OMB Control No.: 2127-0004

Part 573 Safety Recall Report

Manufacturer Name : XL Hybrids INC Submission Date : FEB 15, 2019 NHTSA Recall No.: 19V-098 Manufacturer Recall No.: NR

Manufacturer Information :

Manufacturer Name : XL Hybrids INC Address: 145 Newton St. Boston MA 02135 Company phone: 6176488500

Vehicle Alterer Information :

Vehicle 1: 2013-2018 Isuzu Reach Descriptive Information : XL has determined that all 94 Isuzu Reach vehicles at Federal Express equipped with its electric hybrid system constitutes the recall population. No other Isuzu Reach vehicles with XL's hybrid system technology exist in the field. Production Dates : JAN 01, 2015 - FEB 15, 2019

Description of Defect :

Description of the Defect :	During driving, Isuzu Reach vehicles with XL's electric hybrid system may experience a failure of the Carden joint on the front drive-shaft.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	The front drive-shaft could potentially separate from these Isuzu Reach vehicles, and fall onto the roadway.
Description of the Cause :	XL has determined that regular maintenance is required of the double Carden joint on the front drive-shaft, in the form of lubrication with grease. When the Carden joint is not properly lubricated, the centering mechanism can fail leading to total failure of the drive-shaft.
5 0	Typically, a failure of the double Carden joint would be preceded by substantial noise and/or vibration

Supplier Identification :

Component Manufacturer

Name: NEAPCO Address: 38900 Hills Tech Drive

The information contained in this report was submitted pursuant to 49 CFR §573



19V-098

Population:

Number of potentially involved : 94 Estimated percentage with defect : 100 %

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Farmington Hills MICHIGAN 48331 Country : United States

Chronology :

On or around July 2018, XL learned from Federal Express that one of Federal Express' Isuzu Reach vehicles equipped with XL's electric hybrid system experienced a failure. XL did not have reason to know or assume at that time that the front drive-shaft had caused the failure. After learning of a second incident in September 2018 involving another Isuzu Reach vehicle in Federal Express' fleet, XL launched an engineering effort to see if its electric hybrid system could have caused or contributed to the issue. XL determined subsequently that the double Carden joint on the front drive-shaft of the vehicles had malfunctioned due to lack of proper lubrication. XL promptly issued technical service bulletins urging a lubrication protocol in November 2018 to this limited population, while it continued its engineering investigation and analysis of the defect and potential remedies. XL ultimately determined that a new sealed design for the driveshaft, that would not require grease lubrication, was the best and safest option, and began to arrange for that product and prepare its 573 filing. Meanwhile, on February 13, 2019, XL discussed the issue and proposed remedy with NHTSA representatives.

Description of Remedy :

Description of Remedy Program :	XL will replace the current front drive-shafts on all subject Isuzu Reach vehicles with a drive-shaft that does not need grease lubrication, at no cost to the customer. In the interim time period, XL is in frequent communication with Federal Express about the importance of adhering to its maintenance instructions as set forth in the technical service bulletins issued in November 2018.
5 1	The replacement front drive-shaft will include a totally sealed double Carden joint that does not require any preventive maintenance.
Identify How/When Recall Condition was Corrected in Production :	

Recall Schedule :

Description of Recall Schedule : XL has been in regular communication with Feder this drive-shaft issue. Federal Express is aware of replace the current front drive-shafts with ones th lubrication. XL intends to start this process within and hopes to complete the replacements as quickl later than the end of 2019. The Company intends

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	notification letters within 30 days, rather than 60 days given the
	relatively small vehicle population.
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	NR - NR

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 : Address :

Country : Company Phone :

* NR - Not Reported

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