GCS - GECB

Service Tool Manual

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1 Revision History

Date	SCN	Author	Comment
14-Mar-2002	GAA30082CAB	A. Gerwing	first issue; also applicable for TCB, TCBC and HCB
21-Nov-2003	GAA 30082 CAC	A. Pfeffer	M126, M137 added; Status Display corrected; minor corrections
07-Sep-2004	GAA 30781 AAA	M. Hoinkis	added TCBC 30781 baseline
14-Dec-2004	GAA 30781 AAB	M. Hoinkis	Loader SCN (part menu)
06-Jan-2005	G15 30780 AAA	A. Pfeffer	also applicable for GECB
2005-02-18	G22 30780 AAA	A. Pfeffer	board versions for SHO/WCO corrected
2005-02-25	G22 30780 AAA	H.-K. Spielbauer	Selftest updated
2005-02-28	G2230780AAA	A. Pfeffer	Selftest updated
2005-07-21	GAA 30780 AAB	A. Pfeffer	GECB: Compass added: M111, M115, M1331
2005-07-21	**GAA30780AAB**	H.-K. Spielbauer	Update for Compass Release
2005-11-04	Gxx30781AAE	D. Cominelli	Test-Event with new time stamp
2006-01-17		M. Hoinkis	cut call mask; DIAG ACT-T;
2006-11-30		H.-K. Spielbauer	SCN update
2007-01-12		M. Hoinkis	System Menu with ARO
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2008-07-17	**GP130780DAB**	A. Pfeffer	No change
2008-12-04	**GAA30780DAC**	A. Pfeffer	M137 added for GECB and Compass
2009-02-19	G1630780DAD	M. Wilke	GECB2 board ID added (M123)
2009-05-07	**GAA30780DAD**	M. Hoinkis	M119 & M129 added (Rescue Status & ARO-Test)
2009-05-20	G1130780DAE	S. Seelmann	M134 Position Indicator Codes ex-panded
2009-06-08	G1330780DAE	A. Pfeffer	M19 Korean UCM added
2009-06-19	**GAA30780DAE**	A. Pfeffer	M137 Setup Speech: OPEN DOOR MSG, CLOSE DOOR MSG, EMS/EMT MESSAGE added
2009-07-22	G1630780DAF	H.-K. Spielbauer	M126 Test Plug Menu (LCB_II, TCB, HCB, TCBC only)
2009-08-04	G1830780DAF	M. Wilke	SOD Expiration Counter (M-2-7)
2009-09-08	**GAA30780DAF**	A. Pfeffer	no changes
2009-09-21	G1130780DAG	M. Wilke	OFT-C Pairing
2009-11-19	G1930780DAG	M. Wilke	Gateway 2 RS-CAN Converter Board
2010-03-17		S. Seelmann	Speech Setup EHS/EMT typo corrected

Date	SCN	Author	Comment
2010-05-07	**GAA30780DAH**	A. Pfeffer	Release
2010-06-28	**GP130780DAH**	A. Pfeffer	No changes
2010-09-07	**GP230780DAH**	H.-K. Spielbauer	Release
2010-11-25	**GAA30780DAJ**	M. Hnida	Release
2011-01-31	G1630780EAA	A. Pfeffer	Menu M14 SYTEM-CHECK added Function M141 UCM-EN added
2011-01-31	G1630780EAA	M. Hnida	In M123, added display of SCNs to Test Part-No Menu
2011-02-10	**GAA30780EAA**	H.-K. Spielbauer	Release
2011-04-06	**GAA30780EAB**	A. Pfeffer	Release
2011-05-27	**GP130780EAB**	A. Pfeffer	No changes
2011-07-20	G1730780EAC	SG Cho	Added the monitoring menu for ARO
2011-10-25	G2530780EAC	A. Pfeffer	Removed descriptions for LCB2, TCB, TCBC; Reworked function overview; Revised display for M23 “Setup Inst”; Corrected default text in M136 “Setup ELD”; Minor corrections in M111 Status-Calls
2011-10-28	**GAA30780EAC**	A. Pfeffer	Release
2011-11-08	**G5130780EAC**	D. Cominelli	Corrected the OKI Speech Sythesizer table in section 5.3.7
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2012-03-27	**GP330780EAC**	A. Pfeffer	Release

2 Introduction

The Service Tool is a pocket terminal that lets you control all elevator functions:

- Monitoring of software states, system inputs and outputs and system messages
- Setup of installation parameters
- Use of software tools.

The access of each function is controlled by the Menu System which allows convenient work with the Service Tool.

The Service Tool Manual describes the Menu System and the single Service Tool functions.

3 System Menu

The System Menu is not available at the LCB_II

The System Menu is an overview of all components which are connected at the CAN bus and have a SVT menu.

3.1 Navigation

The System Level-Menu can be entered in 2 ways:

1. by connecting physically the Service Tool onto any Service Tool plug
2. pressing the Module key twice out of a subsystem menu

M-M Selection of the System Level-Menu

GoOn go to second page of System Level-Menu (if more than 4 menus detected)

3.2 Entries (dynamic)

```
1:OCSS  2:DRIVE>
3:FDOOR 4:RDOOR>
```

1: OCSS TCBC or GECB

2: DRIVE MCBIII or GDCB

3: FDOOR front DCSS5 via CAN or Multidrop

4: RDOOR rear DCSS5 via CAN or Multidrop

5: SPBC SPBC, SPBC_II, SPBC_III

6: RMH REM5 (connected at OCSS SVT plug)

7: LWB LWB_II

9: ARO external ARO

3.3 Multiple SVT Connections

Multiple SVT connections can be established by connecting the SVT to any local Service Tool plug (e.g., MCBIII, …) and by selecting the same subsystem in the SVT menu.

Note: TCBC SVT menu access must be the final connection, otherwise it will be disconnected by other connections.

An earlier SVT connection will be disconnected by any other SVT connection. Following SVT display will indicate this:

```
disconnected
by other SVT
```

3.4 Gateway 2 RS-CAN Converter Board

If a Gateway 2 is connected to the GECB SVT port via the RS-CAN-Converter the REM_TYPE is configured to “6”. “1” means an RMH is connected instead.

In the case of REM_TYPE “6”, if by any reason a SVT is connected to the SVT port of the GECB during power up, the SVT will show:

```
local SVT
disconnected
```

Please press any key in this case and the normal GECB menu is shown. Alternately you can disconnect the SVT and connect again.

3.5 System Level Msg.: connection to OCSS is not available

```
   waiting
for SYSTEM MENU
```

If the GECB is not available, you will see this message for 6 seconds. Then the SVT will switch automatically into the local SVT menu.

3.6 System Level Msg.: a subsytem is not available

e.g.

```
wait for LWB
or press 'M' 2x
```

If a subsystem is not available, you will see this message (‘LWB’ as an example). If you press MODULE twice times, you will get the System Menu.

4 Tree Structure

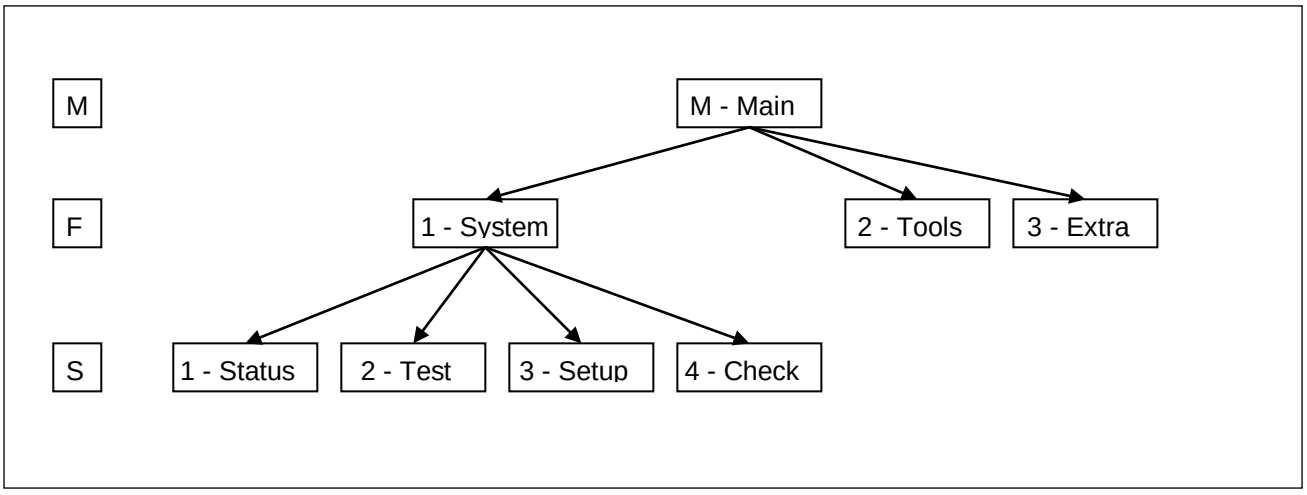
All Service Tool functions are organized in a Tree-Structure.

It is divided into a **SYSTEM** path, where you have access to the main Service Tool functions

- STATUS (system monitoring)
- TEST (system test functions)
- SETUP (setup of system environment)

a **TOOL** path and an **EXTRA** path.
The TOOLS path contains the Service Tool functions which support installation and maintenance of the elevator. The EXTRA path contains a function to activate software.

Menu Structure:



Function Overview:

4.1 Key Overview

The Menu System allows you to access the single Service Tool functions if you choose the right path through the Tree Structure by pressing the corresponding key (number 1,2,...8).

If there is only one number to choose, you can call the function also with the key **ENTER**. The ">" character indicates that you can toggle between the different menus using the **GOON** or **GOBACK**.

The **CLEAR** key lets you jump one step back.

If you want to jump back to one of the three Main Level of the architecture (MONITOR, FUNCTION or SET) you can press the Main Level keys **M**, **F** or **S**.

4.2 Short Keys

The Short Keys provide direct access to certain , often used Service Tool functions, eliminating the need to step through the menu structure.

