

# Part 573 Safety Recall Report

# 21V-800

**Manufacturer Name :** Volvo Car USA, LLC**Submission Date :** OCT 14, 2021**NHTSA Recall No. :** 21V-800**Manufacturer Recall No. :** R10136**Manufacturer Information :**

Manufacturer Name : Volvo Car USA, LLC

Address : 270 Three Point Drive  
Ridgeville SC 29472

Company phone : 201-768-7300

**Population :**

Number of potentially involved : 194,546

Estimated percentage with defect : 100 %

**Vehicle Information :**

Vehicle 1 : 2001-2007 VOLVO V70

Vehicle Type : LIGHT VEHICLES

Body Style : STATIONWAGON

Power Train : GAS

**Descriptive Information :** Volvo has identified, if the air bag inflator propellant tablets are subjected to elevated moisture levels and frequent high inflator temperatures, the tablets can start to decay and form dust particles. This localization of moisture leads to volumetric changes of the tablets surface creating dust over time. Dust increases burn surface area and thereby burn rate. Higher burn rate can result in higher combustion chamber pressure and risk of inflator rupture. This condition could render the driver to be struck by fragments of metal from the inflator. Total of 194,546 vehicles.

Production Dates : JAN 10, 2000 - SEP 15, 2007

VIN Range 1 : Begin : YV1SW53DX11001259 End : YV1SW614982690996  Not sequential

Vehicle 2 : 2001-2007 VOLVO XC70

Vehicle Type : LIGHT VEHICLES

Body Style : STATIONWAGON

Power Train : GAS

**Descriptive Information :** Volvo has identified, if the air bag inflator propellant tablets are subjected to elevated moisture levels and frequent high inflator temperatures, the tablets can start to decay and form dust particles. This localization of moisture leads to volumetric changes of the tablets surface creating dust over time. Dust increases burn surface area and thereby burn rate. Higher burn rate can result in higher combustion chamber pressure and risk of inflator rupture. This condition could render the driver to be struck by fragments of metal from the inflator. Total of 194,546 vehicles.

Production Dates : FEB 22, 2000 - MAY 04, 2007

VIN Range 1 : Begin : YV1SZ58D911000166 End : YV1SZ595771288669  Not sequential

## Description of Defect :

Description of the Defect : When exposed to high temperatures, moisture leaves the tablet and when cooled down is absorbed and accumulated on the tablets surface. This localization of moisture leads to volumetric changes of the tablets surface creating dust over time. Dust increases burn surface area and thereby burn rate. Higher burn rate can result in higher combustion chamber pressure and risk of inflator rupture. Deviation has been identified through component testing at the inflator manufacturer (ZF) and analysis of field return parts investigated together with the inflator manufacturer (ZF) and NHTSA. Volvo Cars investigations have identified an issue regarding the driver air bag. In the event of a crash where the driver airbag is activated, fragments of the inflator inside the air bag may, in certain cases, project out and in worst case strike you, potentially resulting in serious injury or death. Volvo Cars centrally has received and is aware of one rupture incident. That one rupture incident resulted in a fatality report related to this condition. ZF Group Manufacturer of the Inflator.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : In the event of a crash with a driver airbag activation where a rupture occurs the driver might be struck by fragments from the inflator potentially resulting in serious injury or death.

Description of the Cause : Driver airbags containing FG2 Twin inflators with 5AT 148 N propellant. Propellant decay over time in certain conditions potentially resulting in critical inflator combustion pressures. If the propellant tablets are subjected to elevated moisture levels and frequent high inflator temperatures, the tablets can start to decay and form dust particles. When exposed to high temperatures, moisture leaves the tablet and when cooled down is absorbed and accumulated on the tablets surface. This localization of moisture leads to volumetric changes of the tablets surface creating dust over time. Dust increases burn surface area and thereby burn rate. Higher burn rate can result in higher combustion chamber pressure and risk of inflator rupture.

Identification of Any Warning that can Occur : Inflator exposed to critical environments (hot and humid) frequently during its lifetime are at highest risk. Sufficient propellant degradation needs to be present – depending on customer usage, climate factors and vehicle parameters. In the event of a crash with a driver airbag activation where a rupture occurs the driver might be struck by fragments from the inflator. Which may cause serious injury or death.

## Involved Components :

Component Name 1 : Driver Air Bag Assembly

Component Description : Driver air bag assembly with FG2 twin inflator containing 5AT 148N

Component Part Number : NR

## Supplier Identification :

### Component Manufacturer

Name : AutoLiv

Address : 1320 Pacific Drive

Auburn Hills Michigan 48326

Country : United States

## Chronology :

6.18.2019 VCUSA legal received Attorney letter for alleged rupture (Hudson); 8.28.2019 Volvo/ZF/NHTSA joint Hudson Vehicle Inspection; 9.10.2019 Volvo/ZF/NHTSA joint technical meeting; 9.20.2019 Volvo/ZF/NHTSA joint technical meeting; 9.26.2019 Volvo/ZF/NHTSA joint technical meeting; 10.25.2019 Volvo/ZF/NHTSA joint technical meeting; 01.23.2020 Volvo/ZF/NHTSA joint technical meeting; 03.26.2020 Volvo/ZF/NHTSA joint technical meeting; 6.4.2020 Volvo/ZF/NHTSA joint technical meeting; 8.27.2020 Volvo/ZF/NHTSA joint technical meeting; 10.20.2020 NHTSA requested meeting - FG2-Twin Discussion; 10.28.2020 NHTSA requested meeting - FG2-Twin Decision; 12.3.2020 Volvo rollout plan presented to NHTSA; 02.11.2021 Volvo/ZF/NHTSA joint technical meeting; 03.18.2021 Volvo/ZF/NHTSA joint technical meeting; 07.01.2021 Volvo/ZF/NHTSA joint technical meeting; 10.11.2021 Condition considered as critical by Critical Concern Management Team; 10.13.2021 Field Action decision confirmed by Volvo Car Corporation; 10.14.2021 Implementation date; Condition was detected by Market. Number of vehicle reports with the condition reported to Volvo Cars from National Sales Company, 1 law suit case.

## Description of Remedy :

Description of Remedy Program : To remedy the concern vehicles, Volvo Cars will replace the driver air bag at no charge to the customer.

How Remedy Component Differs from Recalled Component : Driver air bag with a modern state-of-the-art propellant/inflator.

Identify How/When Recall Condition was Corrected in Production : Vehicles are no longer in production. Deviation has been identified through component testing at the inflator manufacturer (ZF) and analysis of field return parts investigated together with the inflator manufacturer (ZF) and NHTSA.

**Recall Schedule :**

Description of Recall Schedule : REMEDY NOTICE

Planned Dealer Notification Date : OCT 14, 2021 - OCT 14, 2021

Planned Owner Notification Date : DEC 14, 2021 - DEC 14, 2021

\* NR - Not Reported