



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

JAN 14 2014

1200 New Jersey Avenue SE.  
Washington, DC 20590

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Sean Beckstrom  
Vice President-Legal Affairs  
Graco Children's Products, Inc.  
3 Glenlake Parkway  
Atlanta, GA 30328

NVS-212jfa  
EA13-001

Dear Mr. Beckstrom:

On February 21, 2013, the National Highway Traffic Safety Administration's ("NHTSA" or "the Agency") Office of Defects Investigation (ODI) opened Engineering Analysis (EA) EA13-001 to investigate an alleged safety-related defect affecting the harness buckle in certain child car seats manufactured by Graco Children's Products Inc. (Graco). The alleged defect involves difficulty in unlatching the harness buckle. In some cases, the buckle becomes stuck in a latched condition so that it cannot be opened by depressing the buckle's release button.

This investigation has revealed numerous instances where the harness buckle was difficult or impossible for consumers to unlatch. As discussed below, ODI believes that the model years (MY) 2009-2013 car seats produced with the "Signature", "QT", and "QT3" buckles (the Subject Seats)<sup>1</sup> contain a defect related to motor vehicle safety, as a stuck or sticking buckle prevents or impedes the removal of a child from a car seat in any emergency situation. Accordingly, ODI requests that Graco conduct a safety recall of all of these car seats.

**I. HARNESS BUCKLE APPLICATION.**

AmSafe, Inc. ("Amsafe")<sup>2</sup> is the supplier of the Signature, QT and QT3 buckles used in the Subject Seats. Graco has stated that the Signature buckle is a proprietary design that is unique to Graco and was initially used in MY 2009 Graco car seats. Graco introduced the QT buckle into its car seat production in August 2010, and completely phased out the Signature buckle from production in late 2011. To address ongoing consumer complaints of difficulty unlatching the QT buckle, certain modifications were made. The modifications resulted in the introduction of the QT3 buckle into production in October 2012. Less than a year later, in May 2013, Graco began to phase out the QT3 buckle when it introduced a completely new buckle supplied by Indiana Mills and Manufacturing, Inc.<sup>3</sup> ("IMMI"). The IMMI buckle, which has a different

<sup>1</sup> The Subject Seats include the following models: Cozy Cline, Comfort Sport, Classic Ride 50, My Ride 65, My Ride w/Safety Surround, My Ride 70, Size 4 Me 70, Smartseat, Snugride, Snugride 22, Snugride 30, Snugride 32, Snugride 35, Tuetonia 35, Snugride Click Connect 40, Nautilus, Nautilus Elite, and Argos 70.

<sup>2</sup> AmSafe is a provider of safety restraint products.

<sup>3</sup> Indiana Mills and Manufacturing, Inc. is a provider of safety restraint products.



design and operating mechanism from either the Signature, QT, or QT3 buckles, is currently being offered to some consumers as a replacement buckle for almost all of the Subject Seats. The IMMI buckle is also being used as the current production buckle for new product.

## II. SUMMARY OF ODI'S INVESTIGATION.

On October 15, 2012, ODI initiated this investigation as Preliminary Evaluation (PE) PE12-031 after the Agency received 25 Vehicle Owner Questionnaire (VOQ) reports from consumers alleging sticking or stuck buckles in Graco car seats. ODI upgraded the matter to EA13-001 on February 21, 2013, following Graco's response to ODI's PE Information Request (IR) and the Agency's evaluation of additional consumer complaints. Since October 2012, ODI has received 135 VOQ reports which indicate difficulty in unlatching the harness buckle, or not being able to unlatch it at all. The most recent VOQ was received on January 8, 2014.

Investigation and analysis of the ODI data reveal that 53 of the complainants could not unlatch the buckle at all and had to resort to other methods to remove their child from the car seat, including cutting the harness straps (14 reports), fully loosening the harness straps and maneuvering the child out through the straps with a still latched buckle (35 reports), or removing the entire car seat from the vehicle with the child still confined to the car seat (4 reports). Additionally, some complainants reported that they had to seek help from others or call emergency responders to remove their child from the car seat.

Graco has received over 6,100 consumer reports complaining of sticking or stuck buckles, many of which echo similar serious concerns. For example, 74 of Graco's complainants reported cutting the harness straps to remove their child from the car seat.

