

SS 1034428 New Cascadia, Cummins Engine and WABCO OnGuard (Obtaining Cruise When Adaptive Cruise Is Interrupted)

This solution originally published for loss of Adaptive Cruise Control when encountering interruption of the forward radar. Information was provided, documenting how drivers could obtain cruise control using the Pause (cancel) button. On 7/14/2020, this solution was updated providing software releases information that will allow drivers to obtain Adaptive Cruise Control without cycling the ignition for “self-heal”.

Applicable Vehicles:

Applies to all New Cascadia (P4) vehicles built with Cummins engines and WABCO OnGuard.

Issue:

Interruption of the forward radar system results in loss of both standard and adaptive cruise functions. The OnGuard system will recover (self-heal), once the issue goes away, but the driver cannot get Adaptive Cruise Control functional until the ignition switch is cycled.

Solution:

All New Cascadia vehicles with Cummins engines and WABCO OnGuard come standard with “Adaptive Cruise Control” and “Adaptive Cruise Control Recovery” enabled. On all of our current built Freightliners, cruise on/off control is used to enable the cruise feature when adaptive cruise is not available. Since New Cascadia does not support a cruise on/off switch, the cancel button must be used to obtain cruise control when Adaptive Cruise is not available. To obtain cruise control when Adaptive Cruise function has been interrupted, press the pause (cancel) button 2 times (ON-OFF-ON-OFF) and then press the set button once. A Set or Resume command on the Set, Resume buttons will then engage the Cruise Control feature without Adaptive Cruise Control functionality.

Additional information added 7/14/2020:

1. ISX Cummins Performance Engines have a fix that was put in production 1/20/2020.
 1. The ECM software is compatible for all X15 engines from 2017 forward.
 2. Part of the "self-heal" process, requires a toggling the Pause/Cancel twice + CC set to allow for recovery.
2. ISX Cummins Efficiency Engine will come in mid-year (2020).these engines will have the same fix.
 1. The ECM software is compatible for all X15 engines from 2017 forward.
 2. Part of the "self-heal" process, requires a toggling the Pause/Cancel twice + CC set to allow for recovery.
3. X12 is expected to pick up this functionality later this year (2020), a timeline is not currently available for ISX12N.

How To update a vehicle to have adaptive cruise recovery capability. Added 7/14/2020

1. Update the engine calibration
2. Change Adaptive Cruise Recovery from Conventional to Adaptive* in Features and Parameters as shown below

*This may require an update to Insite as older versions will display Disable / Enable under Adaptive Cruise Recovery

Features and Parameters	ECM Value	Units
[-] X15 CM2450 X124B/X134B		
[-] CM2450A		
[-] Accelerator Interlock	Disable	
[-] Accelerator Options		
[-] Adjustable Low Idle Speed		
[-] Aftertreatment		
[-] Alternator Failure Warning	Disable	
[-] Battery Power Required Lamp	Disable	
[-] Clutch Pedal Position Switch	Not Installed	
[-] Cruise Control	Enable	
[-] Cruise Control Lower Droop	2.0	mph
[-] Cruise Control Upper Droop	2.0	mph
[-] Maximum Cruise Control Speed	75	mph
[-] Adaptive Cruise	Enable	
[-] Adaptive Cruise Recovery	Conventional	
[-] Adaptive Cruise Usage Demand	Disable	
[-] Cruise Control On Off Switch	Conventional	
[-] Cruise Control Pause Switch	Adaptive	

Labels :

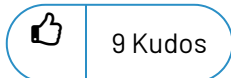
Electrical

New Cascadia

38n

acc p4 self-healing

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Comment

Comments



Robert_Cadell_J

06-25-2019 03:39 PM

Thanks Duane, this is great information



Dale_Swalwell

09-09-2019 11:41 AM

So what is the cause of the interruption? Could it be that the OnGuard needs updated to OnGuard Active to help with communication speed differences between the Cummins engine ECM and the OnGuard system?



Talbert_Simonia

09-09-2019 05:17 PM

The interruption could be caused by build up of snow or dirt on the RDF(front Radar).



Duane_Carlsen

09-10-2019 07:15 AM

Talbert is correct, any interruption of the forward radar will cause Adaptive Cruise Control (ACC) to no longer function until the ignition switch is cycled. The reason for the solution is to inform technicians that normal cruise control can be obtained using the cancel button on the steering controls. This information has also been added to the newest version of the New Cascadia drivers manual. WABCO plans on correcting this function in the future to allow for ACC to be obtained after an interruption of the forward radar and without an ignition cycle.



1 Kudo



MINNEAPOLIS_Pen

09-10-2019 12:53 PM

I've also been having this issue and the three units are equipped with Bendix lane departure system also no fault codes logged but the lane departure switch led was dim after going through all the wiring I pulled the rt lower A panel apart and found a Bendix harness that had a notice on saying both ends need to be plugged in or unplugged. Traced it to the back wall and it wasn't plugged into anything unhooked at the pillar, all three trucks are trouble free from adaptive cruise issues now.

Pat

Penske 0475



2 Kudos



Harbinder_Sethi

09-28-2019 05:30 AM

I HAD ONE WITH SIMILAR ISSUES WHERE CUSTOMER INSTALLED A DEER GUARD IN FRONT OF THE RADAR ECU , CAUSING INTERMITTENT INTRUPTIOINS , HAD TO REPLACED THE DEER GAURD WITH THE CORRECT ONE.