SERVICE PROCEDURE

21507
JANUARY, 2022

SUBJECT: **SAFETY RECALL**
ENGINE CONTROL MODULE (ECM) on certain 2020, 2021, 2022, and 2023 CE school bus models built 01/17/2019 thru 01/06/2022 with PSI 8.8L gasoline engines and 2020, 2021, 2022 and 2023 CE school bus models built 04/11/2019 thru 01/06/2022 with PSI 8.8L LPG engines

CUSTOMER LETTER

Print ready (PDF file) copy of the Customer Letter

DEFECT DESCRIPTION

With the vehicle in motion, the Engine Control Module (ECM) may set a fault code resulting in engine shut down without warning. In a bus application, unintended engine shut down without warning may result in evacuation concerns when students must be transferred to another bus near the roadway.

MODELS INVOLVED

This safety recall involves certain 2020, 2021, 2022, and 2023 CE school bus models built 01/17/2019 thru 01/06/2022 with PSI 8.8L gasoline engines and 2020, 2021, 2022 and 2023 CE school bus models built 04/11/2019 thru 01/06/2022 with PSI 8.8L LPG engines.

ELIGIBILITY

This procedure applies ONLY to vehicles marked in the International® Service Portal℠ with Safety Recall 21507. Also complete any other open campaigns listed on the Service Portal at this time.

PARTS INFORMATION

There are no parts for this safety recall.

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TOOLS REQUIRED

NOTE: Prior to performing this Recall, you must ensure your EZ-Tech® or equivalent Electronic Service Tool (EST) has PSI Powerlink Software installed.

Description	Tool Number	Quantity
Powerlink Programming Cable	12-716-01	1
EZ-Tech® or Equivalent	N/A	1
PSI ECU Field Programmer Software	N/A	1
NEXIQ (USB- Link Series)	N/A	1
Battery Charger 55 Amp	PSC550CC	1

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, 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.

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.

1. Park vehicle on flat surface.
2. Shift transmission to Park or Neutral and set parking brake.
3. Turn vehicle ignition to Key OFF position.
4. Install wheel chocks.
5. Open battery compartment and connect battery charger to vehicle battery.

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6. Unlatch and open hood.

7. Obtain a health report from vehicle.

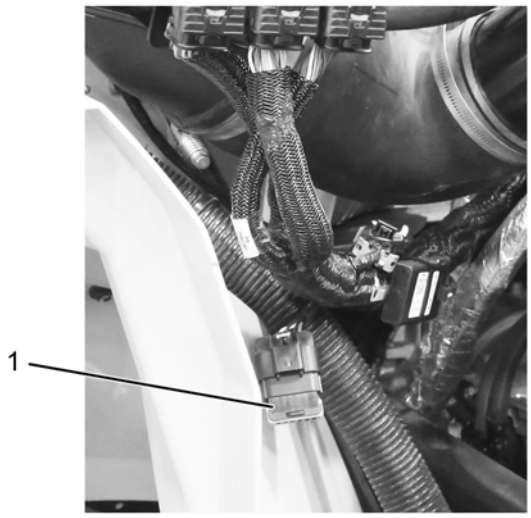
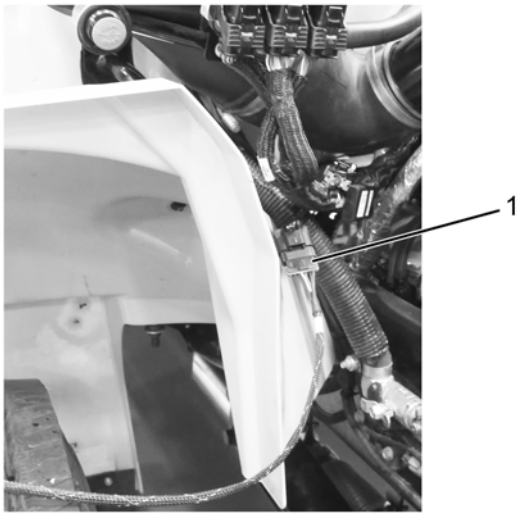


Figure 1. Engine Harness – Proprietary Network Connector

1. Cap

8. Locate proprietary network connector located on the engine harness below Engine Control Module (ECM). Remove protective cap (Figure 1, Item 1) and save for reuse.

