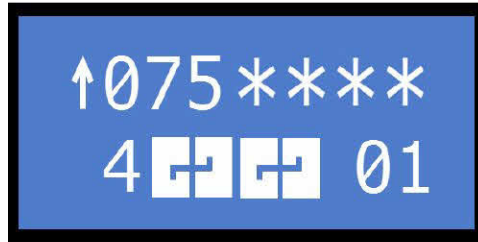## Section 4 – Diagnostic Display & User Interface

4.1 – Diagnostic Display

The diagnostic display on the 3300 control system is located on the CANMB (CAN Mother Board) in the control system in the top floor door jamb. The display gives information on the status of the system, and also provides access to diagnostic information and configuration parameters. Refer to the image below for a representation of the diagnostic screen:

In the upper row of the diagnostic screen, the arrow indicates that the elevator is currently moving in the up direction. If it were moving in the down direction a down arrow would be present. When the car is stopped a minus sign (-) is displayed.

The next characters (075) indicate the present speed of the elevator in cm/s. 75 cm/s equals approximately 150 ft/min. As a rule of thumb, double the speed seen on the display to obtain the car speed in ft/min.

The 4 asterisks (sometimes called 'snowflakes') on the right side of the screen in the top row are different points in the safety circuit.

- The first asterisk indicates that the circuit breaker that supplies the safety circuit "DUEISK-A" is closed.
- The second asterisk indicates that the car is **NOT** on inspection operation.
- The third asterisk indicates that the car and hoistway doors are closed.
- The fourth asterisk indicates the safety circuit in the hoistway and on the car (final limits, governor, pit stop, car top stop switch, escape hatch, plank switch, etc.) is closed.

NOTE: *With the elevator parked at a floor on Automatic Operation with the doors closed, only the first 2 asterisks will be displayed. This is because the hoistway door locks do not close until power is applied to the door motor, retracting the clutch. The doors can be opened from the hoistway just by applying pressure to open the landing doors.*

In the bottom row, the "4" indicates that the car is at or near the 4th landing.

The next items on the bottom row of the display are the status of the front and rear doors. The front is displayed first, followed by the rear. In the image above the doors are closed and locked. The following door statuses may be seen:

| Doors Closed | Doors Closed & Locked | Doors Closing | Doors Opening | Doors Opened | Door Status Unkown | Doors Stopped |

The last character in the bottom line is the present control status. "01" indicates that the car is on automatic operation and available for passenger travel.

4.2 – Control States

The control status information on the bottom right side of the display indicates the present state of the elevator system. Refer to the chart below for common states that may be seen.

State	Description
00	Out of Service
01	Automatic Operation
02	Independent Operation
03	Fire Phase I
04	Fire Phase II
05	Emergency Power Operation
06	Earthquake Operation
07	Code Blue Operation
09	Water in pit sensor active
11	Automatic Operation with load weigh disabled (parameter 107 active)
36	Emergency Power Halt
37	Stop switch in car open
38	Stop switch in FF panel open
39	Elevator is overloaded
40	Invalid configuration (see note below)
41	Invalid hoistway image (must perform learn trip)
42	Invalid load weigh configuration
45	Belt life exceeded
51	Installation travel (parameter 105 active)
52	Configuration (parameter 40 active)
53	Controller Inspection Operation
54	Car Top Inspection Operation
56	Hoistway Access Operation
57	Test Travel Operation (parameter 104 active)
58	Acceptance Test mode
59	Hoistway Learn
70	Recovery mode (elevator recovering after power loss, etc.)
72	Position recovery (elevator recovering after position loss)
74	Low backup battery power
80	Stop switch in hoistway pressed
81	Stop switch on car top pressed
82	Stop switch on controller pressed
88	Safety circuit open
89	Bypass (car door and/or hoistway door) switch activated

90	System status invalid (will attempt to recover when on automatic operation)
91	Power up
95	Power lost to controller
97	Out of service but available for inspection operation (check error log for cause)
98	Out of service & **NOT** available for inspection operation (check error log for cause)
99	Out of service – must perform 101 reset to operate
W!	Warning – belt life has exceeded 80%

NOTE: *Status 40 indicates that the software configuration has become corrupted. Refer to Section 6.4 for further information.*

Status 98 and 99 will not allow the elevator to run on inspection operation. Status 98 may be cleared by performing a 101 reset at the controller or by a 'soft reset' from the car top or controller inspection run box. Status 99 must be cleared by performing a 101 reset. Refer to Section 5.1.2 for further information on the 101 reset.

4.3 – Diagnostic Screen, User Interface & Menu Navigation

There are 4 buttons located directly below the diagnostic screen. These buttons are used to navigate through the menus and change parameter values. See picture below:

Diagnostic Display Pushbuttons

Starting at the left side, the first button is the escape button. It will back you out of a parameter or menu that you are viewing.

NOTE: *It is always safe to hit the escape button, and if you're not sure where you are in the menu tree, hitting the escape button several times will bring you back to the main diagnostic screen.*

The next 2 buttons are up and down. They are used to scroll through the menus, or parameters in a menu, and are used to increase or decrease parameter values.

The right hand button is enter. It is used to enter the parameter menus, look at parameter values, and program parameters. Do not hit the enter button unless you are sure of what you are doing, as there is no confirmation (for example "Are you sure?") before a value is entered into the system.

4.4 – Navigation into Menu Tree

To access the menus from the main diagnostic screen just press the enter button. The information on the bottom of the screen will change, and you will see the number 10 appear on the left side. See picture below:

```
-  0  0  0  *  *  _  _
   1  0
```

You are now in the parameter menus and at menu 10. To enter the 10 menu and view or modify the parameters in that menu, press the enter button again. The 10 will change to 101, letting you know that you are now at parameter 101. See picture below:

```
-  0  0  0  *  *  _  _
   1  0  1
```

Using the up or down arrows will allow you to scroll to the different parameters in the 10 menu. Pressing the enter button will show you the current value of that particular parameter.

While viewing a parameter value, the escape button will bring you back to the parameter number, and hitting escape again will bring you back to the top of the parameter menus where you will see 10 on the lower left of the screen.

While at the top of the parameter menus (where you see 10 on the lower left side) you can access the different menus by pressing the up or down button to get to the other menus. The menus are as follows:

     10 – Special Commands
     20 – Acceptance Tests
     30 – Status & System Info
     40 – Configuration
     50 – Diagnostics (Error/Event Log)
     60 – Statistics