Part 573 Safety Recall Report 22V-255

Manufacturer Name : Ford Motor Company
Submission Date : MAR 30, 2023
NHTSA Recall No. : 22V-255
Manufacturer Recall No. : 22S27

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 : 252,936
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2020-2021 Ford Explorer Police FHEV
Vehicle Type : LIGHT VEHICLES
Body Style : ALL
Power Train : HYBRID ELECTRIC
Descriptive Information : For 3.3L FHEV Police and 3.3L Gas Police vehicles, the recalled part was introduced into
production on 11/10/2018 and was taken out of production on 04/07/2022.
For 2.3L RWD, 3.0L PHEV, 3.3L FHEV , and 3.0L ST retail vehicles, the affected software was
introduced intro production on 11/10/2018 and was taken out of production on 4/07/2022.
Affected vehicles are equipped with suspect rear axle bolts and and an older version of
Electronic Park Brake Software on retail units.
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.
Production Dates : NOV 10, 2018 - OCT 31, 2020
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Vehicle 2 :	2020-2021 Ford Explorer Police 3.3L Gas
Vehicle Type :	LIGHT VEHICLES
Body Style :	ALL
Power Train :	GAS
Descriptive Information :	For 3.3L FHEV Police and 3.3L Gas Police vehicles, the recalled part was introduced into production on 11/10/2018 and was taken out of production on 04/07/2022. For 2.3L RWD, 3.0L PHEV, 3.3L FHEV , and 3.0L ST retail vehicles, the affected software was introduced intro production on 11/10/2018 and was taken out of production on 4/07/2022. Affected vehicles are equipped with suspect rear axle bolts and and an older version of Electronic Park Brake Software on retail units. 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.
Production Dates :	NOV 10, 2018 - JAN 31, 2021
VIN Range 1 :	Begin : NR End : NR ☐ Not sequential

Vehicle 3 :	2020-2022 Ford Explorer 2.3L RWD / 3.0L PHEV / 3.3 L FHEV Retail / 3.0L ST GAS
Vehicle Type :	LIGHT VEHICLES
Body Style :	ALL
Power Train :	GAS
Descriptive Information :	For 3.3L FHEV Police and 3.3L Gas Police vehicles, the recalled part was introduced into production on 11/10/2018 and was taken out of production on 04/07/2022. For 2.3L RWD, 3.0L PHEV, 3.3L FHEV , and 3.0L ST retail vehicles, the affected software was introduced intro production on 11/10/2018 and was taken out of production on 4/07/2022. Affected vehicles are equipped with suspect rear axle bolts and and an older version of Electronic Park Brake Software on retail units. 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.
Production Dates :	OCT 22, 2018 - APR 11, 2022

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

Description of Defect :

Description of the Defect :	Affected vehicles were built with a 3-point mounted axle design. On some units the rear axle horizontal mounting bolt may fracture. Powertrain torque through the driveline causes axle rotation of the pinion angled towards the subframe, which exerts a bending force on the rear axle bolt. Peak torque is normally experienced during a launch event. After numerous peak torque events are experienced, the bolt may suffer a fatigue failure, which will lead to the axle housing moving out of position, resulting in a condition described by customers and dealer technicians variably as loud, grinding, binding, or clunking noises.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	A fractured rear axle bolt will allow the rear axle housing to move out of

Description of the Safety Risk :	position, resulting in severe noise and vibration. If the rear axle bolt breaks, the driveshaft or half-shafts may become disconnected, resulting in loss of the vehicle's forward power and loss of transmission torque to the rear wheels. Loss of the vehicle's forward power increases the risk of crash and injury. Transmission torque is necessary to hold the vehicle in park. If the parking brake is not applied, the loss of the primary park torque will allow the vehicle to roll in park increasing the risk of crash and injury. Inability to achieve or hold park can result in unintended vehicle movement if the parking brake is not applied, increasing the risk of a crash.
Description of the Cause :	The joint design is not robust to peak axle input torques and manufacturing variability. The primary contributor is insufficient bearing area for maximum joint loads. This results in bearing area deformation, increasing bending stress on the bolt, which may lead to a fatigue failure
Identification of Any Warning that can Occur :	NA

Involved Components :

Component Name 1 :	Axle Cover
Component Description :	Axle Cover
Component Part Number :	L1MW-4A028-G

Component Name 2 :	Bushing
Component Description :	Bushing
Component Part Number :	L1MW-4B425-B

Supplier Identification :

Component Manufacturer

Name :	Mobex Global
Address :	26290 West 8 Mile Southfield Michigan 48033
Country :	United States

Chronology :

Chronology is provided as an attachment

Description of Remedy :

Description of Remedy Program :	For 3.3L FHEV Police built before October 14, 2020, and 3.3L Gas Police vehicles built before January 31, 2021, owners will be notified by mail and instructed to take their vehicle to a Ford or Lincoln dealer to have the bushing and axle cover replaced. There will be no charge for this service. For 2.3L RWD, 3.0L PHEV, 3.3L FHEV, and 3.0L ST retail vehicles , owners will be notified by mail and instructed to take their vehicle to a Ford or Lincoln dealer to have the PCM software updated to engage the Electronic Park Brake when Park is commanded. 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 2021. The ending date for reimbursement eligibility is to be defined. Ford will forward a copy of the notification letters to dealers to the agency when available.
How Remedy Component Differs from Recalled Component :	Parts were modified to add weight savers and to increase the fastener engagement length in order to avoid material deformation.
Identify How/When Recall Condition was Corrected in Production :	NA

Recall Schedule :

Description of Recall Schedule :	Notification to dealers is expected to occur on April 19, 2022. Mailing of owner notification letters is expected to begin June 06, 2022 and is expected to be completed by June 10th 2022
Planned Dealer Notification Date :	APR 19, 2022 - APR 19, 2022
Planned Owner Notification Date :	JUN 06, 2022 - JUN 10, 2022

* NR - Not Reported