

3-1) PROGRAMMING TOOL (P-Tool) FUNCTION:

The P-Tool is available in either a board mount or held versions. The recommended minimum is that each installation technician have a P-Tool.

The P-Tool can be used to:

- View the status of the elevator
- Change parameter settings
- View and clear the fault log
- View and clear the counters
- Put the system into Temporary Run Mode
- Run the elevator while in Temporary Run Mode

Note: While using the P-Tool in programming mode, the elevator will not respond to calls

Note: The P-Tool is rendered in-operable while the elevator is running. The elevator must be at rest.

3-2) CONNECTING P-TOOL:

***** WARNING *****

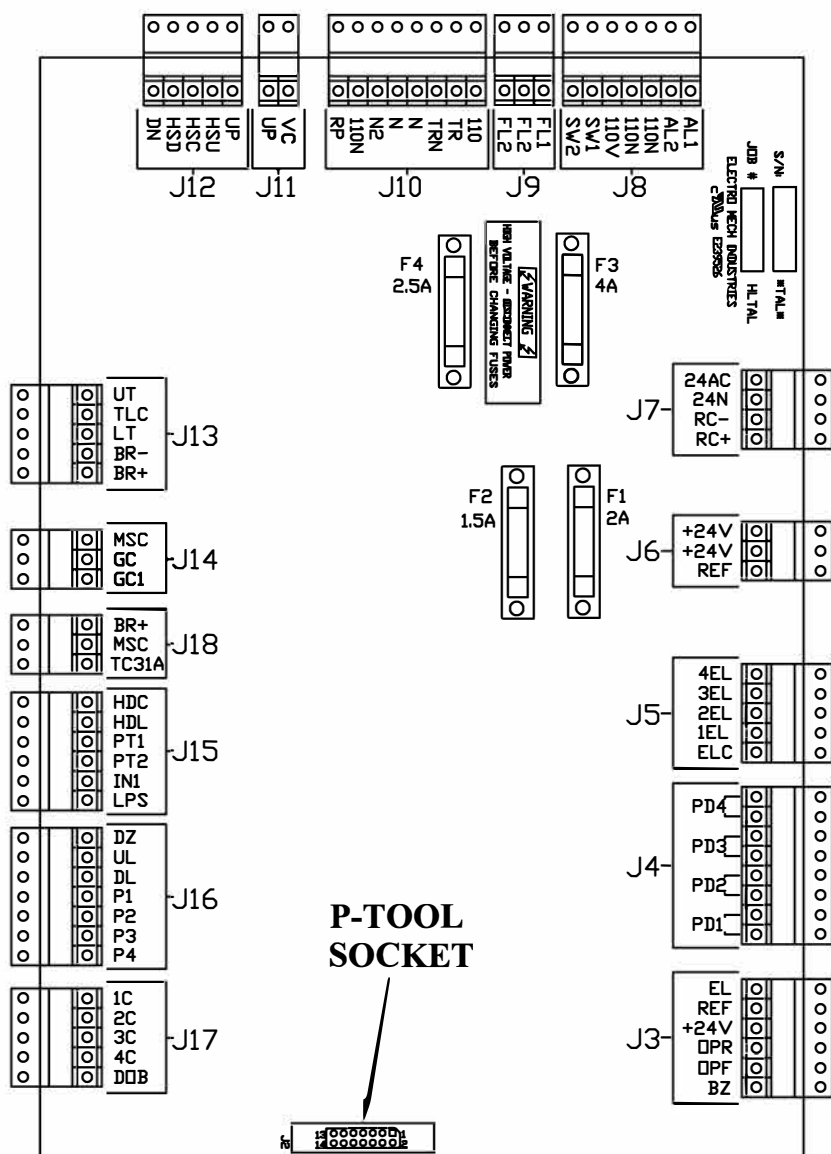
**USE OF THE PROGRAM TOOL IS FOR PROFESSIONAL
ELEVATOR TECHNICIANS ONLY!**

CONNECTING THE P-TOOL TO THE CONTROL BOARD

1. Socket position is on lower right side of board (Location shown below)
2. Move locking tabs on socket outward
3. Insert P-Tool plug into socket

