2021 Cornado 122SD

Ryan Ireland 44 posts since Feb 22, 2016

2021 Cornado 122SD Jan 22, 2021 1:47 PM

Got a 2021 Cornado(ML3464) that came in with shifting issues and check trans light and ABS light on. Found is blowing the 5A fuse for ABS ign. Disconnected the x1 connector from abs module and removed fuse from BPDM, checked resistance of wiring from fuse to ABS x1 connector, 0.2ohm. Load tested with LoadPro only dropped 0.1v. Loaded with headlamp and compared brightness with direct power at fuse holder light brightness was same. Looking over wiring schematics found this same 5A fuse that controls the ign power to ABS module also is dedicated power for the steering angle sensor and the ESC/YAW module. My question is should this be a bigger fuse/self resetting circuit breaker? that seems a few too many modules to be running from a 5A fuse. I know the ABS is just a wake up signal, but since this is a oil tanker truck if gets in a wheel spin condition or top heavy sway, could this be drawing too much power for this circuit. Logs no codes in ABS and only logs codes for loss communication with ABS. Has Eton Ultrashift.

From what I understand they have 5 of these truck all new less than 10k miles that are having same issues, they bring them to us one at a time.

Tags: abs, 122sd, cornado, trans shifting

Jon Cecil *925 posts since Nov 25, 2014*

Re: 2021 Cornado 122SD Jan 23, 2021 6:43 AM

I don't think those components are pulling much amperage hence the 5 amp fuse. Is the fuse blowing when installing or it blows after the unit leaves? Have you inspected for a short to ground on 376A?

Ryan Ireland *44 posts since Feb 22, 2016*

Re: 2021 Cornado 122SD Jan 26, 2021 1:43 PM

I checked all wiring from bpdm to instrument cluster, which included removing dash to access all the wiring. Also found that even thou the wiring schematic calls out a steering angle sensor and a esc/yaw module and a PLC filter, this truck had none of them. Found potential places where wires could rub. On this truck the circuit 376A powers the ABS ecu ign. also is power into relay for the hill start assist(HSA) light in ICU, at relay the circuit changes to 376N*.

Michael Palumbo *1,587 posts since Nov 13, 2014*

Re: 2021 Cornado 122SD Jan 28, 2021 2:27 AM

When you referred to the wiring schematic

> the wiring schematic calls out a steering angle sensor and a esc/yaw module and a PLC filter, this truck had none of them.

I'm guessing you meant G06-85634-. G06-85634- is difficult to follow. Ignoring the parts with the last three digits that your VIN does not list in parts pro makes it easier. Looking at BOM 330 for your VIN I see you only need to follow the parts of G06-85634- that have -001, -002, -004, -005, -007.

Parts List: 330-C21757
WIRING-ABS,CAB

Ref	SL	AD	Description	Part Number	QTY	UM	Alt Part Number
			:TERM-AI,MISC	23-13208	R		
			:TERM-AI,TIMER,MCP SER	23-13209	R		
			:TERM-PAC METRI-PACK SER	23-13213	R		
			:CONN-ADDON,PAC,TPA,CPA	23-13302	R		
			:PLUG-10CAV,MP630,PAC15393805,B	06-42557-000	1	EA	
			LEGEND-HSA	24-01793-047	1	EA	
			INSTL:MOD 320 WRG,CAB,DASH		R	EA	
			DASH LAYOUT IN MOD 320		R	EA	
			INSTL-WABCO,ABS/ECU,J1939,WO	D06-48116-000	R	EA	
			SCHEM-WRG,PDM,REMOTE,FLX	D06-41902-000	R	EA	
			INSTL-SW & GA,AUX PANEL,STD	D22-66200-000	R	EA	
			INSTL-DR COMPONENT,CLUSTER,FLX	D22-44594-000	R	EA	
			WRG-ABS,DASH SW,HILL START	G06-85634-007	R	EA	
			WRG-ABS,6S6M	G06-85634-001	R	EA	
			WRG-ABS,ATC	G06-85634-002	R	EA	
			WRG-ABS,BRAKE PRESSURE SENSOR	G06-85634-004	R	EA	
			WRG-ABS,FRONT SOLENOID	G06-85634-005	R	EA	

Since the steering angle and YAW sensors are only in dash numbers your VIN does not show in PartsPro, you are correct, your vehicle was not built with them.

Jon Cecil *925 posts since Nov 25, 2014*

Re: 2021 Cornado 122SD Jan 27, 2021 5:27 AM

Are you able to get the fuse to blow while it's at the shop? Disconnecting the ABS ECM and duplicating the same operating conditions to see if fuse still blows. Keep breaking down the system.

Brett Bates *6 posts since Jun 30, 2020*

Re: 2021 Cornado 122SD Jan 29, 2021 9:27 PM

We have run into this issue with a couple older 122's. Troubleshooting had always resulted in a no fault found.

What we ended up doing was installing a 10 amp fuse in place of the 5 amp. With a 10 amp fuse installed, the affected units never had an issue.

We tested the 10 amp fuse after stumbling on a couple wiring diagrams showing a 10 amp ignition fuse for the abs module. This was only done after verifying a no fault found situation of the oem wiring to and from the abs module.