



COMPONENT NOTES:

Crystal Y1 can be 26.540, 26.590, 26.640, 26.690, 26.740, 26.800MHZ.

- Q1 - MPSH10 or 2SC380-R - hFE Range 60-100
- Q2 - 2N2924 or MPS2924 or 2N4124 - hFE Range 150-250
- Q3 - 2N2923 or MPS2923 or 2SC380-O - hFE Range 90-180
- Q4 - 2N2923 or MPS2923 or 2SC380-O - hFE Range 90-180
- Q5 - 2N2924 or MPS2924 or 2N4124 - hFE Range 150-250
- Q6 - 2N2925 or MPS2925 or Selected 2N4124 - hFE Range 230-470
- Q7 - 2N2924 or MPS2924 or 2N4124 - hFE Range 150-250
- Q8, Q9 - 2SC8550 or ZTX750 - PNP Rated at 1A
- Q10, Q11 - 2SC8050 or ZTX650 - NPN Rated at 1A

Voltages listed are to be used as a guide only.
Voltages may vary slightly and are referenced to ground, with transmitter antenna off and with neutral pulsing.

RECEIVER TUNING POROCEDURE

Use only ceramic tipped tuning wands for alignment - do not use metal tools of any kind.

1. Attach scope probe to ground land and to junction of 27K (R13) and .1uf (C17) as indicated
2. Set scope to 10ms / horizontal division, and 0.5V / vertical division.
3. Rotate coil slug even with top of coil form.
4. Carefully rotate T1 yellow slug clockwise to bottom-most position.
5. Carefully rotate T2 white slug counter-clockwise to upper-most position.
6. Remove transmitter antenna, set transmitter within arms reach, and turn on.
7. Peak T2 black for best signal shape, then move transmitter back until signal becomes weak.
8. Carefully rotate T1 yellow slug up, and T2 white slug down until maximum amplitude is reached.
9. Re-peak T3 black slug for maximum amplitude and best shaped wave form.
10. Move transmitter back - Rotate L1 slug downward for maximum signal amplitude.
11. Attach and extend transmitter antenna - power up, and make certain receiver does not swamp.
12. Operational range should be at least 10 feet with transmitter antenna removed.

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File:	F:\Schematics\100808a		Drawn By:	Mike Dorffler