The Service Tool functions **Input**, **Calls**, **Install**, **RSL** and **Events** are assigned to the Standard Short Keys **S4** (Shift 4), **S5** (Shift 5), **S6** (Shift 6), **S7** (Shift 7), **S8** (Shift 8).

Short Key **S9** (Shift 9) is a free programmable key to store any position of the Tree – Structure as a sixth Short Key. Once you have stored **S9** (by pressing S9 at the desired position) you can reset it only on level **M** (Main – Menu).

Key	old key name	new key name	Description
S4	SETUP INST	DISP IN	M-1-3-1 SETUP INSTALL
S5	SETUP ALTER	SEL OUT	M-1-3-2 SETUP RSL
S6	RET		M-1-2-1 TEST EVENTS
S7	DISPL INPUT	DISP STATE	M-1-1-2 STATUS INPUTS
S8	ENTER CALL	ENT CALL	M-1-1-1 STATUS CALLS
S9	PROG	TEST	Programmable Shortkey • Select any Service Tool Function and press S9 to store this key as a Shortkey for that function. • While using any other Service Tool Function, press S9 to jump to the previously stored function. • Press M – S9 to reset the definition for this key. You can now redefine this key for a different Shortkey

Example

press keys	description
M - 1 - 1 - 3	use M113 to view system outputs
S9	**Program S9** as Shortkey for M-1-1-3
S7	View system inputs
S8	Enter calls
S9	**Use S9** to view system outputs
S7	View system inputs
M – S9	**Reset S9**
M - 1 - 1 - 6	Use M116 to view commands
S9	**Program S9** as Shortkey for M-1-1-6
S8	Enter calls
S9	**Use S9** to View commands

5 Menu Functions of the Service Tool

The following chapters describe the functions of the Service Tool.

5.1 Status Functions

The Status Functions allow monitoring the status of the system. The first row provides general information about the Operational Mode and Drive State. The second row is different for each Status Function.

5.1.1 Status Display

M - 1 - 1 - …

The first row of the Service Tool display is identical for all Status Functions:

Display			description	values
123 4 5 6 7 **A-01 IDL ST][][**	1	**A**	Car ID	A-D car identifier for group configurations. Depends on parameter GRP-NO.
	2	**-**	moving direction	- not moving u moving up d moving down
	3	**01**	floor position	** unknown position 00-31 current floor number
	4	**IDL**	Operational Mode	see *Reference List* for all available Operational Modes
	5	**ST**	Drive State	see *Reference List* for all available Drive States
	6	**][**	front door state	] [fully closed <> opening [ ] fully opened >< closing DDO both doors are fully closed and Disable Door Operation is activated
	7	**][**	rear door state	
8 **A-01 >TCI-Lock!**	8		blink message	A blinking message appears if the system is blocked. This message shows the reason of the shutdown. See *Reference List* for all available Blink Messages.

5.1.2 Status Calls Menu **S8 / M - 1 - 1 - 1**

With this function you can view the general status of the system and enter calls.

```
A-01 IDL ST ][][
C>   U00D00 A 1C
```

The following keys can be used in this menu:

GOON / GOBACK	change the call type
0 … 9	enter a floor number
ENTER	enter the selected call type at the selected floor

Description of display:

Display			description	values
A-01 IDL ST][][**C> U00D00 A 1C** 1 2 3 4 5 6	1	**C**	call type	Standard Calls: C car call U up hall call D down hall call E emergency hall call If EN-EXT=1 is selected, the Extended Calls are shown with lower case letters: c extended car call u extended up hall call d extended down hall call e extended emergency hall call use **GOON** / **GOBACK** to change between the call types
	2		destination	0-31 the value you entered > prompt to enter a destination P destination entry device installed at this floor, no call possible
	3	**U00**	number of accepted calls in up direction	
	4	**D00**	number of accepted calls in down direction	
	5	**A**	load status	A ANS (LWX; <100kg) D Default (normal; 80-110%) F Full (LNS; >80%) O overload (LWO; >110%)
	6	**1C**	group size and power supply	1C-8C number of detected cars in the group during Normal Operation 1E-8E number of detected cars in the group during Emergency Power (EPO).

5.1.3 Status Inputs Menu

S7* / *M - 1 - 1 - 2

This function displays system inputs.

```
A-01 IDL ST ][][
 aes  es  DW DFC
```

The inputs are arranged in pages, each page containing four inputs. Active inputs are displayed in upper case letters, inactive inputs are displayed in lower case letters. See document *Gxx30780xxx_REF* for a list of available inputs.

Only those inputs are displayed which are currently used by the software, that means that the list of inputs is rearranged every time an installation parameter is changed. The complete list is shown if the parameter DISP-ALL=1 is programmed.

The following keys can be used in this menu:

GOON / **GOBACK**	display the next/previous page of inputs.
UP / **DOWN**	display a brief description of the input page in the first row.
ON	jump to the first page of inputs

5.1.4 Status Outputs Menu ***M - 1 - 1 - 3***

This function displays system outputs.

```
A-01 IDL ST ][][
 u   D   T   g
```

The outputs are arranged in pages, each page containing four outputs. Active outputs are displayed in upper case letters, inactive outputs are displayed in lower case letters. See document *Gxx30780xxx_REF* for a list of available outputs.

Only those outputs are displayed which are currently used by the software, that means that the list of outputs is rearranged every time an installation parameter is changed. The complete list is shown if the parameter DISP-ALL=1 is programmed.

The following keys can be used in this menu:

GOON / **GOBACK**	display the next/previous page of outputs.
UP / **DOWN**	display a brief description of the output page in the first row.
ON	jump to the first page of outputs

5.1.5 Status Group Menu ***M - 1 - 1 - 4***

This function displays the status of all cars in the group.

```
A-01 IDL ST ][][
B-03 NOR ST <>][
```

The first line always displays the status of the own car, while the second line displays the status of one of the other cars in the same group.
If no group communication is active (i.e. not installed or broken link), then the following display is shown:

```
A-01 IDL ST ][][
B***************
```

The following keys can be used in this menu:

GOON / **GOBACK**	select the car in the second line of the display

Description of display::

Display			description	values

`A-01 IDL ST ][][`
`B-** nav na ][][`
`1 2`
	1	**nav**	Operational Mode of other car	RNG-ICD=0:
				Some OpModes cannot be transmitted by Ring ICS 3.3 or earlier. Those modes are displayed as "nav":
				DAR, DCS, UFS, ACC, EAR, DLM

	2	**na**	Drive State of other car	RNG-ICD=3: Only three drive states are available in Ring ICD 4.0 or later: na: not available av: available dc: decelerating

5.1.6 Status ICSS Menu ***M - 1 - 1 - 5***

This function displays which other boards are detected in the group.

The following keys can be used in this menu:

GOON / GOBACK	select the next/previous information page

Description of display (since **GAA30780DAB**):

Display		description	values
1 **ICSS0 IS ONLINE** **ICSS1 is offline** 2	1	Tells whether the ICSS0 for EMS (Ring address 11) is alive.	IS ONLINE is offline
	2	Tells whether the ICSS1 (Ring address 10) is alive.	IS ONLINE is offline
1 **GCB12 IS PRIMARY** **GCB14 is offline** 2	1	Tells whether the GCB1 for Compass (Ring address 12) is alive.	IS PRIMARY IS SECNDRY is offline
	2	Tells whether the GCB2 for Compass (Ring address 14) is alive.	IS PRIMARY IS SECNDRY is offline
1 **Compass is off** **Config: None** 2	1	Tells whether any GCB has detected keypads and/or touchscreens for Destination Entry.	COMPASS IS ON Compass is off
	2	Tells the Compass type as defined by EN-GCB, DEST-DE and the configuration of the GCB.	None Full Mixed Up Boost

Description of display (until **GAA30780DAA**):

Display		description	values
1 **ICSS0 IS ONLINE** **ICSS1 is offline** 2	1	Tells whether the ICSS0 for EMS (Ring address 11) is alive.	IS ONLINE is offline
	2	Tells whether the ICSS1 (Ring address 10) is alive.	IS ONLINE is offline
1 **GCB1 IS ONLINE** **GCB2 is offline** 2	1	Tells whether the GCB1 for Compass (Ring address 12) is alive.	IS ONLINE is offline
	2	Tells whether the GCB2 for Compass (Ring address 14) is alive.	IS ONLINE is offline
1 **Compass is off**	1	Tells whether any GCB has detected keypads and/or touchscreens for Destina-tion Entry.	COMPASS IS ON Compass is off

5.1.7 Status Command Menu ***M - 1 - 1 - 6***

This function shows the Door- and Motion-Commands which are generated by the Operational Control part of the Software.

```
A-01 IDL ST ][][
F:CLD6    R:CLD6
```

The following keys can be used in this menu:

GOON / **GOBACK**	select the next page of commands

Description of display:

Display			description	values
A-01 IDL ST][][F:CLD6 R:CLD1 1 2	1	**F:CLD6**	front door command from OCSS	see table below
	2	**R:CLD1**	rear door command from OCSS	see table below
A-01 IDL ST][][MC:CarGoTo To:01 1 2	1	**MC:CarGoTo**	Motion command from OCSS to MCSS	see table below
	2	**To:01**	Actual Target	Bottom - Top

If a DO-5 or AT120 is installed, the following additional displays are available:

A-01 IDL ST][][F:CLD6 / Cld&Dob 1 2	1	**F:CLD6**	front door command from OCSS	see table below
	2	**/Cld&Dob**	front door command as sent to the DCSS5/AT120	see table below
A-01 IDL ST][][R:CLD1 / Cld 1 2	1	**F:CLD1**	rear door command from OCSS	see table below
	2	**/Cld**	rear door command as sent to the DCSS5/AT120	see table below
A-01 IDL ST][][F: 010 R: 011 1 2	1	**F: 010**	status of ST1, ST2, ST3	000 - 111
	2	**R: 011**	status of RST1, RST2, RST3	000 - 111

Description of the commands:

