

# “THE DUCT-FREE ZONE”

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The onboard diagnostic capability of some inverter mini splits still impresses and fascinate me years after my first exposure to them. That said...I have to admit I'm still impressed with the idiot light on the dashboard of my truck that tells me when I have a tire going down. How does it know?

Some inverter mini splits use flashing LED lights to communicate errors within the system...I'm not a fan of this communication technique. Flashing a tiny yellow light about the size of the point on a pen 18 times in 30 seconds to tell me the system is experiencing high pressure makes my brain hurt. I always seem to encounter this first thing on a Monday morning when I'm still a little bleary-eyed...trying to count out 18 flashes of a light in 30 seconds becomes an exercise in futility. I much prefer the systems that use an alpha-numeric language to communicate errors.

An example of this is the GREE Multi21+ multi-zone inverter mini split product. There are a total of 58 errors that can be communicated in an alpha-numeric code at the indoor unit. The error code is projected through the cover of the evaporator with what

I call, “back-light projection” and it is in LARGE, easy to read type that can be seen by an old guy like me whose eyesight ain't what it used to be.

Now, as impressed as I am with onboard diagnostics, I'm still an old man... “old-school” if you will...and I don't completely trust them. ...and I think that's a good thing.

In my troubleshooting curriculum, I use the example of the E1 error in the GREE product. E1 means the system is experiencing high pressure. I ask my audience, “what is the first thing you want to do?”

Inevitably attendees start barking out things like, “check the coil”... “check the filter”... “check to see if the outdoor fan motor is running”...and on and on.

All of those answers are fine, but not the answer that I was looking for...

The first thing I'm going to do when a system tells me I have high pressure is put a gauge on it... COME ON! Consider this...

Let's say you put a gauge on it and the gauge indicates the system is NOT experiencing high pressure...well, what can you condemn based on that information alone? ...the pressure switch! Right?

Look...here is my point.

We are professionals...we took the time and effort to learn our trade...a trade that is not easy or simple...a trade that took us years to master. Please don't lose sight of your own skills and abilities... don't place all your trust in onboard diagnostic systems. Use them to compliment your own skills and talents...not as the “be-all end-all.”

What do most people do when the idiot light on their dashboard comes on telling them they have a tire going down? They pull over, get out of the car and look at the tire...they don't just immediately drive to the nearest gas station to get to an air pump. Even the least auto savvy driver wants the visual confirmation that the tire is indeed going down...why should we as professional tradespeople be any different?

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