



COST-SAVINGS TECHNOLOGIES FOR THE DIESEL INDUSTRY

## **Trouble Shooting the CCS Electrical System**

Following this procedure will help in determining the cause of the electrical failure and isolate the faulty component.

### **Power Control Module (PCM) error code 1, 2, or 3.**

#### **ER1: The PCM is drawing too much power.**

1. This code can result from an operating system that is greater than 36 volts.
2. Check voltage at the yellow wire (constant power) and the brown wire (key on power)
3. This code can also result if the pump is highly restricted such as the bottle nipples not being cut open to pass air or kinked hoses.

#### **ER2: The PCM is not drawing any current.**

1. This code can result from an open ground circuit. Trace the green ground wire checking for broken strands and verify that the wire terminal end is properly attached. Check that the grounding point is tight and free from paint, grease and rust. If needed, ohm out the wire to rule out this as a problem.
2. Check the 3-wire plug inside the yellow box that connects the external wire harness to the black PCM for proper pin connection.
3. If external ground is found to be good, the problem is internal of the PCM.

#### **ER3: The PCM is supposed to be off, but is drawing current.**

1. Check to see that the brown wire (key on Power) is not hooked to a constant on power source.
2. An internal problem exists inside the PCM.



**Brown wire = (+) "Ignition on"**

**Yellow wire = (+) "continuous battery power"**

**Green wire = (-) Ground**

If all circuits to the PCM are good and the screen is blank or the pump will not run, and unit is under the 1 year warranty. Contact EcoPro at the number below and an RMA return number will be issued for a replacement unit.