

# Gen 5 DD15 100/31 no troubleshooting

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[Penske Garland](#) 5 posts since Oct 12, 2016

**Gen 5 DD15 100/31 no troubleshooting** Feb 13, 2021 1:10 PM

Good morning! I have a P4 Cascadia with Gen 5 DD15 showing an active 100/31 fault code in the M.C.M. There is also an inactive 100/15 fault code in the M.C.M. I can not find any troubleshooting for either of these fault codes, and I do not know where to start, other than the basics. The unit is full of oil, both 120 pin on the M.C.M. and the oil sending unit connectors were secure, the connector spread was tight and I did not see any pins pushed in. The V.I.N. is MV8003 and the unit only has 5600 miles on it. Thank you, and have a great day!

100/31 - P OIL rationality error low  
100/15 - P OIL rationality error high



[Brett Hall](#) 12 posts since Jul 25, 2020

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 13, 2021 1:48 PM

i would start by checking power and grounds at sensor connector. including shared powers and grounds. if all checks ok. would try just plugging in a new/test sensor and see if code goes inactive



[Penske Garland](#) 5 posts since Oct 12, 2016

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 13, 2021 3:15 PM

I am getting five volts at all the sensors listed on the schematics and good grounds; unfortunately, we do not have a test sensor. I will try to order one.



[Steve Reppard](#) 168 posts since Jun 29, 2020

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 13, 2021 1:49 PM

Make sure software levels and fuel maps are up to date- sounds like software related to me, there is limited t/s for code 100 right now for gen 5 engines.

GHG21 Gen5 DD15 Heavy Duty Engine Platform GHG21 DD15 units built in 2021 software & fuel maps noted below, which was released on January 4, 2021. #

MCM21T 17.2.1.4 Software with Fuel Map Version ZGS 002 #

ACM301T 8.52.3.0 Software with Fuel Map Version ZGS 001 #

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CPC501T R20.31.00.00A Software for Western Star 49X & New Cascadia with Eaton Endurant Vehicles: o DT12 On Highway (1500 rpm) shift map p/n A0264488102 ZGS 001 o DT12 High Power (1625 rpm) shift map p/n A0264488202 ZGS 001 o New Cascadia w/ Eaton Endurant software only, no shift map #

TCM01T NAMT201403 Software for DT12 Equipped Vehicles



[Penske Garland](#) 5 posts since Oct 12, 2016

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 13, 2021 2:20 PM

All software is up to date, sorry.



[Steve Reppard](#) 168 posts since Jun 29, 2020

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 13, 2021 4:06 PM

If you followed fmi 3 or 4 t/s steps it should rule out circuit issues- make sure to verify circuits are isolated from grounds and powers also. Rationality codes are usually software related as stated above- did you verify sanity of oil pressure sensor koeo hot and cold?



[Penske Garland](#) 5 posts since Oct 12, 2016

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 13, 2021 6:56 PM

I followed the troubleshooting, and did not find an issue. The oil pressure sensor shows zero, both cold and hot. The freeze frame data shows that the oil pressure was in range, at the time of the failure, as well. I will try to re-flash the software, maybe there was a glitch in the programming.



[Michael Palumbo](#) 1,620 posts since Nov 13, 2014

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 14, 2021 12:58 AM

Did you have a MIL or CEL with these codes?

I found a 100/15 during PDI. The response I got from CSC was

CSR advised tech it's a silent fault, won't light up a CEL or MIL.

- no further T/S needed.

2/8/2021 11:27:59 AM DTNATSWS

Customer Complaint - Active fault found during PDI inspection. No warning lights on.;

Fault Code -

0-CPC/ECM #1/100/15 - P oil rationallity error high\*/Active-Yes;

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**Penske Garland** 5 posts since Oct 12, 2016

**Re: Gen 5 DD15 100/31 no troubleshooting** Feb 14, 2021 2:07 PM

I did not, but the customer complained of a check engine light. Since this was the only fault active, and it was oil pressure related fault, my supervisor was concerned. Thank you very much!