

R2301: PACCAR MX Engine Model Year 2022 Pre-Production Retrofit

3/24/2023

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R2301

PACCAR MX Engine Model Year 2022 Pre-Production Retrofit

Subject

PACCAR MX Engine Model Year 2022 Pre-Production Retrofit

Whats New Abstract

The emissions exemption **expired on 12/31/2021** for certain pre-production vehicles equipped with PACCAR Model Year 2022 MX engines. Production-level engine, VECU, and Digital Display software is now available to make these vehicles compliant. New Engine Emissions and Clean Idle labels will be installed.

Condition

Kenworth has determined that certain pre-production vehicles had an emissions exemption expiration date of 12/31/2021. These vehicles must have their engine, VECU, and Digital Display software updated to production levels and their Engine Emissions label replaced.



NOTE

A Clean Idle label must also be installed on all chassis within this campaign.

Chassis Affected

9 Model Year 2022-2023 T680 and T880 chassis equipped with a Model Year 2022 PACCAR MX engine.

Action

Campaign

Service all chassis affected that enter your dealership, even if the customer has no issue with the chassis.

- Review the attached chassis list for your dealer code and schedule your customer(s) for service if their

chassis is on the list.

- Confirm with the customer that your dealership will be the repairing location before ordering the engine and clean idle labels.
- **NOTE:** If chassis is classified as **VV** (Vehicle Validation) on the attached chassis list, do not order labels prior to the vehicle arriving at the shop. VV chassis may not require labels. See Procedure section for more information.
- **Confirm that chassis-specific Engine Emissions Label and Clean Idle Label have arrived before scheduling the customer for repairs.** See procedures section for TCS365 label ordering information.
- In Service Management, select Campaign **R2301** to add it to the case. If the unit is released back into service without performing the repair, make sure to also release the Campaign in Service Management.
- If you are not using Service Management to start repair orders, review SIR for "Complete" next to the **R2301** Campaign code prior to performing this repair. If R2301 is marked as "complete" in either SIR or Service Management, the repair has already been completed and the chassis does not require any further action for this retrofit.
- Follow the procedures below to update the vehicle software and install new Engine Emissions and Clean Idle labels.

This exemption expired on 12/31/2021.

Vehicle owners could receive civil fines per regulation 40 CFR 19.4 up to \$5,580 per engine. In addition, owners may be required to discontinue operation of the vehicle until the retrofit is completed.

Warranty

There is no time or mileage limit to this campaign. **The emissions exemption for affected vehicles expired on 12/31/2021.** To avoid possible fines, it must be completed immediately. Kenworth will pay for parts (labels) at dealer net plus applicable mark-up and labor:

- **1.1 hours** labor to inspect labels, update software using DAVIE4 (PCI-2, DD, VECU), complete TCS365 cases, replace Engine Emissions Label, install Clean Idle Label, and submit photos of labels. Use Quick Claim Code **R2301**.
- See the "Procedure" section of this bulletin for Clean Idle Label location guides.
- File an additional claim for extraordinary circumstances. A quick claim for standard labor must be filed first.
- File the claim within 14 days in accordance with Warranty Policy [CA009](#).

Kenworth dealers may perform R2301 repairs on Peterbilt chassis, but Quick Claims do not apply. For

Peterbilt chassis repairs, use the long claim input form.

Take photos of the labels and attach them to the warranty claim.

Claims filed without these photos may be denied.

PRWS CLAIM CODING			
Campaign Code:	R2301	Campaign Type	Retrofit
Claim Category:	Engine	Repair Type	Proactive
Customer Concern Code	173	Causal Code	A1
Corrective Action Code	12	Responsibility Code:	Camp
Failure Location	053-005-001	Causal Part	MXENGINELABEL
Supplier Code	N/A	SRT Code	B23-02A 1.1 hrs Update software and install labels per bulletin procedure

Parts

An Engine Emissions Label and Clean Idle Label are required for this campaign. Labels must be ordered and

received before scheduling the customer for repair.

Take photos of the new labels after installation and attach them to the warranty claim.

Claims filed without these photos may be denied.

Quantity	Part Number	Description
1	MXENGINELABEL	Engine Emissions Label
1	Y53-1075	PACCAR Engine Clean Idle Label

TCS365 cases are required to order the appropriate labels.

