



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

1200 New Jersey Avenue SE.
Washington, DC 20590

April 28, 2020

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Thomas McCarthy, Head
Vehicle Safety Compliance
Fiat Chrysler Automobiles US LLC
800 Chrysler Drive
CIMS 482-00-83
Auburn Hills, MI 48326

NEF-0102jao
PE16-014

Dear Mr. McCarthy:

The Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) opened Preliminary Evaluation (PE16-014) to investigate allegations of vehicle roll-away after the operator allegedly shifted the transmission to Park in certain model year (MY) 2013 - 2016 Ram 1500 and MY 2014 - 2016 Dodge Durango equipped with a rotary shifter manufactured by Fiat Chrysler Automobiles US LLC (FCA). We are sending this letter to get updated information associated with this investigation.

This office has received 223 total VOQ reports (inclusive of the 85 VOQs cited in the prior information request letter) of vehicle roll-away after the operator allegedly shifted the transmission to Park in certain MY 2013 - current Ram 1500 and MY 2014 – current Dodge Durango equipped with rotary shifter. A copy of each of the reports will be provided electronically for your information. A list of the reference (ODI) numbers for these reports is included below.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** all MY 2013 - current Ram 1500 and MY 2014 - current Dodge Durango equipped with rotary shifter 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.
- **Subject system:** 1) the automatic transmission components that control transmission gear engagement and 2) the electronic rotary shift-by-wire control switches including any and/or all of the following: software, external controls (e.g. transmission control switch, paddle switches, etc.), HMI interface, engine start/stop button control logic, neutral and park shift lock systems, electric parking brake function and all associated control modules (e.g. transmission control module, gear shift modules, etc.), communication

networks (e.g. CAN-C, CAN-dedicated, etc.), wiring, connectors, actuators, solenoids and sensors (e.g. park position sensor).

- **Alleged defect:** either one of the following symptoms or conditions:
 - a. Vehicle movement¹ after the operator attempted to shift to Park while either the engine is running, or has been turned off; or
 - b. Any complaints alleging that the shift-by-wire system shifted to Neutral or other non-Park gear when the operator attempted or expected a shift to Park (or when the consumer thought the vehicle shifted out of park on its own);
- **FCA:** Fiat Chrysler Automobiles US LLC, all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of FCA (including all business units and persons previously referred to), who are or, in or after 2008, were involved in any way with any of the following related to the alleged defect in the subject vehicles:
 - a. Design, engineering, analysis, modification or production (e.g. quality control);
 - b. Testing, assessment or evaluation;
 - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
 - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.
- **Document:** “Document(s)” is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and

¹ Vehicle movement means movement beyond what would normally be expected of a properly operating transmission engaging the park pawl system.

computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by FCA, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by FCA or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as FCA has previously provided a document to ODI, ODI is requesting that FCA produce a comprehensive submission that includes all documents, even if previously provided. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation

Please repeat the applicable request verbatim above each response. After FCA's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, the number of subject vehicles FCA has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by FCA, state the following:
 - a. Vehicle identification number (VIN);
 - b. Make;
 - c. Model;
 - d. Model Year;
 - e. Gear selector type (differentiate by version, supplier, and control logic version, if more than one control strategy was used);
 - f. Type, design version, and control logic version of ignition switch mechanism (e.g. push button start, fob insert, or mechanical ignition key)
 - g. Whether or not the vehicle was originally manufactured with a vehicle securement strategy (e.g. AutoPark functionality);
 - i) If not, whether the vehicle has been updated via FCA's ongoing non-safety field action to introduce a vehicle securement strategy (the CSN to update the transmission control software);
 - (1) If updated, the date the vehicle software was updated via the CSN;
 - h. Date of manufacture;
 - i. Date warranty coverage commenced; and
 - j. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

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

2. State the number of each of the following, received by FCA, or of which FCA 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; and
 - e. Third-party arbitration proceedings where FCA is or was a party to the arbitration; and
 - f. Lawsuits, both pending and closed, in which FCA is or was a defendant or codefendant.

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 FCA'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.

