



June 5, 2020

Mr. Bruce York, Chief
Medium and Heavy Duty Vehicle Division
Office of Defects Investigation
U.S. Department of Transportation
National Highway Traffic Safety Administration
1200 New Jersey SE
Washington, D.C. 20590

Re: **PE20-003, Partial Response**
NEF-106xt

Dear Mr. York:

On behalf of the Volvo Group, I am providing this partial response to the questions in your letter dated May 5, 2020. We are working to secure answers to all the questions and will be providing responses to all questions by August 1, 2020. Thank you for granting our extension request of August 1, 2020.

Important Note: Your letter was addressed to Volvo Trucks North America; however, the scope of the inquiry is MY 2013-2016 CHU & CXU Mack Trucks. Where appropriate, I have substituted Mack for Volvo, as the manufacturer is Mack Trucks.

Please feel free to give me a call if you have any questions

With Best Regards,



Tim L. LaFon
Vice President, Regulatory Affairs
Telephone: (336) 393-2233
Fax: (336) 393-2444
Email: timothy.lafon@volvo.com

1. *State, by model and model year, the number of subject vehicles Mack has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Mack, state the following:*
 - a. *Vehicle identification number (VIN);*
 - b. *Make;*
 - c. *Model;*
 - d. *Model Year;*
 - e. *Transmission model number, design version, electronic control module part number (if so equipped), software version and optional features installed as original equipment;*
 - f. *Engine model number and power output;*
 - g. *Date of manufacture;*
 - h. *Date warranty coverage commenced; and*
 - i. *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." A pre-formatted data collection file, which provides further details regarding this submission, will be provided to you.

Response: An excel spreadsheet with the aggregate and detailed information is provided in the enclosed file folder labeled "PRODUCTION DATA".

The source of this information is the Volvo Group North America's Aftermarket, Quality, and Operations department. The information was last collected on June 5, 2020

2. *State the number of each of the following, received by Mack, or of which Mack 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 where Mack is or was a party to the arbitration; and*
 - f. *Lawsuits, both pending and closed, in which Mack 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 Mack’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: A partial response is provided below.

Category	Status	Total number
<i>a. Consumer complaints, including those from fleet operators</i>	Data being collected	TBD
<i>b. Field reports, including dealer field reports</i>	Data being collected	TBD
<i>c. Reports involving a crash, injury or fatality</i>	Complete	None
<i>d. Property Damage Claims</i>	Complete	None
<i>e. Third-party arbitration proceedings where Mack is or was a party to the arbitration; and</i>	Complete	None
<i>f. Lawsuits, both pending and closed, in which Mack is or was a defendant or codefendant.</i>	Complete	None

The source of this information is the Volvo Group North America’s Legal and Regulatory Affairs departments. The information was last collected on June 5, 2020.

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. Mack’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. Incident location;*

- i. *Report or claim date;*
- j. *Whether a crash is alleged;*
- k. *Whether property damage is alleged;*
- l. *Number of alleged injuries, if any;*
- m. *Number of alleged fatalities, if any;*
- n. *The assessment of a Mack dealer of the actual or likely cause or factors contributing to the alleged incident(s) in the subject vehicle (if there was no examination of the vehicle by a dealer, so state; if a dealer examined the vehicle and did not identify the actual or likely cause or factors contributing to the alleged incident(s) in the subject vehicle(s) so state); and*
- o. *Mack's Assessment of the cause or factors contributing to the alleged incident(s) in the subject vehicle (if Mack has not and has never identified the actual or likely cause or factors contributing to the alleged incident(s) in the subject vehicle, so state).*

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

Response: Information is being collected and will be provided when available.

- 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 Mack used for organizing the documents.*

Response: Information is being collected and will be provided when available.

