

HONDA

American Honda Motor Co., Inc.
1919 Torrance Boulevard
Torrance, CA 90501-2746
Phone (310) 783-2000

December 17, 2020

Mr. Jeffrey Giuseppe
Associate Administrator for Enforcement
National Highway Traffic Safety Administration
Attn: Recall Management Division (NVS-215)
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Re: Part 573, Defect Information Report
2020 Model Year Honda Accord Hybrid
2020 Model Year Honda CR-V Hybrid
2020-2021 Model Year Honda Insight
Power Converter Unit / DC-DC Converter

Dear Mr. Giuseppe:

In accordance with the National Traffic and Motor Vehicle Safety Act and 49 CFR Part 573 Defect and Noncompliance and Responsibility Reports, Honda is submitting the enclosed Defect Information Report regarding a safety recall of certain 2020-2021 model year Honda Accord Hybrid, CR-V Hybrid, and Insight vehicles to address a defect with the power converter unit / DC-DC converter.

If you have any questions about this report, please feel free to contact me.

Sincerely,

AMERICAN HONDA MOTOR CO., INC.



Jeff Chang
Senior Manager
Product Regulatory Office

JC:wvt

Defect Information Report

573.6(c)(1)

Name of manufacturer: Honda Manufacturing of Indiana, LLC
Honda of America Mfg., Inc.

Manufacturer's agent: Jeff Chang
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>Model Year</u>	<u>Dates of Manufacture</u>	<u>Number of Vehicles</u>
Honda Accord Hybrid	2020	10/21/2019 to 06/11/2020	10,385
Honda CR-V Hybrid	2020	01/16/2020 to 06/05/2020	4,728
Honda Insight	2020	10/21/2019 to 05/13/2020	12,601
Honda Insight	2021	05/18/2020 to 06/01/2020	124

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

The recall population was determined based on manufacturing records. The manufacturing 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:

Only certain vehicles with a power converter unit (PCU) installed that contains transistors with a high concentration of dopant injections are included in the recall. Similar vehicles not included in the recall had PCUs installed that contain transistors with an appropriate concentration of dopant injections.

Identification of affected component:

Component:	PCU Assy.			
Part No.:	Accord Hybrid	2020	1B000-6C2-A21	1B000-6C2-C21
	CR-V Hybrid	2020	1B000-5RD-A02	
	Insight	2020	1B000-6L2-A21	1B000-6L2-C21
		2021	1B000-6LS-A41	1B000-6LS-C41

Country of Origin: Japan
Manufacturer: Mitsubishi Electric Corporation

573.6(c)(3)

Total number of potentially affected vehicles: 27,838

573.6(c)(4)

Percentage of affected vehicles that contain the defect: 2%

573.6(c)(5)

Defect description:

The DC-DC converter on certain PCUs contain transistors with a high concentration of dopant injections. The increased doping, along with cold ambient temperatures, could amplify the voltage output and shut down the DC-DC converter due to overvoltage, which prevents the 12-volt battery from recharging. If vehicle operation continues after illumination of the 12-volt battery system charging indicator, a depleted 12-volt battery can restrict or eliminate motive power, increasing the risk of a crash.

573.6(c)(6)

Chronology:

November 2019 to March 2020

Honda launched investigations in the U.S. and several global markets that received reports of DC-DC converter failure. The supplier's assembly processes were evaluated, and Honda found that there were no specifications for the application of dopant injections to the transistors on the DC-DC converter. The supplier began monitoring for high concentrations of dopant injections in the transistors, which Honda identified to be the cause of the increased voltage in the DC-DC converter in low ambient temperatures. The increased voltage inadvertently activated a test circuit only used during vehicle manufacturing, which amplified the DC-DC converter voltage output. Voltage output above the system's threshold could result in overvoltage and shut down the DC-DC converter.

July to November 2020

Honda examined the multitude of scenarios potentially occurring due to DC-DC converter failure and the inability to recharge the 12-volt battery. The failure mode was also confirmed during re-creation testing in different hybrid electric vehicle models installed with the same PCU and DC-DC converter.

December 10, 2020

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

As of December 10, 2020, Honda has received 53 warranty claims, 65 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 an authorized Honda dealer. The dealer will update the PCU software program for free. Owners who have paid to have these repairs completed at their own expense will be eligible for reimbursement, in accord with the recall reimbursement plan on file with NHTSA.

573.6(c)(8)(ii)

The estimated date to start notification to dealers: December 18, 2020

The estimated date to start notifications to owners: February 25, 2021

573.6(c)(10)

Representative copies of all notices, bulletins and other communications:

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

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: K9E