Newell Rubbermaid
Brands That Matter

Baby & Parenting
Essentials

September 26, 2013

Via Electronic Mail

Frank S. Borris II, Director
Office of Defects Investigation
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Re: Graco response to NHTSA EA13-001 Request for Additional Information

Dear Mr. Borris:

Graco Children's Products, Inc. ("Graco") hereby submits this letter in response to the National Highway Traffic Safety Administration's ("NHTSA") Engineering Analysis EA13-001 request for additional information to investigate allegations that the harness buckle of various Graco child restraints for model years 2009-2013 is difficult to unlatch or becomes stuck in the latched position.

Graco submits under separate cover to the Office of the Chief Counsel various supporting attachments that contain confidential commercial or business sensitive information.

As stated in Graco's response to the NHTSA information request PE12-031, Graco's current view is that the scope of this evaluation relates to both the Signature Buckle and the QT Buckle designs as previously detailed in Graco's response to PE12-031. Both buckle designs are 5-point buckles with 2 tongues and a central release button.

Graco initially utilized the Signature Buckle design on many 2009 models. This proprietary buckle design was created as a joint effort between AmSafe and Graco. The Signature Buckle was used exclusively on Graco child restraints. Graco later introduced the QT Buckle design on its child restraints. The QT Buckle was developed independently by AmSafe and is commercially available to other child restraint manufacturers. Graco believes that other manufacturers use, at least a version of, the QT Buckle on commercially available products.

As you will see from this response, Graco is in the process of converting to a new buckle on its child restraints to improve the consumer experience and address the consumer frustration with Graco child restraints. However, Graco continues to have no reports of any injury or evidence of degradation in crash performance nor does it believe at this time that there is any safety issue

with either the Signature or QT buckles. Graco has collected the necessary information as requested by NHTSA and provides the following response to each of the requested items.

1. State the number of all subject child seats Graco has manufactured, or imported for sale, in the United States, by platform model year, and buckle type. Provide the data by monthly production volumes in a table in Microsoft Excel, or a compatible format, entitled "PRODUCTION DATA." **Provide the table in the same format as in response to PE12-031**.

   Graco's Response:

   Graco provides the number of child restraints manufactured from January 1, 2009 through August 31, 2013 for the child restraint models that utilize the Signature and QT buckles as shown in **Attachment A – PRODUCTION DATA**. The child restraint models that have utilized the Signature and QT buckles include the following:

   Nautilus and derivative models Nautilus Elite and Argos 70
   MyRide 65 and derivative models MyRide 65 with Safety Surround and MyRide 70
   Comfort Sport and Classic Ride 50
   Size4Me
   CozyCline
   SmartSeat
   Snugride
   Snugride 30
   Snugride 32
   Snugride 35
   Step 1 Safe Seat
   Snugride Click Connect 40

   Graco notes that the monthly production volumes for the period from January 1, 2009 to Nov 30, 2012 as reported in Graco's December 21, 2013 response to PE12-031 request for information have increased in **Attachment A**. Graco has been able to refine and clarify its production volumes which includes adding in the category of infant child restraints that are part of Travel Systems which were inadvertently omitted in the December 21, 2013 response.

2. State the number of each of the following, received by Graco, or of which Graco is otherwise aware, which relate to, or may relate to, the alleged defect in the subject child seats not included in response to NHTSA's Information Request (IR) in PE12-031:
   a. Consumer complaints;
   b. Field reports, including dealer field reports;
   c. Reports involving a fire, crash, injury, or fatality, based on claims against the

manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by the alleged defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
d. Third-party arbitration proceedings where Graco is or was a party to the arbitration; and,
e. Lawsuits, both pending and closed, in which Graco is or was a defendant or codefendant.

For subparts "a" through "d," state the total number of each item (e.g., consumer complaints, reports from retailers, etc.) separately. Multiple incidents involving the same child seats 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 item "c" provide a summary description of the alleged problem and causal and contributing factors and Graco's assessment of the problem, with a summary of the significant underlying facts and evidence. For item "d" and "e", 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.

Graco's Response:

a. Consumer Complaints

Graco provides the total number of consumer complaints from Graco's consumer feedback database for the Signature and QT buckles in **Attachment B**. The information is presented by child restraint platform and by buckle type for the time period from December 1, 2012 through August 2, 2013 (which is supplemental information to the total number of consumer complaints included in Graco's response to NHTSA's Information Request in PE12-031). Graco notes that there are 3 buckle types noted in **Attachment B**: QT, Signature and Unknown Buckle. If a consumer was unable to provide a date of manufacture, model number or both, Graco cannot determine which buckle (QT or Signature) is involved in the consumer complaint. Therefore, such complaints are tallied as an unknown buckle.