ODI utilized the production and complaint data provided by Graco to determine that the Signature and QT buckles exhibit a similar problem experience, with both buckle types having high complaint rates in excess of 100 complaints per 100,000 child seats produced. While the QT3 has a lower, but still significant problem experience, car seats using the QT3 buckles also have significantly less time in service, having been produced and placed in service more recently. ODI does not believe that the modifications Graco implemented in developing the QT3 address the root cause of the sticking and stuck buckles identified by Graco.

## III. GRACO'S ASSESSMENT AND CONCLUSIONS.

Graco maintains that the root cause of the sticking and stuck buckles is contamination of the internal buckle components by "*food, dried liquid drinks, vomit, formula, etc.*" that migrates or seeps into the buckles over a period of normal usage, causing the buckles to become difficult to unlatch or becoming stuck in the latched condition. Graco believes that the contamination impedes the buckle function, which is noted by an increase in the force required to open the buckle. (See EA IR Response at p. 18).

Based on the information it has provided to ODI, Graco's assessment is that buckles that are difficult to unlatch or that become completely stuck and cannot unlatch, trapping a child in the car seat, are not a safety-related problem. Rather, Graco believes its customers are experiencing a "*perception*" and a "*frustration*" issue with unlatching their car seat buckles. (See EA IR Response at p. 20). Graco states that the "*ledge*" of the sliding button on the Signature buckle and the push location on the QT buckle, as well as consumers purportedly using "*improper*

*unbuckling procedures*” on the QT and QT3 contribute to the perception and frustration experienced by its customers. (See EA IR Response at p. 18 & 19).

To address the issues related to contamination and improper unbuckling procedures, Graco and AmSafe developed “*enhanced*” buckle cleaning instructions (Signature, QT, and QT3 buckles) and buckle operation instructions (QT and QT3 buckles only). These instructions are being provided to consumers who call Graco on a case-by-case basis as an “*initial remedy*” for sticking buckles. (See EA IR Response at p. 16). The buckle cleaning and operating procedures were also phased into new production owner’s manuals around April 2012, and added to Graco’s website in around March 2013.

**A. Graco’s Position Regarding Removing a Child From a Car Seat with a Sticking or Stuck Buckle During an Emergency.**

Graco states that if the buckle of one of the Subject Seats cannot be opened or unlatched in an emergency situation, the child occupant of the car seat can be extricated from the car seat by loosening the harness assembly, unlatching the chest clip and removing the child from the seat with the harness still buckled. Additionally, according to Graco, if the buckle is sticking or stuck following an accident or emergency and the child occupant cannot be freed from the car seat’s harness assembly, the entire car seat can be disconnected from the vehicle and the car seat and child could be removed from the vehicle as one single unit. (See PE IR Response at p. 17).

**B. Lawsuits and Claims Against Graco Related to Sticking or Stuck Car Seat Buckles.**

Graco has repeatedly stated that the complaints of sticking buckles being investigated by ODI do not pose an unreasonable risk of safety to the users. In support of its position Graco states: “*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.*” (See EA IR Response at p. 19).

It is ODI’s understanding that there are two pending lawsuits alleging the buckles of the Subject Seats are difficult to unlatch or will not unlatch. The first lawsuit is a consumer class action complaint alleging Graco car seats with a QT buckle produced between 2009-2012 “are defective in that the harness buckle...is either unreasonably difficult to unlatch, or simply will not unlatch.” The lawsuit further alleges “[t]he defects pose an unreasonable safety hazard to consumers and/or their children because in the event of a vehicle accident it may be imperative to remove the child from the seat belt as quickly as possible to avoid further injury or death.” (*Long v. Graco Children’s Products, Inc.*, Case No. 13-1257, United States District Court, Northern District of California).

Graco is also a named defendant in the matter of *Ramirez v. State of California, et. al.*, Case No. BC494065, Los Angeles County Superior Court. In this wrongful death lawsuit, plaintiffs allege that Graco “designed their ‘Nautilus’ car seat with parts that made it extremely difficult to remove a child that was secured in the seat during an emergency”. The *Ramirez* matter alleges the death of a two-year-old child, Leiana Ramirez, who was killed in a car fire following a motor vehicle accident. The minor child was seated in a Graco Nautilus car seat, one of the Subject Seats, at the time of the incident.

