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HONDA

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

August 11, 2022

NEF-101tph
PE22-003

Ms. Sharon Yukevich, Chief
Vehicle Defects Division - D
Office of Defects Investigation
U.S. Department of Transportation
National Highway Traffic Safety Administration
1200 New Jersey Ave., SE
Washington, DC 20590

Dear Ms. Yukevich:

In reply to your letter dated June 14, 2022 requesting certain information in support of ODI's open Preliminary Evaluation (PE22-003) to investigate allegations of the engagement of the Collision Mitigation Braking System (CMBS) with no imminent collision hazard present in certain model year (MY) 2018-2019 Honda Accord and 2017-2019 Honda CR-V vehicles manufactured by American Honda Motor Co., Inc., we submit the following responses for American Honda Motor Co., Inc. (HONDA).

Pursuant to 49 U.S.C. section 30166, please find below numbered responses to each of your information requests:

1. **State, by model and model year, the number of subject vehicles and peer vehicles Honda has <u>manufactured</u> for sale or lease in the United States. Separately, for each <u>subject vehicle</u> manufactured to date by Honda, state the following:**
   a. **Vehicle Identification Number (17-character VIN);**
   b. **Make;**
   c. **Model;**
   d. **Model Year;**
   e. **Subject system trade / trim name, part number and design version installed as original equipment;**
      i. **Software version;**
      ii. **Firmware version;**
      iii. **Hardware version;**
   f. **Date of manufacture (MM/DD/YYYY);**
   g. **Date warranty coverage commenced (MM/DD/YYYY); and**
   h. **The State in the United States where the vehicle was originally sold or leased or delivered for sale or lease (postal abbreviation).**

   Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA."

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Response:

The number of subject and peer vehicles Honda has manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions are provided in the table below:

[[

	Model	Model Year	Number of Units Manufactured
Subject Vehicles	ACCORD	2018	
		2019	
	CR-V	2017	
		2018	
		2019	
Peer Vehicles	RDX	2017	
		2018	
	Civic	2017	
		2018	
		2019	
	PILOT	2017	
		2018	
		2019	
	PASSPORT	2019	

]]

Source: Honda database for market analysis (CoReMQ)
Last date the information was gathered: 8/4/2022

For data elements "a" through "h" of Request 1: Please see folder R1, "PRODUCTION DATA", in the attached .zip file which contains individual files for each subject vehicle. This was done to keep files as small as possible to make working with the data less cumbersome for you.

2. **State the number of each of the following, received by Honda, or of which Honda is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:**
   a. **Consumer complaints, including those from fleet operators;**
   b. **Field reports, including dealer field reports;**
   c. **Reports involving a crash, injury, or fatality;**
   d. **Property damage claims;**
   e. **Third-party arbitration proceedings, both pending and closed, where Honda is or was a party to the arbitration; and**
   f. **Lawsuits, both pending and closed, in which Honda is or was a defendant or codefendant.**

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For subparts "a" through "f" state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report, and a consumer complaint).

In addition, for items "c" through "f," provide a summary description of the alleged problem and causal and contributing factors and Honda's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

Response:

[[

Report Type/Category	Quantity (#)
a. Consumer complaints, including those from fleet operators:	[redacted]
b. Field reports, including dealer field reports:	
c. Reports involving a crash*, injury or fatality:	
d. Property damage claims*:	
e. Third-party arbitration proceedings where Honda is or was a party to the arbitration:	
f. Lawsuits, both pending and closed, in which Honda is or was a defendant or codefendant:	

]]* *For these subsets of the reports that involve a crash or property damage, it is not always clearly delineated in the complaint whether the crash occurred with the subject system activated. These are included in the response for completeness.*

For the summaries related to data elements "c" through "f" and for details requested for data elements "e" and "f", please see folder "R2", filename "2c-f" in the attached .zip file.