Labels will only be attached to the vehicle **after** the software update has been verified.

See Procedures below for the TCS365 case creation guides.

Procedure

Please follow your dealership's safety procedures and precautions to ensure the vehicle can be safely repaired and maintained.



NOTE

Pictures of the Non-Exempt emissions label and the Clean Idle Label must be attached to the warranty claim. If these pictures are not attached, your claim may be denied.

1. Check Engine Emissions Label to verify if it is Exempt or Non-Exempt.

IMAGE



EXEMPT EMISSIONS LABEL

IMPORTANT ENGINE INFORMATION		Engine No. Y081950	PACCAR MX-13 MANUFACTURED BY PACCAR	
Fuel Rate at Adv. HP	257.6 mm ³ /stroke	Idle Speed	600 ± 70 RPM	
Max. Rated Speed	1700 RPM	Valve Lash (mm)	0.50 Int. 0.70 Exh.	
Max. Adv. kW/hp	320/430 kW/hp	Max. Initial Timing	Electronic	
Family	EPCR12.9M01	Date of Mfg	05/2015	Displacement 12.9 L
This engine conforms to U.S. EPA and CARB regulations applicable to 2014 Model Year New Heavy-Duty Engines. This engine has a primary intended service application as a heavy-duty engine. The engine is certified to operate on ultra-low sulfur diesel fuel only. Exhaust Emission Control System: DDI, TC, CAC, ECM, EGR-C, OC, SCR-U, PTOX				STD EPA CARB NOx 0.20 0.20 PM 0.01 0.01

NON-EXEMPT EMISSIONS LABEL

If the label is **NON-EXEMPT**:

- A. Take a photo of the label and submit it with your warranty claim.
- B. Verify there is a PACCAR Clean Idle Label installed on the driver's door.
 - a. If a Clean Idle Label IS installed, take a picture of the label to attach to your warranty claim.

No further action is required.

- b. If a Clean Idle Label IS NOT installed, proceed to Clean Idle Label ordering process and Clean Idle Label placement in procedures below.

If the label is **EXEMPT**, continue below.



NOTE

This procedure will require 2 separate TCS cases:

1. Engine Label Request
2. Clean Idle Label Request

2. Order Engine Emissions Label and Clean Idle Label for the specific chassis by opening 2 separate TCS365 cases (see case creation guides below). Labels will be sent overnight from PACCAR Parts.
3. Ensure Engine Emissions Label and Clean Idle label have arrived before programming vehicle modules. Labels must be ordered through TCS365 and will be shipped overnight to dealers. See below for case creation guides.
4. Update software in the PCI-2, VECU, and DD
 - A. Ensure DAVIE4 is up to date.
 - B. Connect battery charger to vehicle during programming.
 - C. Connect DAVIE4 to the chassis.
 - Connect to 9-pin diagnostic connector
 - Connect to Ethernet connector



- D. Download new software for the PCI-2, VECU, and DD.

- E. Install software following the prompts in DAVIE4. Refer to E134 for information aboutu programming PACCAR MX engines.

5. After programming software to the vehicle, verify the Software values are as follows: (Please ensure the

software component group numbers update to what is shown below.)

- PCI: 1083 = 2388XXX (where XXX is HP rating)
- VECU: 1220 = 2388641
- DD: 1027 = 2389616

6. Clear DTCs in all modules.

7. Disconnect DAVIE4

8. Apply the Engine Emissions Information label to the engine air horn and the Clean Idle label to the driver's door of the vehicle as shown below.

 NOTE
Engine Emissions and Clean Idle Labels are chassis-specific. It is the dealer's responsibility to attach the correct labels to each chassis. Mismatched labels can result in regulatory fines.

Take photos of the new labels after installation and attach them to the warranty claim.

TCS365 Case Creation Guide for ordering Engine Emissions Label

This label comes from PACCAR Parts Special Orders.