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. FCA'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), street address, email address and telephone number;
 - d. Vehicle's VIN;
 - e. Vehicle's make, model and model year;
 - f. Vehicle's mileage at time of incident;
 - g. Incident date;
 - h. Report or claim date;
 - i. Whether a crash is alleged;
 - j. Whether property damage is alleged;
 - k. Number of alleged injuries, if any;
 - l. Number of alleged fatalities, if any;
 - m. Whether the incident was investigated by FCA;
 - n. The specific location and orientation of the vehicle prior to movement;
 - o. The direction of movement;
 - p. Whether the engine was running;
 - q. The position of the gear selector mechanism as reported by the operator;
Whether the operator was out of the vehicle at the time of the event, and if so their proximity to the vehicle at the time of the event;
 - r. Whether the report alleges one or more incidents of unpowered rollaway (i.e., incidents occurring with the engine off, or with the transmission in a neutral-like state);
 - s. Whether the report alleges one or more incidents of powered rollaway (i.e., incidents occurring with the engine running and powering the vehicle movement);
 - t. A summary of all service repairs performed on the subject system in connection with the alleged incident(s);
 - u. Diagnostic Trouble Codes (DTC) if any present and their description; and,
 - v. FCA's assessment of the cause of the incident, including but not limited to the following:
 - i) The position of the gear selector mechanism when the movement occurred;
 - ii) The transmission gear engaged when the movement occurred;
 - iii) Whether a fault in the subject system, or any other vehicle system/component, caused or contributed to the incident;

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

4. Produce copies of all documents related to each item within the scope of Request No. 2 which allege injury or fatality. Organize the documents separately by category (i.e.,

consumer complaints, field reports, etc.) and describe the method FCA used for organizing the documents. Describe in detail the search methods and search criteria used by FCA to identify the items in response to Request No. 2.

5. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that FCA 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 FCA is planning to issue within the next 120 days.
6. 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, FCA. 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. Brief 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 brief 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.

7. Describe all modifications or changes made by, or on behalf of, FCA in the design, material composition, manufacture, quality control, supply, or installation of the subject component, 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 component;
 - e. The part number(s) (service and engineering) of the modified component;
 - f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
 - g. When the modified component was made available as a service component; and
 - h. Whether the modified component can be interchanged with earlier production components.

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

8. Provide the following information for each version of the subject system installed in the subject vehicles:
 - a. Provide a functional block diagram of the subject systems;
 - b. Describe all system design characteristics and related diagnostics incorporated to prevent unintended gear selection from occurring, including mismatches between displayed and actual gear positions or failure of the transmission to achieve a selected gear position;
 - c. Describe all system control logic, warnings, displays or ergonomic design characteristics used by FCA to reduce the possibility for the operator to exit the vehicle with the transmission unintentionally left in a position other than Park and/or to prevent unintended vehicle movement from occurring;
 - d. Describe, and provide copies of all documents related to, all design failure mode and effects analyses (DFMEA) and fault tree analyses (FTA) of the subject system that relate in any way to unintended vehicle movement as the driver is exiting or after the driver has exited the vehicle;
 - e. Describe, and provide copies of all documents relating to, all human factors/human machine interface testing, studies or expert evaluations that may be related to the alleged defect in the subject vehicles;
 - f. Describe the response of the subject system if the operator switches, or attempts to switch the engine off when the gear selector is not in Park;
 - g. Describe any or all conditions under which the subject system will automatically shift the transmission to Park;
 - h. Describe any and all conditions under which the subject system will automatically shift to Neutral, including all associated warnings/messages provided to the operator;
 - i. Describe any "start-stop" technology for the engine, which may be actuated for fuel efficiency and/or safety reasons and how it interacts with the transmission control system;
 - j. Describe any override control logic and timing relative to transmission gear position, engine status, vehicle speed, service brake switch status, and driver's door switch status which may be entered into via a sequence of driver operations (e.g. "car wash mode");
 - k. Describe any fault remediation strategies for instances where a disagreement exists between the position of the shifter and the actual gear status of the transmission;
 - l. Describe and provide video and audio recordings of all warnings provided to the operator and all automatic control functions of the subject and electronic park brake systems (as may be equipped) for the following situations:
 - i) The driver's door is opened when the engine is running and the gear selector is not in Park;
 - ii) The driver's door is opened when the engine is off and the gear selector is not in Park;
 - iii) The driver's door is opened when the engine is running and the gear selector is in Park;
 - iv) The operator attempts to operate the ignition control when the engine is running and the gear selector is not in Park;

- v) The vehicle is moving and the operator attempts to shift to Park (include speed thresholds for the control logic related to this function);
- vi) Any other state or circumstance FCA believes is pertinent; and
- m. State whether any of the subject vehicles have a hill-assist function or other system which may act to hold the vehicle at a standstill, even if the brake pedal is released, and if so identify the make, model and model year for each.

9. Furnish FCA's assessment of the alleged defect in the subject vehicle, including:

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);
- 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.

Legal Authority for This Request

This letter is being sent to FCA pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information.

Civil Penalties

FCA's failure to respond promptly and fully to this letter could subject FCA to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, as amended, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$21,780 per violation per day, with a maximum of \$108,895,910 for a related series of daily violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. See 49 CFR 578.6 (as amended by Fixing America's Surface Transportation Act (the "FAST Act"), Pub. L. 114-94, § 24110(a)(2), 129 Stat. 1312 (Dec. 4, 2015)). This includes failing to respond completely, accurately, and in a timely manner to ODI information requests.

