INFORMATION REDACTED PURSUANT TO THE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C. 552(B)(6)

FOLEY
FOLEY & LARDNER LLP

ATTORNEYS AT LAW
WASHINGTON HARBOUR
3000 K STREET, N.W.
SUITE 600
WASHINGTON, D.C. 20007-5109
202.672.5300 TEL
202.672.5399 FAX
WWW.FOLEY.COM

WRITER'S DIRECT LINE
202.295.4792
nenglund@foley.com EMAIL

CLIENT/MATTER NUMBER
122152-0101

August 25, 2020

VIA E-MAIL

Jeffrey Eyres
Senior Trial Attorney
Office of Chief Counsel
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Re: Harmony Juvenile Products Second Partial Response to NHTSA's July 20, 2020 Information Request – AQ 20-001

Dear Mr. Eyres:

On behalf of Harmony Juvenile Products, we are submitting the enclosed Second Partial Response to the Agency's July 20, 2020 Information Request regarding Audit Query (AQ) 20-001. As discussed with the Agency, the enclosed includes Harmony's explanation of the Notice of Non-compliance submitted to Transport Canada that relates to NHTSA Recall No. 18C-001 and provides responses to Request Nos. 24 through 28. Harmony provided its initial Partial Response to the information request on August 17, 2020, which responded to Request Nos. 1 through 5 and provided explanation of the of V7 Convertible Deluxe Car Seat (Model# 0302001TNC). Responses to the remainder of the requests (Requests Nos. 6 through 23 and 29 through 32) will be submitted on or before August 31, 2020.

Please contact me at (202) 672-5542, or Nick Englund at (202) 295-4792, if you have any questions.

Sincerely,

[redacted]

Christopher H. Grigorian

Enclosures

cc: Tanya Topka (NHTSA ODI)
Dr. Elizabeth Wolfe (NHTSA ODI)
Michael Noah (Harmony Juvenile Products)

[redacted]

Harmony Juvenile Products
Second Partial Response to July 20, 2020 Information Request (AQ 20-001)

This Second Partial Response to the Agency's July 20, 2020 Information Request regarding Audit Query (AQ) 20-001 is submitted on behalf of Harmony Juvenile Products (Harmony). On August 17, 2020, Harmony submitted its first Partial Response to the Information Request. Following a discussion with NHTSA personnel related to the first Partial Response, Harmony is providing some background on the voluntary compliance initiative Harmony submitted to Transport Canada, which the Information Request referred to as Canadian Recall No. 4. Harmony is also providing some background on a NHTSA recall (NHTSA Recall 18C-001) that preceded the compliance initiative in Canada that involved a substantially similar issue with the Big Boost Deluxe. Additionally, Harmony is providing responses to Request Nos. 24 through 28.

Background on Canadian Campaign No. 4

NHTSA's July 20, 2020 Information Request defined Canadian Recall No. 4 as "the recall titled 'Harmony Big Boost Deluxe Booster Seat – Non-compliance to Canada Motor Vehicle Safety Standards,' No. 2019-P02 E, published by Transport Canada on August 30, 2019." Because the term recall is a technical term, Harmony does not agree with NHTSA's characterization of the issue underlying Transport Canada's public notice TP 14566 as a recall. On May 3, 2018, Harmony voluntarily submitted a Notice of Non-compliance to Transport Canada to begin a voluntary compliance campaign, which ultimately lead to the notice titled "Harmony Big Boost Deluxe Booster Seat – Non-compliance to Canada Motor Vehicle Safety Standards," No. 2019-P02 E, published by Transport Canada on August 30, 2019. Exhibit No. 1 (May 3, 2018 Voluntary Notice of Non-compliance). Due to the distinction between a recall and a notice of noncompliance, Harmony will refer to this campaign as Canadian Campaign No. 4.

As detailed in Transport Canada's August 30, 2019 notice (TP 14566 – Public Notice), Harmony conducted a campaign related to the Big Boost Deluxe with UAS Belt Positioning Booster Seats (Model# 0304018CBR) manufactured between January 30, 2016 to December 31, 2017. *See* Exhibit No. 2 (TP 14599 – Transport Canada Public Notice). Specifically, the public notice identified the issue as "certain Big Boost Deluxe seats did not meet the dynamic requirements for chest acceleration of the *Motor Vehicle Restraint Systems and Booster Seats Safety Regulation.*" *See id.*

The structural base of the booster seat involved in Canadian Campaign No. 4 is identical to its U.S. analogue, the Big Boost Deluxe with Latch booster seat (Model# 0304017CBK). The non-structural differences between the two models (labeling, instructions, registration cards) are immaterial to the product's performance with the dynamic testing standards.