Note: Plug & Socket are polarized. Match key on plug to slot on socket

4. Press the (1) Key (Display will show current status of the Elevator)



3-3) PROGRAMMING MODE:

PROGRAMMING MODE

1. P-Tool must be connected to control board with display showing the status of the Elevator.
2. Press the (A) key to access the Main Menu Screen

NORM (1) PROG(2) LOG (3) COUNT(4) C
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Main menu screen

3. Press the (2) key, you will be prompted to enter the password

PASSWORD THEN # PROG:

Factory set Password is
12345

4. Enter the password and then press the # key
Note: If keystrokes are too fast the unit may not accept the entry. Make sure a star symbol appears on the display before making the next entry.
Note: See section 2-1 in this manual before making any changes to the Password.

Number of Floors (2)

First Parameter
will be shown

5. You may navigate through the parameter fields by using the Keys shown below.
 - (A) To Return to the Main Menu
 - (B) To Scroll Up through Parameters
 - (C) To Scroll Down through Parameters
 - (D) To Clear the current Value
 - (#) To Save the change

6. To Change a Parameter: Scroll to the Parameter, choose setting and then press the # key to save the change.

Note: Unit is out of service and will not accept calls, when in Program mode.

If no key strokes are initiated for 2 minutes, the unit will return to Normal operating mode.

7. If a Change to a Parameter is made, return to the Main menu, (A) key, return to Normal mode, (1) key, and then press the Star key to re-set the unit. This insures that the change will be initiated for the next operation.

NOTE: If you change the parameter for NUMBER OF STOPS, all factory parameter settings will be lost. Board default parameters will automatically be loaded. Default & Factory settings are listed in this manual.

3-4) LOG MODE:

LOG MODE

The Log stores 20 faults in a First in First out format. (1st fault drops off when 21st fault registers)

1. P-Tool must be connected to control board with display showing the status of the Elevator.
2. Press the (A) key to access the Main Menu Screen

NORM (1) PROG(2) LOG (3) COUNT(4) C
--

Main menu screen

3. Press the (3) key

EVENT DESCRIPTION 2UL

The first line describes the fault.

(2U) Indicates where fault occurred and was during an UP run.

(2D) Would indicate during a down run

(2R) Would indicate fault occurred while the car was at Rest.

(L) Indicates that the fault being view is the most recent event.

4. Press the (#) key to see the date and time

TIME:	14:34:59
DATE:	30-06-11

5. You may navigate through the parameter fields by using the Keys shown below.

(A) To Return to the Main Menu

(B) To Scroll Up through Events

(C) To Scroll Down through Events

(D) To Clear the Log

(#) To Save the change

6. When you want to clear the Log you will be prompted for the Password.

Enter the password and then press the # key. When the # key entry is made, the log will clear and bring you back to the Main Menu screen.

Note: If keystrokes are too fast the unit may not accept the entry. Make sure a star symbol appears on the display before making the next entry.

3-5) VIEW & CLEAR COUNTERS:

COUNTER MODE

1. P-Tool must be connected to control board with display showing the status of the Elevator.
2. Press the (A) key to access the Main Menu Screen

NORM (1) PROG(2)
LOG (3) COUNT(4) C

Main menu screen

3. Press the (4) key

TRIP:	5
TOTAL:	43

Trip: Counts each time the car responds to a call. (Resetable)
Sample shows that there have been 5 runs since the last time that the Counter was cleared.

Total: Same as trip but is not resetable.

