The crystal input transformer is made up of three coils so placed that a signal of maximum strength is impressed on the low impedance primary of the crystal output transformer. The crystal filter with its phasing condenser is inserted between these transformers. With proper adjustment of the phasing condenser single signal operation can be secured. When the crystal is shorted, or the crystal switch is in the "out" position, the signal is impressed directly on the crystal output transformer which feeds the grid of the 6K7 first IF stage.

The second and third IF transformers are identical and provide maximum stabilized gain. The use of two iron-core IF stages gives an order of gain and selectivity which has heretofore never been obtained in communication receivers. The IF selectivity of the 1937 Super Skyrider, without crystal, at 100 times input is 11 KC.

The 6K7 second detector gives half-wave diode detection, AVC, and the triode section of this tube is the first stage of audio amplification. The plate of this section of this multi-purpose tube is transformer coupled to the grid of the push-pull 6L6's.

The push-pull 6L6 stage running straight Class "A" delivers 14 watts of undistorted audio power. Before actually drawing any grid current the output is in the neighborhood of 17 watts.

The beat oscillator is a 6K7 electron-coupled to the diode section of the 6K7.

The high-current 5Z3 rectifier provides ample current for the complete receiver with its push-pull 6L6 audio output stage.

In this receiver the speaker is not a portion of the filter system. This allows the receiver to be operated independently of the speaker itself. A permanent magnet 5000 ohm speaker is the type we recommend for use with this receiver.

The headphone jack is connected to the input of one of the 6L6 tubes.(Output) The possibility of shock to the operator is eliminated by having no direct current on the phones.

The total consumption of power by this receiver is 127 watts.

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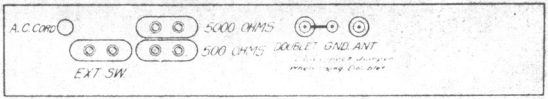


MODEL S-11

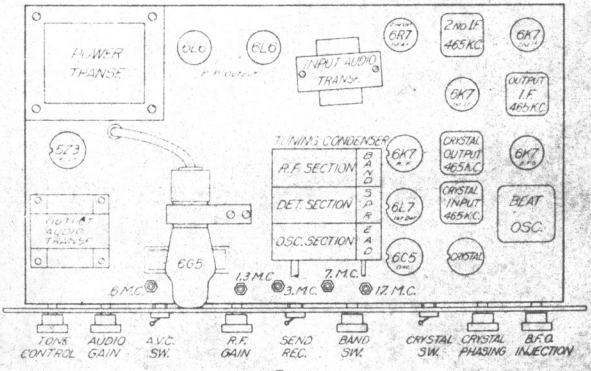


FIG. 1

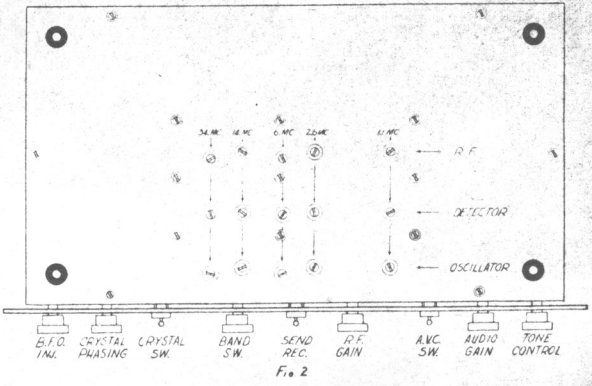
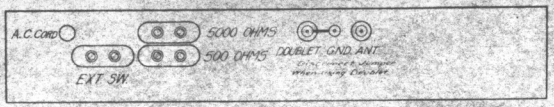


FIG. 2



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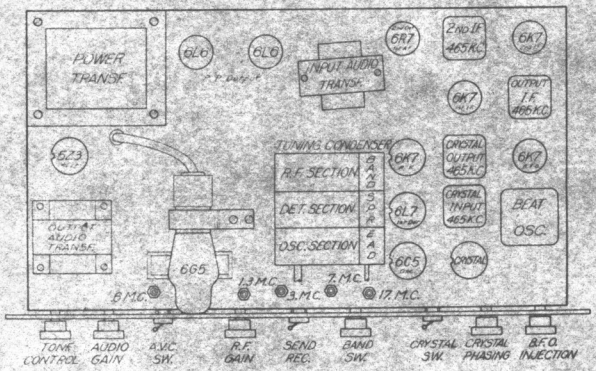

Fig. 1

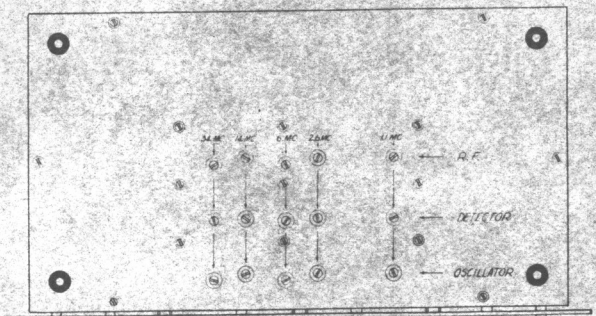

Fig. 2