1. Open TCS365 in Google Chrome or Microsoft Edge.
2. Select: Order Support / Order Inquiry.
3. Select Case Type: Place an Order.
4. Select Case Category: Labels
5. On the Place an Order page, fill in the following required fields as follows and fill in the other fields as appropriate:
 - Account Name: As appropriate for your dealer
 - Vehicle Year: 2022
 - Subject: R2301 Label Order
 - Dealer PO #: As appropriate for your dealer
 - Part Number: MXENGINELABEL
 - Vehicle OEM: select from drop-down list
 - Vehicle Chassis Number: enter last 8 of VIN

TCS365 Case Creation Guide for ordering Clean Idle Label

This label comes from PACCAR Parts Special Orders.

1. Open TCS365 in Google Chrome or Microsoft Edge.
2. Select: Order Support / Order Inquiry.
3. Select Case Type: Place an Order.
4. Select Case Category: Labels
5. On the Place an Order page, fill in the following required fields as follows and fill in the other fields as

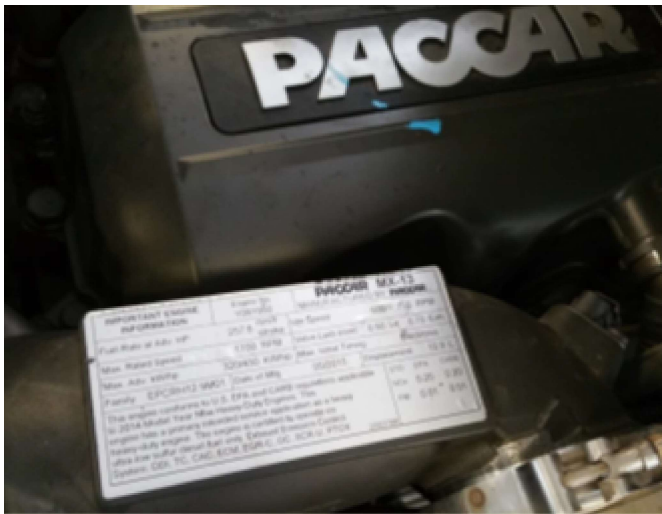
appropriate:

- Account Name: As appropriate for your dealer
- Subject: R2301 Engine Software and Label Retrofit
- Description: Clean Idle Label needed for R2301
- Vehicle OEM: Select from drop down menu
- Vehicle Chassis Number: Last 8 of VIN
- Vehicle Year: Model Year
- Dealer PO#: PO Number
- Label Part Number: Y53-1075 (Clean Idle Label)

When the labels arrive, call the customer in to have software update and labels installed.

Engine Emissions label placement:

