

## MODELS 514, 542 AND 543



Clip the defective unit out, leaving enough of its leads attached to the tube socket so an eye loop may be formed in the leads. Each lead of the new component may then be passed through the proper loop, pruned to length, crimped and soldered.



NOTE 1. CAPACITORS: VALUES ARE IN MMF UNLESS OTHERWISE NOTED.

2. RESISTORS: VALUES ARE OHMS, K=1000 MEG=1,000,000.

3. SOCKET CONNECTIONS: PIN #8 ON EACH SOCKET IS A DUMMY PIN USED FOR A SPARE TERMINAL. A SMALL HOLE IN THE TUBE SOCKET BETWEEN PINS #1 & 8 IS USED TO KEY THESE PINS.

4. ALL D.C. VOLTAGES MEASURED AT 117 VOLTS LINE ON A 20,000 OHMS PER VOLT METER. ALL VOLTAGES ARE D-C UNLESS OTHERWISE NOTED

## ALIGNMENT CHART

| Step | Connect Test Oscillator to                  | Test Osc. Setting | Dial Drum Setting | Adjust for Maximum Output        |
|------|---------------------------------------------|-------------------|-------------------|----------------------------------|
| 1    | 12BA6 grid (1) in series with 0.05 mf. cap. | 455 kc            | Minimum capacity  | Cores of 2nd I-F transformer T3  |
| 2    | 12BE6 grid (7) in series with 0.05 mf. cap  |                   |                   | Cores of 1st I-F transformer, T2 |
| 3    | Inductively coupled to Radio loop           | 1620 kc           |                   | C1D (oscillator)                 |
| 4    | Radio loop                                  | 1500 kc           | Tune for max.     | C1A (antenna)                    |

