24v DC VPL Troubleshooting Tips

WARNING: DISCONNECT BATTERIES AND AC POWER BEFORE SERVICING ANY MECHANICAL OR MOVING COMPONENTS!

A. BATTERY CHECKOUT – When the batteries become weak the gate can begin to run noticeably slower. (NOTE: Batteries should only be checked when you are sure they have had adequate time to fully charge.) Turn off the AC power and run gate for 5 to 10 cycles while observing low battery indicator LED D12. If LED 12 comes ON, batteries are too weak to function properly. If LED 12 does not light, then voltage should be checked as they still may be near failure. Correct voltage is approximately 25.5VDC. (NOTE: If LED D12 does light, gate will open to conserve batteries in this test or in a real power loss, even if mode switch 8 is on S2 is off.) Return of AC power will clear the low battery indicator. If the batteries are not completely drained, you may have to charge the batteries as they may be too weak. Correct charge voltage is 27.5 VDC with batteries not connected (adjustment is at R63).

B. GATE WILL NOT CLOSE - Check for any active inputs, AC power loss, AC power switch is off or weak batteries. Check that batteries are connected properly. Is switch S3 in "ON" position (this is manual open switch). Check if S2 switch number 8 is in "ON" position and if AC power is lost, See LED D14. Check LED D12, if lit and AC power is off, then batteries need to be charged or replaced.

C. GATE WILL NOT OPEN - Check for AC power loss at D14 (check AC power switch) and that batteries are fully charged. Check fuses and if inputs are wired correctly, test S3 manual open switch.

D. GATE DEAD – NO OPERATION - Check LED D14 for AC power indication and check that AC power switch is "ON". Check LED D11 for Heart Beat pulses, if none and D14 (AC) & D5 (BRAKE) are on, then gate has repeatedly sensed obstructions. Clear obstruction, then clear with next new input. IRD (D2) LED is flashing, MRT (Maximum Run Timer) has expired. Gate was unable to reach the closed limit switch. Check that fast run timer is set to run as long as possible.

E. FUSE(S) ARE BLOWN - F3 (10 AMP AC) AND/OR F4 (15 AMP DC) Check for shorts in wiring. If F3 AC fuse is blown, then batteries may also be dead. If you continue to blow fuses and no apparent shortages are visible, you most likely have a blown circuit board and it will need to be replaced.

WARNING: FOR CONTINUED PROTECTION AGAINST FIRE, ONLY REPLACE WITH THE SAME TYPE AND RATING OF FUSE.

F. GATE CLOSES THEN REVERSES - See IRD adjustments, also check for obstacles in gate travel, such as trees, sticks, etc. Charge voltage to batteries too low, adjust at R63. With batteries disconnected, set to 27.5.

G. **IRD OBSTRUCTION SIGNAL TO OTHER GATE NOT WORKING CORRECTLY -**
Remove connector at J3, obstruct gate3, LED D13 should go off for a few seconds. This indicates signal was transmitted. Be sure gate3s share a common ground.

H. GENERAL SERVICE -
Belt(s) loose or need(s) replacement. Charge voltage for batteries should be 27.5 VDC with batteries disconnected (set at R63).