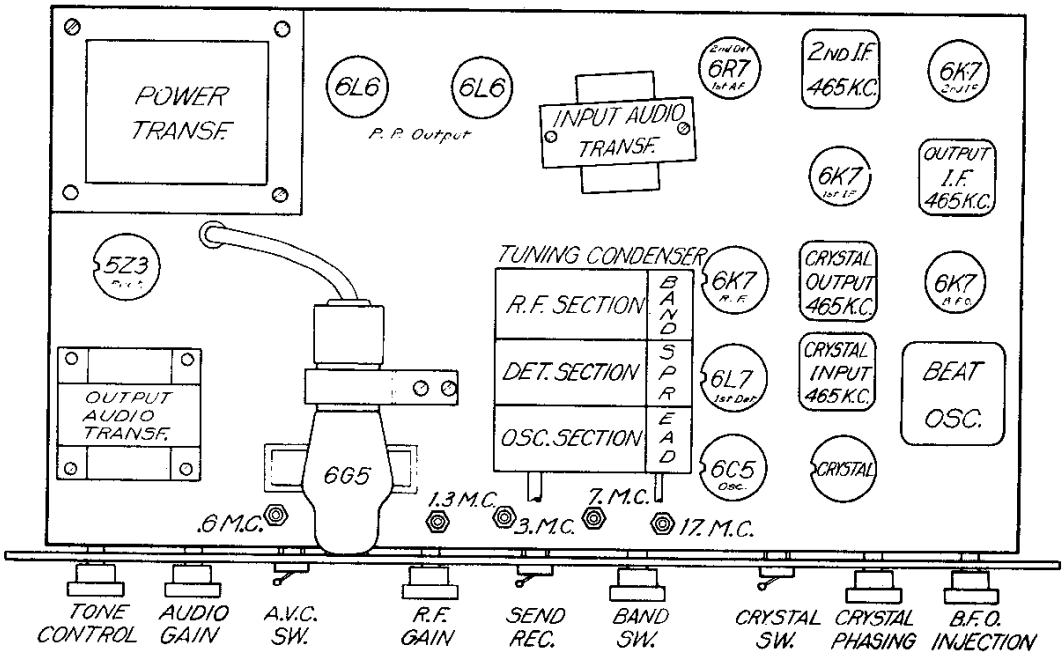


Fig. 1

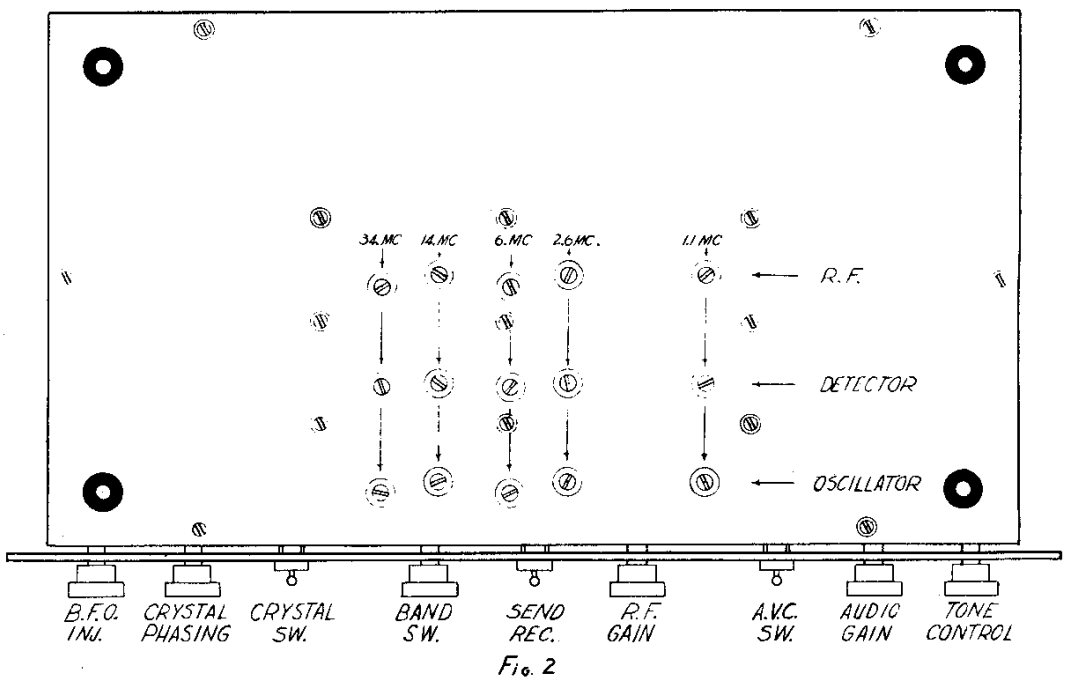


Fig. 2