

APPENDIX B

DAR DIAGNOSTIC SWITCH/LED FUNCTIONS

SWITCH Tens-Units	FUNCTION
0 1-9	PMI Input/Output Status. LEDs 1 thru 16 indicates the I/O (Input/Output) modules status of the "dialed" PMI board (1 thru 9). If the module is ON (voltage at terminal of input module, or closed circuit for output module) the corresponding LED will illuminate. This is very useful during wiring and circuit verification.
1 0-9	PMI Input/Output Status. Same as above but for PMIs 10 thru 19.
2 0	All LEDs OFF.
2 1	All LEDs ON. Verify the LED operation.
2 2	Real Time Clock Operation. The binary representation of the real time clock time in second.
2 3	DPP deviation count from the floor position reference. Note that +/-1 count off from floor level is normal. If the count is more than 3, adjustment of FCP is necessary. For ex. LED 1 thru 3 would represents 3 bits off from floor level. LEDs 21 thru 24 indicate an above or greater condition, while LEDs 17 thru 20 indicate a below or smaller condition. If the condition is the same (such as at floor level reference) LEDs 1 thru 16 will be OFF while LED 20 will be ON.
2 8	Velocity deviation from programmed inspection speed while on inspection (IVE) or deviation from top speed during automatic operation. The deviation count is in ten (10) FPM increments. Refer to above example.
2 9	Same as above except the deviation count is in one (1) FPM increment. Refer to above example.

VIII. TROUBLESHOOTING CHECKLIST FOR CAR CONTROLLER

For proper operation of the elevator, whether trying to run on inspection or automatic, the following inputs must be energized in the correct sequence.

1. All slowdown limit inputs must be high if the car is not at a terminal landing.
SD1,SD2...SDx
SUI,SU2 ... SUX x=max number of limits.
2. All safety inputs must be high all the time. GV, HS, CS and ICS inputs are located on PMI#2 and shown on Relay Section 2.
3. The 5CR On Off Switch (SCRS) input must be high all the time.
4. The SCR Fault trip (TRIP) input must be high all the time. The trip input is controlled by the 3CR relay from the SCR drive, which is energized whenever the drive is in a non-fault condition. Refer to Relay Section 3.
5. Both Gate and Lock (GL) inputs must be high when the doors are fully closed One input is PMI#1,IO#14 and the other input is on PMI#2,IO#5.
- * 6. The Overload Fault (OLF) input must be high all the time. The OLF input is controlled by the 2CR relay from the SCR drive, which drops out if the SCRs are overheated. Refer to SCR Drive Logic Interface 3. *Swift 5000 (analog Dr) OLF is overspeed switch. OLF input module.*
7. The Normal Power (NP) input must be high all the time. Refer to the Emergency Power print
8. When a start sequence is initiated either by a call pilot during auto or a directional push button during inspection, the Up Relay (UR) input must come on for the up direction and the Down Relay (DR) input must come on for the down direction. Refer to Relay Section 3.
9. If all of the previous inputs are correctly energized, the controllers CPU will turn on the System Master (SM) output which will energize the DH, MC, BK1 and BK relays. Refer to Relay Section 3. Once this occurs, the Cpu will look for the Master Contactor (MC) and the Brake Relay (BK) inputs to turn on immediately before sending out a speed dictation signal to run the car. Refer to Drive Logic Interface 1.
10. As the car starts to move, depending on direction, the Up Tach (UT) or the Down Tach (DT) input should turn on. Refer to the Drive Logic interface 1.

• Check 6 is 2 possible definitions and SD 412 SCR over temp 2CR Relay.
* Analog drive ten percent switch.

car dial

20

21

23

28

29

All leds off.

All leds on.
DPP Deviation from floor pos.
Deviation from dictated speed 10 fpm/led.
Deviation from dictated speed 1 fpm/led.