

P4 start only once after reset



[Victor Dodevski](#) 13 posts since Aug 6, 2019

P4 start only once after reset Sep 14, 2020 11:02 PM

Cascadia P4 DD15 .Got customer complain about no crank .. Kill switch to OFF wait 10secs turn ON, we got crank and start.. Shut off truck tried again to start but no.. Kill switch again, start again... Basically once you reset it with kill switch you got one start.. Any points were to start guys? Thank You



[Jon Cecil](#) 790 posts since Nov 25, 2014

Re: P4 start only once after reset Sep 15, 2020 12:38 AM

VIN?

What's happening when it won't crank? Any lights or codes?

First step is powernet troubleshooting



[Victor Dodevski](#) 13 posts since Aug 6, 2019

Re: P4 start only once after reset Sep 15, 2020 3:14 AM

No lights no codes just relay clicking..Vin: 3akjhhd3jsjc7077



[Victor Dodevski](#) 13 posts since Aug 6, 2019

Re: P4 start only once after reset Sep 15, 2020 3:59 AM

I don't think it's need powernet troubleshooting .. always when i "reset it" starts right the way



[Jon Cecil](#) 790 posts since Nov 25, 2014

Re: P4 start only once after reset Sep 15, 2020 6:15 AM

The heart of your electrical system are the batteries. With any electrical problem, I think it is good practice to go through the powernet testing. This will check your batteries.

What troubleshooting have you done?

There are 677/7 and 677/3 codes logged on virtual technician in the past several days. Not sure if any of these codes were created by you.

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Have you tried just holding the key longer in the crank position for about 10-15 seconds? The MCM is actuating the solenoid on the starter but needs to see the crank inputs from both the CPC and SSAM at the same time for it to occur.

The 21 pin on the MCM can be removed and inspected. Water intrusion, spread pins, corrosion, etc. This wire has been pinched by the oil pan before as well. I didn't see any warrantable repair history with that though.



[Jon Cecil](#) 790 posts since Nov 25, 2014

Re: P4 start only once after reset Sep 15, 2020 6:29 AM

Also looking in the A+I manual, there is a over crank protection that could be enabled for starter control. You will need to look at the parameters. It might be normal operation. Have you started the unit, shut it down, let it sit for about a minute and attempt to start again without cycling the CLDS?



[Kyle Siebert](#) 3,913 posts since Nov 14, 2014

Re: P4 start only once after reset Sep 15, 2020 10:38 PM

I agree, to run a powernet test first. I wouldn't, but I know to check power and ground to the starter while cranking (when its not cranking) to be sure voltage is available. Very common to not do this and end up missing a loose starter cable at the batteries and replacing the starter for no reason. Its typical for it to crank when cold and after 600 amps runs thru it (heat builds resistance) and it wont start after. That's why the powernet test is strongly recommended and required for warranty.

Do you have the crank signal voltage available when cranking at the starter? Do you have a log file? Could be spread crank circuit pin at the SSAM for the ignition key. There have been issues with build up of debris on the crank speed sensor causing a intermittent no crank with a starter blocked error.



[Victor Dodevski](#) 13 posts since Aug 6, 2019

Re: P4 start only once after reset Sep 16, 2020 3:35 PM

All the cable were good tight clean, it was so obvious that there's no reason for powernet test.. I found the problem btw.. this customer just got this truck used, company who owned the truck before installed some gps/control device connected on the diagnostics port. Soo that device need like 20-30 secs to connect with the server.. as soon as it's connected we got no crank situation . Thanks for your help guys



[Kyle Siebert](#) 3,913 posts since Nov 14, 2014

Re: P4 start only once after reset Sep 16, 2020 4:13 PM

Well, glad you found your issue. Thanks for sharing the cause. Was that tied into the ignition key crank circuit or start signal to the starter? Or, hard to believe, was it purely connected to j1939 and somehow blocked a crank request?

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Re: P4 start only once after reset Sep 17, 2020 2:29 AM

I was not allowed to proceed with taking it out, but I believe it was connected on j1939 .. even the stereo was playing some notifications and the Windows XP shutdown and UP sound was playing and then : You have 411



unread messages.. The number was real