### C. Graco's Actions in Response to Consumer Complaints of Stuck or Sticking Buckles.

It is ODI's understanding that consumers who contact Graco are provided a "no cost" remedy on a case-by-case basis for reports of stuck or sticking Signature and QT buckles. Graco's customer service may either provide buckle cleaning or operating instructions, a replacement buckle, a replacement car seat, or a refund.

### IV. ODI HAS TENTATIVELY CONCLUDED THAT THE BUCKLES IN THE SUBJECT CAR SEATS POSE AN UNREASONABLE RISK TO MOTOR VEHICLE SAFETY.

ODI disagrees with Graco's view that a safety-related defect does not exist.

Harness buckles that become stuck in a latched condition or that are difficult to unlatch are not operating to their design intent as a "quick release" connector for the harness assembly.<sup>4</sup> When a harness buckle of a car seat, just as a vehicle seat belt buckle, becomes stuck in the latched condition, or becomes difficult to unlatch, it creates an unreasonable risk to safety.<sup>5</sup> In a post-crash or other emergency situation where time is the critical factor and where every second counts, a buckle that is stuck or difficult to unlatch can take an excessive amount of time to open, or it may not be possible to unlatch the buckle at all. Further, in a post-crash or other emergency situation it is unreasonable, and it may not even be possible, to extricate a child from the car seat, either through the still fastened harness or with the child buckled into the car seat, as Graco suggests can be done. Many consumer complaints the Agency has received voice the same concern. For example:

#### ODI VOQ #10550731

Buckled my three year old into their [sic] Nautilus car seat. When we reached our destination[,] it was extremely difficult to unbuckle and get her out. **I was beginning to panic and considering cutting her straps off.** (emphasis added).

#### ODI VOQ #10511591

My toddler travels with me up to 4 round trips a day....Today we were on an outing...and we **spent over 45 minutes trying to unbuckle her from the seat.** I tried very hard as well as a large gentleman nearby in the parking lot who happened to notice me in distress. **My toddler became increasingly upset as it was getting scary.** The man was also shocked to see that he wasn't getting it unbuckled with strong force. **We debated cutting it apart; we also debated calling 911** to have the fire department unleash it....To get her out, we loosened up the straps as much as we could and squeezed her from the seat...**It's extremely unnerving to have this happen to your child,** and even more, the worst case scenarios are already playing in my mind: **what if we had a car fire or a car accident?** (emphasis added).

<sup>4</sup> See 49 CFR § 571.209; Standard No. 209 Seat belt assemblies, at S3, "Buckle means a quick release connector which fastens a person in a seat belt assembly."

<sup>5</sup> Over the past ten years there have been eight safety recalls on vehicle seat belt buckles that could not be unlatched.

**ODI VOQ # 155537**

This past week [the buckle] would not release so my son was stuck in the car seat. **We had to use pliers to force the latch to release.** (emphasis added).

As a “quick release” device, all that should be required to release the harness buckle is to simply push the buckle release button. Graco’s multi-step set of instructions to unlatch the harness, as noted in Graco’s “enhanced unbuckling procedure”, is uncommon and not intuitive and should not be required to remove a child from a car seat. Additionally, first responders, good Samaritans or anyone who is unfamiliar with the buckle’s operation or its sticking characteristics, do not have time to read an instruction manual when faced with an emergency.

Graco’s suggestion that a child can be removed through a still buckled harness, or that the car seat could be removed from the vehicle in a post-crash situation with the child still seated in the car seat is impracticable. In a post-crash situation, to remove a crying and agitated child through the still buckled harness takes time, a critical factor in any emergency situation. Further, maneuvering the child through the harness assembly may not even be possible in the event of injury to the child, or to the parent or caregiver who is present in the vehicle. Additionally, some of Graco’s convertible car seats and booster seats are rated for children up to 70 pounds. It is unreasonable to assume that most drivers, particularly females, are able to lift a 70 pound child plus the weight of the car seat out of the vehicle.

ODI does not believe that food or drink contamination should create any buckle performance issues. It is completely foreseeable that children will eat or drink while seated in their car seat and that some amount of these substances may enter the buckle. Contamination by food and drink are common to the environment in which car seats are used and should not inhibit or prevent the buckle from its intended function as a “quick release device.” ODI has not investigated this issue with any other child car seat manufacturer.

ODI believes that the hazards and risks involved in the delay of extricating a child from a car seat in any emergency situation are significantly increased and rise to the level of unreasonable risk when the harness buckle is difficult to open, or is stuck in a latched condition.

