

2016 Cascadia brakes holding on?



[Ken Clarke](#) 5 posts since Mar 15, 2019

2016 Cascadia brakes holding on? Jan 14, 2021 7:05 PM

I have a 2016 Cascadia s/n:GR0709 and driver reports it is holding the brakes applied, about 5psi. It only starts to act up after about 30 minutes of driving, and it holds on anywhere from 5 seconds to a minute. I have been able to intermittently recreate the issue, which only happens with a trailer connected, on the road. Bobtail it doesn't act up. once I return to yard it doesn't do it any more either, making diagnosis difficult. It happens with the foot brake, using the spike doesn't change it. It is for sure actually holding the brakes on, because you can feel it slowing the truck and the engine has to work hard to accelerate. It seems like its holding all the brakes on, not just the trailer as i cant see the trailer pulled down trying to stop. Brake lights are staying on when its holding the brakes on. I have replaced the tractor protection valve and RSC valve mounted to it with one off another truck and no difference on either truck. I replaced the treddle valve, no change. I have tried unplugging the RSC valve to see if it could be computer related, didn't make a difference. I have replaced the drive axle combo valve, no difference. This truck is hooked to different trailers regularly and the trailer change doesn't change the brakes holding on. I have no codes in any of the computers. has anyone seen this issue before? I searched here and this seems to be an issue with P4's but this is a P3.



[Shop Managers](#) 13 posts since Nov 13, 2014

Re: 2016 Cascadia brakes holding on? Jan 14, 2021 9:31 PM

check you tractor trailer protection valve under the cab behind the driver side i have found 2 cases where it starts leaking from the service to brake side internally and starts to slowly apply the brakes on tractor and trailer until it almost can stop the truck have found them to be defective and have no fault code or anything hope this helps



[Chris Vanboom](#) 185 posts since Nov 21, 2014

Re: 2016 Cascadia brakes holding on? Jan 18, 2021 4:30 PM

Does the issue only happen when Hill Start Aid is activated? We had a similar truck with the same issue here a few weeks ago but the issue would not happen if the driver used the HSA override switch to prevent the HSA from activating. The issue was caused by the active braking solenoid valve on the steer axle sticking internally.



[Ken Clarke](#) 5 posts since Mar 15, 2019

Re: 2016 Cascadia brakes holding on? Jan 18, 2021 5:07 PM

A bit of an update on this unit. I had already changed the tractor protection valve, but I used one I had in stock off of a unit that we wrote off. so I tried a new one on the weekend, no change... when I went to pull the truck out of the shop I noticed the driver had a disposable mask hanging on the spike(even though he told me he doesn't hang anything there, and I hadn't noticed it there any other time I had it in). this got me investigating

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further, and if I pull the spike just enough to get the application gauge to move I can get it to hold pressure in the system, even air fed by the foot valve. like I can put 2lbs on with the spike, hold it there and press the foot valve and it will hold 5-7psi till I let the spike go. I left a note for the driver to not put anything on the spike, especially not his mask. the driver left with the unit yesterday and got an hour from the shop and its the same. I'm wondering if the spike is leaking past just a bit, and after a bit of driving it builds enough pressure in the system and when he applies the brake it hold that pressure in the system. I tried this with another unit we have here and it does the same, but its not having issues with the brakes holding on... So I told him to try pulling the spike and releasing the next time he has it holding pressure and see if it releases all the way. I have also told him to try shutting off the HSA, however I know it will act up even at 60mph so I'm thinking its not that, but with me not able to consistently recreate it, I'm up to try anything to figure this one out...



[Chris Vanboom](#) 185 posts since Nov 21, 2014

Re: 2016 Cascadia brakes holding on? Jan 18, 2021 5:13 PM

I have seen several spike valves that hold pressure in the system. The spike valve does need to vent a small amount of pressure under certain conditions even if it isn't being used. If the spike valve does not vent as it should it will cause the problem you are seeing.



[Talbert Simonian](#) 1,850 posts since Nov 21, 2014

Re: 2016 Cascadia brakes holding on? Jan 18, 2021 8:51 PM

Have you checked the Quick Release inline Valve at the TP Service line.



[Ken Clarke](#) 5 posts since Mar 15, 2019

Re: 2016 Cascadia brakes holding on? Jan 18, 2021 9:39 PM

Yes i did change the quick release valve on the trailer service line. I even added an extra on the glad hand end to see if i could get it to release...



[Ken Clarke](#) 5 posts since Mar 15, 2019

Re: 2016 Cascadia brakes holding on? Jan 18, 2021 9:40 PM

I have heard from the driver and he says pulling the spike and releasing releases the pressure held on the brakes, so when the truck returns I'm going to replace the spike valve. I think i have finally found the issue...



[Ken Clarke](#) 5 posts since Mar 15, 2019

Re: 2016 Cascadia brakes holding on? Jan 28, 2021 11:46 AM

Final update, I changed the spike valve and the truck hasn't acted up since.