Part 573 Safety Recall Report 23V-609

Manufacturer Name : Subaru of America, Inc.
Submission Date : DEC 01, 2023
NHTSA Recall No. : 23V-609
Manufacturer Recall No. : WRM-23

Manufacturer Information :

Manufacturer Name : Subaru of America, Inc.
Address : One Subaru Drive
Camden NJ 08103
Company phone : 844-373-6614

Population :

Number of potentially involved : 8,915
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2022-2022 Subaru BRZ
Vehicle Type : LIGHT VEHICLES
Body Style : 2-DOOR
Power Train : GAS
Descriptive Information : -Description of the issue: The affected vehicles may be equipped with rear combination lamp assemblies where the turn signal may become temporarily inoperable.

-The basis for how the recall population was determined: Potentially affected vehicles were identified by tracing the affected rear combination lamp LOT number to the corresponding vehicle production records.

-How the recalled products differ from products that were not included in the recall: Vehicles not included in the recall are equipped with rear combination lamp assemblies with a larger capacitor.

The recall population includes certain 2022 model year BRZ vehicles. The number of potentially affected BRZ vehicles is 3,214.

Production Dates : JUN 30, 2021 - APR 19, 2022
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Vehicle 2 :	2022-2022 Toyota GR86
Vehicle Type :	LIGHT VEHICLES
Body Style :	2-DOOR
Power Train :	GAS
Descriptive Information :	-Description of the issue: The affected vehicles may be equipped with rear combination lamp assemblies where the turn signal may become temporarily inoperable. -The basis for how the recall population was determined: Potentially affected vehicles were identified by tracing the affected rear combination lamp LOT number to the corresponding vehicle production records. -How the recalled products differ from products that were not included in the recall: Vehicles not included in the recall are equipped with rear combination lamp assemblies with a larger capacitor. The recall population includes certain 2022 model year Toyota GR86 vehicles. The number of potentially affected Toyota GR86 vehicles is 5,701.
Production Dates :	NOV 04, 2021 - APR 20, 2022

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

Description of Defect :

Description of the Defect :	The rear turn signals may temporarily become inoperable. Headlights and brake lights are not affected by this condition.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	If the rear turn signal lamps become inoperable, other road users may not realize that the rear turn signal or the rear hazard lights have been activated, increasing the risk of a crash.
Description of the Cause :	If exposed to certain intense light sources, such as bright sunlight, back electromotive force (EMF) is generated and the circuit voltage drops. Given certain elemental variations in the rear turn signal lamp circuit, and/or vehicle input voltage instabilities, voltage may further drop below a certain threshold and the controller will detect a failure and temporarily disable the signal lamp until the voltage returns to within tolerance and the signal is cycled.
Identification of Any Warning that can Occur :	The driver will notice rapid flashing of the dashboard turn signal indicator lamp.

Involved Components :

Component Name 1 :	LENS & BODY COMPL LH
Component Description :	Left Rear Combination Lamp
Component Part Number :	84913CC021

Component Name 2 :	LENS & BODY COMPL RH
Component Description :	Right Rear Combination Lamp
Component Part Number :	84913CC031

Supplier Identification :

Component Manufacturer

Name :	Ichikoh Industries, LTD.
Address :	80 Isehara, Itado Kanagawa Foreign States 259-1192
Country :	Japan

Chronology :

December 7, 2021 – Subaru received a technical report from another market noting a system fault identified by the rapid blinking of the turn signal indicator. Subaru began a joint investigation with supplier.

April 19, 2022 – Subaru began production of vehicles with revised tail lamp assemblies after review of the circuit design determined that a specific capacitor may be undervalued when the circuit is presented with input voltage instabilities from the vehicle side.

February-May 2023 – In February 2023, Subaru received an inquiry from Transport Canada regarding a customer claim of inoperable rear turn signals while exposed to intense, direct sunlight. In early March 2023, Subaru received a similar inquiry from NHTSA. In April and May 2023, Subaru met with NHTSA and shared updates on our investigation. By May 2023, Subaru had developed an understanding of the potential failure mechanism (i.e. back EMF from intense red wave light) but had yet to gain an understanding of the potential impact of circuit tolerance variability in relation to real-world occurrences.

May – August 2023 –Subaru began a healthy part collection in order to estimate the occurrence rate of this condition when exposed to a controlled, intense, and direct source of red wave light. While the results of this study confirmed that the condition would only occur under narrow conditions, and that operation was only temporarily interrupted, it was determined that circuit variability did not exclude enough susceptible components from potential real-world occurrence if exposed to those narrow conditions.

August 24, 2023 – Out of an abundance of caution, Subaru decided to conduct a voluntary safety recall.

Through August 24, 2023, Subaru is aware of 2 non-dealer Subaru field reports and 2 warranty claims for Subaru vehicles in the U.S. market related to the condition described in this report.

Subaru is not aware of any reports involving crashes or injuries resulting from this condition.

Description of Remedy :

Description of Remedy Program :	For all affected vehicles, dealers will replace both rear combination lamp assemblies with assemblies containing the improved circuit. The manufacturer will provide reimbursement to owners for repairs according to the respective general plan submitted to NHTSA.
How Remedy Component Differs from Recalled Component :	The remedy components are produced with a larger value capacitor in the rear turn signal circuit, eliminating the effect of back EMF.
Identify How/When Recall Condition was Corrected in Production :	Subaru began assembling vehicles with improved rear combination lamp assemblies on April 19, 2022.

Recall Schedule :

Description of Recall Schedule :	Dealer notification occurred on September 1, 2023 Interim owner notification occurred October 27, 2023 Final owner notification is expected to occur by January 15, 2024
Planned Dealer Notification Date :	SEP 01, 2023 - SEP 01, 2023
Planned Owner Notification Date :	JAN 15, 2024 - JAN 15, 2024

* NR - Not Reported