- 5. *State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Mack 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. *Mack's claim number*
- b. *Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;*
- c. *VIN;*
- d. *Repair date;*
- e. *Vehicle mileage at time of repair;*
- f. *Repairing dealer's or facility's name, telephone number, city and state or ZIP code;*
- g. *Labor operation number(s);*
- h. *Problem code(s);*
- i. *Replacement part number(s) and description(s);*

- j. Concern stated by customer;*
- k. Comment, if any, by dealer/technician relating to claim and/or repair;*
- l. The assessment of a Mack dealer of the actual or likely cause or factors contributing to the alleged incident(s) in the subject vehicle (if there was no examination of the vehicle by a dealer, so state; if a dealer examined the vehicle and did not identify the actual or likely cause or factors contributing to the alleged incident(s) in the subject vehicle(s) so state); and*
- m. Mack's Assessment of the cause or factors contributing to the alleged incident(s) in the subject vehicle (if Mack has not and has never identified the actual or likely cause or factors contributing to the alleged incident(s) in the subject vehicle, so state).*

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

Response: Information is being collected and will be provided when available.

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

Provide a list of all labor operations, labor operation descriptions, problem codes and problem code descriptions applicable to the alleged defect in the subject vehicles.

State, by make and model year, the terms of the new vehicle warranty coverage offered by Mack 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 Mack 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: Information is being collected and will be provided when available.

- 7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Mack 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 Mack is planning to issue within the next 120 days.*

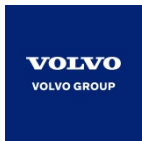
Response: Information is being collected and will be provided when available.

8. *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, Mack. 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.

Response: Information is being collected and will be provided when available.

9. *Describe all modifications or changes made by, or on behalf of, Mack in the design, material composition, manufacture, quality control, supply, or installation of any mDRIVE transmission component(s) (including associated wiring, sensors, electronic control modules and software), installed on the subject vehicles, which relates 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) or software version number(s) of the original component or software, the part description (including acronyms), and supplier;*
 - e. The part number(s) (service and engineering) or software version(s) of the modified component, and the supplier;*
 - f. Whether the original unmodified component or software version was withdrawn from production and/or sale, and if so, when;*
 - g. When the modified component or software version was made available as a service component or service software reflash/ reprogram; and*



- h. Whether the modified component or software version can be interchanged with earlier production components

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

Response: Information is being collected and will be provided when available.

10. *State the number of each of the following that Mack has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable):*

- a. *Clutch Valve Unit: (CVU)*
- b. *Concentric Clutch Actuator (CCA); and*
- c. *Brake Pedal Position Signal Switch; and*
- d. *Any kits that have been released, or developed, by Mack for use in service repairs to the subject component/assemblies described above in "a" through "c."*

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also, identify by make, model and model year, and other vehicles of which Mack is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

Response: Information is being collected and will be provided when available.

11. *Provide ODI copies of any mDRIVE transmission diagnostic and service information including information found on the Trucks Dealer Portal (www.trucksdealerportal.com)*

Response: Information is being collected and will be provided when available.

12. *Describe the manner in which the wiring harness from the mDRIVE transmission gear lever selector to the mDRIVE transmission electronic control module is routed and secured using text and pictorial descriptions. In addition, describe all modifications or changes made by, or on the behalf of, Mack in the design, material composition, manufacture, quality control, supply, or installation of the subject wiring harness.*

Response: Information is being collected and will be provided when available.

13. *Describe the potential and/or actual consequences of the wiring harness from the mDRIVE transmission gear lever selector to the mDRIVE transmission electronic control module chafing and/or short-circuiting. Provide Mack's assessment of the vehicle operator's ability to mitigate the alleged defect condition as it is occurring, in the event the subject wiring harness has been compromised.*

Response: Information is being collected and will be provided when available.

14. *Furnish Mack'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);*
- d. The risk to motor vehicle safety that it poses;*
- 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;*
- f. What actions the vehicle operator might take to mitigate the alleged defect condition as it is occurring; and*
- g. The reports included with this inquiry.*

Response: Information is being collected and will be provided when available.