If FCA cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, FCA does not submit one or more requested documents or items of information in response to this information request, FCA must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office. In addition, do not submit any business confidential information in the body of the letter submitted to this office. Please refer to PE16-014 in FCA's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If FCA claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, FCA must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended, to the Office of Chief Counsel (NCC-100), National Highway Traffic Safety Administration, Room W41-326, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. FCA is required to **submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.** Please remember that the phrase "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONTAINS CONFIDENTIAL BUSINESS INFORMATION" (as appropriate) must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 49 CFR 512.6. If you submit a request for confidentiality for all or part of your response to this IR, that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats. *See* 49 CFR 512.6(c) (as amended by 72 Fed. Reg. 59434 (October 19, 2007)).

If you have any questions regarding submission of a request for confidential treatment, contact Daniel Rabinovitz, Trial Attorney, Office of Chief Counsel at daniel.rabinovitz@dot.gov or (202) 366-8534.

Due Date

FCA's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by June 12, 2020. FCA's response must include all non-confidential attachments and a redacted version of all documents that contain confidential information. If FCA finds that it is unable to provide all of the information requested within the time allotted, FCA must request an extension from me at (202) 366-0139 no later than five business days before the response due date. If FCA is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information FCA then has available, even if an extension has been granted.

Please send email notification to Joseph Oxenham at Joseph.Oxenham@dot.gov and to ODI_IRresponse@dot.gov when FCA sends its response to this office and indicate whether there is confidential information as part of FCA's response.

If you have any technical questions concerning this matter, please call Joseph Oxenham of my staff at (202) 366-5464.

Sincerely,

Scott Yon, Chief
VDD-B
Office of Defects Investigation

The following VOQs are related with this investigation and can be viewed at NHTSA.gov;

11301995, 11299571, 11289624, 11288912, 11283095, 11257274, 11257245, 11221503, 11220691, 11196391, 11184831, 11183852, 11180342, 11180239, 11179755, 11176239, 11174236, 11171347, 11166228, 11162324, 11161802, 11155710, 11151552, 11150938, 11131628, 11124231, 11123616, 11121737, 11120641, 11115646, 11114288, 11114273, 11114056, 11113088, 11111517, 11111133, 11110308, 11105356, 11103559, 11099030, 11098704, 11096907, 11089933, 11084436, 11084190, 11082404, 11081984, 11079956, 11078632, 11076570, 11074954, 11074241, 11073457, 11072628, 11072303, 11071577, 11066783, 11066329, 11066200, 11065734, 11062132, 11061581, 11061458, 11057632, 11055929, 11055092, 11054672, 11053001, 11052175, 11051694, 11048622, 11047055, 11046240, 11044874, 11043942, 11043897, 11043416, 11041523, 11041334, 11033964, 11031468, 11030294, 11024962, 11024833, 11020964, 11019434, 11019094, 11019010, 11016020, 11015875, 11013661, 11012479, 11010658, 11010511, 11006733, 11006347, 11005355, 11004240, 11002648, 11002506, 11000211, 11000083, 10995458, 10994036, 10993655, 10993073, 10992274, 10991756, 10991563, 10991360, 10991326, 10985673, 10985661, 10984698, 10983865, 10981397, 10979158, 10978745, 10970936, 10970491, 10970425, 10969850, 10969213, 10968156, 10967557, 10967538, 10967051, 10958947, 10957950, 10957844, 10955910, 10955721, 10955064, 10954606, 10954479, 10949084, 10948987, 10947109, 10946329, 10946140, 10945899, 10945500, 10945145, 10944678, 10944649, 10944620, 10943851, 10940348, 10940345, 10940315, 10940067, 10939821, 10939252, 10939092, 10938793, 10938780, 10938747, 10938731, 10938701, 10938422, 10937858, 10937699, 10937043, 10936829, 10936828, 10936821, 10936820, 10936810, 10936771, 10936741, 10936731, 10936725, 10936712, 10936589, 10936508, 10936488, 10936478, 10936444, 10936432, 10936424, 10936408, 10926262, 10923886, 10917771, 10917680, 10914057, 10911170, 10910068, 10906809, 10903709, 10899161, 10898999, 10898192, 10896337, 10887416, 10884961, 10883952, 10875918, 10875626, 10870288, 10865590, 10863765, 10861466, 10861275, 10861070, 10860998, 10859918, 10825024, 10820611, 10808836, 10787674, 10764187, 10761819, 10749304, 10746574, 10744809, 10726180, 10701261, 10664380, 10648455, 10617268, 10559744, and 10554951.