Subject: Emissions Recall GHG21 Detroit™ DD13 Model Year 2020 Software Reprogramming

Models Affected: Detroit[™] GHG21 DD13 471.928

General Information

Daimler Trucks North America LLC, on behalf of its Detroit Powertrain Division, has determined that some Model Year 2020 GHG21 DD13 engines require reprogramming of the MCM to meet certification. Programming the MCM, ACM, and CPC to a **<u>MINIMUM</u>** of the software and fuel map version listed below is necessary.

NOTE: Reference 20TS-04 – Detroit™ CPC501T GHG21 Only; Bootloader Update if New Cascadia CPC501T is not at the software level shown in this table.

		Vehicle	Model			
		New Cascadia	All Other Models			
re 13	MCM Software Version	14.2.1.3 with ZGS 002	14.2.1.3 with ZGS 002			
oftwa	ACM Software Version	7.61.1.0 ZGS 002	7.61.1.0 with ZGS 002			
wertrain S Y2020 GHG	CPC Software Version	R19.32.00.00A	R44_00_000A			
άΣ	TCM Software Version	NAMT191402	NAMT191402			

The MCM software and fuel maps became effective for all GHG21 DD13 engines, which began production on January 6, 2020. Any GHG21 DD13 Platform engine in model year 2020 vehicles, with a vehicle manufactured between January 6, 2020 and January 23, 2020, and running older fuel map version ZGS, need reprogramming of the MCM. Note that some trucks that have already been reprogrammed and are excluded from this recall.

Note: Currently available software and fuel map levels may be higher than the minimum levels shown above.

The California Air Resource Board (CARB) and the Environment Protection Agency (EPA) regulations require that software and fuel maps meet certification criteria. Reprogramming the MCM corrects the fuel map to a certified version.

There are approximately 1,200 engines affected by this Emission Recall Campaign.

Work Instructions

Please refer to the attached work instructions. Prior to performing the emissions recall, check the vehicle for a completion sticker (Form WAR261).

Labor Allowance

Table 1 – Labor Allowance

Procedure	Time Allowed (hours)	SRT Number	Corrective Action
	D20R1		
INSPECTION ONLY	0.1 Hours	996-R103A	06 - Inspect
REPROGRAM TWO MODULES	0.4 Hours	996-R103C	12-Repair Recall/Campaign
REPROGRAM THREE MODULES	0.5 Hours	996-R103D	12-Repair Recall/Campaign

Claim Reimbursement

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in OWL:

Table 2 - Claim Reimbursement

Claim Type	Recall Campaign
Campaign (number with appropriate condition code)	D20R1
Component Code	044-003-286
Cause Code	A1 - Campaign
Primary Failed Part	DDC REPROGRAM1
Use the following labor operation if progr	amming was NOT REQUIRED.
	Procedure A ¹
Labor Number	996-R103A
	Inspection ONLY
Labor Hours	0.1 Hours
Part Number	DDC REPROGRAM1
Parts Return	NONE
Use one (1) of the following labor operation	ons if programming was REQUIRED.
	Procedure B ¹
Labor Number	996-R103C
	MCM and ACM Reprogramming
Labor Hours	0.4 Hours
Part Number	DDC REPROGRAM1
Parts Return	NONE

	Procedure C ¹
Labor Number	996-R103D
	MCM, ACM, and CPC Reprogramming
Labor Hours	0.5 Hours
Part Number	DDC REPROGRAM1
Parts Return	NONE
¹ Administrative time (SRT 939-6010A) for 0.3 ho	urs is automatically added to the claim.

IMPORTANT: View OWL prior to beginning work to ensure the vehicle is involved and determine if the campaign has already been completed.

All claims must be submitted within 30 days of the repair and within 30 days of the termination date of the campaign.

For questions, U.S. and Canadian dealers can contact the Warranty Campaigns Department via Web inquiry at DTNAConnect.com / WSC, or the Customer Assistance Center at (800) 385-4357. Export distributors can submit a web inquiry or contact your International Service Manager.

Copy of Notice to Owner

Subject: Emissions Recall D20R1

GHG21 DETROIT[™] DD13 Model Year 2020 Software Reprogramming

Daimler Trucks North America LLC, on behalf of its Detroit Powertrain Division, is initiating emissions recall D20R1 to modify the vehicles mentioned above.

