g GE Energy	Test and Operating Procedure	
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DISTRICT MGR:	QUALITY REP: Robert Dunn	
TITLE: Power Supply Module Test Procedure	PROCEDURE: LOU-GED-DS3820PSSx-F	

1. INTRODUCTORY DESCRIPTION

A. This procedure establishes the methods for testing a **DS3820PSS_ Power Supply.**
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. All equipment clean will be performed as instructed in the GEES SOP Sec. 14.0

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.
    7. Circuit board discolored or burned.
    8. Printed wire runs burned or damaged.

5. REVISION HISTORY

Revision	Date	Initials	Reason for Revision
A	11/08/96	JDS	Initial Procedure – After Verification
B	06/07/02	RKD	Added section 5 & 6, Changed procedure number
C	11/21/02	JDB	Changed Procedure # to test PSSA and PSSB versions, Clarified section 9 with added table settings, Added Load Instrument Initial Settings.
D	1-24-03	JDS	Added torque spec. for standoffs
E	10-24-03	JFH	Added install in drive instructions
F	9/29/08	GC	Added clarity to section 9, and added footer to document & change header.
G			
H			
I			
J			
K			

6. REFERENCE DOCUMENTATION

- Reference: GEK

7. THEORY OF OPERATION

Refer to DS3820PSSB documentation for theory of operation.

8. TEST EQUIPMENT TO BE USED

DS3820PSSB Transformer Test Assembly

Digital Multimeter

Variable Solid State Load (Transistor Devices Inc. or Equivalent)

Inch ounce Torque Screwdriver

9. FINAL TEST AND OPERATION PROCESS

All Standoffs that are replaced must be torqued to 25-inch ounces max !!!

A. Connect Jumper from PCOM to DCOM to ACOM

B. Plug ribbon cable from Transformer Test Fixture into JA, from Variable Load into JE.

C. Plug connector JH from test Fixture to JH on the NPSY board.

D. Plug Molex "Y" cable from Variable Load into JC.

E. Verify the following jumpers:

Card	Jumper	Setting
DS3800DPSS	J1	STO
DS3800NPSY or NPSS	J1	REM
DS3800NPSY or NPSS	J2	REM

F. Verify the following jumpers:

G. Verify all switches on Variable Load are in the C/C position.

H. Apply Power to Variable load and UUT, Verify all loads are set at zero.

I. Verify that the PS OK LED is on.

J. Verify the following measurements:

- Lead	+ Lead	Reading	Tolerance	Adjustment Pot
TP2	TP1	+5V DC	.1 V	R3
TP2	TP3	-15V DC	.3 V	R1
TP2	TP4	+15V DC	.3 V	R2
JC8	JC12	+28V DC	27 TO 33 VDC	None

K. Verify that the PS OK LED is on.

L. Verify lamp marked relay contact test is on.

M. Load UUT outputs per the following:

Output	Current
+5V	9.5 A
+15V	.45 A

Output	Current
-15V	.45 A
+28V	.40 A

N. Verify that the PS OK LED is on.

O. Re-verify that all voltages are within tolerance while under load.

- Lead	+ Lead	Reading	Tolerance	Adjustment Pot
TP2	TP1	+5V DC	.1 V	R3
TP2	TP3	-15V DC	.3 V	R1
TP2	TP4	+15V DC	.3 V	R2
JC8	JC12	+28V DC	.56 V	None

P. Increase Load on +5V line until the PSOK and relay contact test lamp goes off and verify fault indicator signal lamp comes on. Return +5V load to 9.5 amps and verify PSOK and relay contact test lamp comes on and fault indicator signal lamp goes off.

Q. If unit maintains outputs for at least 10 minutes the unit passes.

R. If unit is from Westvaco, install repaired supply into Siltron Digital Drive, run for an hour or so and verify there are no faults.

10. SPECIAL INFORMATION

TEST WRITTEN BY: David Smith **DATE:** 11/08/96

TEST VERIFIED BY: Monte Starling **DATE:** 1/25/03