g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GEB-4006L6502**

Test Procedure for the Canadian 4006L6502 Helper Card

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1. SCOPE

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

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)

6.2 Install card into SP3200 Drive by following this procedure:

6.2.1 With all power off, remove JP connector from the Lambda Power supply from the 4006L6500 and the 0621L0436 card, and connect it to the JP connector of the 4006L6502 under test.

6.2.2 Remove the ribbon cable connected to the JF connector of the 0621L0429 and install a new ribbon cable from the JF connector of the 0621L0429 to the JF connector on the 4006L6502 under test.

6.2.3 Install on the 4006L6502 the 34 pin to 50 pin one wire connector from JZ-1 to JY-49.

6.2.4 Connect a 0621L0446 pushbutton card to the JD connector on the 4006L6502.

6.2.5 Connect the workstation computer to the DB25 connector on the 061L0446 card.

6.2.6 Card is now connected to the SP3200.

6.2.7 Power up the main 3-phase supply and all breakers to the drive. Turn on the Workstation computer.

6.2.8 From the DOS prompt, change the directory on the C drive to helper. From the DOS prompt now type helper and ENTER to start the workstation software. See that communications was established. Press the Tab key to Password to proceed.

6.2.9 Press the RETURN key to go to main menu and insert the data disk. Select Utilities Menu. Select J to establish communications.

6.2.10 Press any key after communication has been established. Select K to go to the Main Menu.

6.2.11 From the MAIN MENU, select A - Utilities Menu.

6.2.12 From the UTILITIES MENU, select B - File from disk to workstation.

6.2.13 Enter the file name HLPRRUN and answer Y to File to workstation.

6.2.14 After all files are copied to the work master, press any key and return to the UTILITIES MENU.

6.2.15 Select E, Copy from the Workstation to the Silpac.

6.2.16 Once the file has been uploaded to the Silpac, press reset on the 446 card.

6.2.17 The LCD should display the following:

*** HLPRRUN HELPER STATUS *** OK (*flashing*)
CONTACTOR OPEN
HELPER STOPPED FIELD FIRING ON
DATA LINK COMM LOSS

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

6.2.19 Turn off power to Silpac by opening CB1

6.2.20 You can leave the test station on

6.3 ***TEST COMPLETE ***

7. Notes

7.1 None at this time.

8. Attachments

8.1 None at this time.