

# OTIS

Central & East Europe Area

**FOD BERLIN**

## FIELD COMPONENT MANUAL

### Brake Release Electrical Board (BRE) Startup Routine

Part: 4 – D1  
No.: GAA26800BGII\_FC1  
Vintage: 01 / 1  
Page: 1 / 5  
Date: March1, 2000

## **Brake Release Electrical Board**

### **Startup Routine**

Authorization Date D1: 16.02.2000  
Running on PCB: GAA26800BG1  
Software Version: - - -  
Document Revision :

<b>Date</b>	<b>Author</b>	<b>Comment</b>
1.03.2000	W. Schoppa	Original Version

Copyright 2000, OTIS GmbH & Co. OHG Berlin.

No part of this document may be copied or reproduced in any form or by any means without the prior written consent of OTIS GmbH & Co. OHG.

**OTIS**

Central & East Europe Area

**FOD BERLIN**

**FIELD COMPONENT MANUAL**

**Brake Release Electrical Board (BRE)  
Startup Routine**

Part: 4 – D1  
No.: GAA26800BGII\_FC1  
Vintage: 01 / 1  
Page: 2 / 5  
Date: March1, 2000

<b>1</b>	<b>Introduction .....</b>	<b>3</b>
<b>2</b>	<b>Abbreviations .....</b>	<b>3</b>
<b>3</b>	<b>Pre-Power Checks.....</b>	<b>3</b>
<b>4</b>	<b>Power Checks.....</b>	<b>3</b>
<b>5</b>	<b>LED Checks .....</b>	<b>3</b>
<b>6</b>	<b>Adjustment and Calibration .....</b>	<b>4</b>
6.1	Parameter Adjustment and Description.....	4
<b>7</b>	<b>Trouble Shooting .....</b>	<b>5</b>

www.up-lift.cn

## 1 Introduction

This manual covers instructions for checkout of the **Brake Release Electrical Board** and adjustment / calibration hints of the BRE.

## 2 Abbreviations

<b>TCB</b>	Traction Control Board
<b>SPB</b>	Service Panel Board
<b>SVT</b>	Service Tool

## 3 Pre-Power Checks

Inspect all equipment for signs of damage, loose connections or other defects.

## 4 Power Checks

connector	measurement points voltage - reference point	voltage (tolerance)
<b>P 1</b>	P1:5 – P1:1	12VDC (10,2 – 13,8V) (battery)
<b>P 1</b>	P1:4 – P1:2	12VDC (10,2 – 13,8V) (battery)
<b>P 2</b> with pressed button BRB1	P2:2 – P2:5	12VDC (10,2 – 13,8V) (battery)
<b>P 2</b>	P2:4 – P2:5	12VDC (10,2 – 13,8V) (battery)
<b>P 4</b>	P4:1 – P4:3	110 VDC +/- 10% (brake) 75VDC +/- 10% (brake hold voltage)

## 5 LED Checks

### General:

The states of LED's will be defined as follows:

- LED off
- LED on
- \* LED is continuous flickering

function description	State of buttons		State of LED's		Description
	BRB 1	BRB2*	LED2 (BRB2)	LED1 (BRB2)	
No activation of BRE	pressed	key-unlocked	●	○	
activation of BRE	pressed	key-locked	● *	● *	Rescue operation with BRE

## 6 Adjustment and Calibration

Adjustment of the BRE has to be done by the Service Tool of the SPB in the menu of the TCB.

### 6.1 Parameter Adjustment and Description

Parameter Adjustment with M-1-3-1-7 (Service):

Parameter	Value Default (range)	Description and hints
<b>BRE-Max</b>	10  ( 0 ..30 ) [in cm/s]	<b>Maximum speed for Brake Release Electrical</b>  Manual rescue operation: SPB drops the brake if the measured car speed is higher than BRE-MAX.  <b>Decrease</b> of this parameter would drop the brake automatically at a lower speed on manual brake release operation.
<b>BRE-Min</b>	7  ( 0 ..29 ) [in cm/s]	<b>Minimum speed for Brake release Electrical</b>  Manual rescue operation: SPB pulls the brake again if the car speed has become lower than BRE-MIN.  This parameter smoothes out the BRE manual brake release operation and avoids full-stops between each brake lifting. <b>Decrease</b> of this parameter would more slow-down the car at rescue operation, whilst an <b>increase</b> of this value would release the brake again at a higher speed level.
<b>BRE-Hold</b>	10  ( 0 ..63 ) [in cm/s]	<b>Switch to Hold-Voltage for Brake Release Electrical</b>  Manual rescue operation: The power for the BRE device is reduced after the measured car speed has reached BRE-Hold.  This Parameter sets the value for reducing the voltage level to the brake if it is detected being release, to safe battery energy. An <b>increase</b> of this parameter value would result in higher battery energy consumption. A <b>decrease</b> might result in an too early reduction of the voltage of the brake and could avoid a not full opening.
<b>BRE-Tout</b>	5  ( 0 ..5 ) [in 100ms]	<b>Timeout for Brake Release Electrical</b>  Manual rescue operation: The brake is dropped if no speed is detected after BRE-TOUT.  An <b>increase</b> of this value can result in a too high car speed in case of a non-detected speed encoder error! A <b>decrease</b> could avoid car movement at near-balanced situation in BRE rescue mode, as the time might not be sufficient to detect any car movement and the brake would drop before a car speed is detected, although the car just starts to move. Rescue-operation would not be successful then!

## 7 Trouble Shooting

function description	State of buttons		State of LED's		Possible reason	action
	BRB 1	BRB2	LED2 (BRB2)	LED1 (brake)		
activation of BRE	pressed	key-locked	*	*	If the car does not move: <ul style="list-style-type: none"> <li>empty battery due to a too long rescue operation</li> <li>Parameters are not OK</li> <li>Car is in balance</li> </ul>	<ul style="list-style-type: none"> <li>➤ charge battery</li> <li>➤ set default values TCB: M-1-3-1-7</li> <li>➤ bring weights on the top of the car</li> </ul>

www.uplift.ch