

2020 M2 106 J1939 ISSUES



[Jason Ziegler](#) 48 posts since Aug 24, 2015

2020 M2 106 J1939 ISSUES Feb 11, 2021 4:50 PM

I HAVE A 2020 FREIGHTLINER M2, VIN NUMBER LU9764. GAUGES DROPPING OUT AND THE DEF GAUGE STARTS TO FLASH RED. THIS HAPPENS INTERMITTENTLY AND WHEN THE TRUCK IS IDLING OR RUNNING WHEN IT GETS TO TEMPERATURE. FAULT CODE 523525/14 J1939 500K CAN BUS ELECTRICAL PERFORMANCE FAULT CODE BECOMES ACTIVE BUT ITS STARTS FLASHING. I HAVE CHECKED WIRING I DONT SEE ANY OBVIOUS ISSUES WITH THE WIRING. I AM JUST WONDERING IF ANYONE ELSE HAS RUN INTO THIS ISSUE. THANK YOU AND HAVE A GREAT DAY.

- [\(1FVACXD27LHLU9764\) 2-11-2021 0713.46.DrumrollLog](#) 4.3 MB



[Kyle Siebert](#) 4,151 posts since Nov 14, 2014

Re: 2020 M2 106 J1939 ISSUES Feb 6, 2021 4:40 PM

Check j1939 voltage to ground at 9 pin DLC with key on. Should be about 2.6 and 2.4 volts. One at 0 and another leg lower than normal voltage usually means short to ground on one leg. Disconnect batteries (most accurate) and measure resistance across j1939 (pins C and D). Should have 60 ohms. Then measure resistance j1939 to ground. Should be over 2k ohms to ground.

If it's 40 ohms, find extra resistor installed. Should have CGW internal and a external resistor.

If 120 ohms, unplug 76 pin bulkhead passthru and see if it stays at 120 ohms, that means the missing resistor is outside. If it changes from 120, then it's a issue from the 9 pin DLC to the CGW.

If under 2k ohms to ground, unplug 76 pin and if it get to about 2k, issue is outside (firewall, air compressor area, near chm, left frame rail by motor mount, ect.). If short to ground is still reading at 9 pin DLC with 76 pin unplugged, it's inside the cab, check for j1939 by CGW and see if it goes to passenger a-pillar area (optional wiring) it could be pinched by the door sill cover. Could be other places in the dash but that's the only spot I've found it damaged inside the cab.



[Jason Ziegler](#) 48 posts since Aug 24, 2015

Re: 2020 M2 106 J1939 ISSUES Feb 6, 2021 4:44 PM

Thank you for all your help with this

Get Outlook for iOS<<https://aka.ms/o0ukef>>



[Jason Ziegler](#) 48 posts since Aug 24, 2015

Re: 2020 M2 106 J1939 ISSUES Feb 10, 2021 8:05 PM

I followed the test as outlined as you wrote, when checking first part I had the 2.4 volts and 2.6 volts, the next test I removed the batteries and checked the ohms and found 60 ohms at c and d. Performed resistance checks from the j1939 to ground and had above the 2k at 5.8 k and 5.7 k, anything I should move forward checking or testing ??

Get Outlook for iOS<<https://aka.ms/o0ukef>>



Kyle Siebert 4,151 posts since Nov 14, 2014

Re: 2020 M2 106 J1939 ISSUES Feb 10, 2021 10:42 PM

See if you can get a log file of it acting up and attach it.



Jason Ziegler 48 posts since Aug 24, 2015

Re: 2020 M2 106 J1939 ISSUES Feb 11, 2021 1:27 PM

i am not sure if i attached that log file right. if not can you instruct me on how to add it here ?



Jason Ziegler 48 posts since Aug 24, 2015

Re: 2020 M2 106 J1939 ISSUES Feb 11, 2021 1:53 PM

What gets me it takes about an hour for it to start acting up

Get Outlook for iOS<<https://aka.ms/o0ukef>>



Jason Ziegler 48 posts since Aug 24, 2015

Re: 2020 M2 106 J1939 ISSUES Feb 11, 2021 1:26 PM

C:\ProgramData\Detroit Diesel\Drumroll\Log Files\1FVACXD27LHLU9764) 2-11-2021 0713.46.DrumrollLog



Kyle Siebert 4,151 posts since Nov 14, 2014

Re: 2020 M2 106 J1939 ISSUES Feb 11, 2021 4:57 PM

[Re: Anyone ever do the Autobaud reset from 500k to 250k and it not work?](#)

[SS 1032995 2016 and later M2 Glider Application -- J1939 500k autobaud to 250k procedure](#)

[How to determine 250k or 500k](#)

module 160 in parts pro for datalinks



Kyle Siebert 4,151 posts since Nov 14, 2014

Re: 2020 M2 106 J1939 ISSUES Feb 11, 2021 5:02 PM

[SS 469463 - Electronic Architecture Drawings - OBD16 and Newer](#) This is also a good post about datalink structure. The New Cascadia TM manual has a UPDATED version at 1.03.002 Datalink Communication

Structure. Unfortunately i believe the M2 is outdated for when they removed J1939 250k. But its a very clear view of what is going where than searching module 160 drawings.