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JRomano

Lube Tech

03-29-2021 10:32 AM

electrical

Vehicle Information

VIN: 3AKJHLDR3KSKG2709

Model: PT126DC

Model Year: 2019

Mileage: 214,514 miles

Make: CASCADIA

Are you currently seeing this same issue on other DTNA vehicles at your location?: no

Base Model: FTL

Vehicle Systems Involved

ELECTRICAL

Customer states when hooking up any trailers older than a 2016 the trailer lights will not come on. he hooked up to any of the newer trailers it works just fine. This truck was running a double trailer and the first trailer was a 2009 and the second was a 2017. The 2009 had no lights but the rear trailer(2017) had lights.

Add tags



0 Kudos

Reply



Talbert_Simonia

King Pin

03-29-2021 03:19 PM

I would first check the 7-way plug. In Parts Pro module 296 schematic G06-94431-001 shows pin 2 and pin 6. Pin 2 is Black wire for tail lights. Pin 6 is Brown wire for clearance lights.

Add tags



1 Kudo

Reply



JRomano

Lube Tech

03-30-2021 04:55 AM

Customer states that they replaced the 7 way harness and the receptacle and is still having the same issue.

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Reply



Rolandas_Zulca

Knuckle Buster

03-30-2021 05:50 AM

Could it be ground problem in the sleeper for the 7 way harness?
New trailers usually have all LED lamps and drains much less AMP when older has incandescent lights all around.

Add tags



1 Kudo

Reply



Kyle_Siebert

Optimus Prime

03-30-2021 03:13 PM

I'd say connect to a older trailer and verify only the trailer marker lamps are INOP. Easier said than done though. Looking at the SSAM wall chart Trailer marker lamps should hold up to 20 amp load. Kind of brings me back to what lights are out. Brake lamps, tail lamps, marker lamps? Is it just marker lamps? I would certainly be looking at a ground issue if its all lamps. That trailer ground goes thru the 7 way and about 3 feet or so goes to the cab skin. Kind of a known issue in the past --

SS 1033950 New Cascadia - Trailer Receptacle - Back Wall Grounding Stud

This cab skin ground can also be miss wired at the MGJB GNDP post or the GNDP post ground miswired to the GNDE post. Or the GNDP ground at the frame rail could have a poor connection. **FL806AB - P4 MGJB, GNDP Correct Grounding**

So to prove thats good you could hook a carbon pile to the trailer ground pin and put a 30 amp load on it. Should have under 1 volt drop from that trailer ground pin to the neg battery ground. If you have over 1 volt drop I would suggest moving the meter from the trailer ground pin to the cab skin. Drop goes below 1 volt, its probably a poor ground in the sleeper back wall grounding stud. Still over 1 volt drop when moved, check the GNDP post for 4 correct wires. I could go on and on but hopefully you get the point by now.

Other thing to consider, put a 10 to 15 amp load on that trailer 7 way and see if it holds a load, again having a older trailer here would make this process a lot easier but a carbon pile or couple of parallel headlights should do the trick. If it doesn't hold a load, back probe the SSAM x1 pin 2 or 3 for trailer marker or trailer tail lamps. See if its putting out voltage there. If it is, there is resistance between those two points that needs to be found and addressed.

Finally, there are some parameters in parts pro that can be dug into with DL8 to determine if its set for LED's vs Bulbs. Just cause the wall chart says 20 amps, it may be parameterized to only put out 10 amps. It does say bulb/led in that wall chart. Modules with trailer like parameters: 47D, 30A, 301. These don't have good descriptions in parts pro but Diagnostic Link 8 would have more info on those parameters. There are a couple other modules i'd check if those didn't make any sense. Or just try looking at DL8 parameters for something that makes more sense.

Add tags



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Reply

