1. INTRODUCTORY DESCRIPTION

A. This procedure establishes the methods for testing a DS200SDCI Main Control Card.
B. Environmental ranges: 70 +/- 10 Deg. F. with 20-75% R.H.
C. Unit warm-up/stabilization period requirement: None
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 tolerance for each characteristic being calibrated.
D. All deviations shall be documented.

3. EQUIPMENT CLEANING

A. Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to site specific SRA's for cleaning guidelines

4. EQUIPMENT INSPECTION

A. The following criteria should be used as a guideline or basis for the inspection process of the this unit:
    1. Wires broken or cracked.
    2. Terminal strips / connectors broken or cracked.
    3. Loose wires.
    4. Components visually damaged.
    5. Capacitors leaking.
    6. Solder joint, cold or otherwise inadequate.
    7. Circuit board discolored or burned.
    8. Printed wire runs burned or damaged.

5. REVISION HISTORY

Revision	Date	Initials	Reason for Revision
A	6/7/02	MMS	Initial Procedure – After Verification
B	8/20/07	C. Wade	Added Special Note Page 3 Section 9
C	3/16/2011	C. Wade	Added section 7 on useable revision levels & updated cleaning equipment guidelines
D			
E			
F			
G			
H			
I			
J			
K			

6. REFERENCE DOCUMENTATION

- DC2000 Test Instructions, New Version Drives
- AC/DC 2000 Course Manual

7. Revision Levels

- **All DS200SDCIGxAEB and higher cards shall be upgraded to the AHB revision level. All cards below this revision level are not usable per Orange Book.**

8. TEST EQUIPMENT TO BE USED

- Fixture H033758
- Fluke DMM

9. FINAL TEST AND OPERATION PROCESS

SPECIAL NOTE: Relay K2 will be change out with new, unless we have changed it in the last 18 months. Any defective relay found will be automatically changed out.

- Set jumpers **JP1** and **JP2** to the **1-2** position.
- Set switch **SW1-1** to **ON** and switches **SW1-2** through **SW1-4** to **OFF**.
- Install SDCI card in Drive, **Do Not Apply Power!**
- On control panel measure from **COM** to all **RED TEST JACKS**. Verify there are no shorts or low resistance readings (<100 ohms) on power rails. Shorts or low resistance must be corrected before applying power to Drive.
- Apply power to drive by pulling **E-STOP**.
- On control panel, verify **1FAPL** lamp is glowing.

- On Control Panel, Check power supply voltages. All voltage checks are with respect to **COM.** Verify table below.

VOLTAGE	RANGE
+ 5 VDC	+ 4.9 to 5.1 VDC
+ 15 VDC	+ 14.75 TO 15.25 VDC
- 15 VDC	- 14.75 TO 15.25 VDC
+ 24 VDC	+ 26 TO 28 VDC
- 24 VDC	- 26 TO 28 VDC
MSRF-47	+ 26 TO 28 VDC
EIV1-74	+ 14.75 TO 15.25 VDC

- **Execute Test 12** (SCR TEST).
- **"CELL TEST PASSED"** will be displayed if all checks pass.
- On Control Panel verify 0 ohms between **MANC** and **MACM**.
- Push **RUN** up on Control Panel.
- On Control Panel Verify 0 ohms between **MANO** and **MACM**.
- On control panel, verify lamps **1FAPL** and **MACPL 1-2** are glowing.
- Push **RUN** switch down on Control Panel.
- END OF TEST.

TEST WRITTEN BY: **Monte Starling** **DATE:** 06/07/02

TEST VERIFIED BY **Kenny Greenwell** **DATE:** 3/16/2011