

# Part 573 Safety Recall Report

# 17V-201

**Manufacturer Name :** Hino Motors Sales U.S.A., Inc.**Submission Date :** AUG 31, 2017**NHTSA Recall No. :** 17V-201**Manufacturer Recall No. :** AA6N0**Manufacturer Information :**

Manufacturer Name : Hino Motors Sales U.S.A., Inc.

Address : 41280 Bridge Street

Novi MI 48375

Company phone : 248-699-9300

**Population :**

Number of potentially involved : 1,831

Estimated percentage with defect : 100 %

**Vehicle Information :**

Vehicle 1 : 2013-2017 HINO XFC710L, XFC720L, XFC730L, XFC740L

Vehicle Type : BUSES, MEDIUM &amp; HEAVY VEHICLES

Body Style : ALL

Power Train : HYBRID ELECTRIC

**Descriptive Information :** On March 17, 2017, Hino Motors Ltd. determined that a safety-related defect exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR part 573 Defect and Noncompliance Reports.

Production Dates : AUG 27, 2011 - DEC 27, 2016

VIN Range 1 : Begin : JHHLPL1HXCK001001 End : JHHSPM2HXHK002012  Not sequentialVIN Range 2 : Begin : JHHLPL1HXCK001001 End : JHHSPM2HXHK002012  Not sequentialVIN Range 3 : Begin : JHHLPL1HXCK001001 End : JHHSPM2HXHK002012  Not sequential**Description of Defect :**

**Description of the Defect :** The clutch drum spline of the front module of the Hybrid Vehicle (HV) motor may wear out. If the clutch drum spline wears out, the vehicle will lose the ability to move under its own power.

FMVSS 1 : NR

FMVSS 2 : NR

**Description of the Safety Risk :** If the clutch drum spline wears out, the vehicle will lose the ability to move under its own power.

This condition could increase the risk of a crash in the worst case.

**Description of the Cause :** Because the wear resistance of the drum spline is insufficient, the drum spline will deteriorate due to torque variation caused by sympathetic vibration while driving, or as a result of PTO operation.

**Identification of Any Warning that can Occur :** If the clutch drum spline wears out, the vehicle will lose the ability to move under its own power.

## Supplier Identification :

### Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

## Chronology :

Feb. 6, 2015

Hino started a recall for replacement of the front module on hybrid vehicles; the new front module contained a strengthened output shaft.

Sep. 22, 2016

Hino received information that a hybrid vehicle, to which the front module recall was implemented, was not able to move, Hino inspected the vehicle. As a result, Hino assumed that there was a possibility of a front module fault and collected the parts for examination.

Oct. 5, 2016

Hino issued service alert SA-16-026 to facilitate the collection of parts for evaluation.

Oct., 2016

The supplier examined the collected parts. As a result, it was determined that the drum spline of the front module was worn out.

Oct., 2016

The supplier performed duplication testing to identify the failure mode.

Oct. to Nov., 2016

The supplier worked on measures to increase wear resistance of the drum spline, created parts with an increased wear resistance, and performed durability testing.

Dec. 22, 2016

Because there was a gap between the assumed mechanism causing the failure, and the actual condition of failures in the field, and the cause had not been clarified, Hino decided to examine the failures in the field. Although the cause was not clear, Hino decided to increase the hardness of the drum spline as a provisional measure and monitor the results.

Jan.to Feb., 2017

Hino performed vehicle examination in the field, and began to monitor the effectiveness of the drum spline with increased hardness.

Mar.17, 2017

Hino continued evaluating the effectiveness of the increased hardness and the quality in mass-production. Under this condition, Hino held a Safety Committee meeting and determined that a safety-related defect existed.

## Description of Remedy :

Description of Remedy Program : The wear resistance of the drum spline was increased as a provisional measure. The effectiveness and the quality in mass-production are being currently evaluated.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : Hino increased the hardness of the drum spline beginning Dec. 22, 2016 as a provisional measure.

## Recall Schedule :

Description of Recall Schedule : An interim notification letter will be issued to customers by May 22, 2017. While the effectiveness of increased hardness of the drum spline is in the process of being evaluated, Hino is preparing for the HV motor to be equipped with the improved drum spline. As soon as the evaluation is completed and an improved HV motor and the improved drum spline has been made available for installation, final notification will be issued to customers and the HV motors without the improved drum spline will be replaced.

Planned Dealer Notification Date : OCT 31, 2017 - OCT 31, 2017

Planned Owner Notification Date : OCT 31, 2017 - OCT 31, 2017

\* NR - Not Reported