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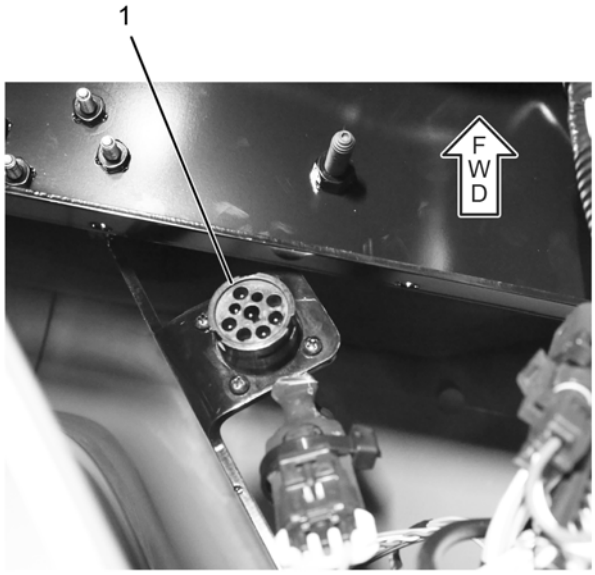
Figure 2. Powerlink Programming Cable – Under Hood

1. Connector

9. Using Powerlink programming cable, connect appropriate connector (Figure 2, Item 1) to proprietary network harness.

10. Route remainder of programming cable into vehicle interior.

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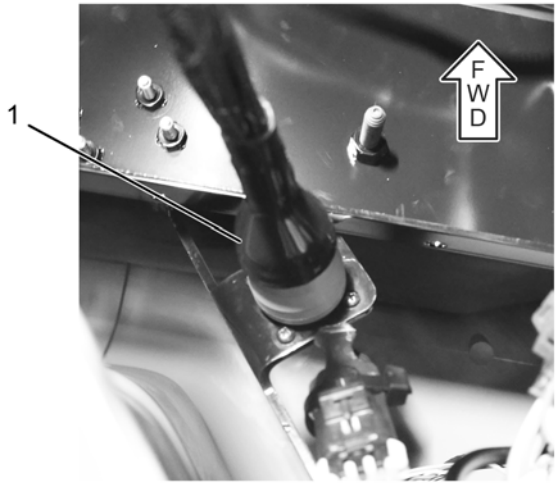


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Figure 3. Data Link Connector (DLC) – Under Dash

1. DLC

11. Locate DLC (Figure 3, Item 1) under vehicle dash.



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Figure 4. Powerlink Programming Cable – Under Dash

1. Connector

12. Connect 6-pin connector of programming cable (Figure 4, Item 1) to DLC.

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Figure 5. Powerlink Programming Cable – USB Interface

1. Connector
2. Laptop / USB interface connector

NOTE: Ensure laptop screen saver and sleep settings are turned OFF or set to a minimum of one hour.

13. Connect programming cable (Figure 5, Item 1) to laptop / USB interface connector (Figure 5, Item 2).

14. Turn vehicle ignition to Key ON, Engine OFF.

NOTE: Refer to PSI Product Bulletin PSI220001 at the end of this document for calibration and programming information.

15. Using EZ-Tech® or equivalent Electronic Service Tool (EST) with PSI Powerlink Software installed, program ECM. Refer to attached PSI Bulletin PSI220001 for additional information.

16. Turn vehicle ignition to Key OFF position.

17. Disconnect EST from DLC and underhood proprietary network connector.

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18. Install protective cap to proprietary network connector.
19. Close and latch hood.
20. Disconnect battery charger from vehicle battery and close compartment.
21. Remove wheel chocks.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation Number	Description	Time
A40-21507-1	Connect to vehicle and recalibrate ECU	0.4 hr

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.



