

ECM not seeing PTO On signal



Daniel Navarro 54 posts since Apr 16, 2017

ECM not seeing PTO On signal Oct 20, 2020 5:40 PM

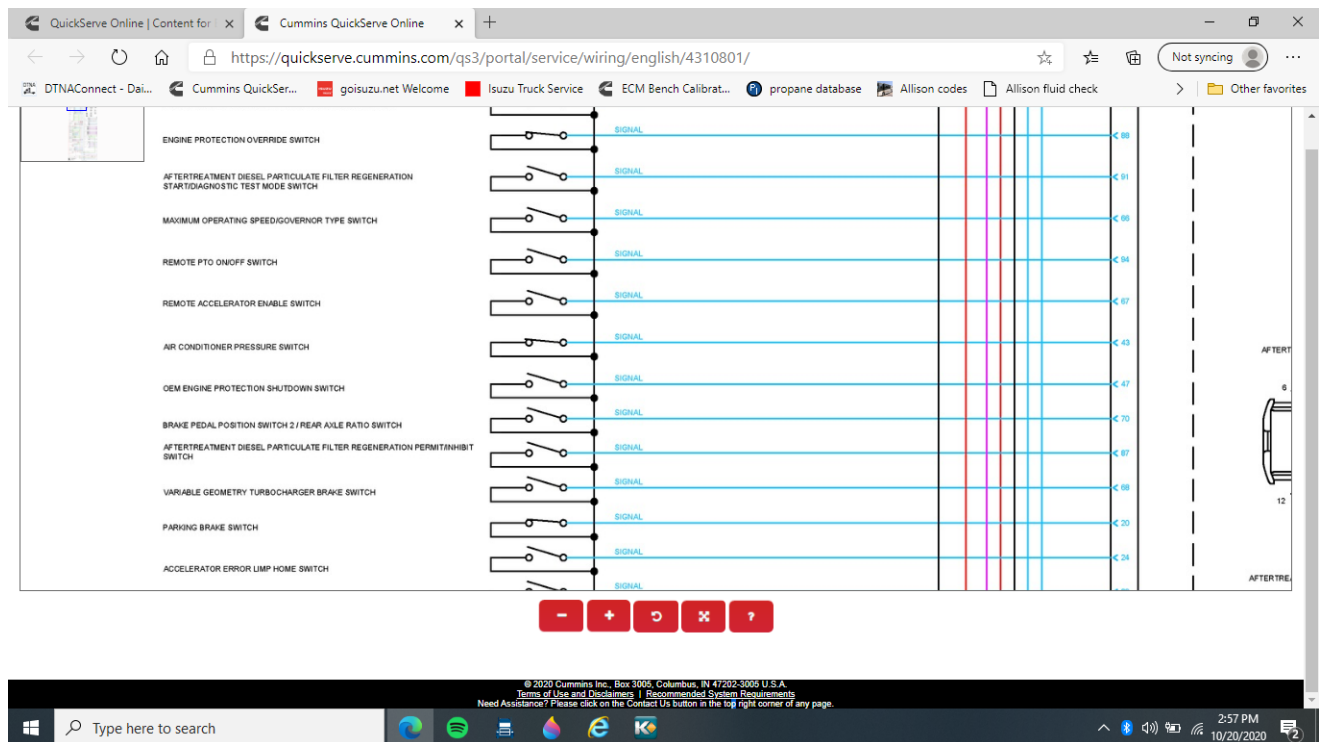
Ser# GD3330 my PTO is working except for the remote throttle up switch. Found that my ECM is not seeing PTO On but the light in the dash is working. Having a hard time locating a diagram of the PTO switch input to the ECM connector. Any help would be greatly appreciated.



Trey Regar 21 posts since Feb 3, 2015

Re: ECM not seeing PTO On signal Oct 20, 2020 6:59 PM

it shows a remote pto accelerator and pto switch on the cummins wiring diagram per your serial number. is that what your looking for?



Michael Palumbo 1,455 posts since Nov 13, 2014

Re: ECM not seeing PTO On signal Oct 20, 2020 11:41 PM

Check your Cummins parameters for j1939 multiplexing.

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If your remote throttle is hardwired to the ECM as seen in the Cummins schematic [Trey Regar](#) added but the j1939 multiplexing parameter says the ECM should expect remote throttle over the j1939 then the ECM will ignore your hard wired remote throttle input and read the value from j1939 datalink instead.



[Daniel Navarro](#) 54 posts since Apr 16, 2017

Re: ECM not seeing PTO On signal Oct 21, 2020 10:48 AM

We had a sister unit on lot that I compared my multiplexing parameters too and found that someone had disabled the Remote PTO parameter that was set to body controller for the source address. After changing that back all is working now, thank you!



[Sean Evans](#) 458 posts since Nov 12, 2014

Re: ECM not seeing PTO On signal Oct 22, 2020 12:05 AM

Thanks for letting us know what you did to fix it!!!