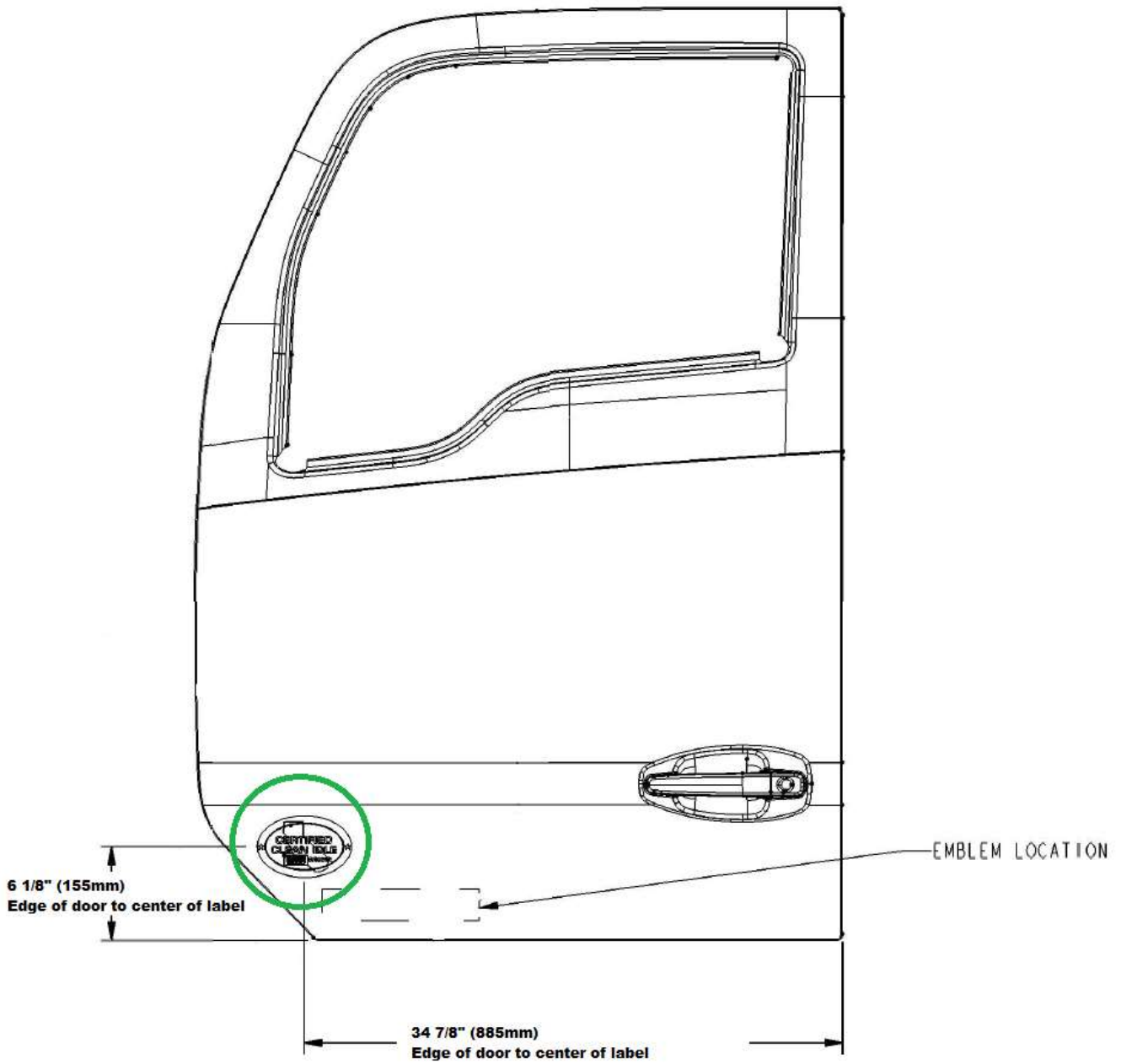
MX-13

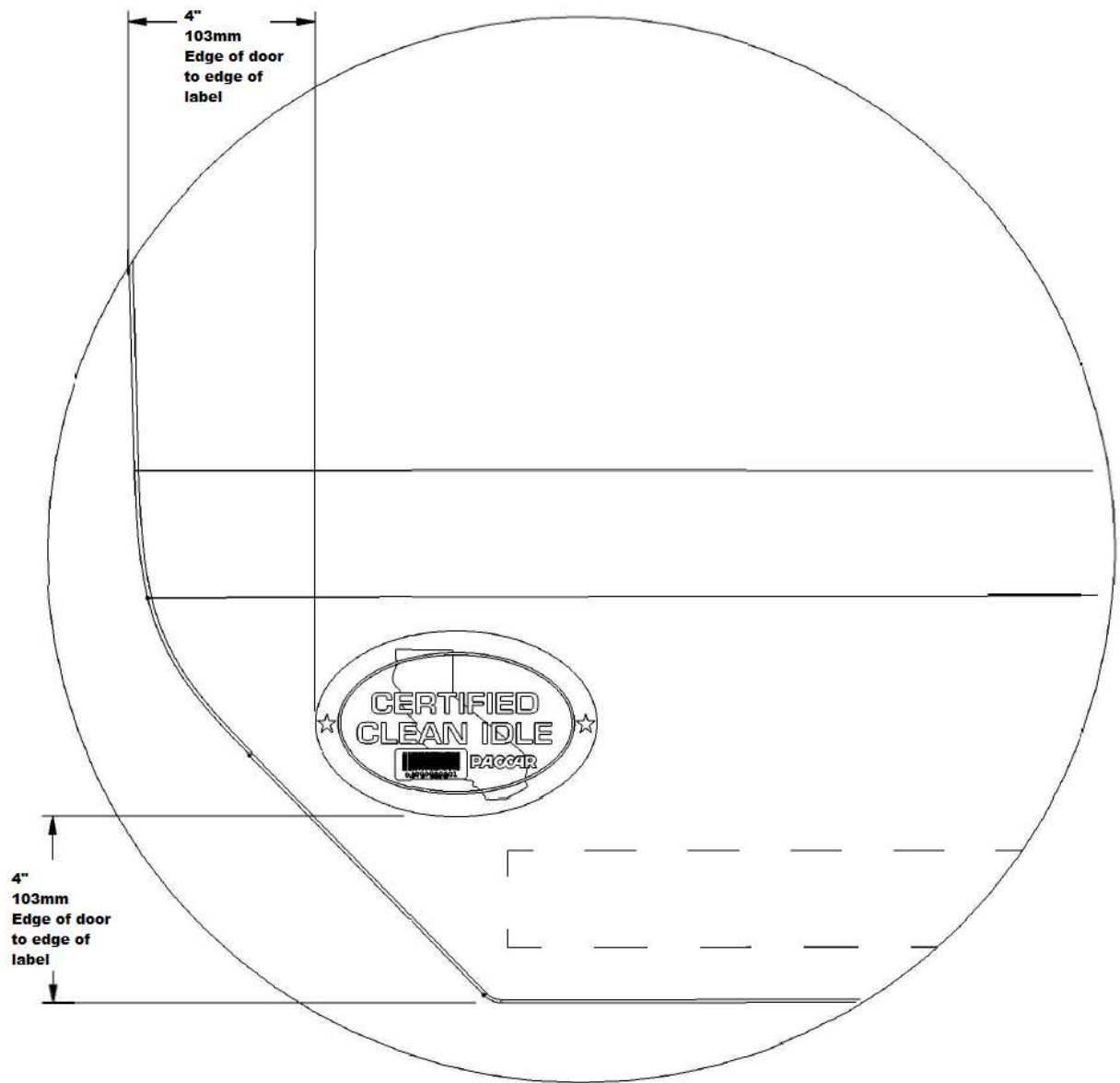