4. Pressing the (C) key toggles you to the Re-level Counter

UP LEVELING	0
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Up Leveling: Counts each time the car re-levels without a call. (Resetable)

5. Pressing the (C) key toggles you to the Service Interval Counter

SERVICE INTERVAL	24
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Service Interval: Counts each time the car responds to a call. (Resetable)

6. You may navigate through the parameter fields by using the Keys shown below.
 - (A) To Return to the Main Menu
 - (B) To View Run Counter
 - (C) To View Re-level Counter
 - (D) To Clear the Counters
 - (#) To Save the change
7. When you want to clear the Counters you will be prompted for the Password.
Enter the password and then press the # key. When the # key entry is made, the log will clear and bring you back to the Main Menu screen.
Note: If keystrokes are too fast the unit may not accept the entry. Make sure a star symbol appears on the display before making the next entry.

3-6) CLOCK SETTING

CAR POS: 1 REST	PRESS (A) TO VIEW THE MENU
NORM: 1 PROG: 2 LOG:3 COUNTER:4 C	PRESS (C) TO SCROLL DOWN TO THE NEXT SCREEN
BACK: PRESS B CLOCK: 7	PRESS (7) TO VIEW OR CHANGE THE CLOCK
CURRENT CLOCK:1 CHANGE CLOCK :2	PRESS (1) TO SEE THE CURRENT CLOCK
TIME: 10:13:15 DATE: Th07-05-21	PRESS (B) TO GO TO THE PREVIOUS SCREEN
CURRENT CLOCK:1 CHANGE CLOCK :2	PRESS (2) TO CHANGE THE CLOCK
YEAR: (21) SAVE:# DEL:D C	TYPE IN THE YEAR THEN PRESS # TO SAVE PRESS (D) IF NECESSARY TO DELETE
MONTH: (05) B SAVE:# DEL:D C	TYPE IN THE MONTH THEN PRESS # TO SAVE PRESS (D) IF NECESSARY TO DELETE
DAY: (07) B SAVE:# DEL:D C	TYPE IN THE DAY THEN PRESS # TO SAVE PRESS (D) IF NECESSARY TO DELETE
WKHDAY: (07) B SAVE:# DEL:D C	TYPE IN THE WEEK DAY. THEN PRESS # TO SAVE PRESS (D) IF NECESSARY TO DELETE 1 Sunday - 7 Saturday
HOUR: (10) B SAVE:# DEL:D C	TYPE IN THE HOUR THEN PRESS # TO SAVE PRESS (D) IF NECESSARY TO DELETE
MINUTE: (13) B SAVE:# DEL:D C	TYPE IN THE MINUTE THEN PRESS # TO SAVE PRESS (D) IF NECESSARY TO DELETE
SECOND: (15) B SAVE:# DEL:D C	TYPE IN THE SECOND THEN PRESS # TO SAVE PRESS (D) IF NECESSARY TO DELETE PRESS (A) TO GO TO THE MAIN SCREEN

3-7) PARAMETER SETTING

Parameter	Board Default	Job Settings	Job Settings
Password:	12345		
Number of Floors	2		
Single Automatic PB	YES		
Drive System	HYDRO		
Fixed Cam	NO		
Delay Up Stop	0		
Run Timer	90		
Car light Timer	5		
Non-Interference Timer	2		
Car Call Cancel Timer	10		
Florida Option	NO		
Automatic (Power) Gate	NO		
Floor 1 Gate	1		
Floor 2 Gate	1		
Floor 3 Gate	1		
Floor 4 Gate	1		
PreOpening	NO		
G&D Timer Cancel	NO		
Gate Open Timer	15		
Gate Re-open Timer	10		
Homing Floor	0		
Homing Timer	5		
DC Timer	15		
Short Floor 1-2	NO		
Short Floor 2-3	NO		
Short Floor 3-4	NO		
Call Button Fault	NO		
Re-level shutdown Counter	5		
Re-level shutdown Timer	2		
Auto shut down counter	0		
Sabbath	Yes		
Service Interval Counter	0		

4-1) TEMPORARY RUN MODE:

The purpose for this mode of operation is to allow the installer to move the platform up or down during the installation process. During this mode of operation safety chains MSC, LPS, GC,GC1, HDC and HDL will be disregarded. If the motor overload connected to PT1 and PT2 opens, the platform will not move.

