

M2 500k issue



[Garrett Leonard](#) 2 posts since Jan 28, 2015

M2 500k issue Jan 28, 2021 3:48 PM

VIN: ML4475

I have a new M2 with a HEIL garbage compactor body on it. Truck has very intermittent ABS and engine lights on for code 3488 on Cummins for no ABS and ABS has 231/9 for no eec1 but have to wait for it to start communicating to see this code. Found to be missing resistor from module 33u body builder had just installed a blank plug, changed over to a 23-13303-902 that is called out in A66-08400-000. Still having same issues after getting resistance to 60 ohms. With Diagnostic link can read every ecu on 500k with exception of abs and cannot read ABS with Wabco Toolbox either when issue is occurring. Check all power and grounds to abs including the voltage on the data link. Load test all circuits while it was failed everything still checks out correct and within spec. Inspected the 1939 500k for issues with wiring and found nothing. Also performed drag test on all terminals. We have installed a test ABS ECU and had same failure. Any help on this would be greatly appreciated.

Thanks

Garrett Leonard

Tags: 500k, 231-9, 3488

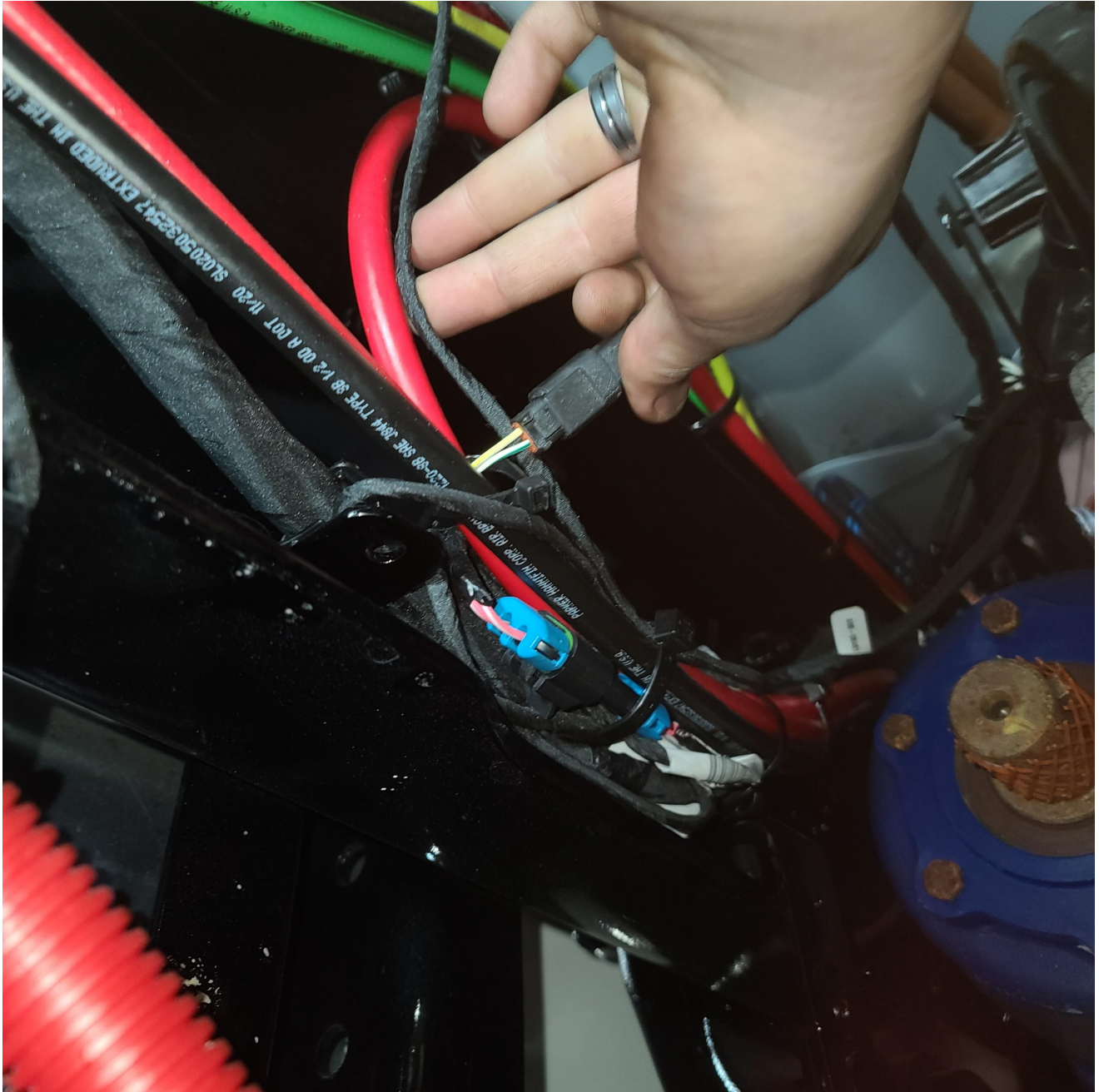


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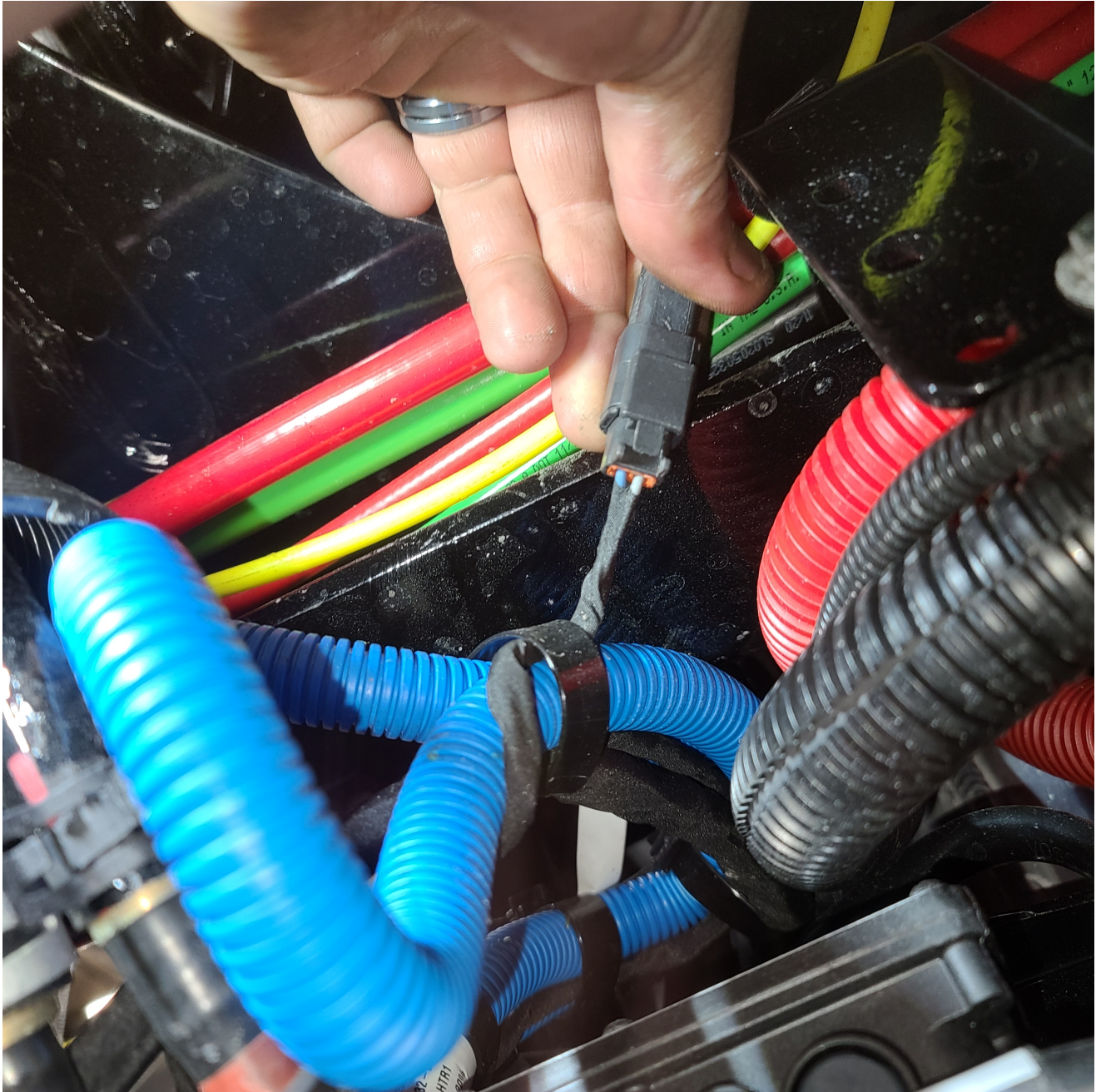
Re: M2 500k issue Jan 28, 2021 6:19 PM

try this document, the ABS wiring comes up from the frame wraps around to a 32 pin round plug behind the drivers side fender, goes up thru the floor then to the ABS module, Both Chassis CAN and Cummins (network) resistors are in the left frame rail.

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500 k H1939 terminating resistor



Cummins databus resistor

Please verify voltage on pins C and D should be 2.3 and 2.6 respectively and that you have 60 ohms as you have stated.

You can also look in module 160 for help also, has Heil tapped into our Databus (chassis side) that your aware of, if so I would eliminate or unplug that connection and see if your issue goes away, Also remove the lower DS kick panel at the BHM where the ABS module is, make sure the databus connections there are sound,

