

Qc4 R B₂ 5 Black
Meissner

STANDARD I. F. TRANSFORMERS

GENERAL INSTRUCTIONS

This transformer has been designed as a replacement unit satisfactory for use in most radio sets having an intermediate frequency corresponding to that stamped on the box or within a reasonable range on either side. It has been carefully tested for gain and selectivity and is pretuned to the frequency marked. When properly installed in the radio set, it should require but little adjusting in order to obtain satisfactory operation.

1. Don't use long grid or plate leads; install the transformer in such a position that the grid and plate leads are as short and direct as possible.
2. Don't use close-fitting shielding on grid, plate or diode leads. If the previous transformer used a shield on any of these leads, use a piece of 3/8 or 1/2 inch dia shielded loom as is used shielding automobile antenna leads, or make up the equivalent from a piece of loom used for house wiring, covered by a piece of woven shielding, or even heavy lead foil or tin foil. There is one exception where flexible spring shielding has been used on grid leads, employ the same type of shielding on the replacement.
3. Don't connect the new unit according to the same code as the old one unless it corresponds to the following code: Use only Blue for Plate, Green for Grid or diode, Red for B-plus and Black for AVC or Ground as the case may require. Yellow is used for the Center-Tap when required. Transformers having terminal bases instead of color-coded leads are connected as shown in Fig. 1 below.
4. Don't neglect to align (adjust) the trimmers on the new unit slightly to obtain best performance (See "Method of Alignment").
5. If the set oscillates with the new units aligned, this is evidence that the new units are very high in sensitivity. Oscillation may be stopped by applying one or more of the remedies outlined in "Oscillation or Feedback."

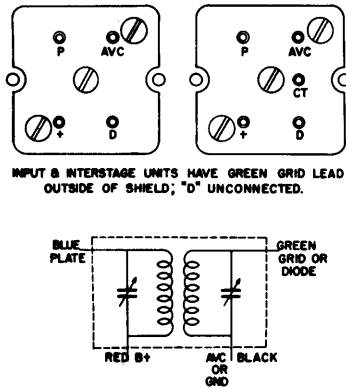


FIG. 1

Method of Alignment

A. With service oscillator and output meter: Connect equipment in accordance with Fig. 2, set oscillator for proper intermediate frequency, turn up output of oscillator until there is a clearly audible but not loud note from the speaker; adjust the screws of each I. F. transformer, one at a time, until the maximum deflection on the output meter is obtained on each. As the sound output increases, reduce the signal fed from the oscillator.

B. Without Test Equipment: Tune set to the weakest station you can hear. Adjust each I. F. trimmer screw in succession for maximum strength of signal, repeating the process at least once. If the signal becomes very loud as the aligning progresses, tune to a still weaker station or reduce the aerial to a short piece of wire to cut down the input.

Oscillation or Feedback

To reduce feedback and eliminate oscillation, the following remedies are recommended:

- A. If this is a replacement transformer, use shielding of leads as described above in Section 2.
- B. Use close-fitting tube shields on the 1st detector and I. F. tubes.
- C. If the only by-pass from B-plus to chassis is an electrolytic condenser, shunt this with a 1/4 or 1/2 MFD. "non-inductive" paper condenser.
- D. Check to see that all "hot" leads (grid, plate and diode) are as short and direct as possible.
- E. If the I. F. tube has its bias resistor common to some other tube, rearrange the circuits to have a separate bias resistor for the I. F. tube, giving proper bias (same as when bias resistor was common to two or more tubes; measure with 1000 ohm-per-volt meter) and by-pass it with a 0.1 MFD. by-pass condenser.

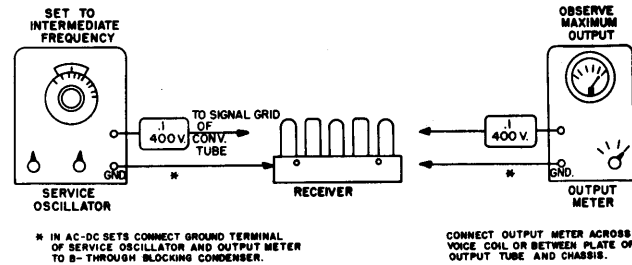


FIG. 2