[Sean Evans](#) 458 posts since Nov 12, 2014

Re: ECM not seeing PTO On signal Oct 22, 2020 12:06 AM

Your truck does not appear to be wired from the factory to work like this. (Cummins engines typically aren't interfaced with the PTO wiring on the M2/SD product) .You have 2 options for the engine speed to increase

1. Engage the PTO, then use the cruise switches to set the engine speed that they want.
2. If you want the engine to automatically go to a preset speed when the PTO is engaged, you can do this using the remote engine interface connector shown in module 148. You would need to connect the 439U circuit shown in drawing G06-87007-002 so that it gets switched to ground when the PTO is engaged. The engine interface connector is a grey 16 pin connector, which should be in the left frame rail behind the cab in this truck. 439U is wired to pin 94 of the engine ECM connector, which is "Remote PTO"



[Robert Cadell Jr](#) 2,643 posts since Nov 9, 2014

Re: ECM not seeing PTO On signal Oct 21, 2020 12:27 AM

Is this a multiplexed pto switch? Is the pto pre-wired from the factory ? Are you trying to do a pto ramp up?

With a Muncie pto, you have the on off solenoid and the pressure switch i believe the pressure switch works off circuit 200e, which is seen by the chm if this is a m2.

Let me know i can walk you thru this depending on the switch part number you have momentary or on off and if its a freightliner switch



[Daniel Navarro](#) 54 posts since Apr 16, 2017

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Re: ECM not seeing PTO On signal Oct 21, 2020 10:49 AM

Yes that was the issue. It is multiplexed but the parameter was disabled.



Francois Tourigny 72 posts since Mar 8, 2019

Re: ECM not seeing PTO On signal Oct 21, 2020 1:51 AM

I suggest you to go into the parameter option from INSITE and check for these parameter into J-1939 Multiplexing, if they are DISABLE, you just need to ground the right pin at the ECM connector to activate the PTO MODE. It could be the Cab PTO or Remote PTO.

Most of M2 with Cummins/Allison I've seen are PTO multiplexed, and it's more complicated to explain how exactly they are set. Let us know what type of parameter you got.

WORK OBJECT NAME : NA

Features and Parameters		ECM Value	Units	Original Value
Idle Increment/ Idle Decrement Switch		Disable		
Idle Validation Switch		Disable		
Parking Brake		Enable		
Source Address		23 - Instrument Cluster #1		
PTO On/Off Switch		Disable		
PTO Set / Resume Switch		Disable		
Rear Axle Ratio Switch		Disable		
Remote Accelerator Pedal or Lever		Disable		
Remote Accelerator Pedal or Lever Switch		Disable		
Remote PTO Switch		Disable		
Service Brake Switch		Enable		
Source Address		33 - Body Controller		
Torque Derate Switch		Disable		
Wait To Start Lamp		Disable		
Service Brake Switch		Enable		
Starter Lockout		Disable		
Sudden Deceleration Event Settings		Enable		
Sudden Deceleration Rate Threshold		9.0	mph/s	
Switched Maximum Engine Operating Speed		Disable		
Transmission Setup		Enable		
Gear Down Transmission Ratio		0.75		
Top Gear Transmission Ratio		0.65		
Transmission Type		Automatic		
Trip Information		Enable		
ECM Time Offset		000000	seconds	



Robert Cadell Jr 2,643 posts since Nov 9, 2014

Re: ECM not seeing PTO On signal Oct 21, 2020 2:00 AM

If your trying to use a momentary on off switch supplied by freightliner and the qe set the remote pto switch to enable and then to module 33, bhm. The switch again if momentary on off or normal on off is gonna be the key. If you have this switch part number A06-37217-017, I have the parameter number to help ya set up the remote pto and ramp up.

Rob "Doc" Cadell

DTNA Master Technician/Elgin Lead Tech

ECM not seeing PTO On signal

TransChicago Truck Group BFWD
Shorewood IL 60404
803 917 5397 Cell
Good Hunting - you'll find your issue



[Daniel Navarro](#) 54 posts since Apr 16, 2017

Re: ECM not seeing PTO On signal Oct 21, 2020 10:49 AM

That is 100% correct. Thank you



[Francois Tourigny](#) 72 posts since Mar 8, 2019

Re: ECM not seeing PTO On signal Oct 21, 2020 5:31 PM

I noticed that with some software update ex: BZ90002.11 @ BZ90002.25 (the two digit after dot) Some parameters are affected, It happened to me with REGEN switch and PTO too... It's a good thing to start with checking if it's MUX or HW.



[Robert Cadell Jr](#) 2,643 posts since Nov 9, 2014

Re: ECM not seeing PTO On signal Oct 21, 2020 5:36 PM

Don't forget guys, MAKE Templates when you hook to a Cummins, it will save you later.

Rob "Doc" Cadell
DTNA Master Tech/Elgin Lead Technician
Trans Chicago Freightliner BFWD
Shorewood,IL
(803)-917-5397
Good Hunting – You'll find your problem



[Sean Evans](#) 458 posts since Nov 12, 2014

Re: ECM not seeing PTO On signal Oct 22, 2020 12:04 AM

I suppose this might be another situation where techs having access to the VEPS system might be helpful

[Robert Cadell Jr](#)



[Robert Cadell Jr](#) 2,643 posts since Nov 9, 2014

Re: ECM not seeing PTO On signal Oct 22, 2020 12:07 AM

We are working on that, however we at least have the chec tool for the truck side.

Rob "Doc" Cadell

ECM not seeing PTO On signal

DTNA Master Technician/Elgin Lead Tech
TransChicago Truck Group BFW
Shorewood IL 60404
803 917 5397 Cell
Good Hunting - you'll find your issue