



SERVICE NOTES



SN 7121

GOLDEN EAGLE MARK IV

TRANSMITTER

SYMPTOM:

The Channel Number display is blank and the transmit relay will not key. The reset "low limit" LED comes on but there is no channel display.

POSSIBLE SOLUTIONS:

1. In the synthesizer circuit (PLL section) C121 should be 10 pF N750 and C123, 39 pF N750. The early 23 channel models employed NPO's. Also R101 and R102 should be changed to 330 ohms and a 1 meg ohm resistor should be added from the base of Q101 to ground.
2. The changes noted in paragraph 1 have been incorporated in 40 channel units. All units should be checked to insure that the following changes are included. (Refer to Figures 1 and 2)
 - a. 3, 1N914 diodes and a 10 uh choke (or 2 - 18 uh chokes in parallel) in series from the base of Q103 to ground.
 - b. R129 should be 2.2K
 - c. 3, 1N914 diodes, a 10 uh choke (or 2 - 18 uh chokes in parallel) and a 220 ohm resistor in series from the base of Q104 to ground.
 - d. R127 should be 680 to 1000 ohms (normally 1K)
 - e. R131 should be 47 ohms. If a 100 ohm resistor exists, it is acceptable to add another 100 ohm resistor in parallel on the bottom side of the circuit board.
3. In those units where the symptom is still present after the foregoing changes have been made proceed with the following:
 - a. The color stripes on Q102, Q103 and Q104, MPS6514 transistors, should be checked. If the 2nd or middle stripe is yellow it should be replaced. The transistors with the yellow stripe have lower gain and can be employed elsewhere in the unit, but cannot be used for Q102, Q103 or Q104.

OVER



