SUBJECT: DG-1 STANDARD SERVICE PROCEDURE

DATE 8/10/79

1 of 2

INTRODUCTION

A majority of DG-1 failures are caused by either dirty connectors, or cold soldered connector pins between the top and bottom foil paths of the double printed boards.

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

- 1. PHYSICALLY DISCONNECT THE MAIN POWER CORD!
- 2. Remove cabinet covers; top with speaker lead, and bottom.
- 3. Unplug the top and bottom connectors from the DG-1 unit.
- 4. Remove the Digital Unit assembly by removing 4 screws from the chassis underside.
- 5. Disassemble the Digital Unit; remove 8 screw and slide off the cover.
- 6. Remove both PC Boards, 4 screws each.
- 7. For those connector pins joining top and bottom foil paths; reheat pin, flow .031" diameter solder from the top to insure the solder joint through the PC Board.
- 8. Wash the board to board Molex connectors with FRESH trichlore-thelyne. Heat dry and inspect for flux residue. If necessary, reclean. Also, remove the pin connectors from the DG-1 chassis, (note they insert from the Digital PC board side) and clean in FRESH trichlor. Heat dry and spray with silicone lubricant. Spray into the board mounted connectors with silicone.
- 9. Reassemble by reversing steps 8,6, and 5.
- 10. Reinstall by reversing steps 4,3, and 2.

HOW TO SOLDER ON THE DG-1 PC BOARDS

- 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 trichloretheylyne and a small flux brush. Neatness counts it's YOUR radio.

NOTES:

- 1. The best possible method of cleaning the Molex connectors is by ultrasonic cleaner and fresh solvent. Otherwise, use a spray.
- 2. In extreme cases, replace the Molex connectors, 6 pieces E40-0607-05
- 3. For 15 & 10M invalid numbers, such as a backward "6", replace D13, D14 SV-03 on the Counter Mix unit X54-1150-00. These are three section diodes (three junctions in one package) V21-0007-05.
- 4. For random or rolling display which will not correct by cleaning connectors, etc., check the CCR mixer input level. It should be 50mV as measured with a hi-Z RF VTVM, and can be adjusted by TC-l on the IF unit X48-1150-00, and measured on the IF, TP6. (TS-820S Service Manual states 0.1mV- correct this to 50mV).

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