On April 17, 2018, more than a year prior to the public notice for Canadian Campaign No. 4, Harmony submitted a noncompliance report in accordance with 49 CFR Part 573 (573 Report) for the U.S. version of the Big Boost. *See* Exhibit No. 3 (573 Report for NHTSA Recall 18C-001). Harmony's 573 Report described the noncompliance as follows, "In one test, chest g-forces exceeded the standard's limit." *See* Exhibit No. 3 (573 Report for NHTSA Recall 18C-001). The

[redacted]

"chest g-forces" referred to in the 573 Report are the U.S. equivalent of Canada's "dynamic requirements for chest acceleration" referenced in the noticed for Canadian Campaign No. 4.

Harmony initiated NHTSA Recall 18C-001in response to compliance testing conducted by NHTSA on January 10, 2018. *See* Final Report of FMVSS 213 Compliance Testing of Harmony Juvenile Products Big Boost Deluxe Booster Seat, Model 0304017CBK (Report No. 213-MGA-18-036), enclosed herewith as Exhibit No. 4 (Test Report No. 213-MGA-18-036). One of the three Big Boost Deluxe booster seats tested by NHTSA raised concerns about the seat's performance with respect to the calculated HIC36 and the maximum chest acceleration. *Id.* After reviewing the testing, Harmony discussed with NHTSA some concerns with the compliance testing. In particular, Harmony was concerned about repeatability of the MGA (NHTSA's contractor) test as the two other sample seats complied with the dynamic limits and prior testing by Harmony demonstrated the seat's compliance. Despite these concerns, Harmony ultimately submitted, and NHTSA accepted, the April 17, 2018 573 Report, which limited the noncompliance to the chest acceleration issue. With respect to the recall's scope, the 573 Report included the full production range of Big Boost Deluxe seats manufactured for sale in the United States (November 1, 2015 through June 24, 2017).

Following the Big Boost Deluxe's 573 report, Harmony and NHTSA spent multiple months discussing potential remedies for Big Boost Deluxe products in the United States. In parallel with the NHTSA discussions, Harmony worked with Transport Canada and ultimately agreed to conduct a similar noncompliance campaign in Canada (Canadian Campaign No. 4). In short, NHTSA Recall 18C-001 and Canadian Campaign No. 4 involved nearly identical products (the Big Boost Deluxe) for the same condition (failure to meet the chest acceleration criteria) and covered the full production range of Big Boost Deluxe seats for the respective countries.

With respect to reporting the Canadian noncompliance campaign to NHTSA, 49 CFR 579.11(a) requires manufacturers to report foreign recalls involving identical or substantially similar products sold or offered for sale in the United States within five working days after the manufacturer determines, or receives notice from a foreign government, that there is a safety recall or other safety campaign in a foreign country. 49 CFR 579.11(a) and (b). But the manufacturer is exempt from these reporting obligations if:

> The manufacturer has determined that for the same or substantially similar reasons relating to motor vehicle safety that it is conducting a safety recall or other safety campaign in a foreign country, a safety-related defect or noncompliance with a Federal motor vehicle safety standard exists in identical or substantially similar motor vehicles, motor vehicle equipment, or tires sold or offered for sale in the United States, and has filed a defect or noncompliance information report pursuant to part 573 of this chapter, provided that the scope of the foreign recall or campaign is not broader than the scope of the recall campaign in the United States

49 CFR 579.11(d).

As NHTSA is aware, Transport Canada has largely adopted identical safety standards to the Federal motor vehicle safety standards. Although Harmony filed its initial 573 Report for the

Big Boost Deluxe more than a year before Transport Canada's notice, NHTSA Recall 18C-001 and Canadian Campaign No. 4 are for the same performance concern – exceeding the chest acceleration performance requirements. Moreover, during discussions with NHTSA concerning potential remedies, Harmony offered a remedy for the chest acceleration issue (re-routing the shoulder portion of the vehicle's lap-and-shoulder seat belt) that Transport Canada accepted. Based on the discussions with the Agency, Harmony's understanding is that NHTSA was aware of the Canadian campaign for the same issue and that the proposed remedy had been accepted by Transport Canada. Ultimately, however, NHTSA pushed for, and Harmony agreed to, a different remedy for the U.S. products.