Source: Automobile Customer Service (ACS), Tech Line, Field Reports, and Honda's matter management system.
Last date the information was gathered: 8/3/2022

3. **Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:**
   a. **Honda's file number or other identifier used;**
   b. **The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);**
   c. **Vehicle owner or fleet name (and fleet contact person), email address and telephone number;**
   d. **Vehicle owner or fleet street address, city, state (postal abbreviation), and ZIP code;**
   e. **Vehicle Identification Number (17-character VIN);**
   f. **Vehicle's make, model, and model year (please use distinct fields for each data type);**

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g. **Vehicle's mileage at time of incident;**
h. **Incident date (MM/DD/YYYY);**
i. **Report or claim date (MM/DD/YYYY);**
j. **Whether a crash is alleged;**
k. **Whether property damage is alleged;**
l. **Number of alleged injuries, if any; and**
m. **Number of alleged fatalities, if any.**

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

Response:

For data elements responsive to "a" through "m": Please see folder "R3", filename "REQUEST NUMBER TWO DATA" in the attached .zip file.

Source: Automobile Customer Service (ACS), Tech Line, Field Reports, and Honda's matter management system.
Last date the information was gathered: 8/3/2022

4. **Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Honda used for organizing the documents. Describe in detail the search methods and search criteria used by Honda to identify the items in response to Request No. 2.**

Response:

Please see folder "R4", filenames "PE22-003 R4 ACS", "PE22-003 R4 Tech Line", "PE22-003 R4 FQR" and "PE22-003 R4 Legal" in the attached .zip file for copies of documents related to this request. Search methods/criteria descriptions are provided in the file "R4 Search Methods" which is also in the R4 folder.

Source: Automobile Customer Service (ACS), Tech Line, Field Reports, and Honda's matter management system.
Last date the information was gathered: 8/3/2022

5. **State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Honda to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.**

Separately, for each such claim, state the following information:

a. **Honda's claim number;**
b. **Vehicle owner or fleet name (and fleet contact person), email address and**

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telephone number;

c. Vehicle owner or fleet street address, city, state (postal abbreviation), and ZIP code;
d. Vehicle Identification Number (17-character VIN);
e. Repair date (MM/DD/YYYY);
f. Vehicle mileage at time of repair;
g. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
h. Labor operation number(s);
i. Problem code(s);
j. Diagnostic trouble code(s);
k. Replacement part number(s) and description(s);
l. Concern stated by customer;
m. Cause as stated on the repair order;
n. Correction as stated on the repair order; and
o. Additional comments, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

Response:

The total number of warranty claims that may relate to the alleged defect in the subject vehicles is summarized in the table below:

[[

	Certified Used Car	GOODWILL	NON DISCRETIONARY	Vehicle Service Contract	Total by Model/MY
ACCORD					
2018					
2019					
CR-V					
2017					
2018					
2019					
Total by claim type					

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For data elements responsive to "a" through "o": Please see folder "R5", filename "WARRANTY DATA" in the attached .zip file.

Source: Warranty Database
Last date the information was gathered: 8/8/2022

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6. **Describe in detail the search methods and search criteria used by Honda to identify the claims in response to Request No. 5, including the labor operations, problem codes, diagnostic trouble codes, part numbers and any other pertinent parameters used.**

Response:

Please see contents of folder R6 file name "Search Criteria" in the attached .zip file for Honda's response to Request 6.

Source: Warranty Database
Last date the information was gathered: 7/11/2022

7. **Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions, diagnostic trouble codes and diagnostic trouble code descriptions applicable to the alleged defect in the subject vehicles. State whether the diagnostic trouble codes are automatically reported to the warranty database electronically or manually entered into the warranty database by a claims administrator.**

Response:

There are no diagnostic trouble codes available to be triggered by the alleged defect and there are no problem codes specifically applicable to the alleged defect. Labor operation codes that dealers may use (entered manually) to be reimbursed for work performed in response to a customer claiming the alleged defect are listed and described below:

[[

Labor Operation	Description
1111E1B	[redacted]
1201G7A	
6183A1	
7381A4	
7381B5	
7381B6	
7381D4	
7381D6	
7383A0	
7383A3	
7385A2	
7453A0	
8121B4B	
831120D	
8311A5E	
9815A0A	
9815A0C	

]]