Certain GHG21 Detroit[™] DD13 Model Year 2020 Software vehicles require reprogramming.

Updated software and fuel maps became effective for all GHG21 DD13 engines, which began production on January 6, 2020. Any GHG21 DD13 Platform engine in model year 2020 vehicles, with a vehicle manufactured between January 6, 2020 and January 23, 2020, and running older fuel map version ZGS, need MCM reprogramming. Note that trucks, that have already been reprogrammed, are excluded from this recall.

The California Air Resource Board (CARB) and the Environment Protection Agency (EPA) regulations require that software and fuel maps meet certification criteria. Reprogramming the MCM corrects the fuel map to a certified version.

Records available to us indicate that your vehicle has one of the eligible engines. Instructions for this Emissions Recall Campaign have been sent to your local Detroit Diesel Authorized Repair Facility and the labor time required to perform this software update is approximately **0.5** hours.

Please contact a Detroit Diesel Authorized Repair Facility to arrange to have the Emissions Recall performed. To locate an authorized facility, search online at https://demanddetroit.com/find-a-dealer/

This service will be completed for you at no charge under the provisions of this notice.

Please understand that the California DMV (Department of Motor Vehicles) will reject vehicle registration renewals if this emission related recall has not been completed.

If you have paid to have this recall condition corrected prior to this notice, you may be eligible to receive reimbursement. Requests for reimbursement may include parts and labor. Reimbursement may be limited to the amount the repair would have cost if completed by a Detroit Authorized Repair Facility.

The following documentation must be presented to your dealer for consideration for reimbursement. Please provide original or clear copies of all receipts, invoices, and repair orders that show:

- The name and address of the person who paid for the repair.
- The Vehicle Identification Number (VIN) of the vehicle that was repaired.
- What problem occurred, what repair was done, when the repair was done.
- Who repaired the vehicle.
- The total cost of the repair expense that is being claimed.
- Proof of payment for the repair (such as the front and back of a cancelled check or a credit card receipt).

Reimbursement will be made by check from your Detroit Diesel dealer. Please speak with your Detroit Diesel authorized dealer concerning this matter.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your continued satisfaction with our products.

DETROIT WARRANTY CAMPAIGNS DEPARTMENT

Enclosure



Detroit Diesel Corporation 13400 Outer Drive, West Detroit, Michigan 48239-4001 Telephone: 313-592-5000

Work Instructions Subject: GHG21 DETROIT™ DD13 Model Year 2020 Software Reprogramming Models Affected: DETROIT™ GHG21 DD13 471.928

Corrective Procedure

- 1. Apply parking brake, chock wheels, and perform any other applicable safety steps.
- You <u>MUST</u> use DiagnosticLink[®] Professional 8.12 Service Pack 1 (*or higher*) when reprogramming. REFERENCE DTNAConnect "My Communications" notice dated 07/24/2020 for more information on DiagnosticLink[®] 8.12 Service Pack 1, or 20CSA-10.
- **3.** Begin the process by connecting DiagnosticLink[®] to the vehicle. Make sure that all the modules (ACM, CPC, MCM, and if applicable, the TCM) are connected.

NOTICE:

BEFORE you begin reprogramming, make sure the VIN is correct in all modules (ACM, CPC, MCM, and if applicable, the TCM). If the VIN is not correct in all modules, you will get an error message when attempting to reprogram.

4. Make sure the VIN is correct in all modules (ACM, CPC, MCM, and if applicable, the TCM) by looking at the "Identification" screen in DiagnosticLink[®]. If the VIN is not correct in all modules, correct the VIN under the "Actions" drop-down menu in DiagnosticLink[®] by selecting the "Check VIN Synchronization" item. Select "Start" from this panel and follow the prompts. You will be prompted to cycle the key until the routine has completed. When synchronization is complete, turn the key back on (key ON, engine OFF) and continue with the download process.