Type	Display	Description
Door Commands	OPEN	open door
	DEEN	deenergize door (TCI, DTO, DTC, ESB)
	CLD1	close door; no DOB, no LRD, no EDP
	CLD2	close door; full DOB, full LRD, full EDP
	CLD3	close door; full DOB, full LRD, lim EDP
	CLD4	close door; full DOB, lim LRD, lim EDP
	CLD5	close door; full DOB, no LRD, no EDP
	CLD6	close door; full DOB, no LRD, lim EDP
	CLD7	close door; lim DOB, no LRD, lim EDP
	CLD8	close door; lim DOB, no LRD, no EDP
	CLD9	close door; full SGS, nothing else
DO-5 Commands	Ded&Eds	deenergize door; no door movement allowed
	Ded	stop door; door may be operated using Service Tool (connected to DO-5)
	Cld&Dob	close door; only DOB enabled
	Cld	close door; no Reversals enabled
	Ndg	close door; no Reversals enabled; reduced profile
	Cld&Rev	close door; LRD, DOB and PP enabled
	Opn	open door
Motion Commands	CarGoTo	Go to specific floor
	ESMGoTo	Emergency Service
	Stand By	Standby or Inspection
	ReInit	reinit position
	ImmStop	Immediate Stop
	Nxt Flor	Go to next reachable floor

Abbreviations:

DOB = Door Open Button
LRD = Light Ray Device
PP = Passenger Protection

5.1.8 Status Drive Menu *M - 1 - 1 - 7*

Displays the status and commands of the drive subsystem.

```
A-01 IDL ST ][][
Drv: Idle
```

The following keys can be used in this menu:

GOON / **GOBACK**	select the next/previous page

Description of display:

Display			description	values

`Au01 NOR FR ][][`
`Drv: Running`
`1`
	1	**Running**	Drive Status	see table below

`Au01 NOR FR ][][`
`Cmd: GoToLnd 05`
`1 2`
or
`Au01 INS IN ][][`
`Cmd: Tci up`
`1 2`
	1	**GoToLnd**	Drive Command	GoToLnd Run to specified landing

	2	**05**	specified Target	Top…Bottom
	1	**Tci**	Drive Command	Corr Correction Run into specified direction Resc Rescue Run to next floor into specified direction Tci Inspection Run (TCI) into specified direction Ero Inspection Run (ERO) into specified direction
	2	**up**	specified direction	up move up down move down stop don't move

`Au01 NOR FR ][][`
`at05mt05nc02af01`
`1 2 3 4`
	1	**at05**	Actual Target (final destination)	Top…Bottom

	2	**mt05**	Motion Target (Accepted Target from Drive)	Top…Bottom
	3	**nc02**	Next Commitable Floor	Top…Bottom
	4	**af01**	Actual Floor	Top…Bottom

Description of the Drive Status:

Drive Status	Description
NotAvail	Drive is not communicating
Shutdown	Drive has shut down
Init	Drive is initializing during PowerUp
Idle	Idle
Running	Accelerating or running at constant speed
Stopping	Decelerating to Target
AtTarget	Arrived at target
Calibr	Encoder-Adjustment or Learn-Run
Wt_F_Saf	Wait For Safety; safety chain is open

5.1.9 Status Rescue Menu (GECB_II only) ***M - 1 - 1 - 9***

Displays the rescue status (rescue –mode, -encoder, -battery).

```
A-01 IDL ST ][][
NOR UP 1.60m/s
```

The following keys can be used in this menu:

GOON / **GOBACK**	select the next/previous page

Description of display:

Display			description	values	
A-01 NOR FR][][NOR UP 1.60m/s 1 2 3	1	**NOR**	Rescue Status	NOR ARO MRO	normal (none rescue) Automatic Rescue Operation Manual Rescue Operation
	2	**UP**	Direction of car (rescue encoder)	-- UP DN	none movement car goes UP car goes DOWN
	3	**1.60m/s**	Speed of car (rescue encoder)	0.00 – 9.99 m/s	
A-01 NOR FR][][Ubat50.1V HTS31' 1 2	1	**Ubat 50.1V**	Battery Voltage / charge voltage	0 – 99.9 Volt	
	2	**HTS31'**	Hall Temperature Sensor (mounted at SP (Service Panel)	0 – 99 ° C	

5.2 Test Functions

These functions provide access to the diagnostic functions of the system and allow to test some basic functionalities.

5.2.1 Test Events Menu **S6 / M - 1 - 2 - 1**

View all events which has been stored since last *cleared*.

```
 00021 savedRuns
000153 savedMins
```

number of runs since the events were last cleared
number of elapsed minutes since the events were last cleared

View Events

The following keys can be used in this menu:

GOON / **GOBACK**	display the next/previous event
UP	clear events
DOWN	display 100 msec timestamps

Description of display:

Display			description	values
1 0204 TCI/ERO on c003 t000020 p** 2 3 4	1	0204 TCI/ERO on	number and text of event	see Service Tool Reference List for a list of possible events
	2	003	counter	0 – 999
	3	00020	elapsed time since last occurence of this event	0 – 999999
	4	**	car position where the last event occurred	00 – 31 ** unkown position

Erase Events

You can either erase all events which are stored in the system or erase a single event.

The following keys can be used in this menu:

GOON / **GOBACK**	Display the next/previous event

UP	**Erase all events**
	`Erase EVENTS ?`
	`n=0 y=1 >`
	Press **1** - **ENTER** to continue
	or press **CLEAR** to cancel
	`Erase EVENTS ?`
	`n=0 y=2 >`
	Press **2** - **ENTER** to erase all events
	or press **CLEAR** to cancel
	`Erase EVENTS ?`
	`done!`

5.2.2 Test Diagnostics Menu ***M - 1 - 2 - 2***

This menu displays the diagnostic values which have been stored in the E2Prom. These values are memorized even if the power is switched off.

```
01 DIAG ACT-T
000:00:00:01
```

View Diagnostics

The following keys can be used in this menu:

GOON / **GOBACK**	display the next/previous diagnostic value
UP	display description lower line (available for time-related values only)

Description of display:

Display			description	values
1 **01 DIAG ACT-T** **002:03:04:05** 2 3 4 5	1	**01 DIAG ACT-T**	number and text of diagnostic value	see Service Tool Reference List for a list of existing diagnostic values
	2	**002**	months	0-999
	3	**03**	days	0-29
	4	**04**	hours	0-23
	5	**05**	minutes	00-59
1 **01 DIAG UP-CNT** **000000023** 2	1	**03 DIAG UP-CNT**	number and text of diagnostic value	see Service Tool Reference List for a list of existing diagnostic values
	2	**000000023**	counter	

Erase Diagnostics

You can either erase all values which are stored in the system or erase a single value.

The following keys can be used in this menu:

GOON / **GOBACK**	Display the next/previous diagnostic value

UP	**Erase all Diagnostic values**
	`Erase DIAGN. ?`
	`n=0 y=1 >`
	Press **1** - **ENTER** to continue
	or press **CLEAR** to cancel
	`Erase DIAGN. ?`
	`n=0 y=2 >`
	Press **2** - **ENTER** to erase all events
	or press **CLEAR** to cancel
	`Erase DIAGN. ?`
	`done!`

ON	**Erase the displayed diagnostic value**
	`Erase Value ?`
	`02 DIAG TOT-T`
	Press **ENTER** to erase this event
	or press **OFF** to cancel

5.2.3 Test Part-No Menu *M - 1 - 2 - 3*

Displays the Software Configuration Numbers (SCN) of the software.

```
No. GAA30081AAA
28-Aug-01  11:32
```

The following keys can be used in this menu:

GOON / GOBACK	display the next/previous number

Part Numbers of Standard Software

Display			description	values
1 No. GAA30081AAA 28-Aug-01 11:32 2	1	GAA30081AAA	SCN of Standard-Software	
	2	28-Aug-01 11:32	date and time of authorization	
1 EE=47AG2375	1	47AG2375	Unit-Number	
1 PR=G1231032AAA 28-Sep-04 11:32 2	1	G1231032AAA	SCN of Loader (integrated into FLASH)	only TCBC software 30781
	2	28-Sep-04 11:32	date and time of Loader	only TCBC software 30781

Part Numbers of Contract Software

1 No. U47CE2375 28-Aug-01 11:32 2	1	47CE2375	SCN of Contract-Software	
	2	28-Aug-01 11:32	date and time of authorization	
Baseline used: No. GAA30081AAA 1	1	GAA30081AAA	SCN of parent software	
1 EE=47CE2375	1	47CE2375	Unit-Number	

Board ID (GECB_II only)

Since software version **GAA30780DAD**, the following keys can be used for GECB_II:

UP / **DOWN**	display the GECB2 board ID

Display			description	values
1 **GECB2 board ID** **press <GOON> ...** 2	1	**GECB2 board ID**	descriptive text	
	2	**press <GOON> ...**	descriptive text	
1 **0000000000000000** **1234567890123456** 2	1	**0000000000000000**	GECB2 board (1st 8 bytes) - MSB on left side	
	2	**1234567890123456**	GECB2 board ID (2nd 8 bytes) - LSB on right side	

NOTE:
In this case UP/DOWN work like an on/off-switch. Pressing UP will show the basic information from above plus the additional information of the GECB_II board ID. Pressing DOWN again will switch off the additional information.

Component SCNs

Since software version **GAA30780EAA**, the following keys can be used:

ON / **OFF**	display the component SCNs

Display			description	values
1 **SDK:** **AAA30982CAF** 2	1	**SDK:**	descriptive text	
	2	**AAA30982CAF**	descriptive text	

NOTE:
Pressing ON will show the basic information from above plus the additional information of the component SCNs. Pressing OFF again will switch off the additional information.

5.2.4 Test RSL Menu ***M - 1 - 2 - 4***

With this menu, the function of Remote Stations can be tested.