ODI believes that Graco’s current process in response to consumers with buckle issues is inconsistent and unreliable. ODI has received reports where consumers have contacted Graco customer service requesting assistance with sticking and stuck buckles. For example, a recent ODI complainant reported the following:

**ODI VOQ # 155537**

[On] December 9<sup>th</sup> I called Graco to let them know what happened [when] the crotch buckle [became stuck] and she said that she would send out a new buckle with the harness and it would be sent express. On December 12<sup>th</sup> **I received a new crotch buckle and harness, without paperwork or instructions, that was the exact same as the one that came with [the] seat originally.** I called Graco again as explained to the lady who answered that my original problem was and what I just received. She looked into it and told me that she was not sure why the **other person sent me the wrong buckle** with the harness. She would send out the new buckle but the soonest I would get it was December 17<sup>th</sup>. On December 18<sup>th</sup> **I received the new buckle without any paperwork or instructions.** (emphasis added).

## V. CONCLUSION

On the basis of the information collected during this investigation, ODI's tentative assessment is that the performance of the buckles in the Subject Seats constitutes a defect related to motor vehicle safety.<sup>6</sup>

ODI requests that Graco initiate a safety recall of the Subject Seats, in accordance with 49 U.S.C. § 30118-30120, to notify all owners, purchasers, and retailers of the problem and to provide a free remedy for each of the subject car seats. Graco provides consumers with assistance for buckle issues if and when they call to complain by providing cleaning instructions, replacement buckles, replacement car seats, and refunds. ODI does not believe that this action alone is sufficient to address the safety risks presented by these buckles for all consumers.

ODI believes that a safety recall will ensure that all registered car seat owners receive proper notification of the safety risks in these buckles along with a free remedy and proper remedy instructions, thus presenting the greatest opportunity for reducing the safety risk in the Subject Seats.

If Graco decides not to conduct the requested recall, it must provide ODI with a full and detailed explanation of its decision, including any additional analysis of the problem beyond Graco's past submissions of information. If Graco fails to initiate a recall, the agency may proceed to an Initial Decision that these buckles contain a safety-related defect. *See* 49 U.S.C. 554. An Initial Decision would be accompanied by the publication of a Federal Register notice describing the alleged defect, the safety consequences of the alleged defect, the ODI investigation, the scheduling of a public meeting, and the issuance of a press release to inform the public regarding this matter.

ODI's recommendation that Graco conduct a safety recall does not constitute a formal finding by NHTSA with respect to the evidence in our investigative file. Also, this recommendation does not constitute an initial or final decision that the subject car seats contain a safety-related defect pursuant to 49 U.S.C. § 30118, or an order to recall those car seats, or a final agency action.

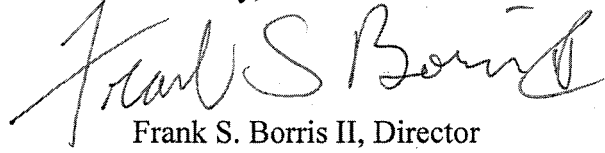
Graco's written response to this letter, in duplicate, referencing the identification codes in the upper right hand corner of page 1 of this letter, must be submitted to this office no later than January 29, 2014. It is important that Graco respond to this letter on time. This letter is being sent pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct investigations and require the submission of reports that may be necessary to enforce Chapter 301 of Title 49. Failure to respond promptly and fully to this letter may be construed as a violation of 49 U.S.C. § 30166, which could subject Graco to civil penalties pursuant to 49 U.S.C. § 30165.

---

<sup>6</sup> The statute defines motor vehicle safety as "the performance of a motor vehicle or motor vehicle equipment in a way that protects the public against unreasonable risk of crashes occurring because of the design, construction, or performance of a motor vehicle, and against unreasonable risk of death or injury in an accident, and includes nonoperational safety of a motor vehicle." *See* 49 U.S.C. § 30102(8).

If you have any questions regarding this letter, please contact Mr. Scott Yon of my staff, at (202) 366-0139. If you have any questions regarding the recall procedures, please contact Ms. Jennifer Timian of my staff at (202) 366-0209.

Sincerely,

A handwritten signature in cursive script that reads "Frank S. Borris II". The signature is written in dark ink and is positioned above the printed name.

Frank S. Borris II, Director  
Office of Defects Investigation  
Office of Enforcement