



SERVICE BULLETIN

from: TRIO-KENWOOD COMMUNICATIONS, INC.

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SUBJECT: DG-5 STANDARD SERVICE PROCEDURE

DATE 8/10/79

(SUPPLEMENT TO THE DG-5 SERVICE MANUAL)

INTRODUCTION

A majority of DG-5 failures are caused by nothing more than an intermittent opening of a plated-through hole connecting top and bottom foil paths of the PC Board.

Before any component level service is attempted, it is advisable to eliminate the possibility of an intermittent connection causing or complicating Counter failure.

PROCEDURE:

1. Disconnect all cables.
2. Remove cabinet; 2 screws at the rear, 2 screws with star washers on the bottom.
3. Disassemble display from chassis; 4 countersunk screws on the side rails.
4. The display unit has 2 through holes without leads, and the Counter main Board has 82 through holes without leads passing through them. Ideal service would be to first remove all solder from these holes using devices as a Pace Sodr-X Tractor, EREM Soldovac, or WIK-IT braid. Then, pass a length of #24 tinned bare wire into each clean through hole, solder, and clip flush. For the 10 holes listed under IC's solder sparingly so as not to create a solder bridge under the component. For the remaining 72 holes, inspect each "pinned" connection from both sides to insure (1) no bridges and (2) a good solder joint.
5. Wash the Display to Counter Board PC Board connectors (male and female) with FRESH trichlorethelyne. Heat dry and inspect for flux residue. Spray the connectors with silicone.
6. Similarly, clean and coat the rear panel RCA jacks as in step 5.
7. Reassemble, reversing steps 3,2,1.

HOW TO SOLDER ON THE DG-5 PC BOARD

1. Use a LOW POWER PENCIL, 35W OR LESS.
2. Use rosin core solder, small diameter.
3. DO NOT create solder bridges or splotches.
4. DO NOT overheat or otherwise lift the foil from the board.
5. Wash excess flux away with FRESH trichlor. and a small flux brush. Neatness counts - it's YOUR radio.

THROUGH HOLE ACCOUNTING

Display unit - 2
 Counter unit - 82
 Total - 84

LOCATIONS:

A. Under; IC2, 4, 13, 20-25, 34, 1 each
 Total - 10

B. Adjacent or between; IC3, 13-14, 15-16, 22-23 - 1 each
 IC1-2, 6, 18 - 2 each
 IC12 - 3 each

Total - 13

C. Located between rows; IC13-18, 20-25 - 5
 20-25, 26-31 - 10
 IC26-31, 32-37 - 15
 IC32-37, 38-39 - 25

Total - 55

D. At rear panel; FS7805 regulator -1
 2SD235 transistor -3

Total - 4

E. Display unit - 2

Additional Points

1. R126 & R129 are power resistors located at the left rear corner of the PCB. Remove the tubing from their outside legs and resolder each lead to the top foil path. Specific symptom for this failure is no display, & NO DECIMALS.
2. For counters which "roll", random count, or inject hash noise back into the TS-520/520S especially when hot, install an additional .1uF @ 12V bypass cap across the FS7805 regulator on the foil side of the PCB from the center ground lead to the outside leg, across C89.
3. for complaints of "hum" or Digital noise from the DG-5 back into the TS-520/S, both during RX & TX, tighten the mounting screws which supply ground to the Carrier unit X50-0009-01 in the transceiver.