GE Electronic Services	TEST PROCEDURE	
	REVISION: A DATE: 10/02/93	PAGE 1 OF 4
QUALITY REP: S. Potenzale	PROCEDURE: 06H-GE-IBT2-A	
TITLE: C.N.C. IBT-2 CIRCUIT BOARD MODULE.		

1. **INTRODUCTORY DESCRIPTION**
   - A. This procedure establishes the methods for testing a IBT-2 circuit board module.
   - B. Environmental ranges: 72+/-10 Deg. F. with 20-95% R.H.
   - C. Unit warmup/stabilization period requirements:
   - D. Personnel using this procedure are expected to have a high degree of confidence and expertise in related testing and calibration procedures.
   - E. Procedures not explained here are considered to be understood as common practice.

2. **TEST EQUIPMENT VERIFICATION:**
   - A. Verify the accuracy of the standard(s) used in the repair/ calibration process by evidence of recent calibration labeling affixed to the test equipment.
   - B. All measurement standards used in this procedure shall be traceable to the NATIONAL INSTITUTE of STANDARDS and TECHNOLOGY (N.I.S.T.) and shall have the accuracy, stability, range and resolution required for the intended use.
   - C. Unless otherwise specified, the collective uncertainty of the Measurement Standard(s) shall not exceed twenty five percent of the acceptable tolderance for each characteristic being] calibrated.
   - D. All deviations shall be documented.

3. **EQUIPMENT CLEANING:**
   - A. Clean equipment (where applicable) in a mild soap solution of Lux Liquid or equivalent brand and warm water.
   - B. Using a soft, short bristled (natural, not nylon) brush, scrub stubborn stains as needed.
   - C. Rinse equipment thoroughly in warm water.
   - D. Dry module in oven for 4 (four) hours minimum at 150 Deg. F.

4. **EQUIPMENT INSPECTION:**
   The following criteria should be used as a guideline or basis for the inspection process of the unit:

   1. WIRES, BROKEN OR CRACKED.
   2. I/O TERMINALS BENT OR DAMAGED.
   3. I/O TERMINAL TENSION LOOSE.

4. COMPONENTS DAMAGED OR DENTED.
5. CAPACITORS LEAKING ELECTROLYTE.
6. CAPACITORS EXHIBITING CORROSION AROUND SEAL.
7. CAPACITORS WITH DISCOLORED INSULATING SLEEVES.
8. SOLDER JOINTS, COLD.
9. STAND-OFF SUPPORTS OR OTHER STRESS POINTS, EXAMINE FOR CRACKED SOLDER JOINTS.
10. CIRCUIT BOARD DISCOLORED OR BURNED.
11. PRINTED WIRE RUNS BURNED OR DAMAGED.
12. SOLDER FLUX, REMOVED.
13. CONFORMAL COATING, COMPLETE EVEN COVERAGE.
14. COMPONENTS, AGED, DETERIORATED, CORRODED, OXIDIZED.

5. THEORY OF OPERATION:

Refer to GEK-45546 factory service manual for theory of operation.

6. TEST EQUIPMENT REQUIREMENTS:

A. Oscilloscope, Tektronix 465 or equivalent.
B. Multimeter, Beckman 3010 or equivalent.
C. Signal generator, Wavetek 171 or equivalent.

7. DIELECTRIC TESTING:

Refer to HIPOT PROCEDURE drawing for further instructions.

8. GENERAL HOOKUP/SETUP PROCEDURE:

8.1

Sin Input:
A. Signal generator signal to 1TB-D.
B. Signal generator return to 1TB-F.

Cos Input:
A. Signal generator signal to 1TB-A.
B. Signal generator return to 1TB-C.

8.2 **Generator Setup.**

1. Frequency: 2.5 Kilohertz
2. Function: Sine wave.
3. Amplitude: 15 Volts Peak to Peak.
4. Offset: Zero.

Note: All subsequent test steps, the signal generator frequency is set to 2.5 Khz. Sine wave, Zero offset.

9. TESTING AND CALIBRATION PROCESS:

APPLY	MONITOR
A. Sin Input. 1TB-D to 1TB-F. 15V P-P.	2TB-A to B. Check for 2V P-P. at 2.5 Khz.
B. Adjust pot P1B thru full rotation.	Observe slight effect on output amplitude. Ensure clean operation.
C. Cos Input. 1TB-A to 1TB-C. 15V P-P.	2TB-D to E. Check for 2V P-P. at 2.5 Khz.
D. Adjust pot P1A thru full rotation.	Observe slight effect on output amplitude. Ensure clean operation.
E. End of Test.	

10. TEST CONCLUSION:

A. Power down all voltage sources, disconnect all jumpers, meters, etc.

11. SHIPMENT PREPARATION:

A. Clean any solder joints as necessary, as repairs were made.

B. Apply a coat of clear conformal coating to board surface area.

C. Do NOT seal adjustment potentiometer, as this is a field-adjustment.

D. Insert unit in an E.S.D. protective shipping bag or container where applicable.

E. Unit is then forwarded to outgoing Q.A. for inspection.

F. Refer to procedure 06H-LQP-150 for general handling requirements before shipping..

12. END.

TEST WRITTEN BY: Greg Peterson DATE: 10/2/93

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