ENgINEERING RELEASED

TEST PLAN
7800 KEYBOARD

COMBined A AND B DESIGN VERIFICATION

PROJECT NO. E0012

1. Introduction

This test plan is to be used to assess the compliance of the actual 7800 keyboard units with the product specification, C024673-221.

This plan is a compression of the more traditional A and B test sequences which is necessitated by the shortage of time and resources. The quality of the design validation assessment will not be compromised, however.

A flow chart of the test schedule is appended hereto. This is a minimum schedule; should failures result, additional testing will be required.

2. Preliminary

A representative sample will be chosen from the pilot area and then subjected to burn-in at 40 deg C for 48 hours. A lot of 14 to 18 units that passed burn-in will be sent to the Design Assurance Laboratory for full evaluation.

Upon receipt, the units will be visually inspected for color, appearance, completeness, and other physical attributes. Comprehensive functional tests will be performed to make sure that these units are working properly.
3. Reliability Assessment
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A group of 6 to 10 units will be subjected to hardware and software regression analysis, return rate assessment, electrical parameter analysis, operating life of the keys, in particular, and of the total system. This will substitute for traditional MTBF studies which are only meaningful for mature products.

4. Environmental Stress Analysis
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The remaining 8 units will be subjected to standard environmental stress tests and EMI evaluation per CO61616, Rev. B. These tests include temperature shock, sine vibration sweep and dwell, temperature/humidity soak, shipping vibration and drop, electrostatic discharge susceptibility, and others as deemed appropriate.

The critical path is in the determination of operating life characteristics. This path will consume from 10 to 15 working days.

5. Report
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A summary report will be prepared in which an assessment of the product reliability will be made. Requirements for corrective actions, if needed, also will be given here.

6. Audit
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Random samples from production will be pulled from time to time to ascertain that product quality requirements are continuing to be met. Only selected tests from this plan will be utilized for audit purposes.