

Part 573 Safety Recall Report

20V-798

Manufacturer Name : Honda (American Honda Motor Co.)**Submission Date :** DEC 17, 2020**NHTSA Recall No. :** 20V-798**Manufacturer Recall No. :** K9E**Manufacturer Information :****Population :**

Manufacturer Name : Honda (American Honda Motor Co.)

Number of potentially involved : 27,838

Address : 1919 Torrance Blvd.

Estimated percentage with defect : 2 %

Torrance CA 90501

Company phone : 1-888-234-2138

Vehicle Information :

Vehicle 1 : 2020-2020 Honda CR-V Hybrid

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : The recall population was determined based on manufacturing records. The manufacturing range reflects all possible vehicles that could potentially experience the problem. 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. The number of affected units is 4,728.

Production Dates : JAN 06, 2020 - JUN 05, 2020

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 2 : 2020-2020 Honda Accord Hybrid

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : The recall population was determined based on manufacturing records. The manufacturing range reflects all possible vehicles that could potentially experience the problem. 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. The number of affected units is 10,385.

Production Dates : OCT 21, 2019 - JUN 11, 2020

VIN Range 1 : Begin :

NR

End : NR

 Not sequential

Vehicle 3 : 2020-2020 Honda Insight

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : The recall population was determined based on manufacturing records. The manufacturing range reflects all possible vehicles that could potentially experience the problem. 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. The number of affected units is 12,601.

Production Dates : OCT 21, 2019 - MAY 13, 2020

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 4 : 2021-2021 Honda Insight

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : The recall population was determined based on manufacturing records. The manufacturing range reflects all possible vehicles that could potentially experience the problem. 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. The number of affected units is 124.

Production Dates : MAY 18, 2020 - JUN 01, 2020

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : 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.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : 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.

Description of the Cause : NR

Identification of Any Warning NR
that can Occur :

Involved Components :

Component Name 1 : PCU Assy.

Component Description : Accord Hybrid

Component Part Number : 1B000-6C2-A21

Component Name 2 : PCU Assy.

Component Description : Accord Hybrid

Component Part Number : 1B000-6C2-C21

Component Name 3 : PCU Assy.

Component Description : CR-V Hybrid

Component Part Number : 1B000-5RD-A02

Component Name 4 : PCU Assy.

Component Description : Insight

Component Part Number : 1B000-6L2-A21

Component Name 5 : PCU Assy.

Component Description : Insight

Component Part Number : 1B000-6L2-C21

Component Name 6 : PCU Assy.

Component Description : Insight

Component Part Number : 1B000-6LS-A41

Component Name 7 : PCU Assy.

Component Description : Insight

Component Part Number : 1B000-6LS-C41

Supplier Identification :

Component Manufacturer

Name : Mitsubishi Electric Corporation

Address : 1-40 Hirohataku

Himeji, Hyogo 671-1123

Country : NR

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.

Description of Remedy :

Description of Remedy Program : 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.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : NR

Recall Schedule :

Description of Recall Schedule : Dealer notification is expected to begin on or around December 18, 2020. Owner notification is expected to begin on or around February 25, 2021.

Planned Dealer Notification Date : DEC 18, 2020 - NR

Planned Owner Notification Date : FEB 25, 2021 - NR

* NR - Not Reported