Utilizing the 2009-2013 production information provided in Request #1 above for child restraint models that corresponds to the complaints, the overall composite percentage complaint rate for all buckles (Signature, QT and Unknown) for the entire production quantity is shown in **Attachment B.**

b. Field Reports, including dealer field reports

Graco has received one field report from a retailer or distributor in the U.S. of the Signature or QT buckle being difficult to unlatch or becoming stuck in the latched position since its

December 21, 2013 response to PE12-031 request for information. **Attachment C** shows the documentation associated with this report.

c. Reports involving a fire, crash, injury, or fatality.

Graco is not aware of any incidents involving a vehicle crash, an injury or a fatality relating to the Signature or QT buckle that related to any alleged difficulty to unlatch or that allegedly became stuck in the latched condition. To the best of Graco's knowledge the Signature or QT buckle has not resulted in any injury or the degradation to crash performance of any Graco Child restraint.

d. Third-party arbitration proceeding.

Graco is not currently nor has it been in the past involved in any third-party arbitration proceedings regarding the Signature or QT buckle in a matter alleging that the buckle was difficult to unlatch or becomes stuck in the latched position.

e. Lawsuits, both pending and closed.

Other than the allegations in the lawsuits (class action and product liability) previously disclosed to NHTSA, Graco is not aware of any litigation involving child restraints equipped with either the Signature or QT buckle that allegedly is difficult to unlatch or becomes stuck in the latched condition.

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. Graco's file number or other identifier used;
   b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, report from retailer, etc.);
   c. Child seat owner's name, address, and telephone number;
   d. Child seat model number;
   e. Child seat model year;
   f. Child seats date of manufacture;
   g. Harness buckle/subject component part number;
   h. Incident date;
   i. Report or claim date;
   j. Whether the harness buckle was allegedly unable to be opened;
   k. Whether the harness was allegedly cut to facilitate removal of the child occupant;
   l. Whether Graco has possession of the subject child seat and or harness buckle;
   m. Number of alleged injuries; and
   n. Number of alleged fatalities.

Provide this information in a table in Microsoft Excel entitled, "EA13-001 REQUEST NUMBER TWO DATA." **Provide the table in the same format as in Graco's response to NHTSA's IR in PE12-031**.

Graco's Response:

Graco provides the requested information in tabular form in **Attachment D – EA13-001 REQUEST NUMBER TWO DATA** which is an Excel spreadsheet with worksheet tabs that represent the various child restraint platforms that utilize the QT and Signature buckles.

The spreadsheet columns correlate to the requested information (a) through (n) as follows:

a. Graco's file number or other identifier used is identified in Column I as the "Reference #"

b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, report from retailer, etc.): **Attachment D** addresses only consumer complaint reports.

c. Child seat owner's name, address, and telephone number: Identified in Columns C through H.

d. Child seat model number: Identified in Column P as "Product Line" which is the platform name and Column Q which is the "Model Number"

e. Child seat model year: Identified by date of manufacture in Column K.

f. Child seats date of manufacture: Identified in column K. If the consumer does not provide the date of manufacture, this field is populated with a date of 1970 which is an internal indicator that no date of manufacture was provided. However, Graco in an effort to be transparent and as inclusive as possible has included the unknown dates of manufacture and disclosed as many incident reports as possible that *may* be responsive.

g. Harness buckle/subject component part number: No part number is captured in Graco's consumer incident reports. However, all complaints identify the buckle type in Column A as QT, Signature or "unknown" (no DOM). Because the consumer was unable to provide a date of manufacture, model number or both, Graco has not been able to determine which buckle (QT or Signature) is involved in the consumer incident. Therefore, the complaint is tallied as an "unknown-no DOM"

h. Incident date: **Attachment D** does not capture the incident date. However, the incident occurrences are generally close to the "Call Date" which is Column J.

i. Report or claim date is identified in Column J as "Call Date"

j. Whether the harness buckle was allegedly unable to be opened: Graco notes that in the course of capturing consumer feedback, whether a buckle was difficult to open or was unable to be opened was not specifically captured. Note that Columns T and U include various categories of buckle performance issues that are from a drop-down menu used by Graco Consumer Service Representatives. The category of "Won't Unlock" may represent buckles that were unable to be unlatched, but this category is a generalization and may not actually reflect the specific issue that NHTSA is investigating. However, Graco in an effort to be transparent has disclosed as many incident reports as possible that *may* be responsive.

k. Whether the harness was allegedly cut to facilitate removal of the child occupant: Graco notes that in the course of capturing consumer feedback, whether a buckle harness was cut to facilitate the removal of a child may not have been identified. This is not a specific item that was captured or was specifically asked. However, when that situation was communicated, the Consumer Services Representative may have captured that event in the "Incident Notes" -or communication thread which is Column W. Graco has performed a search of the Incident notes in Column W for buckle harnesses that were allegedly cut and highlights this finding in Column B.

l. Whether Graco has possession of the subject child seat and or harness buckle: As a matter of course Graco does not have every seat or buckle that consumers call about. Such a decision is at the discretion of the Consumer Services Representative based on the issue and flow of conversation with the consumer. In the event that a car seat or buckle was returned to Graco, such fact would be indicated in the Inspection Notes under ADDITIONAL INFORMATION on the individual incident reports shown in **Attachments E through T.**

m. Number of alleged injuries: There have been no injuries from a buckle being difficult to unlatch or being stuck in the latched position. Graco does not believe this consumer frustration is a safety issue as indicated by the lack of any injuries or an issue that degrades the crash performance of the car seats.

n. Number of alleged fatalities: There have been no fatalities from a buckle being difficult to unlatch or being stuck in the latched position. Graco does not believe this consumer frustration is a safety issue as indicated by the lack of any fatalities or an issue that degrades the crash performance of the car seats.

When accessing **Attachment D – EA13-001 REQUEST NUMBER TWO DATA** which is an Excel spreadsheet, please note the following to help in navigating through the spreadsheets:

1. The worksheets tabs on the bottom are divided by child restraint platform.
2. Within each spreadsheet is some color coding used to visually group multiple rows that are associated with the same incident.

3. It may be necessary to double-click the cell in Column W to expand the full content of the "incident notes". However, these notes are also available in the individual incident reports (**Attachments E through T**)
4. A full incident report of each incident can be found in **Attachments E through T** by cross-referencing the "Reference #" which is Column I to the file name that bears the same number as the "Reference #".

4. Produce copies of all documents related to each item within the scope of Request No. 3. Organize the documents separately by category (i.e., consumer complaints, reports from retailers, etc.) and describe the method Graco used for organizing the documents.

Graco's Response:

Graco provides the requested information regarding consumer complaints in **Attachment E through T** as individual incident reports. Each incident report is named by the database Reference Number and can be cross-referenced to the incidents reported in **Attachment D – EA13-001 REQUEST NUMBER TWO DATA** (column I of the spreadsheets). The incident reports are organized by child restraint platforms on the worksheet tabs on the bottom of the Excel spreadsheet.

Graco notes that it has received an incident report from a consumer about a buckle being difficult to unlatch. Upon further investigation into that specific incident, the child restraint was not a Graco child restraint but a competitor's model that appears to be equipped with a QT buckle. See **Attachment Z** for the incident report for this complaint.

One report from a retailer is presented in **Attachment C.**

Graco does not have any documents relating to reports of crashes, injuries, fatalities or lawsuits regarding a buckle being difficult to unlatch or being stuck in the latched position; as stated above, Graco is not aware of any such events.

5. State a total count for all of the following categories of claims, collectively, that have been paid by Graco to date that relate to, or may relate to, the alleged defect in the subject child seats **not included in Graco response to IR in PE12-031**: warranty claims; extended warranty claims; claims for good will services that were provided; 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. Graco's claim number;
b. Child seats owner's name and telephone number;

c. Child seats model number;
d. Child seat model Year
e. Child seats date of manufacture;
f. Harness buckle/subject component part number
g. Repair date;
h. Repairing facility's name, telephone number, city and state or ZIP code;
i. Labor operation number;
j. Problem code;
k. Replacement part number(s) and description(s);
l. Concern stated by the customer; and
m. Comment, if any, by the technician or person(s) making the repair, and/or the person(s) processing the claim that relate to the claim and/or repair.

Provide this information in a table in Microsoft Excel entitled "WARRANTY DATA." **Provide the table in the same format as in Graco's response to NHTSA's IT in PE12-031.**

Graco's Response:

Graco's data provided in **Attachments E through T** indicates all efforts to address consumer dissatisfaction that allege any buckle issues. Based on the flow of the conversation with the consumer, a Consumer Services Representative may issue a refund to a consumer, replace the buckle component or child restraint, or provide buckle cleaning or buckle operation instructions. Graco does not track individual refunds. Refunds therefore must be gleaned from the individual incident reports shown in **Attachments E through T.**

6. Describe in detail the search criteria used by Graco to identify the claims identified 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 the terms of the new vehicle warranty coverage offered by Graco on the subject vehicles (i.e., the number of months for which coverage is provided and the vehicles systems that are covered). Describe any extended warranty coverage option(s) related to the alleged defect that Graco 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.

Graco's Response:

Graco maintains its consumer feedback in a database that was implemented in September 2009 that collects all pertinent information from consumers who contact Graco. Graco's Consumer Service Representatives collect 1) the consumer's contact information; 2) the

product's model number, date of manufacture and date of purchase; and 3) the issue being communicated by the consumer including component affected. In an effort to capture the voice of the consumer regarding what is wrong and how it happened, Graco's database has a series of taxonomy menu choices. Graco is then able to query the database based on the entered consumer information. Graco's database search criteria included:

1) Car seat models with a date of manufacture of 2009 through 2013;

2) Incidents reported to Graco from December 1, 2012 through August 2, 2013 (which is the relevant time period since the Graco's response to NHTSA's Information Request (IR) in PE12-031.

2) Incidents that included the component of the harness buckle or related components (i.e. Harness Buckle; Harness Assembly (complete) w/tong/buckle; Harness Buckle Tongue; and Tongue for car seat harness)

3) Level 1 "What's Wrong" taxonomy (Hard goods)

3) Level 2 "What's Wrong" taxonomy (Performance; Unlocking/Separating; Doesn't like design; Adjustment)

4) Level 3 "What's Wrong" taxonomy (can't be operated; hard to unlock/open; interference; stuck/sticks; won't come out; and won't unlock / open)

Many consumers who contact Graco benefit from Graco's guidance on buckle operating instructions and cleaning the buckle of any foreign material that may impede its performance. Many consumers are able to remedy their issue with this guidance. In addition, Graco has extended its normal one year warranty coverage to include (at no cost to the consumer) remedies for buckle issues beyond the one year warranty period for buckles that are difficult to unlatch or that become stuck in the latched position. For select child restraint models that do not have a consumer replaceable harness buckle, the extended warranty covers the replacement of the child restraint up through its identified useful life date.

7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject child seats that Graco has issued to any retailers or distributors, regional or zone offices, field offices, Graco customer service representatives, other Graco employees or contractors, or other such 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 Graco is planning to issue concerning the alleged defect and/or subject child seat within the next 120 business days.

Graco's Response:

Graco has communicated to certain retailers and to various media outlets at various points in time during NHTSA's PE12-031 and EA13-001 investigations. Copies of these communications are shown in **ATTACHMENT U.** Portions of the documents have been redacted that are unrelated to NHTSA's PE12-031 and EA13-001 investigations.

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 child seats that have been conducted, are being conducted, are planned, or are being planned by, or for, Graco **that are not included in Graco's response to NHTSA IR in PE12-031**. 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 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.

Graco's Response:

Graco has attempted to retrieve buckles from consumers that consumers have identified are difficult to unlatch or become stuck in the latched position ("returned buckles"). Graco has conducted a more in-depth evaluation of these returned buckles. A sampling of six buckles (4 returned QT1 buckles, 1 returned Signature buckle and 1 new QT3 buckle) were sent out for radiographic examination (X-ray) which resulted in eleven x-ray images. A review of the x-ray images did not detect the presence of any foreign objects that may have impeded the buckle function nor did the images detect any internal buckle components that may have been dislodged or otherwise were out of position that may have impeded the buckle function.

Graco also conducted a cleaning study of 168 returned QT buckles to determine the level of initial force required to unlatch the buckles in the as-received condition and the level of force required to unlatch the buckles after a cleaning operation (ranging from 30 to 90 seconds). Graco used an evaluation scale from 1 to 5 for the buckle unlatching force with a level-5 being equal to

normal buckle effort which is the same as a new buckle and level-1 being most difficult (cannot move button).

Graco was able to make 2 significant observations from this study: 1) a large percentage of returned buckles (56%) exhibited normal (level-5) or near normal (level-4) button release force as-received which implies that buckles resulting in consumer complaints may not necessarily be difficult to unlatch but are based on the consumer's perception, and 2) an even larger percent (92%) of the returned buckles in the cleaning study exhibited a level-5 (normal buckle operation) after the cleaning operation.

Graco concludes that these observations support its theories of root cause from consumers who state that buckles are difficult to unlatch or become stuck in the latched position:
1) foreign material (food, dried liquid drinks, vomit, baby formula, etc.) in the buckle increases the release force and that regular cleaning of the buckle remedies the issue; and
2) the pivoting release button on the buckle is perceived by some consumers to be more difficult than they would expect if the button is not depressed at the top of the red button.

Graco presents the eleven x-ray images and the raw data and a study summary of the 168 buckle cleaning study (addressing items 8 (a) through (f)) in **Attachment V.**

9. ODI understands that Graco is sourcing a new buckle to replace the QT buckle in new production of certain subject child seats. Specifically, that the QT buckle, with a "hinged" release button, will be replaced by a buckle that has a "floating" release button. ODI also understands that the new buckle will be used as a replacement buckle for consumers experiencing unlatching or latching difficulties with their "Signature" and "QT" buckles. Regarding Graco's decision to source a new buckle and to provide it as a replacement part to consumers, provide the following information:

   a. The date or approximate date on which Graco decided to source a new buckle;
   b. The reason(s) Graco made the decision to source a new buckle;
   c. Copies of all documents related to Graco's decision to source a new buckle;
   d. The supplier of the new buckle with contact information for the supplier's representative;
   e. When the new buckle will be, or was incorporated into production;
   f. The subject seats in which it will be installed;
   g. A detailed description and operation of the new buckle;
   h. Whether the "QT"4 buckle was or will be withdrawn from production and/or sale, and if so, when the QT buckle was or will be withdrawn from production and/or sale and from what child safety seat platforms it was or will be withdrawn from production and/or sale;
   i. When the new buckle will be, or was made available to consumers as a replacement buckle and for which child safety seat platforms;
   j. Whether the new buckle can be interchanged with earlier production car seats which use

either a “Signature” or “QT” buckle, and identify by platform those that are and are not interchangeable with the new buckle; and,
k. For those platforms that are not interchangeable, provide Graco’s plan for addressing the alleged defect in these seats.

Graco’s Response:

a. The date or approximate date on which Graco decided to source a new buckle;

Graco decided to consider and begin the process of determining a new source for its child restraint buckle approximately in March 2013.

b. The reason(s) Graco made the decision to source a new buckle;

Graco takes great pride in the quality, usability and safety of all of its products, and always strives to provide products that meet the needs of our customers. After extensive consumer usability assessments and valuable input from some of our customers on the buckles, Graco decided to convert the currently used harness buckles to a floating center-press release button design to provide a perceived better user experience. In addition to its commitment to safety, Graco is also committed to an ongoing pursuit of the most effective and consumer-friendly product technologies. The new harness buckles reflect this commitment.

c. Copies of all documents related to Graco’s decision to source a new buckle;

Graco provides the requested documents in **Attachment W.**

d. The supplier of the new buckle with contact information for the supplier’s representative;

The supplier of the new buckle and the supplier reprentative’s contact information is;

Indiana Mills and Manufacturing Inc. (“IMMI”)
Jim Gould – International Business Development Manager
18881 U.S. 31 North
Westfield, Indiana 46074
(317) 867-8194

e. When the new buckle will be, or was incorporated into production;

Graco provides **Attachment X** that identifies the anticipated timeframes for implementation of the new buckle in production.

f. The subject seats in which it will be installed;

Graco provides **Attachment X** that identifies the child restraint platforms that implement the new buckle in production.

g. A detailed description and operation of the new buckle;

The new buckle design from IMMI has a center press (floating) release button and two buckle tongues. The IMMI buckle for infant child restraint applications will have 30-degree tongues and the IMMI buckle for toddler child restraint applications will have 45-degree tongues. See photos below.



IMMI Buckle 30-deg tongues



IMMI Buckle with 45-deg tongues

h. Whether the "QT" buckle was or will be withdrawn from production and/or sale, and if so, when the QT buckle was or will be withdrawn from production and/or sale and from what child safety seat platforms it was or will be withdrawn from production and/or sale;

Graco is in the process of replacing the QT buckle on all of its current child restraint platforms. **Attachment X** shows the implementation plan with time table and child restraint platform implementation.

i. When the new buckle will be, or was made available to consumers as a replacement buckle and for which child safety seat platforms;

Graco first made the IMMI buckle available to consumers as a replacement buckle through Graco's Consumer Service Department in or about June 2013 for the Nautilus and My Ride 65 child restraints.

j. Whether the new buckle can be interchanged with earlier production car seats which use either a "Signature" or "QT" buckle, and identify by platform those that are and are not interchangeable with the new buckle; and,

The new IMMI buckle can be interchanged on child restraint model platforms manufactured from 2009 to 2013 that are identified in Graco's response to No. 1 with one exception (see response to (k) below).

k. For those platforms that are not interchangeable, provide Graco's plan for addressing the alleged defect in these seats.

The SmartSeat child restraint platform does not have a consumer replaceable buckle/harness system. Therefore, consumers with a SmartSeat child restraint that requires a new buckle will be given a refund or a replacement product with an IMMI buckle.

10. Explain why Graco extended the warranty on the buckle component for the subject child seats from a one year warranty to an unlimited warranty. (See Graco's Response to Question No. 6 in the IR to PE 12-031). Identify the date on which Graco made the decision to extend the warranty, the reason Graco extended the warranty and produce copies of all documents related to Graco's decision to extend the warranty on the buckle component for the subject child seats.

Graco's Response:

Graco has been monitoring its consumer experiences and feedback regarding child restraints that utilize the Signature and QT buckle and determined that a small percentage of consumers are experiencing difficulties unlatching the buckle. While Graco's normal warranty is for one year, Graco has always reserved the right to extend its warranty beyond one year in an effort to maximize the consumer's satisfaction. In an effort to provide the consumer with an improved user interface experience and to maximize the consumer's satisfaction with their Graco child restraint, whether the consumer is experiencing buckle unlatching difficulties within one year or beyond one year, and for a uniform approach to all consumers experiencing any buckle unlatching issues, Graco's Consumer Services department began a more generous approach to

remedying the issue with consumers. While Graco does not have any specific documentation that relates to the decision to provide consumers with no cost remedies, Graco believes it began providing replacement buckles and replacement products or refunds in mid-year 2011. It is important to note that Graco always reserves the right to take steps it deems appropriate to satisfy consumers that call into its Consumer Service line regardless of the product.

11. In response to question No. 12 at subpart g (2), to PE12-031, Graco stated that its Customer Service Department is assisting subject child seat consumers who contact Graco regarding buckle problems on a "case-by case basis," noting that the circumstances of each contact is assessed "to provide the best remedy." Graco further states that, as a result of the contact, consumers may be provided a remedy in one of the following categories: 1) proper unbuckling and/or buckle cleaning instructions (i.e., information), 2) a replacement buckle, 3) a replacement child seat, or 4) a monetary refund. Provide the following information in a table showing the counts for each category, by month and year provided, from the day NHTSA opened PE12-031 to the present, for each of the following:

a. All contacts by consumers regarding or appearing to concern the alleged defect;
b. Contacts that were resolved by a category 1 remedy only;
c. Contacts by consumers that required multiple communications and/or interactions with Graco to resolve a consumer issue regarding or appearing to concern the alleged defect;
d. Contacts that were resolved by a category 2, 3, or 4 remedy, (i.e., hardware shipment or reimbursement);
e. Identify any other remedy offered to a consumer who has contacted Graco regarding or appearing to concern the alleged defect that is not otherwise covered by the categories described above, as well as the number of contacts that were resolved by any other remedy; and,
f. Identify the circumstances under which a consumer contacting Graco regarding the alleged defect is offered a category 1 remedy and the circumstances under which a consumer is offered a category 2, 3 or 4 remedy or some other type of remedy.

Graco's response

With regard to item (a), Graco has provided all consumer contacts concerning buckles that are difficult to unlatch or become stuck in the latched position in individual incident reports in **Attachment E through T** and in Microsoft Excel format in **Attachment D**.

With regard to items (b) through (d), Graco's current consumer feedback database does not capture the category 1 through 4 remedy actions in a way that can be queried, sorted and reported as requested. Furthermore, any multiple contacts are shown within the communication thread if they occur near the incident reporting date or as a separate incident

if an issue were to arise at a future time. The incident reports presented in **Attachments E through T** contain the consumer interaction(s) in the communication thread and provide some indication regarding providing instructions, replacement buckles or replacement child restraints and/or refunds.

With regard to item (e), on occasion rebate letters (offering a rebate on a future purchase) are offered and accepted by consumers whose child may have just outgrown (or will soon outgrow) their child restraint. In these cases, the consumer usually is not interested in a replacement buckle or a replacement of the same child restraint model but is agreeable to a rebate letter.

