

SERVICE PROCEDURE

22502
May, 2023

SUBJECT: EMISSIONS RECALL
Diesel Exhaust Fluid (DEF) Quality Sensor on certain International® DuraStar®, PayStar®, ProStar®, WorkStar® 9900i model trucks and International® HV™, HX®, LoneStar®, LT®, and MV™, Series trucks built 01/08/2016 thru 06/28/2022 and IC Bus® 1300FBC, CE, HC, RE, and TC commercial & school buses built 01/07/2016 thru 12/07/2021 with Cummins ISB, B6.7, ISL9, L9, ISX15 or X15 engines.

CUSTOMER LETTER

Print ready (PDF file) copy of the International [Customer Letter](#)

Print ready (PDF file) copy of the IC Bus [Customer Letter](#)

DEFECT DESCRIPTION

This Emissions Recall applies to truck models for which, per agreement with EPA and CARB, Cummins Inc. provided an emergency calibration for Cummins ISB, B6.7, ISL9, L9, and X15 engines when a DEF Quality Sensor (DQS) was not available. This action addressed the Diesel Exhaust Fluid (DEF) Quality Sensor failures in the field and the unavailability of parts due to the worldwide chip shortage. This recall is step two of this program designed to revert all affected vehicles back to the certified calibration and to provide them with the latest improved DQS and Coolant Control Valve (CCV) designs. Additionally, the emergency calibration and the restoration to the certified calibration with the latest improved DQS and CCV designs have no effect on vehicle emissions.

MODELS INVOLVED

This Emissions Recall involves certain International® DuraStar®, PayStar®, ProStar®, WorkStar® 9900i model trucks and International® HV™, HX®, LoneStar®, LT®, and MV™, Series trucks built 01/08/2016 thru 06/28/2022 and IC Bus® 1300FBC, CE, HC, RE, and TC commercial & school buses built 01/07/2016 thru 12/07/2021 with Cummins ISB, B6.7, ISL9, L9, ISX15 or X15 engines.

ELIGIBILITY

This procedure applies ONLY to vehicles marked in the International® Service PortalSM with Safety Recall 22502. Also complete any other open campaigns listed on the Service Portal at this time.

TOOLS REQUIRED

Description	Tool Number
EZ-Tech® Or Equivalent	N/A
Cummins Insite Pro	N/A
Battery Charger 55 Amp	PSC550CC

PARTS INFORMATION

For detailed parts information, refer to iKNow IK0700120 – [IK0700120 - QLS Emergency Calibration Revert Process \(internationaldelivers.com\)](https://internationaldelivers.com/IK0700120-QLS-Emergency-Calibration-Revert-Process)

SERVICE PROCEDURE

WARNING! To prevent personal injury and / or death, or damage to property, park vehicle on hard flat surface, turn the engine off, set the parking brake and install wheel chocks to prevent the vehicle from moving in either direction.

WARNING! To prevent personal injury and / or death, or damage to property, if the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over.

WARNING! To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING! To prevent personal injury and / or death, or damage to property, allow engine / vehicle components to cool before servicing engine or vehicle.

WARNING! To prevent personal injury and / or death, or damage to property, keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases.

WARNING! To prevent personal injury and / or death, or damage to property, remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last.

1. Park vehicle on a flat surface.
2. Shift transmission to Park or Neutral and set the parking brake.
3. Turn vehicle ignition to Key OFF position.
4. Install wheel chocks.
5. For detailed repair instructions, refer to iKNow IK0700120 – [IK0700120 - QLS Emergency Calibration Revert Process \(internationaldelivers.com\)](https://internationaldelivers.com/IK0700120-QLS-Emergency-Calibration-Revert-Process)
6. Remove wheel chocks.

Additional Requirements for Dealers and Customers Operating in California.

NOTE: The following step is required only for dealers and customers operating in the state of California.

7. After completing this recall, dealer must fill out SALMON-colored Proof of Correction certificate and provide a copy to customer.

Vehicle Emission Recall - Proof of Correction				
License Number	Make	Year Model	Body Type	Vehicle Identification Number
Manufacturer _____			Recall Number _____	
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.				
Dealer's _____		Address, City, State _____		
		Dealership's Authorized		
		X _____		
Return this certificate to DMV <u>only</u> when required - otherwise retain for your records.				

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Figure 1. DMV Certificate, Salmon, (Print on 8.5 x 11 in. White Paper)

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-22502-1	DEFTHV Flow Test; If Required	0.1 hrs.
A40-22502-2	Repl. DEF Head; HC, RE, TC, 1300FBC, 9900i, HX, LT, Pro, Pay – 2017 & Older	1.1 hrs.
A40-22502-3	Repl. DEF Head; CE, Dura, Work – 2017 & Older	1.3 hrs.
A40-22502-4	Repl. DEF Head; HV & MV	0.8 hrs.
A40-22502-5	Repl. DEF Head; CE, RE, HX, Dura, Work, LT, Pro, Pay – 2018 & Newer	0.9 hrs.
A40-22502-6	Repl. DEF Head; HC, TC – 2018 & Newer	1.0 hrs.
A40-22502-7	Recalibrate ECM	0.5 hrs.
A40-22502-8	Repl. DEFTHV; If Required	0.6 hrs.
A40-22502-9	DEF Tank Cutting; Only Units Built 08/31/2017 and Before	0.8 hrs.
A40-22502-10	R&R Battery Box For Access; DuraStar Only	0.8 hrs.
A40-22502-11	R&R Aerodynamic Skirts LT, Lone, Pro; If Required	0.4 hrs.

VEHICLE RECALL 22502

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign must be marked with a CTS-1075 Campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

DO NOT REMOVE
INTERNATIONAL
Campaign No.
VIN
Eng.#
COMPLETED
Service Location Code #
DO NOT REMOVE

ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 22502.

Section 7 of the Warranty Policy and Procedures Manual contains further information related to the submission and processing of AFC / Recall claims.

As with all claim submissions, items acquired locally must be submitted in the “Other Charges” tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, or tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

GROUP	NOUN	C	WARR.	TP	PAD

GROUP — Enter number ←

NOUN — Leave blank ←

C (CAUSE) — Enter either 1, 2, 3. (See below)

- 1. Inspected (No repair required).
- 2. Inspected and repaired.
- 3. Defective part from parts stock.

WARRANTY — (Warranty Code) Enter 40. ←

TYPE PART — Enter P for type part causing failure. ←

PAD — Enter 100 ←

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UNITED STATES AND POSSESSIONS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to replacement with an identical or reasonable equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. Federal law prohibits a dealer from delivering under a sale or lease, a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by the notification of a recall until the defect or noncompliance is remedied.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

CANADA

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

Dealers should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your dealer location.

Dealers must make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited to this campaign because the list may contain information obtained from state motor vehicle registration records, and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

EXPORT

Export Distributors should proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified immediately from your distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC.