Part 573 Safety Recall Report 24V-267

Manufacturer Name : Ford Motor Company
Submission Date : APR 12, 2024
NHTSA Recall No. : 24V-267
Manufacturer Recall No. : 24S24

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Manufacturer Information :

Manufacturer Name : Ford Motor Company
Address : 330 Town Center Drive
Suite 500 Dearborn MI 48126-2738
Company phone : 1-866-436-7332

Population :

Number of potentially involved : 456,565
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2021-2024 Ford Bronco Sport
Vehicle Type : LIGHT VEHICLES
Body Style : ALL
Power Train : GAS
Descriptive Information : Ford's team reviewed manufacturing records to determine the population of affected vehicles. The Ford process is capable of tracing Powertrain Control Module and Body Control Module calibrations to the vehicle in which the calibrations are installed.

These vehicles are not produced in VIN order. Information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-866-436-7332) or by contacting a local Ford or Lincoln dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database.

402,978 Ford Bronco Sport vehicles are affected.

Production Dates : FEB 05, 2020 - MAR 13, 2024
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Vehicle 2 :	2022-2023 Ford Maverick
Vehicle Type :	LIGHT VEHICLES
Body Style :	ALL
Power Train :	NR
Descriptive Information :	Ford's team reviewed manufacturing records to determine the population of affected vehicles. The Ford process is capable of tracing Powertrain Control Module and Body Control Module calibrations to the vehicle in which the calibrations are installed. These vehicles are not produced in VIN order. Information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-866-436-7332) or by contacting a local Ford or Lincoln dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database. 53,587 Ford Maverick vehicles are affected.
Production Dates :	FEB 03, 2021 - OCT 28, 2022

VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Description of Defect :

Description of the Defect :	An insufficient calibration strategy for detecting sudden battery degradations during a drive cycle can lead to (a) a vehicle that is unable to restart after an auto start/stop event or (b) experience a stall while coming to a stop at low speed. Either may be accompanied by a loss of 12-volt accessories, including hazard lights.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	A loss of motive power can increase the risk of a crash.
Description of the Cause :	The BCM and PCM calibrations are unable to detect a sudden change in the 12-volt battery State of Charge (SOC) during a drive cycle.
Identification of Any Warning that can Occur :	None

Involved Components :

Component Name 1 :	Body Control Module
Component Description :	Body Control Module Calibration – Bronco Sport
Component Part Number :	M1PT-14F390-AC*

Component Name 2 :	Body Control Module
Component Description :	Body Control Module Calibration – Maverick Gas
Component Part Number :	NZ6T-14F390-AD*

Component Name 3 :	Body Control Module
Component Description :	Body Control Module Calibration – Maverick HEV
Component Part Number :	NZ6T-14F390-BD*

Component Name 4 :	Powertrain Control Module
Component Description :	Powertrain Control Module Calibration – MY2021
Component Part Number :	M1PA-12A650-*

Component Name 5 :	Powertrain Control Module
Component Description :	Powertrain Control Module Calibration – MY2022
Component Part Number :	N1PA-12A650-*

Component Name 6 :	Powertrain Control Module
Component Description :	Powertrain Control Module Calibration – MY2023
Component Part Number :	P1PA-12A650-*

Component Name 7 :	Powertrain Control Module
Component Description :	Powertrain Control Module Calibration – MY2024
Component Part Number :	R1PA-12A650-*

Supplier Identification :

Component Manufacturer

Name :	Ford Motor Company
Address :	1 American Rd Dearborn Michigan 48166

Country : United States

Chronology :

On October 25, 2023, The National Highway Traffic Safety Administration's Office of Defects Investigation (NHTSA ODI) requested information regarding allegations of loss of motive power (LOMP) followed by a loss of 12-volt accessories on 2021 MY Bronco Sport vehicles. NHTSA provided 29 potentially responsive Vehicle Owner Questionnaires (VOQs) that indicated that most customers' concerns were resolved with a 12-volt battery replacement.

On November 28, 2023, Ford's Critical Concern Review Group (CCRG) opened an investigation into this concern.

From November 2023 through January 2024, the Low Voltage Power Supply Engineering team evaluated field returns and warranty data for 2021 Bronco Sport vehicles focusing on 12-volt batteries and low voltage systems.

From December 2023 through March 2024, the Low Voltage Power Supply Engineering team conducted system and vehicle level testing and teardowns with batteries with various physical conditions and state of charge. The testing revealed that the Body Control Module (BCM) and Powertrain Control Module (PCM) calibrations are unable to detect the battery failure on these vehicles, which can result in a LOMP if the alternator is unable to keep up with the electrical load demand or if an Auto Stop-Start event is initiated.

On January 31, 2024, NHTSA's ODI opened Preliminary Investigation PE24-002 into this concern.

As of February 8, 2024, Ford is aware of 917 warranty reports, 11 field reports, and 54 customer complaints related to this concern. There are 3 unverified reports of fire and 2 property damage claims.

As of February 8, 2024, Ford is not aware of any accidents or injuries attributed to this condition.

On April 5, 2024 Ford's Field Review Committee reviewed the concern and approved a field action.

Description of Remedy :

Description of Remedy Program : Owners will be notified by mail and instructed to take their vehicle to a Ford or Lincoln dealer to have the BCM and PCM calibrations updated. There will be no charge for this service.

Ford provided the general reimbursement plan for the cost of remedies paid for by vehicle
owners prior to notification of a safety recall in May 2023. The ending date for reimbursement
eligibility is estimated to be July 1, 2024.

How Remedy Component Differs from Recalled Component :	The update BCM calibrations M1PT-14F390-ACG (Bronco Sport), NZ6T-14F390-ADD (Maverick Gas), NZ6T-14F390-BDB (Maverick HEV) will provide improved detection of 12V battery SOC during drive cycles, inhbit auto stop/start in the event of a low SOC, and provide notification to the driver if the battery is degraded. The updated PCM calibrations M1PA-12A650-UE (MY21), N1PA-12A650-AE (MY22), P1PA-12A650-AF (MY23), R1PA-12A650-AD (MY24) will increase the alternator output threshold to maintain vehicle operation if a low 12V battery SOC is detected during a drive cycle.
Identify How/When Recall Condition was Corrected in Production :	Not required per 49 Part 573.

Recall Schedule :

Description of Recall Schedule :	Notification to dealers is expected to occur on May 13, 2024. Mailing of owner notification letters is expected to begin May 13, 2024 and is expected to be completed by May 17, 2024.
Planned Dealer Notification Date :	MAY 13, 2024 - MAY 13, 2024
Planned Owner Notification Date :	MAY 13, 2024 - MAY 17, 2024

* NR - Not Reported