OMB Control No.: 2127-0004

Part 573 Safety Recall Report

22E-084

Manufacturer Name: Power Solutions International, Inc.

Submission Date: OCT 21, 2022 NHTSA Recall No.: 22E-084 Manufacturer Recall No.: NR

NHTSA

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION

Manufacturer Information:

Manufacturer Name: Power Solutions International, Inc.

Address: 201 Mittel Drive

Wood Dale IL 60191

Company phone: 350-9400

Population:

Number of potentially involved : 8,046 Estimated percentage with defect : 100 %

Equipment Information:

Brand / Trade 1: Power Solutions Internati

Model: 8.8L OBD HD Engines

Part No. : Multiple

Size: NR Function: NR

Descriptive Information: The suspect PSI 8.8L Gasoline or Gen II LPG products which use the MT88

controller in the school bus chassis and/or school bus chassis CAN network architecture have been identified by the vehicle OEM and submitted in their

respective OEM's 573 reports.

Production Dates: JAN 17, 2019 - MAR 01, 2022

Description of Defect:

Description of the Defect: With the vehicle in motion, the engine control module (ECM) may set fault code

SPN 629 FMI 12 resulting in an engine shut down without warning. The calibration installed on the ECM is designed to shut the engine down in

response to fault code SPN 629 FMI 12.

The root cause of the generation of fault code SPN 629 FMI 12 has not been determined. PSI has concluded that the fault code is not generated solely by engine and ECM interaction, but PSI has not been able to fully investigate other

vehicle system interactions outside of its control

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: In certain conditions, an unintended shut down without warning may result

in an increased risk of a crash.

Description of the Cause: NR

Identification of Any Warning NR that can Occur:

Involved Components:

Component Name: MT88 ECM

Component Description: Engine Control Module

Component Part Number: 32502960

Supplier Identification:

Component Manufacturer

Name: BorgWarner (Formally Delphi)
Address: Avenida de los Encinos 1050

Parque Industrial Villa Florida Reynosa Foreign States 88718

Country: Mexico

Chronology:

March 9, 2021PSI receives email communication from OEM 1 Customer indicating multiple vehicles at the same dealer have reported SPN 629 FMI 12 codes in the ECM.

March through April – PSI starts working with BorgWarner (formerly Delphi), the supplier of ECM, for root cause analysis .

April 22, 2021 – BorgWarner provides PSI their analysis of the returned ECMs. BorgWarner concluded the ECM was acceptable with no internal hardware failure, no solder failure, and ECM functionality was intact. Failure could not be duplicated.

May 2021 – PSI and OEM 1 Customer collaborate to perform additional quality inspections of the vehicle interface connector (VIC) to verify the engine harness pin connections were not the cause of the power surge resulting in the fault codes and shut down.

May 2021 – PSI and OEM 1 Customer evaluate case file data and determine fault 629/12 may be related to the engine stall condition.

June 10, 2021 - PSI and OEM 1 Customer develop a diagnostic plan for a vehicle that is experiencing fault 629/12 to narrow down the scope or identify root cause

June -September 2021 A Control Tec Data logger was installed on a vehicle that previously experienced fault code 629/12 with engine shut down with no repair after the incident. The failure could not be duplicated with over 5,000 miles logged

October 2021 – PSI, BorgWarner and OEM 1 Customer evaluate an alternative default fault code reaction. PSI and BorgWarner agree to move forward with the alternative to develop the new software calibration

Jan 7, 2022 – PSI releases the updated calibrations to OEM 1 Customer via its online service programming portal so OEM Customer can begin updating vehicles

January 2022 – PSI receives email communication from OEM 2 Customer regarding a single customer with two vehicles experiencing engine stall, at least one vehicle is reported to have an SPN 629 FMI 12 code in the ECM August 2022 – PSI releases the updated calibrations to OEM 2 Customer

Description of Remedy:

Description of Remedy Program: OEM's have launched or are in the process of executing a recall on their

vehicles. PSI will not be handling any quarterly reporting.

How Remedy Component Differs NR

from Recalled Component:

Identify How/When Recall Condition NR

was Corrected in Production:

Recall Schedule:

Description of Recall Schedule: OEM's have launched or are in the process of executing a recall on their

vehicles. PSI will not be handling any quarterly reporting.

Planned Dealer Notification Date: NR - NR Planned Owner Notification Date: NR - NR

Purchaser Information:

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name: Navistar, Inc.

Address: 2701 Navistar Drive

Lisle IL 60532

Country: US

Company Phone: 8004487825

Name: Daimler Trucks North America

Address: 4747 N. Channel Ave

Portland OR 97217

Country: US

Company Phone: 8007458000

^{*} NR - Not Reported