In sum, NHTSA Recall 18C-001 and Canadian Campaign No. 4 cover essentially identical products, involve substantially similar reasons (noncompliance with the chest acceleration requirements), and involve the same scope (all the products for the respective countries). Because Harmony had previously submitted the 573 report that initiated NHTSA Recall No. 18C-001, Harmony believes that Canadian Campaign No. 4 did not trigger reporting obligations under 579.11(a) or (b).

Request No. 24

State the date on which Harmony determined to conduct Canadian Recall No. 4.

Response to Request No. 24

As explained above, Harmony submitted a noncompliance report to NHTSA on April 17, 2018. Following the 573 Report for NHTSA Recall 18C-001, Harmony discussed the chest acceleration noncompliance with Transport Canada. On or about May 1, 2018, out of an abundance of caution, Harmony decided to submit a voluntary-compliance campaign. On May 3, 2018, Harmony submitted a Notice of Non-compliance to Transport Canada. *See* Exhibit No. 1 (May 3, 2018 Voluntary Notice of Non-compliance). Harmony continued to discuss the campaign with Transport Canada and possible remedies. On June 18, 2019, after further discussions with Transport Canada, Harmony filed a revised Notice of Non-compliance. Transport Canada published a public notice to its website on August 30, 2019. *See* Exhibit No. 2 (TP 14599 – Transport Canada Public Notice).

Request No. 25

State whether Canadian Recall No. 4 was a safety recall or other safety campaign conducted by Harmony in a foreign country; and

a. If your response to Request No. 25 is not an unqualified affirmative response, explain in detail why Canadian Recall No. 4 was not a safety Recall or other safety campaign conducted by Harmony in a foreign country, and produce all documents supporting or otherwise relating to your response.

Response to Request No. 25

[redacted]

Harmony believes that the Notice of Non-compliance referred to as Canadian Campaign No. 4 would meet the meaning of "other safety campaign" as used in the 49 CFR 579.11.

Request No. 26

State whether Canadian Recall No. 4 involved child restraint systems that were identical or substantially similar to child restraint systems offered for sale in the United States; and

a. If your response to Request No. 26 is not an unqualified affirmative response, explain in detail why Canadian Recall No. 4 did not involve child restraint systems that were identical or substantially similar to child restraint systems offered for sale in the United States, and produce all documents supporting of otherwise relating to your response.

Response to Request No. 26

As explained in the background above, the structural base of the Big Boost Deluxe that is the subject of Canadian Campaign No. 4 is identical to the Big Boost Deluxe booster seat sold in the United States.

Request No. 27

State whether Harmony reported its determination to conduct Recall No. 4 to NHTSA;

a. State the date on which Harmony reported Canadian Recall No. 4 to NHTSA and produce all documents reflecting Harmony's report of Canadian Recall No. 4 to NHTSA; and

b. *If your response to Request No. 27 is not an unqualified affirmative response, explain in detail why Harmony did not report its determination to conduct Canadian Recall No. 4 to NHTSA and produce all supporting or otherwise relating to your response.*

Response to Request No. 27

As explained in the background, on April 17, 2018, Harmony submitted a noncompliance report in accordance with 49 CFR Part 573 to NHTSA for the U.S. version of the Big Boost Deluxe (NHTSA Recall 18C-001). The 573 report preceded the May 3, 2018 Notice of Non-compliance submitted to Transport Canada and related to a substantially similar compliance issue (the chest acceleration performance), involved essentially identical booster seats, and covered the same scope of production. Accordingly, 49 CFR 579.11(d) exempted Harmony from reporting the issue as "a foreign recall or other safety campaign."

Supporting documents are included in Exhibit No. 1 (May 3, 2018 Voluntary Notice of Non-compliance), Exhibit No. 2 (TP 14599 – Transport Canada Public Notice), and Exhibit No. 3 (573 Report for NHTSA Recall 18C-001).

Request No. 28

State whether Harmony reported its determination to conduct Canadian Recall No. 4 to NHTSA within 5 working days after it determined to conduct Canadian Recall No. 4; and

a. If your response to Request No. 28 is not an unqualified affirmative response, explain in detail why Harmony did not report Canadian Recall No. 4 to NHTSA within 5 working days after it determined to conduct Canadian Recall No. 4.