With regard to item (f), as stated in Graco's response to PE12-031, Graco's Consumer Service department interaction with consumers is on a case-by case basis in order to provide the best remedy for each individual consumer. Proper buckle cleaning and operation instructions are usually offered as an initial remedy to help the consumer with their issue. Many consumers are very happy with their child restraint, do not want a replacement, are content with the instructions, and the cleaning procedure addresses the consumer's issue. But when a consumer prefers either a new buckle or a replacement child restraint or even a refund, Graco is happy to accommodate its consumers.

12. Describe all measures Graco has taken since the day NHTSA opened PE 12-031 to the present to update, change or modify the instruction manual as it relates to latching and unlatching buckles on the subject child seats. Provide the date(s) on which Graco made the decision to update, change or modify the instruction manual as it relates to the alleged defect, the date(s) on which the update, change or modification went into effect, and all documents related to the decision making process. In addition, explain in detail what is meant by Graco's statement that "[b]ased on the consumer frustration related to difficulty in unlatching buckles, Graco has reinforced its instructions in the car seat manuals that utilize the QT Buckle to better guide the consumer on unlatching the buckle." (See response to Question No. 12, at subpart g, 3(c) in the IR in PE 12-031). Produce all documents related to or which support this statement.

Graco's Response:

Graco has revised existing manuals for active production child restraints to include the enhanced buckle cleaning and buckle operation instructions. These instructions have also been added to the Care & Instructions tab in "The Graco Store" on www.gracobaby.com. See **Attachment Y** for the website content. Graco has no documentation providing visibility to the exact date a decision to update the instruction manuals was made. The update process is

estimated to have begun in January 2012. Production instruction manual updates began in April 2012 and are ongoing as new child restraint models are introduced. Graco previously reported to NHTSA staff that the production instruction manuals began in June 2012, but after further review, Graco believes the process started earlier. The online website Care & Instruction tab updates began in March 2013. Graco has no formal documentation regarding its internal decision making process. The updates are a result of normal continuous improvement actions to improve customer satisfaction, usability and warranty issues as part of the Graco culture.

Graco has been monitoring consumer feedback about the buckles and has realized the frustration a small percentage of consumers have in unlatching the buckles. Graco is not only committed to safety but to a positive user experience with these child restraints. While a pivoting release button on the QT buckle is recognized by FMVSS-213 and is intuitive to operate, the release force on the QT buckle increases as the button is depressed away from the top of the button. To some consumers, this force differential is perceived to be a higher force than they would expect. In addition, Graco determined that foreign material in the buckle increased the force to press the release button and that cleaning of the buckle significantly improved the buckle unlatching for a buckle that was difficult to unlatch. Graco's guidance about cleaning and buckle operation in its instructions has helped to guide the consumer in unlatching the buckle. Graco has produced its consumer incident reports in **Attachments E through T** to this response and similar incident reports in the attachments to the Graco response to the IR in PE12-031 as evidence of both the consumer frustration and the guidance provided by directing the consumer to cleaning and buckle operation. While it is still too early to determine the total effect of the revised instruction manual information, our internal testing regarding cleaning and interaction with consumers who call Graco indicates that the reinforced instructions are helpful. Graco has also previously provided the instruction manual buckle cleaning and buckle operation instructions in its December 21, 2013 response to PE12-031 in **Attachments 31 and 32**.

13. In consideration of any additional information accumulated and evaluated in preparation of Graco's response to this letter, furnish an update to Graco assessment of the alleged defect in the subject child seats, 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, that the alleged defect was occurring or that the subject component was malfunctioning; and,
f. The reports included with this inquiry.

Graco's Response:

a. The causal or contributory factor(s):

While Graco has expanded its evaluation of a greater number of QT buckles returned to Graco from consumers, Graco has not identified any additional casual or contributing factors. Graco maintains that foreign material (food, dried liquid drinks, vomit, formula, etc.) in the buckle is the cause of buckles increasingly becoming difficult to unlatch or becoming stuck in the latch position. This foreign material is believed to be impeding the buckle function and is noticeable by an increased force necessary to unlatch the buckle.

Graco also maintains that a secondary contributing factor is the QT buckle's pivoting release button. Because the optimum location for minimal force to depress the red button and unlatch the buckle is near the top of the QT Buckle, pushing the button at the middle or lower positions increases the force required to unlatch the buckle and increases some consumer's perception and frustration about the force required to unlatch the buckle.

The Signature Buckle's red button may also present a perceived difference to some consumers in that the red button is required to slide downward in order to unlatch the buckle. Although the surface area of the red button complies with the minimum 0.7 square inch area requirement of FMVSS-213, the contact shape of the red button's "ledge" may be perceived by some consumers to be more difficult than they would expect or are accustomed to.

