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# ALMEGA 2 Brake Test Operation Quick Guide ISSUE: 3 Date: 03/02/2022

## **Prerequisites:**

- 1. Brake Test Switch, and Brake Test Circuit Installed
- 2. Brake Coils are wired correctly and configured for **<u>SERIES</u>** or **<u>PARALLEL</u>** operation!
- 3. Almega 2 Software Version V4.10 or above is installed.
- 4. Brake Test parameters are Setup and Enabled (as below)
- 5. Check Brake Monitoring inputs are configured and working (inputs on when stationary).
- 6. Check the "Lift Car" load is set as per the Lift Standards Test Sheet (e.g, 125%).

#### **STEP 1: PARAMETER SETUP**

Several Brake Control parameters can be found in Travel Controls and Travel Times (as below):

<b>Travel Control Parameters:</b>				
Parameter	Minimum	Maximum	Default	Setup as:
BRAKE TEST CONTROL	NO	SEMI AUTO	NO	SEMI AUTO
BRAKE TEST FLOOR	Bottom Floor	Top Floor	1	Lowest Floor Accessible e.g. floor 1
BRAKE TEST LATCH	NO	YES	NO	NO
Travel Time Parameters:				
Parameter	Minimum	Maximum	Default	Setup as:
BRAKE TEST STR PAUSE TIME	1s	10s	3s	3s
BRAKE TEST CRASHSTOP TIME	2.1s	30s	5s	5s

## **IO Parameters:**

Check an input is configured for Brake Test (i.e. input 101). Input is ON when switch not operated, input is OFF when switch operated.

## **STEP 2: SWITCH TO "PREPARE TO TEST" CONTROL**

- 1. Press MENU
- 2. then ENGINEER'S SELECTION
- 3. then select PREPARE TO TEST
- 4. select DOORS OFF
- 5. Press OK to confirm.

## **STEP 3: TURN OFF BRAKE MONITORING IN THE VF DRIVE (if applicable)**

- 1. e.g. Ziehl Abegg Z4
- 2. Select MONITORING MENU
- 3. SELECT BR; and select option OFF
- 4. Press Enter / Carriage Return to confirm



# **STEP 4: TAKE THE LIFT TO THE HIGHEST FLOOR AVAIBALE (e.g. top floor)**

- 1. Press MENU
- 2. then LIFT / GROUP VIEWER
- 3. then press the TOP button
- 4. a car call will be entered to the top floor
- 5. wait for the lift to reach the top floor.

#### STEP 5: TEST BRAKE / COIL 2 (i.e. keep the power on Brake Coil 1 whilst testing Brake / Coil 2)



- 1. Switch the lift power off, and remove the wiring to Brake Coil 1 (B1+ and B1-)
  - a. Note if series wired brake coils, replace the brake coil with a LINK wire.
- 2. Then re-connect as below:
  - a. + to **BT**, and to **B** Switch the lift power back on.
- 3. The lift is now ready for the Brake Test (Coil 2)
  - a. Press the Brake Test Push and Hold!
  - b. Twist the Brake Test Key Switch Clockwise (as Fig3 below) and Hold!
  - c. The Almega 2 display will show the screen as (*Fig 1*) below:
  - d. After 3 seconds a car call will automatically be placed to the Brake Test Floor.
  - e. The lift will accelerate up to high speed and then crash stop itself (keep the Brake Test Key Switch Held, see *Fig 2*)
  - f. The lift brake will drop and **coil 2** will de-energise, **coil 1** will stay energised.
  - g. The lift will decelerate using the friction of the brake associated with Brake Coil 2 only.
  - h. Switch the lift power off, and remove the wiring to Brake Coil 1 (+ and -)
- 4. Then re-connect back to normal as below:
  - a. Remove any links first.
  - b. + to **B1**+, and to **B1**-
  - c. Switch the lift power back on.

#### STEP 6: RESET THE BRAKE TEST LATCH.

- 1. Press MENU
- 2. then ENGINEER'S SELECTION
- 3. then select BRAKE TEST LATCH
- 4. select NO
- 5. Press OK to confirm.

#### STEP 7: TAKE THE LIFT TO THE HIGHEST FLOOR AVAIBALE (e.g. top floor)

1. i.e. Repeat STEP 4.

# <u>STEP 8: TEST BRAKE / COIL 1 (i.e. keep the power on Brake Coil 2 whilst testing Brake / Coil 1)</u>





- Switch the lift power off, and remove the wiring to Brake Coil 2 (B2+ and B2-)
  a. Note if series wired brake coils, replace the brake coil with a LINK wire.
- 2. Then re-connect as below:
  - a. + to **BT**, and to **B** Switch the lift power back on.
- 3. The lift is now ready for the Brake Test (Coil 1)
  - a. Press the Brake Test Push and Hold!
  - b. Twist the Brake Test Key Switch Clockwise (as Fig3 below) and Hold!
  - c. The Almega 2 display will show the screen as (*Fig 1*) below:
  - d. After 3 seconds a car call will automatically be placed to the Brake Test Floor.
  - e. The lift will accelerate up to high speed and then crash stop itself (keep the Brake Test Key Switch Held, see *Fig 2*)
  - f. The lift brake will drop and **coil 1** will de-energise, **coil 2** will stay energised.
  - g. The lift will decelerate using the friction of the brake associated with Brake Coil 1 only.
  - h. Switch the lift power off, and remove the wiring to Brake Coil 2 (+ and -)
- 4. Then re-connect back to normal as below:
  - a. Remove any links first.
  - b. + to **B2**+, and to **B2**-
  - c. Switch the lift power back on.

#### **STEP 9: TURN BACK ON BRAKE MONITORING IN THE VF DRIVE (if applicable)**

- 1. e.g. Ziehl Abegg Z4
- 2. Select MONITORING MENU from the keypad.
- 3. SELECT BR; and select option 2NC.
- 4. Press Enter / Carriage Return to confirm.



Fig 3: Brake Test Key Switch Fig 1: Brake Test Start Fig 2: Brake Test Crash Stop RSD: O 10TION: SPEED: DEST:8 RSU: RUN: STU: IOTION: NORMAL STEP: STD: RUN: STU: 8-8-BRAKE ST:E ко 7 'ES' 6 6. EMER CARL LANL PREL 5VC: 5VIO: 24IO: 5-ARL LANL PREL 4 4з-3 12 BOT 2-1 MENU MENU