



5 Vehicle Troubleshooting Guide

Visible through the hole in the top of the FRK are two LED's – red and green.

Red	Grn	Condition
Off	On	System operates normally
flashing	On	Condition on startup which prevents power from being applied
On	Flashing	Vehicle will not operate. Number of green flashes indicates fault.

The detailed meanings are as follows:

Red	Grn	Condition	Action
Off	Off	System is off	Check fuses on FRK. Check that key switch is providing power.
Off	On	Operating Normally	None. Vehicle should operate normal – main contactor is on, key power is provided to DSE1000
1 Flash	On	After power is turned on, waiting for the foot switch on the pedal to go “open” (foot off pedal). After 2 minutes, the system will fault out and go to Red=on, Green=4 flashes.	Check the foot switch wiring. Check that nothing is stopping the pedal from coming up.
2 Flashes	On	After power is turned on, waiting for the voltage on the DSE1000 B+ terminal to go higher than 38 volts. This should take no more than a few seconds. If it takes more than 10 seconds, the system will fault out and go to Red=on, Green =5 flashes.	Check the fuses on the FRK. Check the voltage between the B+ and B-bars on the DSE1000.If it is zero, either the DSE1000 is faulty or there is a short in the system.
On	1 Flash	The “F” bar has a low voltage when the foot switch is open. Usually indicates a faulty DSE1000 or a motor wiring issue	Refer to the DSE1000 manual for further troubleshooting.
On	2 Flashes	The foot switch (accelerator pedal) has been off for 2 minutes.	Turn the vehicle off and then on again. If this occurs even when the pedal is pressed, then check the wiring from the pedal.
On	3 Flashes	Pedal Fault. The pedal has 2 independent sensors, and they are not consistent.	Check the pedal wiring. The output voltages from the pedals should sum to 5.0 volts.
On	4 Flashes	The foot switch was closed for 2 minutes after the key was turned on.	Check the foot switch wiring. Check that nothing is stopping the pedal from coming up.
On	5 Flashes	The DSE1000 did not charge up.	Check the fuses on the FRK. Check voltage between the B+ and B-bars.If it is zero, either the DSE1000 is faulty or there is a system short.
On	6 Flashes	Pedal Fault. The pedal sensor showed more than ½ way down, but the pedal switch still showed open.	Check the foot switch wiring.