RSL Selection (GECB with 3 Links only):

If 3 links are activated (i.e. RSL-TYP=1 and all three links are supported by the board), the following menu appears to chose the RSL link. For boards with 1 link, the following choice is not available and the RS address can be entered immediately.

```
RSLtst – Menu >
1 = Car Link
```

```
RSLtst – Menu >
2 = Hall Link
```

```
RSLtst – Menu >
3 = Group Link
```

The following keys can be used in this menu:

1 ... 3	select the link
ENTER	select the link which is currently displayed
GOON / GOBACK	select the next/previous link

RS Test (all boards)

The next screen allows to test the functionality of Remote Stations by address.

```
C-ADR>
```

The following keys can be used in this menu:

0 … **9**	enter an RS address
ENTER	confirm the entered address
GOON / **GOBACK**	test the next/previous RS address
UP / **DOWN**	test the next/previous bit
ON / **OFF**	switch the displayed output on or off

Description of display:

Display			description	values
1 2 3 **C-ADR>04 BIT=1** **IN:on OUT:off** 4 5	1	**C**	selected RS link	C=Car H=Hall G=Group
	2	**04**	selected RS address	04 .. 63
	3	**1**	selected Bit of that address	1 .. 4
	4	**on**	status of RS input	on, off
	5	**off**	status of RS output use **ON** / **OFF** to change the output	on, off

Note that the elevator software cannot update the RSL I/Os as long as long as this menu is selected!
For security reasons, some I/Os (e.g. DO-5 outputs ST1-ST3) cannot be changed by this menu. In this case, it might be necessary to program the related I/O to 00-0 before the output can be tested.

5.2.5 Test Selftest Menu ***M - 1 - 2 - 5***

Performs a selftest of the software.

```
PRx SWx EE? RAx
RS?
```

PR: verifies whether the checksum of the secondary loader is correct
(is automatically skipped in software version GAA30780AAA)
SW: verifies whether the checksum of the application software is correct
(is automatically skipped in software version GAA30780AAA)
EE: checks whether the content of the E2Prom has been changed since the last selftest
RA: checks whether the RAM can be written correctly
(is automatically skipped in software version GAA30780AAA)
RS: checks whether the remote station address setup is correct

A blinking '?' indicates that the corresponding test is running. After completion of the test, the display shows '+' or '-', respectively, or 'x' if the test is skipped.

The following keys can be used in this menu:

GOON / **GOBACK**	• cancel the actually running test and start the next test • display the next/previous RS-error status

Description of display:

Display			description	Values
1 2 3 **PR x EE - RA +** **RS05Ar000** 4 5 6	1	**PR x**	EPROM test	**?** the test has not yet been completed **+** the checksum of the EPROM is correct **-** the EPROM is corrupted → replace the EPROM! **x** the test has been skipped
	2	**EE -**	E2Prom test	**?** the test has not yet been completed **+** the content of the E2Prom (parameters, I/Os, diagnostic values) has not been changed since the last selftest **-** Any value in the E2Prom has been changed since last selftest → Do this test once again. If you don't get a '+' now, replace the E2Prom. **x** the test has been skipped
	3	**RA +**	RAM test	**?** the test has not yet been completed **+** the RAM is ok **-** the RAM is corrupted →replace board **x** the test has been skipped
	4	**RS05**	RS test	04-63 This RS has a problem as described below
	5	**Ar**	Remote Station is A –Available a – not available R – Responding r – not responding	**Ar** Available in Setup, but physically not responding → check address configuration of RS → check wiring and connection → replace RS **aR** Not available in Setup, but physically responding → check I/O-setup → find misconfigured RS **AR** Available in Setup, and also responding; Parity Error detected → There are multiple RS with the same address in the system
	6	**000**	Parity Error Counter	000-999 This is the number of RS parity errors since power on. The counter is only cleared when the power is switched off.

5.2.6 Clear Events Menu *M - 1 - 2 - 7*

This menu clears the event log of the GECB. This is the same functino as implemented in M-1-2-1-UP, but more visible for the user.

```
 Erase EVENTS  ?
ny=1  >
```

The following keys can be used in this menu:

0 ENTER	Leave this menu without clearing the EVENT log

1 ENTER
2 ENTER
	Erase all events
	`Erase EVENTS ?`
	`n=0 y=1 >`
	Press 1 - ENTER to continue
	or press CLEAR to cancel
	`Erase EVENTS ?`
	`n=0 y=2 >`
	Press 2 - ENTER to erase all events
	or press CLEAR to cancel
	`Erase EVENTS !`
	`done!`

CLEAR	Leave this menu without clearing the EVENT log

5.2.7 Test Fixture Menu ***M - 1 - 2 - 8***

This menu allows the user to check whether the hall fixtures are working properly. The sequence is as follows:

1. Enter SVT menu M-1-2-8
2. Get into the car
3. Activate ISC
4. Move from floor to floor and inspect the TTLs and lanterns.
5. Deactivate ISC
6. Leave SVT menu M-1-2-8

```
Hall Fixt. Chk.
Switch on ISC
```

5.2.8 Test ARO Menu (GECB_II only) ***M - 1 - 2 - 9***

This menu allows the user to initiate an ARO run whether the main power is still available. The test will be started by the SVT button '1'. The svt button 'CLEAR' aborts the test. You can jump to other SVT menus during the ARO test without aborting the ARO test.

The sequence is as follows:

#	Step	Display	Time out	Remark
1	check	ARO-TEST GECB_II needed not av. at INS OCB must be on no battery avail	--	only displayed, if a problem occurs; otherwise started with #2;
2	start	ARO-TEST: start? car empty? yes=1	--	only svt button '1' starts the ARO test
3	request	please wait! ARO requested	10s	As first the drive will be stopped by a 'RescueStop' command. Then ARO will be requested as a simulated line fail. If ARO does not start, "ARO not started / push button" will be displayed for 15s.
4	preparing	ARO preparing	--	At this state the rescue relays will be switched and the drive will be powered up by battery. If the svt button 'CLEAR' is pushed, "aborted by user / press 2x MODULE" will be displayed for 15s.
5	performing	ARO performing	--	At this state the OCSS mode ARO will be executed. If the svt button 'CLEAR' is pushed, "aborted by user / press 2x MODULE" will be displayed for 15s.
6	finished	ARO-Test finishd press 2x MODULE	--	After ARO (see feature setup description) the GECB resets itself. If the SVT is not directly connected to the GECB, the display seems frozen during / after the reset. Pushing twice times the modul button leads into the system menu.

5.3 Setup Functions

These functions allow to adapt the system to the needs of the jobsite. All values which are changed by these functions are stored into E2Prom.

The E2P-Selftest (M1-2-5) will display '-' if any value has been changed since the last self-test.

5.3.1 Setup Install Menu

S4* / *M - 1 - 3 - 1

View and setup Installation Parameters.
The parameters can only be changed if the car is not moving.

```
INSTALL – Menu >
  01 System
```

The following keys can be used in this menu:

GOON / **GOBACK**	go to the next/previous group of parameters
0 … **9**	• directly access a group of parameters • enter a new value for the displayed parameter
ENTER	• access the displayed group of parameters • store the new value for the displayed parameter (if the car is not moving)

Description of display:

Display			description	values

`INSTALL – Menu >`
`  01 System`
`  1 2`
	1	**01**	number of parameter-group	see *Service Tool Reference List* for a list and description of available parameters

	2	**System**	name of parameter-group	

`1  2`
`000 System  new`
`TOP  =010>`
`3  4`
	1	**000**	number of parameter within this group	

	2	**System**	name of parameter-group	
	3	**TOP**	name of parameter	
	4	**010**	value of parameter	

`000 System  new`
`TOP  =010>009`
`5`
	5		the value you entered
			
			press **ENTER** to store this value
				0-255

Note:
A new DCS run is required if TOP or BOTTOM is changed.

5.3.2 Setup RSL Menu

S5* / *M - 1 - 3 - 2

View and setup RSL addresses.

```
C-IO I AD P AD P
>
```

The following keys can be used in this menu:

GOON / **GOBACK**	go to the next/previous I/O number
0 … **9**	enter an I/O number
ENTER	display the address of the requested I/O number
UP / **DOWN**	go to the next/previous I/O number which is different from "0 00-0"
ON	change the Invert-Bit of the I/O number: **<address>** - **ON** – **ENTER** Note that you have to enter the address again if you want to change the Invert-Bit.

Description of display:

Display			description	values
1 **C-IO I AD P AD P** **0001=0 04 1>** 2 3 4 5 **IO I AD P AD P** **0001=0 04 1>05 3** 6 7	1	**C**	link for the displayed I/O number	C = Car link H = Hall link G = Group link
	2	**0001**	I/O number	0…9999
	3	**0**	invert-bit	0,1
	4	**04**	address of the Remote Station	4-63
	5	**1**	bit of the Remote Station	1-4
	6	**05**	the address you entered	4-63
	7	**3**	the bit you entered	1-4
1 **Inverted IO !** **0691=1 16 3>**	1	**Inverted IO**	if the Invert-Bit is set, the first row will blink	

5.3.3 Setup Allowed Mask Menu ***M - 1 - 3 - 3***

This function is used to setup the Floor Table masks. Four different Allowed Masks are available:

```
ALLOWED – Menu >
  01  Enable
```

```
ALLOWED – Menu >
  02  Cut_Call
```

```
ALLOWED – Menu >
  03  Card_Rd.
```

```
ALLOWED – Menu >
  04  SHO/WCO
```

The following keys can be used in this menu:

GOON / GOBACK	change to the next/previous mask
1 … 4	press a number to select the mask directly
ENTER	select the displayed mask

Key Handling for all Allowed Masks

The following keys can be used in all Allowed Masks:

GOON / **GOBACK**	change to the next/previous floor number
0 … **2**	enter numbers to program the Allowed Mask
ENTER	store the Allowed Mask
CLEAR	Delete the last input

The following keys can be used in the 1st Allowed Mask:

UP / **DOWN**	Display the corresponding Opening number in the first row: Switch between standard and extended calls: standard calls: at **CUDE CUDE** P R 00 1100 1100 0 0 opening number: at **F:00 R:01** P R 00 1100 1100 0 0 extended calls: at **cude cude** P R 00 1100 1100 0 0 opening number: at **f:00 r:01** P R 00 1100 1100 0 0

