1. INTRODUCTORY DESCRIPTION

A. This procedure establishes the methods for testing a DS2020BRCB Brake Control.
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 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.

5. REVISION HISTORY

Revision	Date	Initials	Reason for Revision
A	7-8-99		Initial Procedure – After Verification
B	8-7-00		Added minor revisions to Procedure
C	06/14/02	RKD	Added column for Initials
D			
E			
F			
G			
H			
I			
J			
K			

6. REFERENCE DOCUMENTATION

- Reference: GEK
- Factory Procedure #_____
- DS2020BRCB Folder

7. THEORY OF OPERATION

- Reference: GEK

8. TEST EQUIPMENT TO BE USED

- Inductive Load
- Multimeter
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9. FINAL TEST AND OPERATION PROCESS

- Connect AC Input to FU2 & FU3

  G1 = 230 VAC

  G2 = 460 VAC

  G3 = 575 VAC

  G4 = 380 VAC
- Connect Switch 1 to **CTB1** & **CTB2**.
- Jumper **DTB1** & **DTB2**, JP1 (2-3), JP3 (1-2), Dip Switch (1-open, 2-8 closed).
- Connect 41 Ω inductive load to **FP** & **BTB12** (use Pos & 41 Ω terminals on load).
- Apply power-verify *GREEN* LED lights, also **PTB1** & **PTB**2 should be open, **FTB1** & **FTB2** should be closed.

- Turn Switch 1 ON, verify *YELLOW* LED lights and **PTB1** & **PTB2** should now be closed.
- Turn Switch 1 to off.
- Turn off AC Input, unhook one side of inductive load.
- Reapply power, verify *GREEN* LED on, **FTB1** & **FTB2** are closed, **PTB1** & **PTB2** are open.
- Turn Switch 1 on , verify *YELLOW* LED turns on. After approximately 3 seconds *YELLOW* LED turns off & *RED* LED turns on.
- Verify **PTB1** & **PTB2** are open, also **FTB1** & **FTB2** are open.
- Turn Switch 1 off and push **PBSW1**, verify *RED* LED goes off and **FTB1** & **FTB2** are now closed.
- Turn Switch 1 on, verify *YELLOW* LED turns on, after approximately 3 seconds *YELLOW* LED turns off and the *RED* LED turns on.
- Verify **PTB1** & **PTB2** are open, also **FTB1** & **FTB2** are open.
- Turn Switch 1 off, short **RTB1** & **RTB2** together (External Reset), verify *RED* LED goes off and **FTB1** & **FTB2** are now closed.
- Verify **+15 VDC** from **TP14** (com) to **TP13** on **DS200SBCB** card is between **+14.9** to **+15.1 VDC**
- Verify **-15 VDC** from **TP14** (com) to **TP15** on **DS200SBCB** card is between **-14.9** to **-15.1 VDC**
- Verify 50 Ω from **BTB2 & BTB3, BTB4 & BTB5, BTB6 & BTB7, BTB8 & BTB9, BTB10 & BTB11.**
- **TEST COMPLETE**

10. SPECIAL INFORMATION

TEST WRITTEN BY: Lloyd F. Groves **DATE:** 7-7-99

TEST VERIFIED BY: David Smith **DATE:** 7-8-99