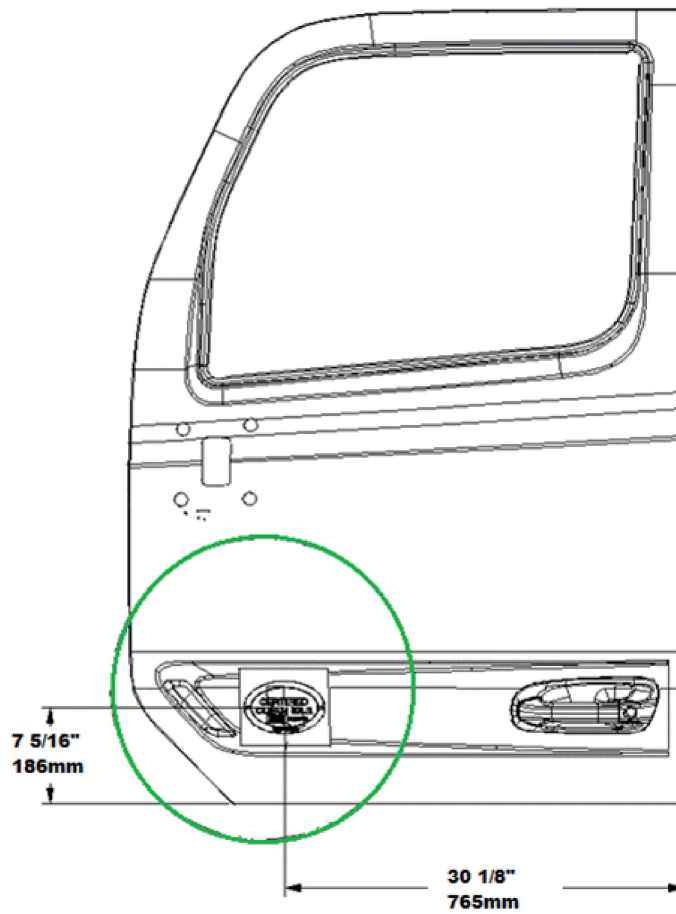
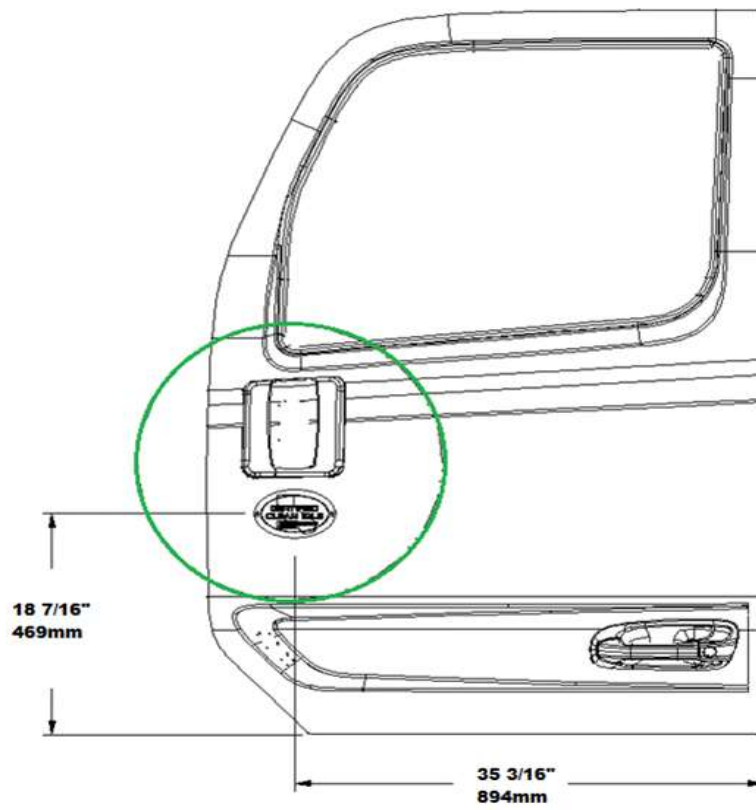
MX-11