Response to Request No. 28

As explained above, Harmony had submitted a 573 report to NHTSA for the Big Boost Deluxe booster seats prior to submitting the notice to Transport Canada for a substantially similar compliance issue and covering the same scope of production. As explained in response to Request No. 27, 49 CFR 579.11(d) exempts recalls and other safety issues for which the manufacturer submitted a 573 report to NHTSA. Because Harmony submitted a 573 report to NHTSA prior to submitting a notice to Transport Canada, the chest acceleration issue was not subject to the reporting requirements of 49 CFR 479.11.

* * *

EXHIBIT No. 1

May 3, 2018

harmony™

HARMONY JUVENILE PRODUCTS

NOTICE OF NON-COMPLIANCE – S. 10.1 MOTOR VEHICLE SAFETY ACT (CANADA)

1. **Name and Address of the Company giving notice:**

   Harmony Juvenile Products
   2450 Rue Cohen
   Saint-Laurent, QC H4R 2N6

2. **Name of the manufacturer of the booster seat:**

   Harmony Juvenile Products

3. **Model name and number of booster seat for which the notice of non-compliance is given and the prescribed class of equipment to which it belongs:**

   Model #0304018CBR Big Boost Deluxe with UAS Belt Positioning Booster Seat

4. **Period during which the restraint system or booster seat was manufactured:**

   The affected booster seat was sold in Canada during 2016- 2017 only. The model of Big Boost currently sold in Canada is not affected by this notice.

5. **Estimated number of booster seats that potentially contain the non-compliance:**

   Approximately 10,000 units are affected by this notice.

6. **Description of the non-compliance:**

   In certain laboratory dynamic testing, the seat belt has the potential to cause forces to be applied to the restrained child's chest in excess of regulatory standard limits.

7. **Evaluation of the risk to the safety of persons that arises from the non-compliance:**

   The resultant chest g's are occurring as the apex of the forward motion is occurring at the exact same MS as the apex of the downward motion. As the two converge, there is a mathematical/theoretical potential failure. As this is highly unlikely to be replicated in real-life vehicles, the overall risk assessment is low.

8. **Statement of the measures to be taken to correct the non-compliance:**

   The Company is in the process of testing a repair kit that will address the non-compliance. Once the repair kit is available, registered owners will receive the repair kit and a letter containing proper installation instructions. Non-registered owners of

affected booster seats, or owners who have moved, should contact Harmony Juvenile Products at customerservice@harmonyjuvenile.com to obtain a free repair kit or if they have any questions.

9. **Conditions affecting the correction of the non-compliance:**

   Testing of a repair kit is in progress.

10. **Number, title or other identification assigned by the company to the notice of non-compliance:**

    None

HARMONY JUVENILE PRODUCTS
(June 18, 2019 – Remedy Included)

REVISED

NOTICE OF NON-COMPLIANCE – S. 10.1 MOTOR VEHICLE SAFETY ACT (CANADA)

1. **Name and Address of the Company giving notice:**

   Harmony Juvenile Products
   2435 Guenette Street
   Saint-Laurent, QC H4R 2E9

2. **Name of the manufacturer of the booster seat:**

   Harmony Juvenile Products

3. **Model name and number of booster seat for which the notice of non-compliance is given and the prescribed class of equipment to which it belongs:**

   Model #0304018CBR Big Boost Deluxe with UAS Belt Positioning Booster Seat

4. **Period during which the restraint system or booster seat was manufactured:**

   The affected booster seat was sold in Canada during 2016- 2017 only. The model of Big Boost currently sold in Canada is not affected by this notice.

5. **Estimated number of booster seats that potentially contain the non-compliance:**

   Approximately 10,000 units are affected by this notice.

6. **Description of the non-compliance:**

   Laboratory testing conducted on behalf of Harmony by an independent third party has consistently confirmed that the Big Boost – when installed in accordance with Harmony's existing instructions – is compliant with all regulatory requirements.

   In some third-party tests conducted on behalf of Transport Canada, when the seatbelt is anchored forward of the seat crease in a manner such that the seatbelt does not wrap around the base of the booster, results have been obtained showing that in some tests, in the event of a collision, the current routing of the seatbelt under the armrest of the Big Boost has the potential to cause forces to be applied to the restrained child's chest in excess of regulatory limits in Canada.

   This notice was filed at the request of Transport Canada

7. **Evaluation of the risk to the safety of persons that arises from the non-compliance:**

The resultant chest g's are occurring as the apex of the forward motion is occurring at the exact same MS as the apex of the downward motion. As the two converge, there is a mathematical/theoretical potential failure. As this is highly unlikely to be replicated in real-life vehicles, the overall risk assessment is low.

