Part 573 Safety Recall Report 20V-795

Manufacturer Name : Ford Motor Company
Submission Date : DEC 17, 2020
NHTSA Recall No. : 20V-795
Manufacturer Recall No. : 20S73

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 : 29,344
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2021-2021 FORD E-Series (E350, E450)
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
Body Style : ALL
Power Train : GAS
Descriptive Information : The recalled part was introduced into production on 05/11/2019 and was taken out of production on 11/13/2020. Affected vehicles are equipped with 7.3L engines.

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 : MAY 11, 2019 - NOV 13, 2020
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Description of Defect :

Description of the Defect : Affected vehicles may contain an engine cover with mispositioned insulation on the underside of the engine cover that does not fully extend to the perimeter of the engine cover as intended. As a result, heat from the engine compartment can cause elevated temperatures on the passenger compartment surface of the engine cover. Vehicles that are modified with Stationary Elevated Idle Control (SEIC) or Battery Charge Protect (BCP) can further increase engine cover surface temperatures under certain conditions.
FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : Direct and continuous contact with certain areas of engine cover surface in the passenger compartment may cause burns to the skin of the driver or front

	seat passenger.
Description of the Cause :	The engine cover insulation design did not allow for sufficient manufacturing tolerances. Vehicle development testing did not evaluate all engine operating conditions during SEIC or BCP function.
Identification of Any Warning that can Occur :	The surface temperature of engine cover corners near the driver or front seat passenger's feet will gradually increase.

Involved Components :

Component Name 1 :	Panel
Component Description :	Engine Cover (Dog House)
Component Part Number :	F8UZ-1510312-BAA

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

September 2020
Ford engineers were asked to inspect a 2021 model year E-Series 7.3L gas ambulance for an elevated temperature concern during an unrelated fleet site visit. Thermal measurements during that visit found surface temperatures at the corners of the engine cover that exceeded Ford's requirements. Visual inspection found that the engine cover insulation did not fully extend into the engine cover corners as designed. Review of units at the vehicle assembly plant found others exhibiting similarly mispositioned engine cover insulation. The findings were brought to Ford's Critical Concern Review Group on September 24, 2020 for review.

October – November 2020
Consistent with initial temperature evaluation at the fleet, vehicle testing at Ford's test facilities found thermal measurements that exceeded Ford's requirements with mispositioned insulation. Additional investigation, found that vehicle upfitters for some of these 2021 7.3L gas engine vehicles enabled the vehicle's SEIC or BCP controls. These features are designed to elevate the engine idle speed to satisfy vehicle performance requirements for certain vehicle applications (e.g. units that require extended A/C usage, or have high electrical load demands from auxiliary equipment, etc.). Testing found that this elevated idle condition may

further increase engine cover surface temperatures under certain ambient conditions when the cooling fan is not running. Under these test conditions, the engine cover surface temperature in the occupant compartment exceeded Ford's requirements even with properly positioned insulation on the underside of the engine cover. This specific use case was discovered during this investigation and had not been tested during vehicle development.

On December 11, 2020, Ford's Field Review Committee reviewed the concern and approved a field action.

Ford is not aware of any reports of accident or injury related to this condition.

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 engine cover inspected for gaps between the rubber seal and the insulation. If gaps are present, the dealer will install engine cover insulation patches in the right hand and left hand inner lower corners of the engine cover. The dealer will also update the powertrain calibration for heat management under elevated idle conditions should a vehicle be equipped with SEIC or BCP. There will be no charge for this service. Ford is excluding reimbursement for costs because the original warranty program would provide for a free repair for this concern. Ford will forward a copy of the notification letters to dealers to the agency when available.
How Remedy Component Differs from Recalled Component :	Panels/Engine Covers (F8UZ-1510312-BAA) will have the insulation patches installed on top of the rubber seal, instead of underneath. R22 and latter powertrain calibrations increase the engine's cooling parameters while under elevated idle durring moderate ambient conditions.
Identify How/When Recall Condition was Corrected in Production :	On September 24, 2020, insulation patches were installed in the right hand and left hand inner lower corners of the engine cover on top of the rubber seal. On November 13, 2020, an updated powertrain calibration for heat management under elevated idle conditions was introduced to production should a vehicle be later equipped with SEIC or BCP.

Recall Schedule :

Description of Recall Schedule :	Notification to dealers is expected to occur on December 18, 2020.

	Mailing of owner notification letters is expected to begin February 8, 2020 and is expected to be completed by February 12, 2020.
Planned Dealer Notification Date :	DEC 18, 2020 - DEC 18, 2020
Planned Owner Notification Date :	FEB 08, 2021 - FEB 12, 2021

* NR - Not Reported