

**DEFECT INFORMATION REPORT**

*REVIEWED BY:  
JOHN TURLEY  
DEC-20-2018  
John Turley*

573.6(c)(1)

**Name of manufacturer:** Honda Motor Co., Ltd.

**Manufacturer's agent:** John Turley  
American Honda Motor Co., Inc.  
1919 Torrance Blvd.  
Torrance, CA 90501-2746

573.6(c)(2)

**Identification of potentially affected vehicles:**

<u>Make/Model</u>	<u>Description</u>	<u>Dates of Manufacture</u>
Honda Clarity Fuel Cell	2017 model year	11/17/2016 to 12/28/2017
Honda Clarity Fuel Cell	2018 model year	12/29/2017 to 02/28/2018

**Description of the basis for the determination of the recall population:**

The recall population was determined based on manufacturing records. The production range reflects all possible vehicles that could potentially experience the problem.

**Description of how the vehicles being recalled differ from similar vehicles not included in the recall:**

All model year 2017 and 2018 Clarity Fuel Cell vehicles are included in the recall.

573.6(c)(3)

**Total number of potentially affected vehicles:** 1,082

<u>Make/Model</u>	<u>Model Year</u>	<u>Number of Vehicles</u>
Honda Clarity Fuel Cell	2017	911
Honda Clarity Fuel Cell	2018	171

573.6(c)(4)

**Percentage of affected vehicles that contain the defect:** 100%

573.6(c)(5)

**Defect description:**

The software programming remedy for NHTSA Recall 18V-068 did not completely countermeasure the potential defect of motive power loss due to misinterpretation of a small decrease in cell voltage. As a result, the Fuel Cell (FC)-ECU could misinterpret a small cell voltage drop as the deterioration of the fuel cell stack possibly causing the warning indicator to illuminate. If the warning indicator illuminates, the vehicle may enter EV limp mode or may lose motive power and come to a stop increasing the risk of a crash.

573.6(c)(6)

**Chronology:**

January 25, 2018

Honda submitted NHTSA recall 18V-068.

May 31, 2018

Honda received the first report of a vehicle losing motive power since NHTSA recall 18V-068 was launched and began an investigation.

July to September 2018

Honda received the second and third report of a vehicle losing motive power. In the three reported failures, a pair of the vehicle's fuel cell stack end part cells exhibited slight deterioration in the cell membrane separating the hydrogen and oxygen electrode, resulting in a small cell voltage decrease.

October to November 2018

Honda learned that the previous countermeasure software for NHTSA recall 18V-068 did not appropriately detect the slight deterioration in the pair of end part cells. Rather, the software was designed to measure cell membrane deterioration in an individual cell. If cell membrane deterioration in a pair of cells was insufficient in meeting the detection threshold standard, the cumulative small drop in voltage from the pair of cells could be misinterpreted as fuel cell stack deterioration and potentially result in a loss of motive power.

December 13, 2018

Honda determined that a defect related to motor vehicle safety existed and decided to conduct a safety recall.

As of December 13, 2018 Honda has received three warranty claims, three field reports, and no reports of crashes or injuries related to this issue.

573.6(c)(8)(i)

**Program for remedying the defect:**

Registered owners of all affected vehicles will be contacted by mail and asked to take their vehicle to a Honda automobile dealer. The dealer will reprogram the FC-ECU with software programming designed to detect small cell voltage drops, provide warning in the instrument panel of reduced motive power, and to see a Honda dealer. Vehicle operation at reduced motive power should last up to one month before the vehicle could potentially lose all motive power due to misinterpretation of a small cell voltage drop as the deterioration of the fuel cell stack.

Because the limited new vehicle warranty on all affected vehicles would have provided a free repair for the problem addressed by this recall, without any payment by the owner, reimbursement for pre-notification repairs will not be offered.

573.6(c)(8)(ii)

**The estimated date to start notification to dealers:** December 21, 2018

**The estimated date to start notifications to owners:** February 14, 2019

573.6(c)(9)

**Representative copies of all notices, bulletins and other communications:**

A copy of the dealer service bulletin, the final owner notification letter and other dealer communication will be submitted to your office as soon as possible.

573.6(c)(10)

**Proposed owner notification letter submission:**

A draft of the owner notification letter will be submitted to your office as soon as possible.

573.6(c)(11)

**Manufacturer's campaign number:** A3O