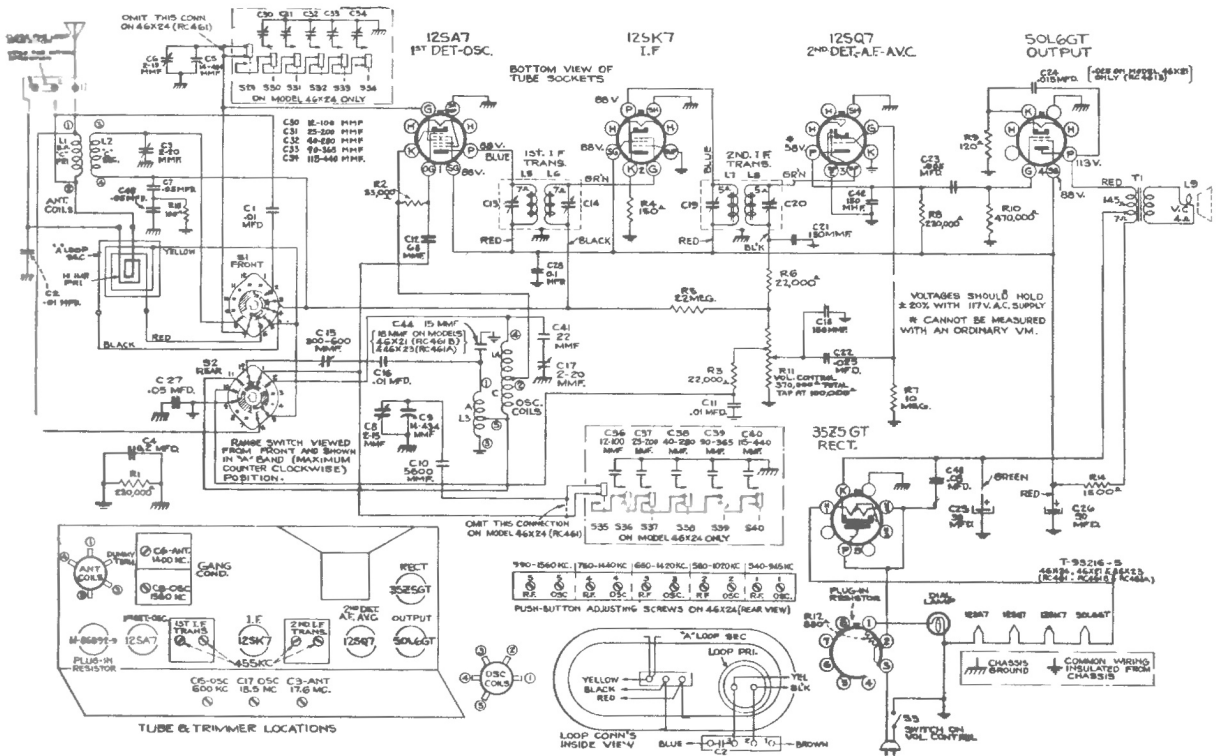


# RCA Victor Models 46X21, 46X23, and 46X24



## Alignment Procedure

**Output Meter Alignment.**—Connect the meter across the voice coil, and turn the receiver volume control to maximum.

**Test-Oscillator.**—Connect the low side of the test-oscillator to the receiver chassis through a .01 mfd. capacitor, and keep the output as low as possible.

**Pre-Setting Pointer.**—With gang condenser in full mesh, the pointer should be adjusted to a horizontal position.

**Antenna.**—The set is equipped with a built-in loop antenna. If the loop antenna is used, the antenna terminal board link should be closed. This link should be open when an external antenna is used. Connect the external antenna to terminal 1.

### Adjustments for Electric Tuning:

The push buttons and corresponding frequency ranges are given in the schematic diagram. Allow the set to warm up for about 15 minutes and proceed as follows:

- List five desired stations in order of the push button ranges.
- Push in the dial tuning (right hand) button and manually tune in the first station on the list.
- Press button No. 1. Turn R-F screw half way in; next turn the oscillator screw entirely in and then gradually back out until the station is heard.
- Adjust the R-F trimmer for maximum output.  
(Clockwise adjustment of oscillator and R-F trimmers tunes the circuits to lower frequencies.)
- By turning the set to a position in which reception is weak a final more accurate adjustment may be made.
- Adjust for each of the remaining stations in a similar manner and place corresponding station tabs in recesses above buttons. A "Dial Tuning" tab should be above button No. 6.

### Precautionary Lead Dress:

- Dress all leads away from oscillator and antenna coils.
- Dress cathode resistor (R4) and B+ lead across 12SK7 socket between plate and grid terminals.
- (46X24 only) Dress leads to push button switch straight up and parallel so that they do not touch each other.
- Dress black lead from 1st I-F transformer over green lead.
- Keep plate-cathode bypass (C43) of rectifier tube away from volume control.

Step	Connect high side of test oscillator to—	Tune test oscillator to—	Turn radio dial to—	Adjust following for max. output—
1	Grid 12SK7 in series with 0.01 mfd.	455 kc	"A" Band Quiet Point at 1,550 kc end of dial	C19 and C20 (2nd I-F Trans.)
2	Grid 12SA7 in series with 0.01 mfd.			
3		600 kc	"A" Band 600 kc	C15 (osc.)
4	Antenna in series with 200 mfd.	1,560 kc	"A" Band Full Clockwise	C8 (osc.)
5		1,400 kc	Resonance on 1,400 kc "A" Band	C6 (ant.)
6	Repeat steps 3 (rock in), 4 and 5			
7	Antenna in series with 300 ohms	18.5 kc	"C" Band Full Clockwise	C17 (osc.)*
8		17.8 kc	"C" Band Resonance on 17.8 kc Signal	C3 (ant.)
9	Repeat steps 7 and 8			

\* Use minimum capacity peak if two can be obtained.