5.3.3.1 Enable Mask ***M - 1 - 3 - 3 - 1***

The following functions can be set for each floor:

- which type of call is allowed
- allow or prohibit parking
- define Short Landings

```
ALLOWED – Menu >
  01  Enable
```

Description of display:

Display			description	values

`at CUDE CUDE P R`
`00>1110 0000 0 0`
1 2 3 4 5
	1	at	floor number	00 - 15

	2	CUDE	front Standard Enable Mask	0000 … 1111 see below 2000 dummy opening
		C	Standard Car Call	0 call type not allowed in this Opening 1 call type allowed in this Opening
		U	Standard Up Hall Call	
		D	Standard Down Hall Call	
		E	Standard Emergency Hall Call	
		lower case letters indicate the call mask for Extended Calls		
	3	CUDE	rear Enable Mask	
	4	P	Park Enable Bit	0 parking allowed here 1 no parking allowed here
	5	R	Reduced Run	Distance between displayed floor and the floor above: 0 Normal Run 1 Short Run (not for OVF10) 4 Medium Run (not for OVF10) Note: Not necessary for **TCBC** Note: Removed for **GECB**

`1 2`
`at F:00 R:-- P R`
`00>1110 0000 0 0`
3
	1	F:00	Opening Number for front door	00-31

	2	R:--	Opening Number for rear	00-31
	3	at00	floor level	00-15

TCBC / GECB
For TCBC / GECB the R-Bit is not necessary. The handling of Short Landings is completely done by the Drive.
TCBC / GECB

LCB2, TCB
Drivetypes with learnrun (OVF20, OVFWW) require the setting of R=1 only in 1LS and 2LS.

LCB2, TCB

5.3.3.2 Cut Call Mask ***M - 1 - 3 - 3 - 2***

The following functions can be set for each floor:

- which type of call is affected by Cut Call key switches
- park with opened doors
-

```
ALLOWED – Menu >
  02  Cut_Call
```

Description of display:

Display			description	values
1 2 3 4 at CUDE CUDE Op 00>1110 0000 0	1	at	floor number	00 - 15
	2	CUDE	front Enable Mask	0000 … 1111 see below
		C	Car Call	0 calls are always allowed 1 calls are deleted if any CCO keys-witch is active
		U	Up Hall Call	
		D	Down Hall Call	
		E	Emergency Hall Call	
	3	CUDE	rear Enable Mask	0000 … 1111 see above
	4	Op	Park with open doors	0 park with closed doors 1 park with front door open 2 park with rear door open 3 park with both doors open

The following RSL inputs can be used to disable calls:

I/O	Name	Remark
610	CCOC	Cut Car Calls On Car link
611	CCOH	Cut Car Calls On Hall link
612	HCCO	Hall Call Cut Off
613	GCCO	Group Call Cut Off
746	HCOC	Hall Call Cut Off from Car

To prevent malfunction: All unused I/O's from the table above must be set to '010' (default).

5.3.3.3 Card Reader Mask ***M - 1 - 3 - 3 - 3***

The following functions can be set for each floor:

- which type of call is affected by Card Reader Operation
- activate Special Door Open Button (SDOB)

```
ALLOWED – Menu >
  03  Card_Rd.
```

Description of display:

Display			description	values
1 2 3 4 at CLD- CLD- Sb 00>1110 0000 0	1	**at**	floor number	00 - 15
	2	**CLD-**	front Enable Mask	0000 … 1110 see below
		C	Car call	0 car call is only allowed if card reader input is activated 1 car call always allowed
		L	force to Lobby	0 don't force car to lobby 1 force car to Lobby if DOB is pressed while the car is resting with closed doors at this floor
		D	enable DOB	0 DOB disabled 1 DOB enabled; setting of L-bit is ignored
		-	not used	
	3	**CLD-**	rear Enable Mask	0000 … 1110 see below
	4	**Sb**	Special Door Open Button	0 no SDOB 1 only front SDOB enabled 2 only rear SDOB enabled 3 both SDOB enabled

5.3.3.4 SHO and WCO Masks ***M - 1 - 3 - 3 - 4***

This mask is used to setup the Shabat Operation and Wild Car Operation.

The following functions can be set for each floor, separately for SHO and WCO:
- Select at which floor the car will stop
- Select which door will be opened

```
ALLOWED – Menu >
  04   SHO/WCO
```

Description of display:

Display			description	values
1 2 3 at SUDFR WUDFR 00 0000 0000	1	at	floor number	00-15
	2	SUDFR	SHO mask	
		U	stop in Up direction	0 action disabled at this floor 1 action enabled at this floor
		D	stop in Down direction	
		F	open Front door	
		R	open Rear door	
	3	WUDFR	WCO mask	
		U	stop in Up direction	0 action disabled at this floor 1 action enabled at this floor
		D	stop in Down direction	
		F	open Front door	
		R	open Rear door	

5.3.4 Setup Position Indicator Menu ***M - 1 - 3 - 4***

This menu defines the display of the Position Indicator at each floor.

```
Pos.Ind.      new
at: L 00 =10 >
```

The following keys can be used:

GOON / **GOBACK**	change to the next/previous floor number
0 ... **9**	enter a code number to program the Position Indicator (see list below)
ENTER	store the new code

Description of display:

Display			description	values
Pos.Ind. new at: L 00 =10 > 1 2 3 Pos.Ind. new at: L 00 =10 >01 4	1	**L**	left or right digit of the PI	L, R
	2	**00**	floor number	00-31
	3	**10**	code for the displayed character or digit	00-39 (40) (see list below)
	4	**01**	the new code you entered	00-39 (40) (see list below)

Description of codes:

Code	Symbol	Code	Symbol	Code	Symbol	Code	Symbol	Code	Symbol
0	0	10	(blank)	20	J (*)	30	T (*)	40	12 (*)
1	1	11	A	21	K (*)	31	U		
2	2	12	B (*)	22	L	32	V (*)		
3	3	13	C	23	M (*)	33	W (*)		
4	4	14	D (*)	24	N (*)	34	X (*)		
5	5	15	E	25	O	35	Y (*)		
6	6	16	F	26	P	36	Z (*)		
7	7	17	G (*)	27	Q (*)	37	-		
8	8	18	H	28	R (*)	38	*		
9	9	19	I (*)	29	S	39	All segments		

(*) These characters cannot be displayed by 7-segment position indicators!

5.3.5 Setup DCS-Run Menu ***M - 1 - 3 - 5***

The Door Check Sequence (DCS) - Function is a safety feature for MCS controllers. It insures that all hoistway door contacts are installed correctly and will open the safety chain when a door opens.
Until the Door Check Sequence is finished successfully it is only possible to move the car in inspection mode. Normal runs are disabled.

```
to start DCS
press ENTER
```

The following error messages can be displayed before the DCS run is started:

Error Message	Reason
`DCS Start Error: Into 1LS and DZ!`	The car is not at the lowest floor. → move the car to the lowest floor (ERO)
`DCS Start Error: Leave 1LS!`	The car is in 1LS, but not in the doorzone. → Leave 1LS or move into DZ.
`DCS Start Error: Not able to Run!`	The car is in shutdown.
`DCS Start Error: Switch off INS!`	The car is in TCI or ERO mode. → Switch to Normal
`DCS Start Error: already done >`	The check has already been done → press **GOON** to start DCS again.

Description of display:

Display			description	values
12 3 4 5 **-00 DW:clsd <>][** **open front door** 6	1	**-**	moving direction	- not moving u moving up d moving down
	2	**00**	floor position	** unknown position 00-31 current floor number
	3	**DW:clsd**	status of DW input and DS contact	DW:clsd landing door is closed dw:opnd landing door is opened
	4	**<>**	front door state	] [fully closed <> opening [ ] fully opened >< closing
	5	**][**	rear door state	] [fully closed <> opening [ ] fully opened >< closing
	6	**open front door**	action	open front door open rear door check DW input close front door close rear door moving to bottom up to next floor
			error text	see table below

The following error messages can be displayed during the DCS run:

Error Message	Reason
Front Door Error	landing door contact is not opened while front car door is opened
Rear Door Error	landing door contact is not opened while rear car door is opened
aborted by ENTER	The key ENTER has been pressed; DCS is aborted.
DW not closed	car door is closed but landing door contact is open
Door opening Err	door could not be opened within 20 seconds
Position Error	The calculated position is higher than TOP.
Door closing Err	door could not be closed within 20 seconds
SE is missing!	safety chain is closed but SE is low.

At the end of the DCS the following displays appear:

