



Temporary Repair Practice

TRP Number: t2488	Revision: A	Released Date: 21-Oct-2021
ECM Calibration for DEF Header Sensor Failures due to Parts Shortage TRP for PACCAR Vehicles		Expiration Date (U.S. and Canada): 31-Dec-2021
		Expiration Date (International): 31-Dec-2021

Attention

- U.S. / Canadian Dealers
- U.S. / Canadian Distr./Branches and Div. Offices (Automotive)

This is to revise and replace T2488, dated 23-Sep-21. This revision is to:

1. Update the Action section, and
2. update SRT list, and
3. update the Other Claimables.

If additional information is required, please contact your Cummins Warranty Operations Group Leader.

Description

This TRP is being issued to address certain PACCAR (Kenworth and Peterbilt) vehicles with DEF header sensor failures in which DEF header replacement parts are **not** available. Due to DEF header part shortages, an ECM calibration is being released that reduces inducement levels to allow for continued operation of the vehicle until DEF header parts become available for a final repair. This TRP authorizes certified repair locations to download an ECM calibration, reducing the inducement levels when DEF header datalink communication faults are detected, if all criteria are met in the Action section outlined below.

Note : This Temporary Repair Practice (TRP) is intended to reimburse for the work directed and described in this document **ONLY**. This TRP is **NOT** intended to cover costs associated with repairing progressive damage, access issues encountered when doing the work, or any other additional items **NOT SPECIFICALLY ALLOWED** by the document. Please review the failure, remaining coverage on the engine, coverage limitations, and warranty administrative procedures to determine if repair costs are outside of those allowed by this TRP, and may be reimbursable under another Cummins program.

Action

In order to qualify for repair under this field action, an engine:

1. Will be covered regardless of coverage status, and
2. **Must** show as OPEN on QuickServe® Online for this field action, and
3. **Must** have one or more DEF header sensor fault code(s) 3868, 4572, and/or 4677 active or has more than one inactive count within the last 25 engine operating hours, and
4. **Must** have followed TSB210187 and determined DEF header sensor fault codes(s) are a result of a failed DEF header sensor(s), and
5. If performed at a Peterbilt or Kenworth dealer, the dealer **must** have followed PACCAR TIB 43-071 and received approval from PACCAR to proceed with the TRP. If performed by another authorized Cummins service location, PACCAR authorization **must** be confirmed by contacting the nearest Peterbilt or Kenworth dealer to have them submit a request to PACCAR and obtain an authorization code.

After verifying that the engine meets the above requirements, perform the following actions:

1. Download and print the attached: Customer Letter and provide to the customer.
2. Follow steps in the Resolution section of TSB210187 to download the applicable ECM calibration and cut and heat shrink the DEF header pigtail harness. The applicable ECM code can be found using the ECM code lookup tool or ECM code list referenced in the Customer Communication section of TSB210187.
3. Document the PACCAR authorization code in the narrative of the claim.

Material Disposition

There are no materials involved in the field action.

Reimbursements

Parts

The following parts are covered under this field action:

Part Number	Quantity	Description
388639600	1	ELECTRONIC FLEET COUNT

Note : All SRTs listed are OPTIONAL. Select **ONLY** the appropriate SRTs for the repair performed.

Labor Using Applicable Access Code and Time

SRT Code	Description	Time (hrs)
00-90X	Administrative time	

SRT Code	Description	Time (hrs)
19-0G5	Engine Control Module Calibration Code - Transfer (CMI) (OPTIONAL)	
19-611	Engine Control Module (ECM) Calibration - Transfer (CM 2250 / CM 2350) (OPTIONAL)	
99-008	Troubleshooting Per TSB210187 (QTY 1)	

Travel

Travel is **not** covered under this field action. Towing is **not** covered under this field action.

Other Claimables

Consumables are covered under this field action.

Note : A total of \$5.00 (USD) is allowed for reimbursement for heat shrink tubing and cable tie reimbursements. Please consolidate all consumables and claim them as one line item in Other Claimables titled "CAMPAIGN SUPPLIES" or other appropriate selections.

Claim Instructions

For Cummins Dealers, claims for this TRP **must** be filed via **RAPIDSERVE™** Web (rsw.cummins.com). For information regarding **RAPIDSERVE™** Web, please reference the "Warranty" tab in QuickServe® Online. If there are additional questions, please contact your local Cummins Distributor.

Claim Codes	
Description	Code
Account Code:	65
Pay Code:	North America Distributor = X
Pay Code:	North America Dealer = D
Pay Code:	International Distributor = I
Pay Code:	International Dealer = R
Failure Code:	WEQPEI

Attachments

[Click here to see customer_letter.pdf](#)

(/service/english/attachments/customer_letter.pdf)

Engine Family	Fuel System
ISX, QSX15 ISX15	
ISX, QSX15 ISX15	
Design Application	Market Application
All	All
All	All
All	All

Document History

Date	Details
	Document Created; 23-Sep-2021
	Update Action, SRT list, Other Claimables; 21-Oct-2021

Last Modified: 21-Oct-2021



September 16, 2021

Dear Customer,

We are continuing to work with our OEM partners to address the industry-wide DEF sensor reliability concerns and current supply challenges. The DEF sensor is a sensor that measures DEF level, temperature, and quality. The DEF sensor uses a microprocessor to perform its functions. A DEF sensor failure prompts the engine software to follow a derate process in accordance with the law, which ensures that drivers are notified of the issue while still being able to operate the vehicle safely for several hours.

In conjunction with our OEM partners, we have supported the development of more robust production DEF sensors. Unfortunately, the global microprocessor constraints are inhibiting the industry's ability to manufacture these components at the rate desired.

To alleviate the impact of these DEF sensor supply constraints on your operations, regulators have allowed for a temporary calibration to be loaded in the engine ECM by a Cummins authorized repair location if the DEF sensor fails.

This temporary calibration will be provided at no cost to you and will allow your vehicle to operate without a system derate after a DEF sensor failure occurs and until a replacement part can be sourced for your vehicle.

Note that while an amber warning lamp and Engine MIL (Multifunction Indicator Lamp) will not illuminate to indicate a malfunction of the DEF sensor, the DEF level indicator may not be functional or will provide an inaccurate reading, regardless of the actual amount of DEF present in the tank. **Use of DEF is still required to operate your vehicle.** The DEF fluid level will need to be manually inspected to ensure proper vehicle operation. If the vehicle's actual DEF level becomes too low, the normal derate process, including an eventual maximum vehicle speed limitation to 5mph will initiate. Therefore, filling the DEF fluid tank during each diesel fuel fill-up is necessary. As long as DEF fluid levels are maintained, the vehicle will operate normally without engine torque and vehicle speed restrictions.

Once supply of DEF sensors become available, you will be contacted and required to make a service appointment to replace the DEF sensor and restore the original engine calibration. Please note, once the replacement parts are available, the repairs must be completed as the vehicle cannot be operated in the State of California without the original engine calibration.