g	Test and Operat	ing Procedure
GE Industrial Systems		
	DATE: 06/14/02	PAGE 1 OF 6
QUALITY REP:		
	Rober	Durll
TITLE:	PROCED	
DC2000 LCC TEST Procedure	LOU -GEI	D-531X306LCC-C

#### 1. <u>INTRODUCTORY DESCRIPTION</u>

- A. This procedure establishes the methods for testing a
- B. Environmental ranges: 70 +/- 10 Deg. F. with 20-75% R.H.
- C. Unit warm-up/stabilization period requirement:
- 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 GE T&IC 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 or otherwise inadequate.
  - 7. Circuit board discolored or burned.
  - 8. Printed wire runs burned or damaged.

g	Test and Opera	ting Procedure
GE Industrial Systems		
	DATE: 06/14/02	PAGE 2 OF 6
	QUALITY REP:	
	Robert	Dwell
TITLE:	PROCEI	DURE:
DC2000 LCC TEST Procedure	LOU -GE	D-531X306LCC-C

# 5. <u>REVISION HISTORY</u>

Revision	Date	Initials	Reason for Revision
A	02/19/99	JDS	Initial Procedure – After Verification
В	02/19/99	JDS	Correct Grammar
C	06/14/02	RKD	Added initial column to section 5, changed
			procedure number.
D			
${f E}$			
F			
G			
H			
I			
J			
K			

g	Test and Operating Procedure	
GE Industrial Systems		
	DATE: 06/14/02	PAGE 3 OF 6
QUALITY REP:		
	Rober	Durll
TITLE:	PROCED	
DC2000 LCC TEST Procedure	LOU -GEI	D-531X306LCC-C

### 6. <u>REFERENCE DOCUMENTATION</u>

• Reference: GEH-6005 8-4

## 7. THEORY OF OPERATION

• Reference: GEH-6005 sections 8-4

### 8. TEST EQUIPMENT TO BE USED

- DC2000 CD01 Cap # **H033758**
- IOS Cap # **H033759**

## 9. FINAL TEST AND OPERATION PROCESS

- LCC Test
- Verify E-stop is pushed in and power light is off
- Remove LCC card form Drive and replace it with UUT.
- Set jumpers as follows.
- J14 1-2 J15 1-2 J16 1-2 J17 2-3 J18 2-3 J19 1-2
- Install firmware version PSP531X306M2\_AD into sockets U6,U7.
- Connect cables of the Drive to ARCPL, ARC2PL, 10PL, 3PL of the LCC card
- Pull E-stop out, power light will come on.
- Verify IOS (Fixture # H033759) is powered up and ARCNET is in display labeled TEST
  TYPE on IOS. If this is not correct refer to Loading Instructions and load file ARCNET.H09

g	Test and Operat	ing Procedure
GE Industrial Systems		
	DATE: 06/14/02	PAGE 4 OF 6
QUALITY REP:		
	Rober	Dwell
TITLE:	PROCED	
DC2000 LCC TEST Procedure	LOU -GEI	D-531X306LCC-C

- **NOTE:** If card you are testing is a G3 it can only communicate "ARCNET" EE 615 must be changed from 130 to 129 this will disable DLAN communications.
- Set FDBP-69 switch to 10 or higher on control box of the Drive you are using to test.
- Verify on IOS that the JOG pushbutton corresponding to the Drive you are using to test is flashing. This means Drive is communicating with IOS and no faults have occurred.
- Press and hold JOG #\_ pushbutton on the IOS Drive will Jog and display labeled SPEED #
  will start to increase. Release JOG #\_ pushbutton and Drive will Stop.
- Refer to loading instructions and load file DLAN.H10
- Verify IOS (Fixture # H033759) is powered up and **DLAN** is in display labeled TEST TYPE on IOS.
- Verify that EE 615 = 130 to enable DLAN communications.
- Verify on IOS that the JOG pushbutton corresponding to the Drive you are using to test is flashing. This means Drive is communicating with IOS and no faults have occurred.
- Press and hold JOG #\_ pushbutton on the IOS Drive will Jog and display labeled SPEED #\_ will start to increase. Release JOG #\_ pushbutton and Drive will Stop.
- On the control box of Drive press IN 1-8 pushbutton. Display lights will change to the RED lights
- KEYPAD TEST
- Press SET display shows (SET)
- Press **DRV**# display shows (DRV#)
- Press **7** two times display shows (SET DRIVE 77)
- Press ENTER
- Display shows (PARAMETR\_E MODE)
- Press **110**

# 

- Press ENTER
- Display shows (DIAG1 264)
- Press **HEX/DEC** display will change to(DIAG1 0108 H)
- Press and hold the green **SHIFT** then press 6/F
- LCC display will change to (DIAG1 FH)
- Press **RESET** on keypad.
- Press 110 then ENTER
- Press **ADDR**, this will show you what address you enter.
- LCC display will show (AD110 264)
- Press **RESET** (3) times until (DIAGNOSTIC MODE) is displayed on LCC.
- Press 3/C LCC display will show (DVM 0000)
- Press 4/D LCC display will show (VA 0000)
- Press 5/E LCC display will show (IA 0000)
- Press 6/F LCC display will show (IF 70.00)
- Press 7 LCC display will show (%SPD 0000)
- Press 8 LCC display will show (TRQ 0000)
- Press 9 LCC display will show (H.P. 0000)
- Press RESET on Control Panel
- Press 1/A, motor will run
- Press STOP
- Press 2/B, motor will run
- Press STOP
- END OF TEST

g	

## GE Industrial Systems

## **Test and Operating Procedure**

DATE: 06/14/02 PAGE 6 OF 6

**QUALITY REP:** 

PROCEDURE:

LOU -GED-531X306LCC-C

TITLE:

**DC2000 LCC TEST Procedure** 

## 10. SPECIAL INFORMATION



TEST WRITTEN BY: David Smith DATE: 02/19/99

TEST VERIFIED BY: Kenny Greenwell DATE: 02/19/99