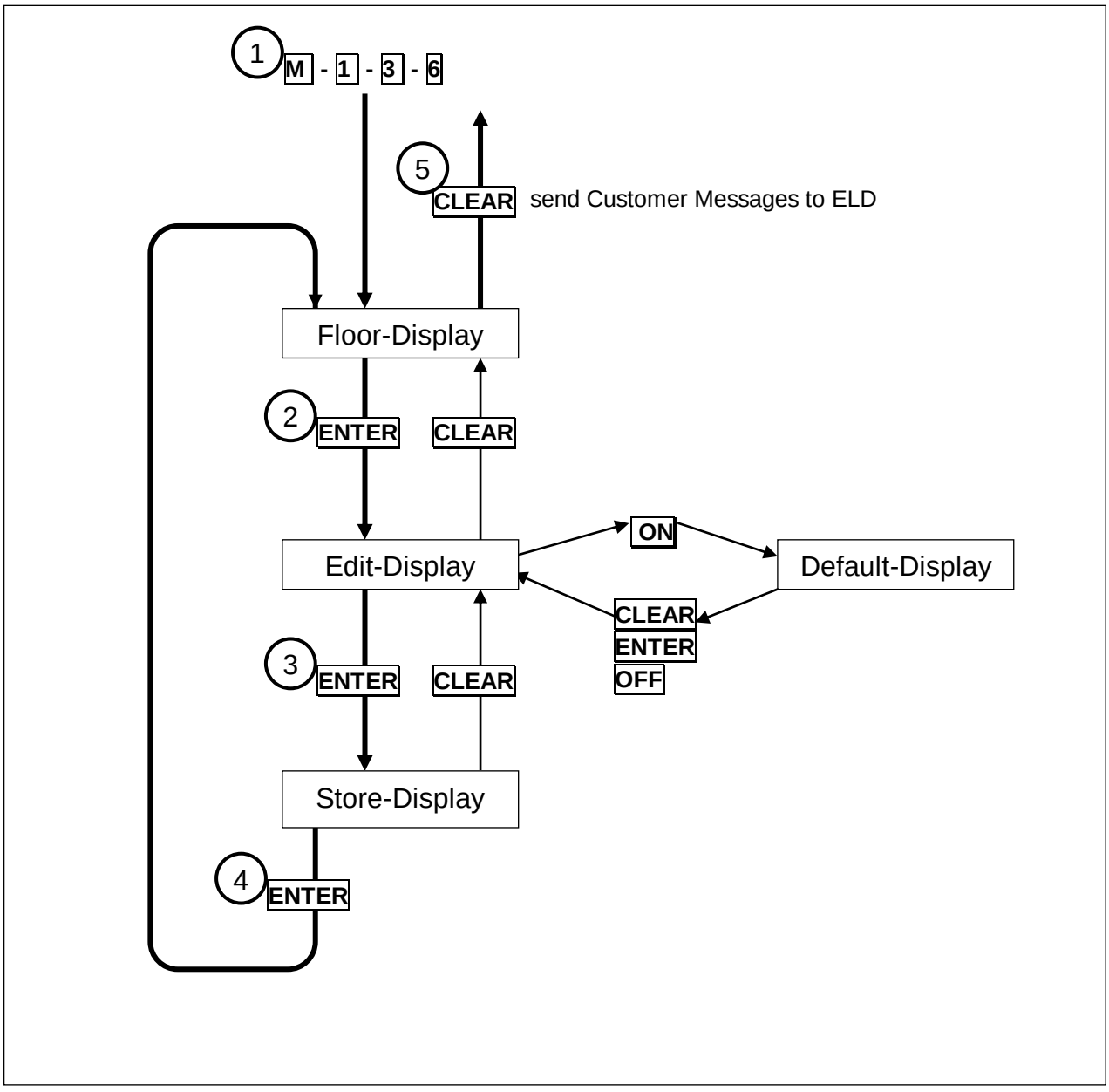
Error Message	Reason
DCS successfull press GOON >	→ press GOON to continue
Check PES,GTC... press GOON >	Reminder what has to be done next → press GOON to continue
to start normal press GOON >	→ press GOON to continue

5.3.6 Setup ELD Menu ***M - 1 - 3 - 6***

The ELD – function is used to define the ”Customer Message” of the OTIS 2000-ELD (CPI-11).
For each floor the Customer Message can be

- displayed (**Floor-Mode**)
- modified (**Edit-Mode and Default-Mode**)
- or stored into EEPROM (**Store-Mode**).

Overview



Floor-Display:

The following keys can be used:

GOON / **GOBACK**	Change the floor number
0 … **9**	Enter a floor number
UP / **DOWN**	Change the Edit-Mode, which will be used in the Edit-Display
ENTER	Transition to the Edit-Display
CLEAR	All messages will be sent to the ELD if you have been in the Store-Display.

Floor-Display:

Description of display:

Display			description	values
0 2 **00?FLOOR ALL?ELD** **BASEMENT** 3	1	**00**	level number	0-31
	2	**ALL**	selected Edit-Mode, which will be used in the Edit-Display	ALL: all characters available A-Z: only A-Z 0-9: only 0-9 %/): only &(),-./:<>' SPE: only ÄÅÅÇØÖÆ HEX: all characters available by using hex input mov: move the text to the left or right
	3	**BASEMENT**	Customer Message which is currently stored in the E2Prom for the selected level	

Edit-Display:

The following keys can be used:

UP / **DOWN**	Change the cursor position within the customer message. The selected position is marked by a blinking "?".
GOON / **GOBACK**	Change the Selected character. The range of available characters is defined by the active Edit-Mode. Edit-Mode "mov": Move the displayed Customer Message to the left or right. This is an easy way to center the message on the ELD.
1 … **9**	Skip through the character set using the selected step width (Key-No.)
0 … **F**	Edit-Mode "HEX": Input 2-digit-HEX-code to enter a new character
ON	Transition to the Default-Display, which allows to use predefined Customer Messages
ENTER	Transition to the Store-Display.
CLEAR	Back to the Floor-Display. The current Customer Message will be buffered so that you can change the Edit-Mode without loosing your changes.

Edit-Display:

Description of display:

Display			description	values
1 2 3 **00 E? ALL<ELD BAS?MENT** 4	1	**00**	floor number	00-31
	2	**E?**	selected character	
	3	**ALL**	selected Edit-Mode	see above
	4	**?**	cursor	
Edit-Mode HEX: 1 2 3 4 **00 E?45 HEX<ELD BAS?MENT** 5	1	**00**	floor number	00-31
	2	**E**	selected character	
	3	**45**	HEX-code for the selected character	00 - FF
	4	**HEX**	Edit-Mode "HEX"	HEX
	5	**?**	cursor	

Store-Display:

The following keys can be used:

ENTER	Store the displayed Customer Message into E2Prom. Activate Floor Mode
CLEAR	Back to Edit-Mode

Store-Display:

Description of display:

Display			description	values
1 **00 write E2P?** **BASEMENT** 2 alternating with 1 **00 press ENTER** **BASEMENT** 2	1	**00**	level number	00-31
	2	**BASEMENT**	current Customer Message	

Default-Display:

The following keys can be used:

0 ... **9**	Two digits input to select the Default Message by entering the List-No.
UP / **DOWN**	select the language
GOON / **GOBACK**	select the predefined Default-Message
ENTER	Transition back to Edit-Display. The desired Default Message will be buffered.
CLEAR , **OFF**	Back to Edit-Display without buffering your changes.

Default-Display:

Description of display:

Display			description	values
1 2 3 **00 06?ELDdef?ENG** **GARAGE** 4	1	**00**	level number	00-31
	2	**06**	number of selected default message	00-19
	3	**ENG**	selected language	ENG, GER, ITA
	4	**GARAGE**	selected Default message	see table below

List of Default Messages

No.	ENG	GER	ITA
0	LOBBY	ERDGESCHOSS	TERRANO
1	BASEMENT	KELLER	SOTTERRANEO
2	PENTHOUSE	DACHTERASSE	ATTICO
3	FLOOR	ETAGE	PIANO
4	RECEPTION	EMPFANG	RICEZIONE
5	EXIT	AUSGANG	USCITA
6	GARAGE	TIEFGARAGE	POSTEGGIO
7	SECRETARY	SEKTRETARIAT	SEGRETERIA
8	RESTAURANT	RESTAURANT	RISTORANTE
9	CAFETERIA	KAFFEESTUBE	CAFFETERIA
10	GARAGE	PARKHAUS	POSTEGGIO
11	POOL	SCHWIMMHALLE	PISCINA
12	SAUNA	SAUNA	SAUNA
13	DOCTOR	ARZT	DOTTORE
14	0 123 456 789	0 123 456 789	0 123 456 789
15	: . () <> / -, & ’	: . () <> / - , & ‘	: . () <> / - , & ‘
16	ABCD EFGH IJKL	ABCD EFGH IJKL	ABCD EFGH IJKL
17	MNOP QRST UVWXYZ	MNOP QRST UVWXYZ	MNOP QRST UVWXYZ
18	Ä Á Å Ç Æ Ø Ö	Ä Á Å Ç Æ Ø Ö	Ä Á Å Ç Æ Ø Ö
19	empty string		

HEX-CODE Table

ASCII	HEX	ASCII	HEX	ASCII	HEX	ASCII	HEX	ASCII	HEX
Blank	20	0	30	A	41	N	4E	Ä	80
&	26	1	31	B	42	O	4F	Á	81
(	28	2	32	C	43	P	50	Å	82
)	29	3	33	D	44	Q	51	Ç	83
,	2C	4	34	E	45	R	52	A-	84
-	2D	5	35	F	46	S	53	-E	85
.	2E	6	36	G	47	T	54	Ø	86
/	2F	7	37	H	48	U	55	Ö	87
:	2A	8	38	I	49	V	56		
<	3C	9	39	J	4A	W	57		
>	3E			K	4B	X	58		
				L	4C	Y	59		
				M	4D	Z	5A		

5.3.7 Setup Speech Menu ***M - 1- 3 - 7***

This menu is used to setup the messages for the vendor speech synthesizer which is controlled by the I/Os 647-656.

```
FLOOR MSG AT 000
01 02 03 04
```

Each message consists of up to four phrases which will be played in sequence. You can view and change the phrases for all available messages.

