g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-CAN-SP3200**

Test Procedure for the Canadian Silpac SP3200 Drive

DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column

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Steve Pharris			Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
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1. SCOPE

1.1 This is a functional testing procedure for the Canadian Silpac.

2. STANDARDS OF QUALITY

2.1 Refer to the current revision of the IPC-A-610 standard for workmanship standards.

3. APPLICABLE DOCUMENTS

3.1 The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.
3.1.1 Check board's electronic folder for more information

4. ENGINEERING REQUIREMENTS

4.1 Equipment Cleaning
4.1.1 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.
4.2 Equipment Inspection
4.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:
4.2.1.1 Wires - broken, cracked, or loosely connected
4.2.1.2 Terminal strips / connectors - broken or cracked
4.2.1.3 Components - visually damaged
4.2.1.4 Capacitors - bloated or leaking
4.2.1.5 Solder joints - damaged or cold
4.2.1.6 Circuit board - burned or de-laminated
4.2.1.7 Printed wire runs / Traces - burned or damaged

5. EQUIPMENT REQUIRED

5.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
1	H190028	Silpac Drive
1	H190027	Silpac Test Station ATE#4

6. Testing Process

Note: This procedure covers the complete initialization of the Silpac and its related test station as if it were in an off condition. Please read this procedure in full before beginning if you are not familiar with this test.

6.1 Testing Procedure

6.1.1 Verify all connection between test station and Silpac are made. This would be the output of the Silpac to the motor on the side of the test station, The tachometer feedback connection, and the communication cables. Four total connections that should be intact already.

6.1.2 Apply power to the test station by plugging in 115VAC cord into 115VAC outlet

6.1.3 Apply power to Silpac by closing CB1

6.1.4 Turn on PC in test station

6.1.5 While the PC is booting execute option 1 on Workmaster

6.1.6 **Log onto PC using password: qwerty**

6.1.7 Close any error boxes that open on the PC desktop

6.1.8 Push the RED pushbutton on the communication card in the series six rack on the right hand side above the two LED's (The card is next to the LED Driver card)

6.1.9 Verify PB18 on the DOSB illuminates

6.1.10 On the PC click Start, then Run, then OK

6.1.11 After the program opens push enter on the keyboard to get to the next screen

6.1.12 Verify communications established and press any key to continue

6.1.13 At the main menu select option A (this opens the utilities menu)

6.1.14 In utilities select option B

6.1.15 At the lower edge of the window find where it says "File this file FROM Disk." in the blank type **3200plus** then push enter

6.1.16 The screen will say "File to the workstation" press Y for yes

6.1.17 Verify successful file transfer with no errors

6.1.18 The utilities menu should now show "3200PLUS" in the Silpac and Workstation ID field

6.1.19 Select option J to initialize the drive

6.1.20 Wait for "Communications Established!" then press any key

6.1.21 Execute option E

6.1.22 The screen will be asking for a password. Leave it blank and just press enter.

6.1.23 Verify the data transfer is successful with no errors. (Takes a few minutes)

6.1.24 The screen will ask if you want to save changes. Press Y for yes

6.1.25 At this point the drive should be ready to run

6.1.26 On Silpac set the Local/Remote switch to local

6.1.27 Verify PB17 on DOSB begins to flash

6.1.28 Using the buttons on the Silpac start and stop the motor

6.1.29 On Silpac set the Local/Remote switch to Remote

6.1.30 On DOSB verify PB17 extinguishes and PB18 Illuminates

6.1.31 At this point the DOSB has control of the drive. Use the following reference to exercise the motor and drive using the push buttons on the DOSB

PB12 = Start

PB32 = Stop

PB31 = Run at approx. 300 RPM (Verify by looking at the display on the Silpac)

PB30 = Run at approx. 1100RPM (Verify by looking at the display on the Silpac)

PB11 = Jog Reverse

PB14 = Jog Forward

6.1.32 If all functions perform as described the drive is functioning properly

6.1.33 Turn off power to Silpac by opening CB1

6.1.34 You can leave the test station on

6.2 ***TEST COMPLETE ***

7. Notes

7.1 None at this time.

8. Attachments

8.1 None at this time.