Source: Warranty Database
Last date the information was gathered: 8/5/2022

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8. **State, by make and model year, the terms of the new vehicle warranty coverage offered by Honda on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Honda offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.**

Response:

Please see below a summary of warranty coverage for the subject vehicles:

Model	Model Year	Miles Covered	Months Covered	Systems Covered	Extended Warranty Coverage Options	Number of Vehicles with Extended Warranty
ACCORD	2018	36,000	36	All	Several time and Mileage options with Zero or $100 Deductible are available	[redacted]
	2019	36,000	36	All	Several time and Mileage options with Zero or $100 Deductible are available	
CR-V	2017	36,000	36	All	Several time and Mileage options with Zero or $100 Deductible are available	
	2018	36,000	36	All	Several time and Mileage options with Zero or $100 Deductible are available	
	2019	36,000	36	All	Several time and Mileage options with Zero or $100 Deductible are available	

For a breakdown of extended warranty coverage option details, please see filename PE22-003 R8 folder R8 in the attached .zip file.

9. **Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Honda has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Honda is planning to issue within the next 120 days.**

Response:

Please see contents of folder R9 in the attached .zip file for Honda's response to Request 9. Note, corporate training material which which can not be redacted have been omitted from the non-confidential submission.

Source: Dealer and Zone office facing web portal (iN) and publications database
Last date the information was gathered: 7/20/2022

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10. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Honda. For each such action, provide the following information:

a. Action title or identifier;
b. The actual or planned start date;
c. The actual or expected end date;
d. Summary of the subject and objective of the action;
e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
f. A summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

Response:

Please see contents of folder R10 in the attached .zip file for Honda's response to Request 10.

Source: QIS Database
Last date the information was gathered: 8/3/2022

11. Describe all modifications or changes made by, or on behalf of, Honda in the design, material composition, manufacture, quality control, supply, or installation of the subject system, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

a. The date or approximate date on which the modification or change was incorporated into vehicle production;
b. A detailed description of the modification or change;
c. The reason(s) for the modification or change;
d. The part number(s) (service and engineering) of the original system;
e. The part number(s) (service and engineering) of the modified system;
f. The firmware version (service and engineering) of the original system;
g. The firmware version (service and engineering) of the modified system);
h. Whether the original unmodified system was withdrawn from production and/or sale, and if so, when;
i. When the modified system was made available as a service system; and
j. Whether the modified system can be interchanged with earlier production system.

Also, provide the above information for any modification or change that Honda is aware of which may be incorporated into vehicle production within the next 120 days.

Response:

Please see contents of folder R11 in the attached .zip file for Honda's response to Request 11.

Source: News parts list/ Drawing
Last date the information was gathered: 7/27/2022

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12. How many and what percentage of the subject and peer vehicles are equipped with the subject system? Provide overall values as well as values broken down by trim level and state the subject system availability for each trim (e.g., not available, optional, standard).

Response:

Please see contents of folder R12 in the attached .zip file for Honda's response to Request 12.

Source: News parts list/ Drawing
Last date the information was gathered: 7/27/2022

13. Describe in detail the differences that exist between the subject system hardware, firmware and/or software configuration and/or integration differences exist between the subject and peer vehicles including but not limited to:
- **a. System suppliers**
- **b. Sensor types (sonar, radar, camera, etc.)**
- **c. Sensor models**
- **d. Number of each sensor type and model installed on each vehicle**
- **e. Sensor installed position(s) and orientation(s) on each vehicle**
- **f. Sensor position and alignment tolerances**
- **g. Sensor mounting hardware**
- **h. Sensor field of view and/or beamwidth**
- **i. Sensor sightline obstructions (e.g., hood, grill) and obstructed area**
- **j. Windshield rake with respect to camera orientation**
- **k. Radar beam masking regions**
- **l. Sensor calibration**
- **m. Software and/or firmware updates to the subject system and their rollout windows**

Response:

Please see contents of folder R13 in the attached .zip file for Honda's response to Request 13.