In either buckle design, the buckles are fully compliant to the buckle requirements of FMVSS-213. The pre-crash buckle release force and the post-crash buckle release force have been demonstrated to be compliant when tested on production buckles to the FMVSS-213 buckle protocols.

b. Failure Mechanism

Graco has not determined any additional failure mechanisms since its December 21, 2012 response to the information request of PE12-031. While there are contributing factors involved in the consumer's perception that the buckle may be difficult to unlatch or becomes stuck in the latched position as described above, other than foreign material in the buckle that may contribute to internal buckle components operating less optimally, Graco and the buckle manufacturer have been unable to identify *any* other failure mechanisms.

c. Failure Mode

Graco has not determined any additional failure modes since its December 21, 2012 response to the information request of PE12-031. The failure mode described by a small percentage of

consumers is typically an increased force required to unlatch the buckle after a period of normal usage time. This is consistent with foreign material accumulating in the buckle but may be accentuated by the other factors that are related to perception that the buckle is harder to unlatch than what would be expected and by improper unbuckling procedure for the QT buckle.

d. Risk to Motor Vehicle Safety

Graco has not determined any additional information since its response to the information request of PE12-031. As shown in **Attachment A**, Graco has been producing the Signature and QT buckles on various models in the 2009-2013 time period that have amounted to several million child restraints in use by consumers. Graco has not received any reported incidents of the buckle allegedly being difficult to unlatch or becoming stuck in the latched position that have resulted in injuries, fatalities, lawsuits or any emergency egress situations since the Signature and QT Buckles have been incorporated into Graco products. Graco believes that some consumers have perceived the buckle as being more difficult to operate than they would have expected, but this has not resulted in any safety-related incidents and does not pose an unreasonable risk of harm to users.

e. Warnings that alleged defect was occurring or that the subject component was allegedly malfunctioning;

Graco has not determined any additional information since its response to the information request of PE12-031. Consumer feedback indicates that the force to unlatch the buckle in many incidents progressively increases over time. Whether the root cause is foreign material inside the buckle or an enhanced perception from various factors, the incident feedback indicates that the consumer is able to detect some difference in the performance of their specific buckle as demonstrated by a perceived increasing force to depress the red button. Consumers have been able to detect an increasing button force and have contacted Graco for various remedy options.

f. Reports

Graco has prepared a more detailed evaluation of returned buckles which is included in response to item No. 8.

CONCLUSION:

Graco provides the following conclusions based on its efforts to analyze the buckle issue and to improve the user interface experience with the buckles.

1. No Injuries, Fatalities or Degradation in Crashworthiness

Graco is not aware of any incidents related to the Signature or QT buckles regarding any injuries, fatalities or degradation of crashworthiness of the child restraint related to Signature or QT buckles that are allegedly difficult to unlatch or that become stuck in the latched position.

2. Buckles are Compliant

The Signature and QT Buckles are fully compliant to the requirements of FMVSS-213. Graco believes that the buckles are not defective but a small percentage of consumers are frustrated and perceive that the buckles are more difficult to open than what they would expect. In addition, some buckles that have been contaminated with foreign material are unable to be unlatched. Although the buckle design contains no design or manufacturing defect and as provided from Graco is a quick disconnect device, it may require periodic cleaning, when exposed to foreign material to internal buckle components, which has been shown to be effective. In addition, the pivoting release button on the QT buckle is a recognized design in FMVSS-213 and is inherently intuitive to operate for the vast majority of consumers.

3. Consumers are being Serviced as Needed.

Consumers that contact Graco are being serviced to provide them with an acceptable no cost remedy for any issues with regard to the Signature and QT Buckles.

4. Graco Continues to Improve Buckles

Graco has initiated a new buckle design from IMMI that incorporates a center-press floating release button. While any buckle may require cleaning, the new buckle design is expected to have a better user interface experience than the pivoting QT buckle release button or the sliding Signature release button.

Graco believes the buckle issue is not a safety-related issue and that it is adequately addressing consumer satisfaction issues with its consumers. Graco looks forward to visiting NHTSA in the future to further discuss its investigation in this matter.

Sincerely,



David Galambos
Senior Regulatory Manager
Graco Children's Products, Inc.

cc: Sean Beckstrom - Vice President, Legal Affairs, Newell Rubbermaid - Baby & Parenting Essentials
Dan Campbell – Crowell & Moring