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not tapped into or that harness that goes down the floor to under the cab has grounded out anywhere (theres welds along there where the floor meets the A pillars, we have seen circuits getting pushed against welds from the trim panel being installed and causing circuits to ground out).

- [Checking and Testing J1939 and Truck CAN Networks1.docx](#) 1.0 MB Preview



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Re: M2 500k issue Jan 28, 2021 6:20 PM

I would use a old school headlight H6054 or something to load test your battery feeds and Ignition, if memory serves the ground for the ABS module is on the ground stud right next to the BHM, its a 10mm socket, make sure thats tight.



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Re: M2 500k issue Jan 29, 2021 8:10 PM

Garrett, did you find anything on this one?



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Re: M2 500k issue Jan 29, 2021 11:23 PM

Yes, Sorry just now getting a chance to respond back, was able to get it to finally fail consist again. This truck does not have the 1939H resistor like most other M2's beside the trans. This unit has the resistor included in the VIH harness A06-08400-000 listed in module 33u. The customer had replaced that harness installing their own and not including it. I installed one by removing a connector in their harness under the passenger bench seat to get my resistance correct. This is where the cab/body controller is located. Had checked and loaded the circuits with a headlamp to verify circuit and checked for voltage drop. Found no issues with those circuits. Once it failed I was able to start isolating and removing each ECU off the data link. Found was able to isolate to the HEIL cab/body controller was shorting out or causing the ABS to freeze up. For some reason wasn't effecting other ECU's on the truck. You would also have to cycle power to the ABS ECU to get it to start reading again. Waiting to get a Hail cab controller from the customer at this moment.



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Re: M2 500k issue Jan 29, 2021 11:34 PM

Excellent glad to hear you found your problem

Rob "Doc" Cadell

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Good Hunting - you'll find your issue