Source: News parts list/ Drawing
Last date the information was gathered: 7/27/2022

14. Describe in detail any known subject system performance differences between the subject and peer vehicles including but not limited to:
- **a. Detection range envelope for the overall system and for each sensor type and model**
- **b. Lane boundary identification**
- **c. Vehicle and obstacle identification**
- **d. Radar system ground clutter rejection**
- **e. Radar cross section (RCS) thresholds**

Response:

Please see contents of folder R14 in the attached .zip file for Honda's response to Request 14.

Source: Part drawings
Last date the information was gathered: 7/27/2022

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15. Describe in detail the subject system behavior differences throughout its operational speed envelope including but not limited to:
- **a. At what speeds are each of the sensors active?**
- **b. At what speeds can each of the sensors trigger a braking event?**
- **c. What is the system behavior near any sensor threshold/handoff speeds?**

Response:

Please see contents of folder R15 in the attached .zip file for Honda's response to Request 15.

Source: Part drawings, Owner's Manual
Last date the information was gathered: 7/27/2022

16. Describe in detail the Honda Sensing/Acura Watch system interactions between the following named features with a focus on sensors, decision algorithms and their impact on braking behavior:
- **a. Collision Mitigation Braking System (CMBS)**
- **b. Traffic Jam Assist (TJA)**
- **c. Lane Keeping Assist System (LKAS)**
- **d. Adaptive Cruise Control (ACC)**
- **e. Road Departure Mitigation (RDM)**

Response:

Please see contents of folder R16 in the attached .zip file for Honda's response to Request 16.

Source: Drawings, New Parts List
Last date the information was gathered: 7/27/2022

17. Describe in detail any known impact of the following environmental factors on subject system performance and any known impact of these factors on the system's ability to detect performance degradation and provide adequate warning to the vehicle operator:
- **a. Time of day and ambient lighting level (i.e., brightness)**
- **b. Glare from the sun, road surface, other vehicles, heat distortion, etc.**
- **c. Precipitation and fog**
- **d. Objects with significant RCS that may be able to trigger false positive braking activation (e.g., bridges, railroad crossings, steel plates, guard rails, etc.)**
- **e. Road grade, bank, and lane curvature**

Response:

Please see contents of folder R17 in the attached .zip file for Honda's response to Request 17.

Source: Part drawings, Owner's Manual
Last date the information was gathered: 7/27/2022

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18. Furnish Honda's assessment of the alleged defect in the subject vehicles, including:

a. The causal or contributory factor(s);
b. The failure mechanism(s);
c. The failure mode(s), including the specific operating conditions at which the unnecessary autonomous braking can occur (e.g., vehicle speed, driving scenario);
d. The risk to motor vehicle safety that it poses; and
e. What warnings, if any, the operator, and the other persons both inside and outside the vehicle would have that the alleged defect was occurring, or subject component was malfunctioning; and
f. The reports included with this inquiry.

Response:

Honda does not believe the Collision Mitigation Braking System (CMBS) in the subject vehicles presents an unreasonable risk to motor vehicle safety and is not aware of any incidents in the US market where it has been determined that the alleged defect has manifested in the subject vehicles. Therefore, we have not conducted a recall or other market action related to the subject system.

During our investigation into allegations of CMBS engagement with no apparent imminent collision hazard present, Honda determined through interviews that some customers possibly had an inadequate understanding of the CMBS function and its operating parameters. Such customers can learn more about the CMBS system by reviewing their Owner's Manual and other educational resources that Honda makes available. Honda has produced various videos and informational publications to educate customers and dealers about the features and limitations of Honda's CMBS which are published on customer facing sites such as owners.honda.com, owners.acura.com and on Honda's YouTube channel.

Honda notes that with the broader adoption of this emerging technology, proliferation of educational material, and incremental design revisions, there is correlation with a significant reduction in customer complaints over time.

Honda is committed to the safety of our customers and will continuously evaluate and refine our technology to ensure customer satisfaction and their confidence in these advance safety systems.

Please do not hesitate to contact me if you have any questions.

Sincerely,

AMERICAN HONDA MOTOR CO., INC.

[redacted]

Jeff Chang
Senior Manager
Product Regulatory Office

JHC:bi

cc: Office of Chief Counsel, NHTSA
Michelle Jongkind, Honda

Attachments