8. **Statement of the measures to be taken to correct the non-compliance:**

The Company will be advising consumers to re-route the shoulder portion of the vehicles lap-and-shoulder seat belt over the armrest of the booster seat. Registered consumers will be provided with an updated side warning sticker for the Big Boost Deluxe seat as well as a letter outlining the re-routing instructions (Consumer Letter) by regular mail. In addition, the Instruction Manual for the Big Boost Deluxe will be updated to reflect the re-routing instructions and the revised Instruction Manual will be available for download by consumers (at no cost). Non-registered owners of affected booster seats, or owners who have moved, should contact Harmony Juvenile Products at customerservice@harmonyjuvenile.com or 1-877-306-1001 to obtain a new side warning sticker and Consumer Letter or if they have any questions.

9. **Conditions affecting the correction of the non-compliance:**

Harmony anticipates that the side warning sticker and the Consumer Letter will be available for distribution to consumers within the next 6 - 8 weeks.

10. **Number, title or other identification assigned by the company to the notice of non-compliance:**

None

EXHIBIT No. 2

Transport Canada is closely monitoring the COVID-19 situation. In response, we have issued some **transportation-related measures and guidance**. Please check if any of these measures apply to you.

You may experience longer than usual wait times or partial service interruptions. If you cannot get through, please **contact us by email**.

For information on COVID-19 updates, please visit **Canada.ca/coronavirus**.

Harmony Big Boost Deluxe Booster Seat – Non-compliance to Canada Motor Vehicle Safety Standards

From: Transport Canada

TP 14566 — Public Notice

Child Restraint Systems

2019-P02 E

August 30th, 2019

Road Safety

Information: 1-800-333-0371

Manufacturer:

Harmony Juvenile Products

2435 Guenette Street

Saint–Laurent, QC H4R 2E9

Importer and distributor:

Harmony Juvenile Products

2435 Guenette Street

Saint–Laurent, QC H4R 2E9

Consumer contact:
Phone: 1-877-306-1001
Email: customerservice@harmonyjuvenile.com

Models affected:
Model Name: Big Boost Deluxe with UAS Belt Positioning Booster Seat (Model# 0304018CBR)

Dates of Manufacture:
January 30, 2016 to December 31, 2017

Number of Units Sold:
10,000 (approximately)

Geographical Distribution:
Across Canada

Issue:

Harmony Juvenile Products is informing the public of a non-compliance of certain Big Boost Deluxe booster seats made between 2016 and 2017. Specifically, Transport Canada testing has shown that certain Big Boost Deluxe booster seats did not meet the dynamic requirements for chest acceleration of the *Motor Vehicle Restraint Systems and Booster Seats Safety Regulation*.

Safety Risk:

Regulations set forth by Transport Canada require that booster seats meet all applicable safety requirements when subjected to a dynamic test, including measures and limits for chest acceleration. Transport Canada

tests indicated that the booster seat in question does not meet the dynamic test requirements for chest acceleration, which could increase the risk of injury in the event of a collision.

Company Actions:

Harmony is advising consumers to re-route the shoulder portion of the vehicles lap-and-shoulder seat belt over the armrest of the booster seat. Registered consumers will be provided with an updated side warning sticker for the Big Boost Deluxe seat as well as a letter outlining the re-routing instructions by regular mail. In addition, the Instruction Manual for the Big Boost Deluxe has been updated to reflect the re-routing instructions and is available for download by consumers (at no cost). Non-registered owners of affected booster seats, or owners who have moved, should contact Harmony Juvenile Products at customerservice@harmonyjuvenile.com or 1-877-306-1001 to obtain a new side warning sticker and Consumer Letter or if they have any questions.

Consumer Recourse:

Owners of the affected booster seats may contact Harmony's customer service at 1-877-306-1001 or customerservice@harmonyjuvenile.com to receive their updated warning sticker and instructions, or for any questions concerning this issue.