The following keys can be used:

GOON / **GOBACK**	change the message which should be displayed or programmed
0 ... **9**	change the codes for the phrases
ENTER	store the phrase codes into E2Prom
CLEAR	delete the last input

Description of display:

Display			description	values
1 **FLOOR MSG AT 000** **01 27 00 00** 2	1	**FLOOR MSG AT 000**	Type of message	FLOOR MSG AT 000 … FLOOR MSG AT 031 UP DIR MESSAGE DOWN DIR MESSAGE WELCOME MESSAGE NUDGING MESSAGE OVERLOAD MESSAGE EPO MESSAGE INSPECTION MSG ALARM MESSAGE EXIT CAR MESSAGE TEST MESSAGE OPEN DOOR MSG CLOSE DOOR MSG HANDICAP MESSAGE (*) CMPS VIP MESSAGE (*) CMPS DEPART MESSAGE (*) EHS/EMT MESSAGE (*) with Compass only
	2	**01 27 00 00**	codes of 4 phrases for the above message	see table below. This example would say "First Floor"

Phrase codes for the OKI Speech Synthesizer:

dec	hex	text	dec	hex	text	dec	hex	text
00	00h	(no operation)	23	17h	Fifty	46	2Eh	Going up
01	01h	First	24	18h	Plaza	47	2Fh	Going down
02	02h	Second	25	19h	Ground	48	30h	Please stand clear of the closing door
03	03h	Third	26	1Ah	Twentieth	49	31h	This elevator
04	04h	Fourth	27	1Bh	Floor	50	32h	is full
05	05h	Fifth	28	1Ch	Basement	51	33h	Please take the next elevator
06	06h	Sixth	29	1Dh	Thirtieth	52	34h	Do not be alarmed
07	07h	Seventh	30	1Eh	Fortieth	53	35h	We are experiencing
08	08h	Eighth	31	1Fh	Fiftieth	54	36h	a temporary power interruption
09	09h	Ninth	32	20h	Story	55	37h	minor technical difficulties
10	0Ah	Tenth	33	21h	Garage	56	38h	is needed for an emergency
11	0Bh	Eleventh	34	22h	Mezzanine	57	39h	Please exit when the doors open
12	0Ch	Twelfth	35	23h	Level	58	3Ah	You are pressing...buttons required
13	0Dh	Thirteenth	36	24h	Lobby	59	3Bh	To summon assistance
14	0Eh	Fourteenth	37	25h	Restaurant	60	3Ch	Concourse
15	0Fh	Fifteenth	38	26h	Lower	61	3Dh	Please push the alarm button
16	10h	Sixteenth	39	27h	Main	62	3Eh	Good morning
17	11h	Seventeenth	40	28h	Cafeteria	63	3Fh	Penthouse
18	12h	Eighteenth	41	29h	Parking			
19	13h	Nineteenth	42	2Ah	One	64-126		(spare)
20	14h	Twenty	43	2Bh	Two			
21	15h	Thirty	44	2Ch	Three	127	7Fh	Test sequence initiator
22	16h	Forty	45	2Dh	Upper			

5.3.8 Setup Time Menu *M - 1- 3 - 8*

This menu is used to setup the date and time of the real time clock. The parameters in the group “11-TIME” enable automatic adjusting of Daylight Saving Time (i.e. Summer-time/Wintertime). For more details, refer to Gxx30780xxx_INS and Gxx30780xxx_FSD.

```
 TIME - Menu  >
Set Date/Time=1
```

The following keys can be used:

1	Enter menu to set or change date and time

```
Setting Time
 31.12.07 23:59
```

Description of display:

Display			description	values
Setting Time 31.12.07 23:59 1 2 3 4 5	1	**31**	Day	1-31
	2	**12**	Month	1-12
	3	**07**	Year	
	4	**23**	Hour	0-23
	5	**59**	Minute	0-59

The following keys can be used:

GOON / **GOBACK**	Change the position of the cursor. The cursor is indicated by a blinking value.
0 … **9**	Enter the new value
ENTER	Store date/time.
CLEAR	delete the last input

5.4 Check Functions

This menu is used to perform system check functions, e.g. handover tests.

5.4.1 UCM-EN Check Menu **M - 1 - 4 - 1**

This function allows to perform the handover test for Unintended Car Movement Protection according to EN81-1.

For the Handover Test procedure, the safety chain is interrupted by a specially designed test plug which is located between the DS and the GS contacts.

After the plug has been removed and a key has been pushed, the car performs a special run with closed the doors and the door bypass is bridged. This special run will use a defined profile to simulate free fall.

When the car leaves the doorzone, the door bypass circuit interrupts the safety chain and causes an emergency stop.

After the test, the displacement of the car must be manually measured by the mechanic.

The Service Tool guides the mechanic through the steps of the handover procedure.

First, the desired direction of the test run must be chosen:

```
Direction?
Up=1 Down=2 >
```

The following keys can be used in this step:

1	Enter “1” to perform the UCM test in up direction. At top floor, “Up=x” is shown and this option is not available.
2	Enter “2” to perform the UCM test in down direction. At bottom floor, “Down=x” is shown and this option is not available.
ENTER	Press ENTER to continue

Now the required load must be confirmed. For the UP test, the car must be empty. For the DOWN test, the car must be fully loaded.

If “Up=1” was selected:

```
Load=0%?
n=0 y=1 >
```

If “Down=2” was selected:

```
Load=100%?
n=0 y=1 >
```

The following keys can be used in this step:

0	Abort the function to load the car as required.
1	Confirm that the car is loaded correctly.
ENTER	Press ENTER to continue

For safety reasons, the doors must be closed during this test.
If DDO is not active, the following screen is shown:

```
DDO on!
```

No keys can be used in this step. When DDO is activated, the next screen is shown automatically.

To prevent unexpected movement of the car, hall calls must be deactivated during this test.
If CHCS is not active, the following screen is shown:

```
CHCS on!
```

No keys can be used in this step. When CHCS is activated, the next screen is shown automatically.

Now the mechanic is instructed to remove the plug which is labeled as indicated below.

```
Remove Plug:
"EN81 UCM-Test"
```

No keys can be used in this step. When the plug has been removed (i.e. DW and DFC are low), the next screen is shown automatically.
Note that the plug simulates an opened landing door so that the software will prevent HAD as long as this menu is active.
If you leave the menu after removing the plug, HAD will be detected!

↓

Confirm to start the test run.

If "Up=1" was selected:

```
Start Up?
n=0 y=1 >
```

If "Down=2" was selected:

```
Start Down?
n=0 y=1 >
```

The following keys can be used in this step:

0	Abort the function.
1	Confirm to start the test run.
ENTER	Press ENTER to continue

↓

The door bypass is activated and a special command is sent to the drive to perform the UCM test run (simulating free fall). This run will be interrupted by the safety chain when the car leaves the doorzone and the doorbypass drops.

```
ok.
wait...
```

No keys can be used in this step. When the Drive reports that the run has ended, the next screen is shown automatically. If the Drive does not respond within 8 seconds, the function is aborted and the failure screen is shown.

↓

The software checks whether the test run was successful and also whether UCM was detected by GECB as well as Drive.

```
ok.
checking...
```

No keys can be used in this step. When everything was correct, the next screen is shown automatically. If this cannot be determined within 8 seconds, the function is aborted and the failure screen is shown.

Now the mechanic must verify that the car has stopped within the required limits. Refer to the Field Instruction Manual for details.

```
Check car!
press ENTER
```

The following keys can be used in this step:

ENTER	Press ENTER to continue

Now the mechanic is instructed to insert the plug which is labeled as indicated below.

```
Insert Plug:
"EN81 UCM-Test"
```

No keys can be used in this step. When the plug has been inserted (i.e. DW and DFC are high), the next screen is shown automatically.

Confirm the result of the test.

```
Test OK?
n=0 y=1 >
```

The following keys can be used in this step:

0	Press “0” if the car was not stopped within the limits.
1	Press “1” if the car was stopped within the limits.
ENTER	Press ENTER to continue.

Now the mechanic is instructed to perform an ERO run so that the UCM blockage is cleared.

```
Run ERO to
continue
```

No keys can be used in this step. When the Drive performs an ERO run, the next screen is shown automatically.

After successful test, the final screen is shown:

```
UCM-Test
done!
```

No keys can be used in this step. The test sequence is finished.

If the test was aborted, the abort screen is shown:

```
UCM-Test
aborted!
```

No keys can be used in this step. The test sequence is aborted.

If an error has occurred, the error screen is shown:

```
UCM-Test
FAILED!
```

No keys can be used in this step. The test sequence has failed.
Check the status and the event log to determine the reason of the failure.

5.5 ARO (Asian OARO only) *M - 1 - 7 - 5*

This menu is used to monitor the ARO (Automatic Rescue Operation).
For more details, refer to Gxx30780xxx_INS and Gxx30780xxx_FSD.

```
FEATURE – Menu >.
5=ARO            .
```

The following keys can be used:

5	REI Mode Operation Monitoring
GOON / GOBACK	Change the menu. There are three kinds of menu – MODE, STEP, TARGET

Description of display:

Display			description	values
SPB F x/x/x/x >` `DRV_F x/x/x >` `1	1	FLAG:	This is only for engineering usage	

Description of display:

Display			description	values
1 2` `POS:x/x DIR:x/x` `TARGET: Axx->Txx` `3 4 5 6	1	POS:	Position value	
	2	DIR	Direction / Rescue direction	
	3	A	The actual floor.	
	4	xx	Floor number	
	5	T	The REI target floor.	
	6	xx	Floor number	

Description of display:

Display			description	values
1` `OPMODE: x/x .` `DRIVE: IDLE .` `2	1	OP-MODE	Current / Previous	
	2	DRIVE	The drive is idle.	IDLE
			The drive is not ready yet.	NOT READY
			The drive is running.	RUNNING
			The drive is stopped.	STOPPED
			The drive is blocked by some reason.	BLOCKED

Description of display:

Display			description	values
STATE: CHECK . MC CMD: CARGOTON	1	STATE:	This menu is to show the ARO step	
			The ARO is initiated.	INIT ARO
			The car is check landing.	CHECK
			The car is running to next floor.	RUN2NEXT
			The car stopped at landing.	AT LANDING
			The car is closing door.	CLOSE DOOR
			The car is wait for DOB input.	WAIT4DOB
			The ARO is successful.	SUCCESSFUL
			The ARO is finished.	FINISHED
			The ARO is not used.	NOT USED
		ABORT	The ARO is aborted by condition.	ABORT N/A
			The ARO is aborted by timeout expired.	ABORT TOUT
			The ARO is aborted by position invalid.	ABORT POS
			The ARO is aborted by inside LS zone.	ABORT LS
			The ARO is aborted by terminal landing direction.	ABORT TML
			The ARO is aborted by counter weight direction.	ABORT CWT
			The ARO is aborted by software error.	ABORT ERR
		MC CMD	This is only for engineering usage.	

Description of display:

Display			description	values
CMD F:x R:x . ST F:x R:x . 1	1	CMD	The door command.	
		ST	The door state.	

