

What we have here is a failure to communicate ECM Style



Today's blog is a quick overview on what to do with a diagnostic communications error with the ECM. For this blog I am using directions for a Cummins ISX15 in a Peterbuilt.

The book calls for interviewing the driver, checking maintenance logs, building a flow chart then holding 6 months worth of Sixsigma meeting to figure out the best/cheapest way to fix this truck. Nope – been there done that and have the hat to prove I survived a Sixsigma.

The first step we want to take is to make sure the key is turned on and the ECM has power. The next step is visibly inspect the plug for damage or foreign matter stuck in pins. It is a good hiding point for wayward French fries. If that looks good, then inspect the harness for damage. It is not as much of a problem now with GPS trackers but more than one driver has had their fleet truck turned up and damaged the data cord to not get caught.

This is going to be a little dry and just an over view.

Scan Tool Error Code:

5023 – Perform ECM No communication procedure

5080 – Recalibrate ECM using appropriate ECM Code

5081 – ECM is ROM Booted recalibration needed

5089 – ECM needs rebooted unplug and wait 30 seconds plug back in

5091 – ECM seeded calibration needed

5092 – ECM incomplete needs calibration

85200 – Missing communication between data link and PC (check your usb cable)

5201 – Missing communication between data link and ECM (Check your 9 Pin)

5202 – Missing communication between data link and ECM (wiggle 9 pin again)

5204 – No Communication between data link and ECM (Maybe Ebay was not a good place to buy the USB Link)



Malfunctions of the J1939 (9 Pin Deutsch)

Open + or – circuit. – with device located after the break communication not possible or erratic.

+ shorted to ground – No data communications

+ shorted to battery voltage – no data communications

- Shorted to battery voltage - no data communications
- shorted to ground - communication possible but erratic

Missing terminating resistor or improper resistance - communication possible but not probable.

54-66 Ohms is the proper terminating resistance.

Thanks for taking a look at today's blog. I wish I could have gotten more in depth with this subject but the flow chart alone is 25 pages and how to fix it is a book.