Before the platform can be moved the following electrical connections will need to be made:

- Drive system (hydro or drum) including motor overload
- L1, L2 & N
- SW1 & SW2

The following jumpers are required:

- From TLC to LT
- From TLC to UT
- From 24V to HDL

Temporary run mode can be initiated in either of the following:

- Hold keys 1,5 and 0 on P-TOOL, then power up
- Logic board Inputs P1, P4 and DOB tied to REF, then power up

The platform will travel UP by constant pressure of either of the following:

- "A" key of PTOOL
- While logic board input 4C is tied to REF

The platform will travel down by constant pressure of either of the following:

- "D" key of PTOOL
- While logic board input 1C is tied to REF

Note: During Temporary Run Mode, the platform will move at low speed.

To return too normal operation, remove power then power up without the initiating conditions.

5-1) IDENTIFYING THE SOFTWARE VERSION:

Periodically we enhance or add features to the operational software. If you call for assistance on a unit, you may be asked to identify the software on your unit.

There are two ways to identify your software:

- 1) The date stamp on the EPROM.
- 2) Connect the Programming tool, perform a reset by pressing the star key and reading the version that shows on the upper right side of the display. Note, if a ? mark is displayed it is an indication that you have the first version of software. If you have a revised version, you will see a "V" followed by an identifier (1.1.0, 1.2.1, 2.1.1, etc).

6-1) PRE-OPERATIONAL SAFETY CHECKS:

This process will confirm that all field wiring has been performed correctly and that the safety circuits function as expected. The critical LED(s) to observe are RED and located throughout the Logic board. These LEDs are designated as follows: **LT, UT MSC, GC, HDC and HDL**

1. Remove all jumpers used during construction, then power up controller in “TEMP RUN” mode with P-Tool (refer to Section 4-1).
2. Confirm P-Tool displays “TEMPORARY MODE REST”.
3. Confirm that gate is closed and hoistway doors are closed and locked. The critical LEDs **MUST** be ON (UT, LT MSC, GC, HDC and HDL).
 - **Note: Other LEDs may be ON as well but are disregarded for these tests**
4. Cycle each of the following applicable switches and confirm that all critical LEDs to turn OFF when the switch is opened and back ON when the switch is closed: Pit Sw., Door, UFL, LFL, Safety Slack Sw., Car Top Stop.
 - **Note: Close all switches and confirm all critical LEDs are ON.**
5. Manually unlock a door lock. Result: HDL goes off.
6. Open a Hoistway door. Result HDC goes off; HDL remains off.
7. Open the Gate. Result: GC goes off; HDC and HDL remain off.
8. Close Gate and Open “IN CAR STOP”: GC goes off; HDC and HDL remain off.
9. Close “IN CAR STOP” switch, gate and hoistway doors

6-2) TEMPORARY MODE RUNNING TESTS:

1. Run the car DOWN until the Lower Terminal Limit opens (LT turns off).
 - a. The P-Tool will indicate “Running Down” but the car must stop.
2. Install a temporary jumper between TLC to TT, LT activates. Run car down to Pit.
 - a. LPS must deactivate.
 - b. Remove the Temporary Jumper
3. Run the car UP until the Upper Terminal Limit opens (UT turns off).
 - a. The P-Tool will indicate “Running UP” but the car must stop.
4. Confirm Selector signal sequence: Refer to Section 7-1 for the required selector sequence. Confirm sequence from lower terminal floor to upper terminal floor in both directions.

6-3) PROGRAM JOB SPECIFIC PARAMETERS:

1. Power down controller, remove J14 from Logic board (MSC & GC)
2. Power up controller and follow instructions of Section 3-3
 - a. Record job parameter on “Parameter Log Sheet” Section 3-6
3. After all job specific parameters have been entered:
 - a. Clear the LOG
 - b. Insert J14
4. Reset Elevator