

DTNA Solutions > Discussions and Feedback > Tech Talk
> CHECK ENGINE LIGHT AND CHECK TRANS LIGHT ON. CODE ...



i Anthony_Sherrod
Apprentice

Friday

CHECK ENGINE LIGHT AND CHECK TRANS LIGHT ON. CODE 3187/9



Vehicle Information

VIN: 1FUJGLD56FLGB2581

Model: CASCADIA 125 INCH SLEEPERCAB

Model Year: 2015

Mileage: 865,085 miles

Make: FTL

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

Base Model: CA125SLP

Vehicle Systems Involved

OTHER SYSTEM (CHECK
ENGINE LIGHT)

HOOKED UP DIAGNOSTICLINK TO CHECK FOR CODES: THERE ARE NO ACTIVE CODES, BUT THERE ARE 2 INACTIVE CODES OF INTEREST : (1) TRANSMISSION SHIFT CONSOLE DATALINK (LIN)- SPN 3187/ FMI 9 (255 COUNTS, LAST ACTIVE TODAY 2/19/2021 @ 5:11 PM). (2) AUTOMATIC GEAR SELECTION: GEAR SHIFT NOT PLAUSIBLE- SPN 524286/ FMI 4 (67 COUNTS, LAST ACTIVE TODAY 2/19/2021 @ 5:09 PM). TROUBLESHOOT FOR 3187/ 9 HAD ME REPLACE THE THE SHIFT STALK SWITCH. TEST DROVE TRUCK CHECK ENGINE LIGHT AND CHECK TRANS LIGHT CAME ON. WHEN I TURNED OFF THE ENGINE, THE TRUCK WOULD NO LONGER CRANK OR START. THE SAME 2 CODES WERE ACTIVE. INSTALLED A TEST CPC4 AND THE CODES WENT AWAY AND I WAS ABLE TO START THE TRUCK. REPLACED THE CPC4 AND FLASHED TO THE LATEST SOFTWARE ON THE SERVER. CODE: VEHICLE SPEED SENSOR OPEN CIRCUIT- SPN 84/ FMI 5 BECAME ACTIVE. THE FIRST STEP OF THE TROUBLESHOOT SAYS" CHECK RESISTANCE BETWEEN PIN 13 ON THE CPC CONNECTOR #3 AND PIN 1 OF THE VSS". CHECKED THE CPC AND FOUND THAT THERE IS NO WIRE IN PIN 13 OF CPC CONNECTOR #3. WENT ONTO PSL AND PRINTED OUT THE GHG 14 CPC4 VIH SCHEMATIC. THE SCHEMATIC SHOWS PIN 13 OF ON CPC CONNECTOR #3 AS BEING VEHICLE SPEED(+) AND PIN 14 ON CPC CONNECTOR #3 AS BEING VEHICLE SPEED(-). THERE ARE NO WIRES IN 13 OR 14. WENT ONTO EZWIRING AND PRINTED OUT VSS SCHEMATIC G06-81763-000. THAT SCHEMATIC ALSO SHOWS THAT THERE SHOULD BE WIRES IN PIN 13 AND 14 OF CPC CONNECTOR #3. CALLED DETROIT DIESEL CSC AND THEY TOLD ME TO FLASH THE CPC TO THE OEM SOFTWARE LEVEL. AFTER FLASHING THE CPC TO OEM THERE ARE NO ACTIVE CODES. TEST DROVE THE TRUCK 30 MILES, NO CHECK ENGINE LIGHT, NO CHECK TRANS LIGHT, NO ISSUES. THE CPC WAS THE PFP. I'VE BEEN NOTICING A TREND OVER THE LAST 6 MONTHS. WHENEVER A NEW ECM IS FLASHED OR SOFTWARE IS UPDATED ON ANY ECM. IF WE HAVE ISSUES OR CODES, CSC HAS US FLASH THE SOFTWARE TO OEM OR FACTORY LEVEL ON THE SERVER AND THAT RESOLVES THE ISSUE. THIS DOESN'T MAKE SENSE TO ME BECAUSE THEY HAVE ALWAYS TOLD US TO FLASH TO THE "LATEST" SOFTWARE ON THE SERVER OR THE "NEWEST" IF IT IS AVIALABLE. WOULDN'T THE FACTORY/ OEM SOFTWARE BE TOO OUT OF DATE TO FUNCTION PROPERLY? DOES ANY ONE HAVE ANY INFO THAT EXPLAINS THE DIFFERENCE BETWEEN OEM/ FACTORY, LATEST, NEWEST? HOW IS OLD SOFTWARE ABLE TO CORRECT NEW ISSUES?

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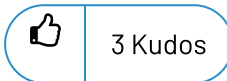
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Talbert_Simonia
Techie Technician

Friday

I have been seeing this issue also. Specially with the CPC. But i find that when i first install a new CPC i always first start at OEM settings. Then when i go to the latest or Newest. I first save parameters. And compare them. If there is a issue we find it there.

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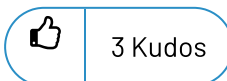
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Steve_Reppard
Piston Head

Saturday

Anthony, When you "replace" with oem or factory it can still have the newest software amd fuel map part #'s but parameters will be factory. There are a couple different vss setups for cascadia and schematics in psl or techlit don't reflect this. We are seeing alot more cpc failures in the past year or so then prior years most likely due to the work load they are responsible for with dt12.

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 Jon_Cecil
Gear Head

Saturday

I want to point out that this schematic populating under this VIN appears incorrect. The VIN is equipped with a DT12. The vehicle speed sensor (output speed sensor) goes to pin 15 and 17 of the TCM. You can verify this by looking at the DT12 schematics in Tech Lit. The TCM broadcasts the Vehicle speed over the PT-CAN to the CPC. You shouldn't have found any wires in the CPC because I think that diagram is set up for an Allison or Eaton transmission.

Add tags



4 Kudos

Reply



 Robert_Cadell_J
Grease Monkey

Saturday

I think [@Jon_Cecil](#) is correct, the DT 12 sees output speed which is then turned into MPH and sent over the data bus ,also to Jon's point like a Eaton (pending the set up) and yes mostly allison.

Add tags



1 Kudo

Reply



 HANS_SCHMEIDER
Apprentice

Saturday

I HAVE NOTICED IT IS NOT A GREAT IDEA TO UPDATE A CPC WITH THE DIAGNOSTIC LINK HISTORY UPLOAD, A LOT OF TIMES THE LAST TIME IT WAS UPLOADED TO SERVER I HAVE SEEN SOME CRAZY PARAMETER CHANGES. AS FOR THE VSS FAULT I HAVE SEEN THAT MULTIPLE TIMES. FORGETS WHAT TYPE IT HAS ON IT.

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2 Kudos

Reply



Jesse_Gutierrez

Grease Monkey

Sunday

Another tip I want to add if not already done , especially when programming P4 Cascadias with DT-12 always make copies of the par files to export and import as this has saved me some headaches in the past , programming isn't always straight forward

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1 Kudo

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