

# Part 573 Safety Recall Report

## 20E-049

**Manufacturer Name :** Allison Transmission, Inc.**Submission Date :** JUL 27, 2020**NHTSA Recall No. :** 20E-049**Manufacturer Recall No. :** NR**Manufacturer Information :****Manufacturer Name :** Allison Transmission, Inc.**Address :** One Allison Way  
Indianapolis IN 46222**Company phone :** 317-242-5000**Population :****Number of potentially involved :** 262**Estimated percentage with defect :** 1 %**Equipment Information :****Brand / Trade 1 :** Allison Transmission, Inc**Model :** H 40 EP Drive Unit**Part No. :** 29540697**Size :** N/A**Function :** Drive Unit**Descriptive Information :** The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 40 EP Drive Units (drive unit P/N 29540697 and 29549708) is 120.

**Production Dates :** JAN 04, 2016 - DEC 22, 2016**Brand / Trade 2 :** Allison Transmission, Inc**Model :** H 40 EP Drive Unit**Part No. :** 29549708**Size :** N/A**Function :** Drive Unit**Descriptive Information :** The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 40 EP Drive Units (drive unit P/N 29540697 and 29549708) is 120.

**Production Dates :** JAN 04, 2016 - DEC 22, 2016

Brand / Trade 3 : Allison Transmission, Inc

Model : H 50 EP Drive Unit

Part No. : 29540673

Size : N/A

Function : Drive Unit

Descriptive Information : The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 50 EP Drive Units (drive unit P/N 29540673 and 29540900) is 48.

Production Dates : JAN 04, 2016 - DEC 22, 2016

Brand / Trade 4 : Allison Transmission, Inc

Model : H 50 EP Drive Unit

Part No. : 29540900

Size : N/A

Function : Drive Unit

Descriptive Information : The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 50 EP Drive Units (drive unit P/N 29540673 and 29540900) is 48.

Production Dates : JAN 04, 2016 - DEC 22, 2016

Brand / Trade 5 : Allison Transmission, Inc

Model : H 40 EP Cert Drive Unit

Part No. : 29557038

Size : N/A

Function : Drive Unit

Descriptive Information : The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 40 EP Cert Drive Units (drive unit P/N 29557038 and 29557036) is 9.

Production Dates : JAN 04, 2016 - DEC 22, 2016

Brand / Trade 6 : Allison Transmission, Inc

Model : H 40 EP Cert Drive Unit

Part No. : 29557036

Size : N/A

Function : Drive Unit

Descriptive Information : The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 40 EP Cert Drive Units (drive unit P/N 29557038 and 29557036) is 9.

Production Dates : JAN 04, 2016 - DEC 22, 2016

Brand / Trade 7 : Allison Transmission, Inc

Model : H 50 EP Cert Drive Unit

Part No. : 29556926

Size : N/A

Function : Drive Unit

Descriptive Information : The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 50 EP Cert Drive Units (drive unit P/N 29556926 and 29556925) is 85.

Production Dates : JAN 04, 2016 - DEC 22, 2016

Brand / Trade 8 : Allison Transmission, Inc

Model : H 50 EP Cert Drive Unit

Part No. : 29556925

Size : N/A

Function : Drive Unit

Descriptive Information : The subject drive units are equipped with certain C1/C2 pressure switches (P/N 29506484 for the pressure switch only) containing weak material.

Population of H 50 EP Cert Drive Units (drive unit P/N 29556926 and 29556925) is 85.

Production Dates : JAN 04, 2016 - DEC 22, 2016

**Description of Defect :**

Description of the Defect : Due to an out-of-specification material condition at the pressure switch supplier, the plastic molding (Ultem 2310) used in the switch assembly may fracture. In addition, on some units, machining debris may contaminate the valve body internal passages affecting valve operation. Either condition may result in a failure of the pressure switch in either an open or closed state.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the pressure switch fails in the closed position, the failure will trigger a diagnostic trouble code. In some circumstances, switch failures in the closed position can potentially disable propulsion at any time during a drive cycle without the ability to regain propulsion. At least one transit bus customer reported experiencing loss of propulsion while traveling through an intersection. In such circumstances, there is an increased risk of a vehicle accident or risk related to offloading passengers in the roadway.

Description of the Cause : The recalled pressure switch assembly units were manufactured by a third party with plastic molding (Ultem 2310) in the switch assembly made of 100% recycled, regrind material (rather than virgin material as specified in Allison Transmission Inc.'s design print) that resulted in a weak assembly.

Identification of Any Warning that can Occur : In some circumstances, shortly before the failure, a malfunction indicator lamp (MIL) may be triggered.

**Involved Components :**

Component Name : C1/C2 Pressure Switch

Component Description : Pressure Switch

Component Part Number : 29506484

**Supplier Identification :****Component Manufacturer**

Name : Honeywell Sensing and Control

Address : Av Parque Industrial  
Ciudad Juarez Foreign States 32630

Country : Mexico

## Chronology :

6/5/2020: Allison Transmission Inc.'s (ATI's) routine review of warranty data indicated an elevated number of claims for subject transmissions manufactured in 2016.

6/5/2020 through 7/7/2020: ATI investigated the warranty claims and determined that the warranty issues involved the same pressure switch that was the subject of a previous ATI recall, NHTSA Recall No. 18E-085.

7/8/2020: Due to the common component and number of warranty claims, ATI's Field Performance Evaluation Review Committee (FPERC) reviewed the issue and made its recommendation to ATI's Executive Field Action Decision Committee (EFADC).

7/10/2020: Based on the information developed during the investigation, ATI – through the EFADC – determined that the condition constituted a safety-related defect. No accidents or injuries have been reported related to this condition.

## Description of Remedy :

**Description of Remedy Program :** ATI will replace the C1 and C2 pressure switches in the affected drive units. Pursuant to 49 CFR 577.11 (e), ATI requests that it be exempt from providing notification of a reimbursement plan. Pre-notification product failures would have been addressed under the terms of the manufacturer's warranty or goodwill

**How Remedy Component Differs from Recalled Component :** The plastic mold used for the defective switches (P/N 29506484) used 100% recycled, regrind materials. The replacement switches use 100% virgin resin as required in the design print.

**Identify How/When Recall Condition was Corrected in Production :** Units produced on and after June 5, 2018 used pressure switches manufactured with 100% virgin resin materials.

## Recall Schedule :

**Description of Recall Schedule :** The timing of owner notification will be determined in consultation with the affected OEMs. In cases where ATI will contact owners, ATI is prepared to commence owner notification on the dates noted.

**Planned Dealer Notification Date :** AUG 10, 2020 - AUG 17, 2020

**Planned Owner Notification Date :** AUG 10, 2020 - AUG 17, 2020

## Purchaser Information :

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : New Flyer Industries of Canada ULC

Address : 711 Kernaghan Avenue  
Winnipeg 00 R2C 3T4

Country : CA

Company Phone : 2042246706

Name : Motor Coach Industries, Limited

Address : 1475 Clarence Avenue  
Winnipeg 00 R3T 1T5

Country : CA

Company Phone : 2042874867

Name : Gillig LLC

Address : 451 Discovery Drive  
Livermore CA 94551-9534

Country : US

Company Phone : 5102645075

Name : Nova Bus, Division of Volvo Group Canada

Address : 1000 Industriel Boulevard  
Saint-Eustache 00 J7R 5A5

Country : CA

Company Phone : 4388431545

\* NR - Not Reported