



**INTERMEDIATE  
FREQUENCY  
455 K.C.**

## CONDENSES

- |     |        |                                  |
|-----|--------|----------------------------------|
| R1  | 130232 | 25M ohm— $\frac{1}{4}$ w.        |
| R2  | 130284 | 25 ohm— $\frac{1}{4}$ w.         |
| R3  | 130170 | 3 megohm— $\frac{1}{4}$ w.       |
| R4  | 101230 | Volume Control— $\frac{1}{4}$ w. |
| R5  | 13000— | 150M ohm— $\frac{1}{4}$ w.       |
| R6  | 130257 | 3 megohm— $\frac{1}{4}$ w.       |
| R7  | 13008  | 150M ohm— $\frac{1}{4}$ w.       |
| R8  | 1305   | 300M ohm— $\frac{1}{4}$ w.       |
| R9  | 130166 | 150 ohm— $\frac{1}{4}$ w.        |
| R10 | 130199 | 150 ohm— $\frac{1}{4}$ w.        |

## CONDENSES

- |        |                               |
|--------|-------------------------------|
| 31282  | .0004 washer cond. (sat. clip |
|        | ant. plate)                   |
| 12912  | .0005 mica                    |
| 124136 | Antenna section dual trimmer  |
| 12938  | .0005 mica                    |
| 1001   | .1 x 400 v.                   |
| 124136 | Osc. Section dual trimmer     |
| 1009   | .05 x 200 v.                  |
| 12912  | .00025 mica                   |
| 10025  | .002 x 600 v.                 |
| 10091  | .15 x 400 v.                  |

## PARTS

- |     |          |   |
|-----|----------|---|
| TT1 | 72 1120Z | Antenna and Oscillator Coil Assembly<br>(Permeability Tuning) |
| TT3 | 108157J  | Input I.F. Coil—455 kc.                                       |
| TT4 | 108157K  | Output I.F. Coil—455 kc.                                      |
| TT5 | 108117   | Output Transformer  |
| TT6 | 114213   | 4 in. speaker—P. M.   |
| SI  | 107249   | On-off switch on volume control                               |
| SI  | 107249   | Fluor light bulb 7' 7"  |

## ALIGNMENT PROCEDURE

- Volume control—Maximum all adjustments.
  - Connect B— of radio chassis to ground post of signal generator through .1 Mfd. condenser.
  - Connect dummy antenna valve in series with generator output lead.
  - Connect output meter across primary of output transformer.
  - Allow chassis and signal generator to "heat up" for several minutes.
- The following equipment is required for aligning.
- An all wave signal generator which will provide an accurately calibrated signal at the test frequencies as listed.
  - Output indicating meter.
  - Non-metallic screwdriver.
  - Dummy antenna—.1 Mfd. and 200 Mmf.

AND	SIGNAL GENERATOR		Connection to Radio	Position of Iron Cores (Dial Setting)	Trimmers Adjusted (In Order Shown)	Trimmer Function	Adjustment
	Frequency Setting	Dummy Antenna					
I. F.	455 Kc.	.1 MFD.	Connect to Grid of 12SA7	Iron Cores All the way out	Two trimmers on top of output I. F. can	Output I. F.	Adjust to maximum output
	455 Kc.	.1 MFD.	Connect to Grid of 12SA7	Iron Cores All the way out	Two trimmers on top of input I. F. can	Input I. F.	Adjust to maximum output
ROAD- AST AND	1720 Kc.	.1 MFD.	Connect to Grid of 12SA7	Iron Cores All the way out	Trimmer (C2) (See chassis view)	Oscillator	Adjust to maximum output
	1720 Kc.	200 MMF.	Connect to Outside Antenna Clip	Iron Cores All the way out	Trimmer (C3) (See chassis view)	Antenna	Adjust to maximum output
	1400 Kc.	200 MMF.	Connect to Outside Antenna Clip	Turn Dial to 1400 Kc.	Adjust position of antenna coil (See coil assembly view)	Antenna Coil Adjustment	Adjust to maximum output (See Note "A.")
	1720 Kc.	200 MMF.	Connect to Outside Antenna Clip	Turn Dial to 1720 Kc.	Adjust trimmer (C3) (See chassis view)	Antenna	Check for tracking (See Note "B.")

NOTE "A"—The antenna coil assembly is made so that it is movable. When making the adjustment as given in the alignment procedure, move the coil assembly very slowly. It can be moved by hand or by pivoting one edge of the blade of a screwdriver in the hole and engaging the blade in the gear teeth of the coil form.