- 5. On the Identification screen, check the current MCM, ACM, and CPC software and fuel map levels. Listed in the table on page 1, are the **MINIMUM** levels required. See Figure 1 for an example of the Identification screen for the MCM
 - a) MCM software 14.2.1.3 and fuel map version ZGS 002



Figure 1 – MINIMUM MCM Software and Fuel Map ZGS levels

- 6. If this is a New Cascadia with CPC501T, check the software level. Is the software level at or above what is listed in table on page 1 "Software Levels"?
 - a) Yes; go to step 7.
 - b) No; refer to 20TS-04 to update the software level to the proper level then go to step 7.
- 7. Is the software and fuel map ZGS version level for the MCM, ACM, and CPC less than, equal to, or higher than the software and fuel map ZGS revision levels listed in the table on page 1? The MCM, ACM, and CPC software and fuel map ZGS version level must meet the <u>MINIMUM</u> requirements. For example, in Figure 2, the MCM software level meets the minimum required of MCM 14.2.1.3, but the fuel map ZGS version level of MCM 001 is less than the minimum levels of MCM 002, thus requires reprogramming.
 - a) If less than the minimum software and fuel map ZGS version levels, proceed to step 8.
 - b) If equal to, or greater than, the minimum software and fuel map ZGS version levels, no programming is necessary. Proceed to step 14.

Device Configuration	V
Fuelmap Part Number	A062 448 41 35 ZGS 001
Fuel Map Description	R_14213_1SP001S004
Certification Number	471LA20m1_400/1750
Software Mode	Running in Application
Rating Code	A0624484135
Application Code	06N04C1952
Application Code Part Number	A0514478035_002
Device Information	V
Software Version	14.2.1.3
Diagnostic Version	242
ECU Serial Number	0038283621
Hardware Part Number	A002 446 09 35 ZGS 002
Software Part Number	A068 448 13 35 7GS 001

Figure 2 – Verifying MCM Software and Fuel Map ZGS levels

- 8. Select "Parameters" option along the left side of the DiagnosticLink® screen. Wait for parameters to be read.
- **9.** Select "Program Device" option along the left side of the DiagnosticLink® screen. There will be "Data to Upload". Click "Connect to Server".
- **10.** Select the "Add" button in the upper right corner of the DiagnosticLink[®] screen and enter the engine serial number. Then click the "Connect to Server" button in the bottom right corner of the DiagnosticLink[®] screen. See Figure 3.



Figure 3 – Adding Engine Serial Number and Connecting To Server

11. Program the MCM and ACM based on the above inspection results and the engine serial number list included with this Emission Recall.

- **12.** When programming is complete, click the "Finish" button and perform the following to allow the modules to synchronize with each other:
 - Disconnect the USB Link at 9-pin vehicle diagnostic port.
 - Turn the vehicle ignition OFF and wait one minute.
 - Turn the vehicle ignition ON (key ON, engine OFF) and wait one minute.
 - Turn the vehicle ignition OFF and wait one minute.
 - Turn the vehicle ignition ON (key ON, engine OFF) and wait one minute.
 - Reconnect the USB Link, reconnect DiagnosticLink[®] to the MCM, ACM, CPC, and if applicable the TCM, and confirm the proper software and fuel map levels.

NOTICE:

CHECK with the customer to see if Auto Elevate can be enabled. Auto Elevate can prevent Aftertreatment System (ATS) issues.

- 13. Ask the customer if they would like Auto Elevate activated. **REFERENCE** Detroit[™] Technical Service letter 16 TS-18 for full details on Auto Elevate.
- **14.** Repairs are complete.

Completion Stickers and Vehicle Emission Recall-Proof of Correction Certificate

Upon completion of Emissions Recall Campaign D20R1, clean a spot on the base label (Form WAR259), write the Emissions Recall Campaign Number D20R1 on a blank, completion sticker (Form WAR261), and attach the completion sticker to the base label.

Label ordering info: DTNAConnect > Services and Reference > Publications & Warranty Supplies > Warranty

• A blank copy of the Vehicle Emission Recall-Proof of Correction Certificate is attached. Please fill this out completely and return it to the customer, as they may need this at the time of their vehicle registration renewal.

icense Number	Make	Year Model	Body Type		Vehicle I	dentificati	on N	umber		
Man T c	ulacturer _ he above d ontrol devic	escribed vehicle	has been replicable Californi	ired, modified a	Reca nd/on equip rol Laws	I Number ped with r	iew c	mission	n	
Deale	r's	, A	Address, Ci	y, State						