5.6 UCMK (Korea only) ***M - 1- 9***

This menu is used to release or to monitor the UCM (Unintended Car Movement) relay contact. The menu is only visible if the parameter EN-UCMK (Enable UCM relay parameter) is enabled. For more details, refer to Gxx30780xxx_INS and Gxx30780xxx_FSD.

```
Local Feature
3=UCM Reset
```

The following keys can be used:

3	Reset UCM relay

```
Local Feature
4=UCMErr Status
```

The following keys can be used:

4	Monitor UCM error condition

Description of display:

Display			description	values
UCM-ERR: z d n q o c 1 2 3 4 5 6	1	Z	Missing doorzone with door opens	z-Z
	2	D	GDCB detects UCM with door opens	d-D
	3	N	CAN message is not received from GDCB for x seconds	n-N
	4	Q	Count data from GDCB is wrong	q-Q
	5	O	UCM relay open error	o-O
	6	C	UCM relay close error	c-C

5.7 Tools Functions

These are a couple of functions for additional diagnostic.

5.7.1 Search IO ***M - 2 - 1***

This function finds all I/O-Numbers which are programmed to a specific RSL address.

The following keys can be used:

0 ... **9**	enter an RSL address and bit
ENTER	start or continue the Search Run
CLEAR	delete the last input

Description of display:

Display			description	values
1 **Search-IO ?** **Adr: 04 / Pin: 1** 2 3	1	**?**	status indicator	? waiting for input (ENTER) ! searching
	2	**04**	Address to be searched for	
	3	**1**	Pin/Bit to be searched for	
1 **Search-IO ?** **>04 1< IO: 0001** 2 3	1	**?**	status indicator	? waiting for input (ENTER ! searching
	2	**04 1**	Addess and Pin to be searched for	04 1 … 63 4
	3	**0001**	I/O-number which is programmed for this Address/Pin	0000 - 9999
Search-IO **no more march!**			no further I/O-Numbers have been found	
Search-IO **no match!**			no I/O-Number has been found	

5.7.2 Erase IO ***M - 2 - 2***

This function completely erases the I/O-Setup in the E2PROM.

```
  Erase IO Part?
n=0 y=1 / Enter
```

	display	keys	description
1	Erase IO Part? n=0 y=1 / Enter	0 & ENTER	leave menu; the setup will not be erased
		1 & ENTER	first confirmation
2	Erase IO Part? n=0 y=2 / Enter	0 & ENTER	leave menu; the setup will not be erased
		2 & ENTER	confirm again to erase the I/O-Setup
3	Erase IO Part! Please Wait:1581 1		1: countdown; the procedure is finished when this number reaches zero

After calling this function all RemoteStation-Adresses will have been deleted and all I/Os will be inactive:

I/O-Nr.	name	default
0	DOL	0 01-0
7-9	LWX, UIS, DIS	0 01-0
12	LWX	0 01-0
17-19	NU, NUSD, NUG	0 01-0
224-255	FPD-xx	0 01-0
480-511	CRS-xx	0 01-0
544	RDOL	0 01-0
588	MTC	0 01-0
610-613	CCO	0 01-0
624	EFO	1 01-0
625	ESH	0 01-0
691	TCI	1 01-0

I/O-Nr.	name	default
692, 693	1LS, 2LS	1 01-0
694	DCL	0 01-0
695	RDCL	0 01-0
697	MCLS	0 01-0
703	ON	0 01-0
746	HCOC	0 01-0
772	AEFO	1 01-0
775	XEFO	0 01-0
783	TCIB	1 01-0
784	PDD	0 01-0
1000	CLR	0 01-0
all others		0 00-0

Description of the default value:

```
  0  01-0
  1  2  3
```

1	Invert-Bit
2	address
3	bit

5.7.3 Setup Inst ***M - 2 - 3***

This function completely erases the Installation Parameter Setup in the E2PROM.

Description of display:

```
 Setup Install ?
n=0 y=1 / Enter
```

	display	keys	description
1	Setup Install ? n=0 y=1 / Enter	0 & ENTER	leave menu; the setup will not be erased
		1 & ENTER	first confirmation
2	Setup Install ? n=0 y=2 / Enter	0 & ENTER	leave menu; the setup will not be erased
		2 & ENTER	confirm again to erase the I/O-Setup
3	Setup Install ! Please Wait...		Installation Parameters are being set to the default values
4	Setup Install ! Setup DONE!		

After calling this function all parameters have been set to the Default-value as indicated in the document *Gxx30780xxx_INS*.

5.7.4 Setup Door ***M - 2 - 4***

This function allows you to change from predefined Door Operators (DOOR=0-10) to Generic Door Operator (DOOR=11) without programming each parameter separately.

Description of display:

	display	keys	description
1	`Which door type? front >`	0 … 9	Enter a doortype as listed in *the List of Installation Parameters* for parameter DOOR.
		ENTER	confirm
2	`Which door type? rear >`	0 … 9	Enter a doortype as listed in *the List of Installation Parameters* for parameter REAR.
		ENTER	confirm
3	`F: FLH` `R: 9550 TLD`	ENTER	Store the default values for Generic Door Operator Parameters
4	`Loading done!` `Have fun!`		Finished

Now you can setup DOOR=11 (or REAR=11) without changing the behaviour of the software.

5.7.5 Customer ID Menu ***M - 2 - 5***

5.7.5.1 Pairing ***M - 2 - 5 - 1***

With this menu you can pair a GECB controller with a specific OFT-C (OTIS Field Tool – Customer).
NOTE: An OFT-C has to be initialized at the WW OTISkey server with a unique Customer ID (CID).
Before an OFT-C is passed on to the customer, it has to be paired with the customers' controller. With that approach an OFT-C from customer B won't work with controllers from customer A and vice versa.

The pairing is enabled with an OFT-A (Adjuster Tool) with M-2-5-1. After this is done someone has 3 minutes left in order to plug in the OFT-C. The GECB will read out the OFT-C's CID and will save it on the GECB.

Description of display (M-2-5-1):

	display	keys	description
1	`Enable Pairing?` `n=0 y=1 >`	0 / 1	0=cancel, 1=pairing
2	`Enable now?` `n=0 y=2 >`	0 / 2	0=cancel, 2=enable pairing
3	`Pairing enabled!` `Please, plug …`		Pairing is enabled: 3 minutes left to plug in OFT-C
4	`OFT-C Pairing` `please wait …`		Wait until OFT-C is paired with controller.

4	`OFT-C Pairing`
	`DONE!`
	or
	`OFT-C Pairing`
	`FAILED!`
	or
	`OFT-C Pairing`
	`WRONG CID!`
			The first line always shows that the GECB is in pairing mode.
			
			DONE: Pairing was successful. The menu is shown after 3 seconds.
			
			FAILED: The connected tool is no OFT-C or the OFT-C was not initialized at the WW OTISkey server. No menu is shown anymore, plug in another tool
			
			WRONG CID: The connected OFT-C was not initialized at the WW OTISkey server. No menu is shown anymore, plug in another tool.

5.7.5.2 Reset ***M - 2 - 5 - 2***

An already paired GECB can be reset (set back to factory default) to make it an un-paired GECB.

Description of display (M-2-5-2):

	display	keys	description
1	`Reset Cust.-ID?` `n=0 y=1 >`	**0 / 1**	0=cancel, 1=reset
2	`Reset now?` `n=0 y=2 >`	**0 / 2**	0=cancel, 2=reset now
3	`Cust.-ID reset!` `Done!`		Reset done.

5.7.6 Check Tool - Tool Expiration Counter ***M - 2 - 7***

With this menu a connected Smart OTIS Dongle (SOD) or an OFT-A (OTIS Field Tool – Adjuster) can be tested for its expiration counter.

```
  TOOLS - Menu >
 7 = Check Tool
```

One of the above tools is connected:

```
Expiration
  count = 000955
```

None of the above tools is connected:

```
NO EXPIRATION,
 press 'CLEAR'
```

NOTE:

An expired OFT-A shows “NO EXPIRATION”.

An expired SOD shows “Expiration count = 00000”.

In addition to this TOOL menu a 60 sec blink message during startup was implemented, which will warn about 50 (or less) connections left until expiration.

5.7.7 Operate Special ***M - 2 - 8***

This menu allows to access the memory addresses of the board.

Engineering only. Not for Field use.

5.7.8 Operate Memory

M - 2 - 9

This menu allows to access the memory addresses of the board.

Engineering only. Not for Field use.

5.8 Extra Functions

These are a couple of functions for additional diagnostic.

5.8.1 Activate SW Menu ***M - 3 - 1***

Since **GAA30780DAJ** the GECB has two places to store application software:

- Active image
- Inactive image

The application runs from the active image. An application download goes into the inactive image without disturbing the current running application.

If the inactive image contains a valid application, the Activate SW menu allows activating it. Activate SW can be called multiple times to switch between the two images back and forth.

After programming the GECB with a non-bootable OMU (for field usage), the Activate SW menu can also be used to switch back to the previous running version. Multiple calls allow switching between the two images back and forth.

Programming the GECB with a bootable OMU (not for field usage) erases the other image preventing switching back with the Activate SW menu.

```
   Validating
  Please wait
```

Checks whether the inactive image is valid

Advances to

```
   Current SW
Press GOON     >
```

GOON

```
GAA30780DAJ
01-Oct-10 13:02>
```

SCN of the current running software (active image)
Date and time of authorization

Press GOON / GOBACK to continue / go back to the previous screen

```
 SW to activate
Press GOON     >
```

Press GOON / GOBACK to continue / go back to the previous screen

```
G1130780DAK
02-Oct-10 13:02>
```

SCN of the software in the inactive image that is available for activation, date and time of authorization

Press GOON / GOBACK to continue / go back to the previous screen

```
  Activate SW?
n=0 y=1   >
```

Press 1 - ENTER to continue
or press GOBACK to go back to the previous screen
or press MODULE to cancel

```
  Activate SW?
n=0 y=2   >
```

Press 2 - ENTER to activate the software in the inactive image
or press MODULE to cancel

```
   Activating
G1130780DAK
```

The GECB resets and starts the selected software (changes the inactive image to be the active one).