ADMINISTRATIVE / DEALER RESPONSIBILITIES

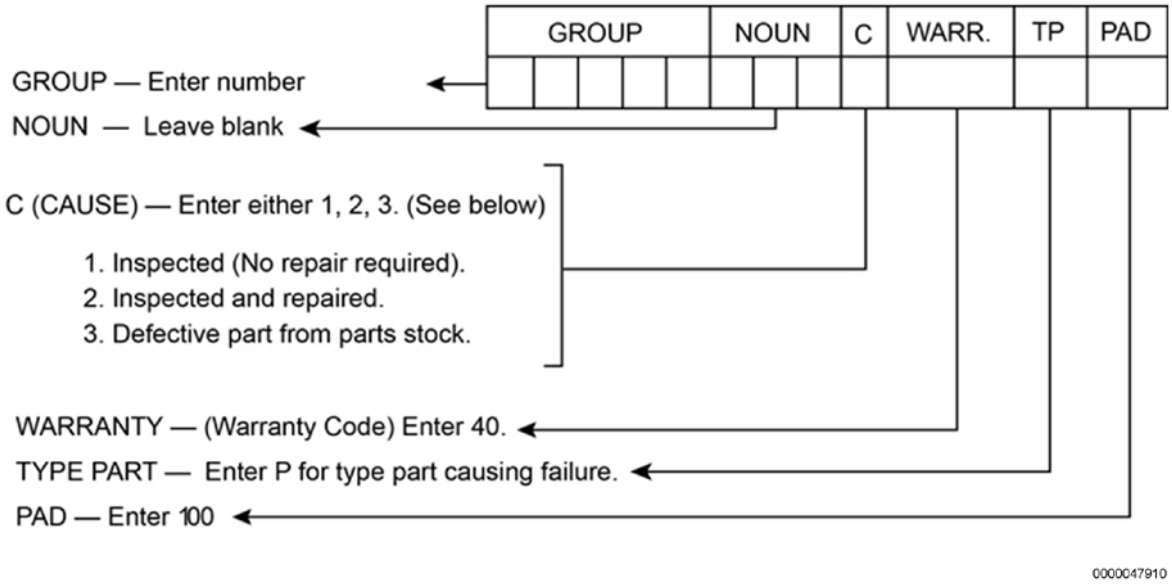
WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 21507.

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

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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.



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. 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.

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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.

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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.

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POWER SOLUTIONS INTERNATIONAL

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– PRODUCT BULLETIN –

Bulletin Number	PSI220001
Title	Navistar 8.8L OBDHD Gasoline and Gen II Propane Calibration Update
Date of Notice	01/05/2022
Engine Displacement	8.8L
Description	At the request of Navistar, Power Solutions International, Inc. (“PSI”) has released updated calibrations for MY19, M20, and MY21 8.8L Gasoline and 8.8L Propane engines. The details and summary of the updates along with warranty eligibility are described below.

General Information

The calibration updates shown below change the reporting and reactions to SOH faults and prevents a forced shutdown reaction when a SOH fault sets.

If the ECM detects the fault once, the ECM will power cycle itself and the MIL will turn on and the vehicle will continue to operate normally. If the fault happens a second time within the same key-cycle, the engine will go into “Forced Limited Power” and the dash will be beeping with the stop sign illuminated on the dash. The vehicle will still be drivable in this situation.

Calibration Information

The calibration shown in yellow on the following tables are the newest release calibrations as of the date of this publication.

Below gasoline calibrations will receive MY22 gasoline calibration: 38300107-2.

TABLE 1

MY22 GASOLINE CALIBRATION: 38300107-2	
Product	**Replaces Old Calibration**
MY19 GAS	38300064-1
MY19 GAS	38300064-2
MY20 GAS	38300081-1
MY20 GAS	38300081-2
MY21 GAS	38300090-1

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Below LPG Gen2 calibrations will receive the MY22 LPG Gen2 calibration: 38300108-2.

TABLE 2

MY22 LPG Gen2 calibration: 38300108-2	
Product	**Replaces Old Calibration**
MY19 LPG	38300037-1
MY19 LPG	38300037-2
MY19 LPG	38300037-3
MY19 LPG	38300037-4
MY19 LPG	38300037-5
MY20 LPG	38300080-1
MY20 LPG	38300080-2
MY21 LPG	38300089-1

Below LPGULN calibrations will receive the MY22 LPGULN calibration: 38300109-2.

TABLE 3

MY22 LPGULN calibration: 38300109-2	
Product	**Replaces Old Calibration**
MY20 LPGULN	38300088-1
MY20 LPGULN	38300088-2
MY21 LPGULN	38300102-1

How to update the ECM calibration?

The ECM calibration is updated using the PSI Powerlink electronic service tool. Follow the steps provided in the PSI Powerlink user manual shown on page 46 "***Calibration Programming***".

Link to download PSI Powerlink User Guide

Warranty Eligibility

ECM calibration updates shown on this publication are not eligible for warranty reimbursement from PSI.