

GENERAL

The printed circuit wiring used in this receiver results in greater uniformity of chassis wiring and component placement, simplified circuit tracing (see figure 2) and greater component accessibility. The printed circuit wiring is permanently bonded to the plastic chassis board. This board is translucent. If a light source is directed on the bottom of the chassis board, the printed wiring will be silhouetted through the board and component location for circuit tracing will be facilitated.

ALIGNMENT PROCEDURE

- Use an isolation transformer if available; otherwise, connect a .1 mfd. capacitor in series with low side of signal generator and connect to common ground (see figure 2).
Caution: Do not connect a ground wire to common ground.
- Set volume control full on.
- Connect output meter across speaker voice coil.
- Use lowest setting of signal generator capable of producing adequate indication on lowest scale of output meter.
- Use a non-metallic alignment tool with a blade 3/32" wide for aligning IF transformers.
- Repeat adjustments to insure good results.

| STEP | CONNECTION OF SIGNAL GENERATOR | SIGNAL GENERATOR FREQUENCY | RECEIVER GANG SETTING | ADJUSTMENT |
|------|--|----------------------------|-----------------------------|--|
| 1 | Through a .1 mfd capacitor to stator, Antenna section of gang tuning capacitor | 455 KC | Gang fully open | "F", *"E", "D" and *"C" for maximum output |
| 2 | Same as "STEP 1" | 1620 KC | Gang fully open | "B" for maximum output |
| 3 | Radiated Signal. Loop of several turns of wire, or place generator lead close to receiver loop for adequate signal pickup. | 1400 KC | Tune in on generator signal | "A" for maximum output |

*Adjustments "C" and "E" made from underside of chassis; see figure 2.

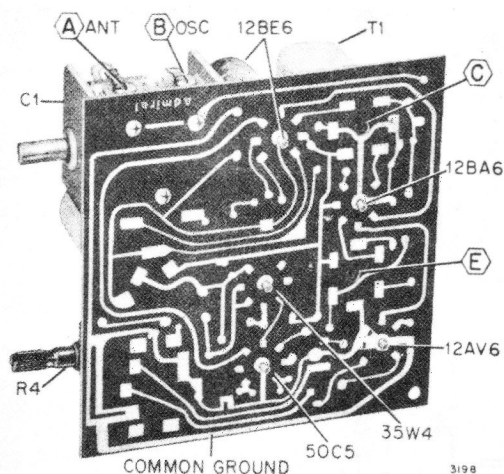


Figure 2. Bottom View of Chassis.
Alignment points, tube locations
and common ground location shown.

REMOVING THE CLOCK

1. After the chassis and front panel assembly are removed from the cabinet, remove the clock control knob located just below the clock on the front panel.
2. Remove three screws that secure the clock to the front panel.
3. Remove the Extrusion and Interlock Assembly bracket and lift the clock timer free.
4. If complete removal is desired, unsolder the three wires that are connected to the clock timer.

SERVICING

All components used in this receiver are standard size and design and are mounted on the chassis top. See figure 3.

Resistors and capacitors should be replaced by clipping out the defective part. Leave pig tail leads as long as possible. Then, trim the pigtailed on the new part and neatly solder it onto the leads protruding from the board.

To replace such parts as oscillator coils and IF transformers, heat the lugs with a low wattage soldering iron and straighten them. Brush away molten solder and then, remove the faulty part by lifting it off the chassis. To install the new part, check the fit of the lugs into circuit board. Then place the part into position. Bend the lugs over and solder into place.

NOTE: Pay particular attention to color coded dots on parts when applicable.

If the bond between chassis base and the "printed wiring" becomes broken, solder a short piece of jumper wire across the damaged portion. Pigtail trimmings from resistors and capacitors are ideal for this purpose.

Remove the lacquer coating on the foil with Alcohol before soldering.

For further information pertaining to printed circuit servicing, refer to Service Manual S559, "Printed Circuits, Service and Repair."

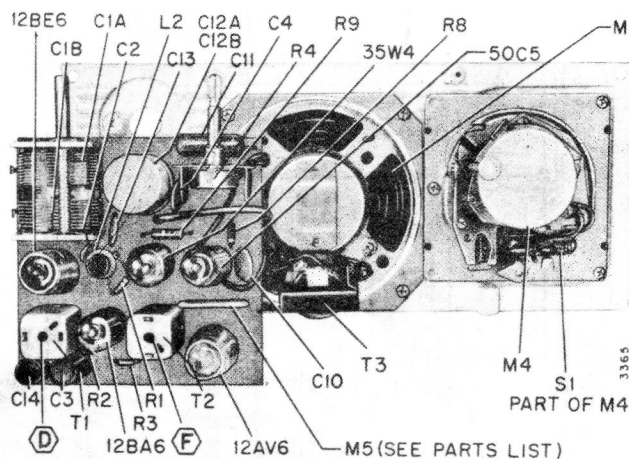


Figure 3. Top View of Chassis. Location
of components and alignment points shown.