

GB9079 Cascadia Engine Brakes Not...



[Ken Rose](#) 22 posts since Mar 19, 2018

GB9079 Cascadia Engine Brakes Not working Dec 30, 2020 1:21 AM

We are a stand alone Western Star Dealer and we traded for three Cascadia's all with sequential sn's. All three have no engine brakes working. All three have no engine brake Activation Light coming on in the ICU. I am unable to get it to come on in I/O in DL. It doesn't come on during self check either. All the switches seem to be working in DL, all the parameters seem to be correct. I have checked and cleaned all the grounds. I can activate the brakes using DL.

I have preformed some swap diagnostics based on CSC, We have swapped the ICU, MSF Main and Slave from a unit that is working. Can someone shed some light on what I am missing? I would guess it all has to do with the Activation light not working. But being a stand alone dealer I don't have full access to Freightliner schematics. I would greatly appreciate some assistance.



[Steve Reppard](#) 142 posts since Jun 29, 2020

Re: GB9079 Cascadia Engine Brakes Not working Dec 30, 2020 4:34 PM

When you operate engine brake stalk switch does switch status change in 3dl? I have seen issues with stalk switch cause this.



[Talbert Simonian](#) 1,831 posts since Nov 21, 2014

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 12:42 AM

Lets keep it simple at first. Check the clutch switch operation. Check parameters and compare with the server.



[Ken Rose](#) 22 posts since Mar 19, 2018

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 12:33 PM

The vehicle has an Allison. The brake switch is operating correctly, the cruise works too.



[Michael Palumbo](#) 1,547 posts since Nov 13, 2014

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 2:49 AM

Your P3 VIN shows the on/off switch in the right pod of the steering wheel, BOM540. The intensity control is a switch on the dash, BOM125.

From vehicle operators manual:

On vehicles equipped with an engine brake switch in the right-hand pod on the steering wheel, operate the engine brake after the engine is warmed up and the vehicle is in motion, as follows:

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1. Remove feet from both the clutch and accelerator pedals. 2. Press the upper half of the on/off switch (see [Fig. 13.5](#)) to turn the engine brake on. The engine brake will engage at the rate last set on the engine brake intensity switch and the engine brake lamp will illuminate.

Maybe someone else can say, I haven't test drove a P3 in a while. Is the indicator light supposed to come on when the on/off switch is turned on, or does it come on after the engine brake is actually engaging. It kind of reads like that. None of the parameters in the engine A&I indicate a minimum vehicle speed but vehicle in motion from the above quote is for the vehicle operator, so possibly a vehicle parameter for minimum vehicle speed. Two sentences you wrote confused me:

I am unable to get it to come on in I/O in DL.

I can activate the brakes using DL.



[Ken Rose](#) 22 posts since Mar 19, 2018

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 12:44 PM

Michael,

While using Diagnostic link I/O setting, we are not able to turn the activation light on, but while using I/O we are able to engage the engine brakes and they work, so all the wiring to the brakes are working.

When you turn the brake switch on at the steering wheel, the slave MSF lights up on the brake position switch. I have another P3 and the activation light comes on, when you press the steering wheel switch. It's a manual transmission unit though. I can turn it on in I/O in DL. After the 1st I am going to try to start from scratch and go through all the grounds. Luckily I have some time.



[Ken Rose](#) 22 posts since Mar 19, 2018

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 12:46 PM

Jon,

I have driven the vehicle, and it doesn't work. It does have PTO's. I will try to reflash CPC with server settings, going to check all the grounds too.



[Jon Cecil](#) 907 posts since Nov 25, 2014

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 7:08 PM

I would monitor if the unit is in PTO mode with DL8. The engine brakes won't work if PTO status is active.



[Jon Cecil](#) 907 posts since Nov 25, 2014

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 3:19 AM

That vin shows a DD15 with an Allison trans. I have never gotten engine brakes on a DD to work in the shop, have always had to have vehicle speed. Going through the A+I manual might help or try reflashing the CPC with the server configuration. Do these units have PTO's on them?

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[Leroy Wagner](#) 29 posts since Nov 11, 2014

Re: GB9079 Cascadia Engine Brakes Not working Dec 31, 2020 7:25 PM

With an Allison trans, you need to be in 2nd gear with converter lockup before the engine brakes will work.