Clean Idle Label Placement:







Attachments

[Chassis List](#)

[Customer Letter](#)

Authored by: JB3



Kenworth Truck Company
Customer Service Department
PO Box 1000
Kirkland, Washington 98083-1000
(425) 828-5888

Date TBD

[First VIN]
Customer Name
Address
City, State Zip



Subject: R2301: PACCAR MX Engine Model Year 2022 Pre-Production Retrofit

Dear Kenworth Customer,

Kenworth is writing to advise you of actions you are legally required to take with regard to your vehicle(s) equipped with pre-production PACCAR Engine Model Year 2022 MX engines due to the recent expiration of emissions exemptions. **The emissions exemptions for these vehicles expired on December 31, 2021.** These vehicles must now be brought into compliance with emissions regulations by receiving updates to production level software for the Engine Controller ("ECU"), Vehicle Electronic Control Unit ("VECU"), and Digital Display ("DD"). The engine emissions label will be replaced, and a Clean Idle label will be installed. Your dealer will pre-order updated labels for your vehicle to minimize downtime. Labels will arrive at the dealer within 2-3 business days.

The software update must be completed to avoid the risk of a potential enforcement action. **Please contact a Kenworth dealership** to schedule an appointment for this work. If you have already had this work performed, please disregard this letter. You can find your nearest Kenworth dealer at Dealer Locator on the website www.Kenworth.com or scan the QR code at the top of this letter.

When contacting your selected Kenworth dealer, refer to campaign **Retrofit R2301** and the VIN(s) listed on this letter. The work may take up to **2.0 hours of labor**, depending on vehicle configuration and dealer scheduling. There will be no charge to you. We apologize for this inconvenience but ask for your cooperation to ensure your continued satisfaction with Kenworth products.

If you require further information about this campaign or experience any difficulty in making arrangements for these updates, please contact Kenworth Customer Service, provide your name, your dealer's city and state, your phone number, your email address (optional), the last 8 digits of your VIN, the bulletin number, and your question using one of the following:

Email: Kenworth.Campaigns@paccar.com with the bulletin number in the subject line

or

Mail: Kenworth Truck Company, P.O. Box 1000, Kirkland, WA 98083-1000, Attn: Customer Service Department

or

Phone: 425-828-5888

If you no longer own this vehicle, we would appreciate you advising us of the name of the new owner.

Thank you,

Annick Hollingsworth
Director of Service Platforms
Kenworth Truck Company

VIN: [VIN List]