



ALIGNMENT PROCEDURE

1. S.C.A. Rejection Filter

- A. Remove the outside case.
- B. Immobilize the oscillator by short circuiting pin 7 of the 12AT7 to ground.
- C. Connect an accurate audio generator set for 67.5KC to the input capacitor of V1A.
- D. Connect an AC V.T.V.M. to the centre tap of T1 secondary.
- E. Adjust the core of L3 (grey impregnated top of chassis coil) for minimum signal on the V.T.V.M.
- F. Remove the short circuit from pin 7 of the 12AT7.

OSCILLATOR AND 38KC TRANSFORMER INITIAL ADJUSTMENT

2. Oscillator

- A. Short circuit signal input pin to ground.
 - B. Using lissajous technique, connect "Y" scope input to the diode junction at T1 secondary.
 - C. Connect "X" axis of scope to a standard 19KC oscillator.
 - D. Adjust L1 (Oscillator) core for figure "8" lissajous figure.
 - E. Leaving set-up as is, switch scope to repetitive sweep and adjust primary and secondary cores of T1 for maximum.
- Note:** The correct peak in each case, is the peak nearest the fully unscrewed position of the core. In a badly mis-aligned converter, it is advisable to fully unscrew both cores and then screw in, in each case until the peak is obtained, cross checking between cores until a true maximum is reached.
- F. Remove short from input and replace cover.

3. Separation Adjustment

- A. Be sure unit is pre-heated for at least 10 minutes.
 - B. Using a multiplex modulator, obtain a correctly phased and proportioned left channel composite signal of 200 mv R.M.S.
- Note:** Due to the complex nature of this waveform, a normal R.M.S. A.C. V.T.V.M. will automatically multiply true composite R.M.S. values by a factor of two. If in doubt, use an oscilloscope, read peak to peak and calculate R.M.S.
- Feed this signal to input of converter.
- C. Connect oscilloscope (repetitive sweep) to right channel output and adjust oscillator for minimum residual output.
 - D. Increase modulator to 2V (true R.M.S.) left composite and adjust primary and secondary of T1 for minimum.
 - E. Repeat C and D steps using high and low input levels respectively until optimum separation is obtained.
- This completes the alignment procedure.

TOP VIEW