Date modified:
2019-08-30

EXHIBIT No. 3

Part 573 Safety Recall Report 18C-001

Manufacturer Name : Harmony Juvenile Products
Submission Date : JUN 07, 2018
NHTSA Recall No. : 18C-001
Manufacturer Recall No. : NR

Manufacturer Information :

Manufacturer Name : Harmony Juvenile Products
Address : 2450 Cohen Street
Montreal, Quebec 00 H4R2N6
Company phone : 999

Population :

Number of potentially involved : 148,165
Estimated percentage with defect : NR

Child Restraint Information :

Make 1 : Harmony
Model : Big Boost Deluxe with Latch
Seat Type : BOOSTER SEAT
Model No. : 0304017CBK
Platform Name / No. : NR
Brand Name : NR
Descriptive Information : The numbers stated in this report reflect the full population.
Production Dates : NOV 01, 2015 - JUN 24, 2017

Description of Noncompliance :

Description of the Noncompliance : In one test, chest g-forces exceeded the standard's limit.
FMVSS 1 : 213 - Child restraint systems
FMVSS 2 : NR
Description of the Safety Risk : Recent laboratory dynamic testing has shown that the current routing of the seatbelt (under the armrest of the Big Boost) has the potential, in the event of a collision, to cause forces to be applied to the restrained child's chest in excess of regulatory limits. The company is not aware of reports of deaths or injuries related to the use of the product.
Description of the Cause : The apex of the forward motion and the downward motion seem to be occurring at the exact same MS whereby contributing to higher chest G-forces. This may occur when the seatbelt is incorrectly anchored forward of the seat crease.
Identification of Any Warning that can Occur : NR

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

Initial booster seat independent testing was conducted mid-2015 for both FMVSS and CMVSS standards, and was later homologated in Europe to the ECE standard in October 2015. Further testing was conducted both domestically and overseas in early 2017 with similarly compliant results. None of these tests showed a noncompliance with the 3YO Hybrid III. Subsequent MGA testing showed a noncompliance as to chest G- forces with the 3YO Hybrid III. Recent testing conducted on May 7, 2018 to specifically address NHTSA's concerns using a 3YO configuration showed compliance with FMVSS 213 standards and passed all requirements. The tests showed that the standard is met if the shoulder part of the seatbelt is routed OVER, rather than under, the booster's armrest.

Description of Remedy :

Description of Remedy Program :	The company will provide a new side warning label and instructional letter outlining the seatbelt routing change to consumers and give an option to download a new instruction book directly from Harmony's website.
How Remedy Component Differs from Recalled Component :	NR
Identify How/When Recall Condition was Corrected in Production :	NA (this product has not been produced since 2017).

Recall Schedule :

Description of Recall Schedule :	NR
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	NR - NR

Purchaser Information :

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name :	NR
Address :	NR
	NR
Country :	NR
Company Phone :	NR

* NR - Not Reported

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

1200 New Jersey Avenue SE
Washington, DC 20590

May 2, 2018

Mr. Michael Noah
Harmony Juvenile Products
2450 Cohen Street
Montreal, Quebec H4R2N6

NEF-150SM
18C-001

Subject: Booster Seat Excessive Force/FMVSS 213

Dear Mr. Noah:

This letter serves to acknowledge Harmony Juvenile Products's notification to the National Highway Traffic Safety Administration (NHTSA) of a safety recall which will be conducted pursuant to Federal law for the product(s) listed below. Please review the following information to ensure that it conforms to your records as this information is being made available to the public. If the information does not agree with your records, please contact us immediately to discuss your concerns.

Makes/Models/Model Years:
HARMONY/BIG BOOST DELUXE/9999

Mfr's Report Date: April 17, 2018

NHTSA Campaign Number: 18C-001

Components:
CHILD SEAT

Potential Number of Units Affected: 148,165

Problem Description:
Harmony Juvenile Products (Harmony) is recalling certain Harmony Big Boost Deluxe booster seats. In the event of a crash, the seat belt may cause excessive force to be applied to the restrained child's chest. As such, these vehicles fail to comply with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) number 213, "Child Restraint Systems."

Consequence:
Excessive chest force can increase the risk of injury.

Remedy:
The remedy for this recall is still under development. The manufacturer has not yet provided a notification schedule. Owners may contact Harmony customer service at 1-877-306-1001.

Notes:
Owners may also contact the National Highway Traffic Safety Administration Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to www.safercar.gov.

Under 49 U.S.C. § 30112(a), it is illegal for anyone, including a manufacturer, distributor, dealer, or retailer to sell an item of equipment or vehicle that fails to comply with all applicable Federal motor vehicle safety standards.

Please update your recall filing to include your remedy plan once it has been determined. Be aware that if your remedy plan involves a modification to the owner's booster seat, the remedy must adequately reduce the force applied to the occupant's chest in a crash, be available quickly, be durable and be easy to install without the possibility that it may be installed incorrectly. If your remedy will involve refunding the owner for the seat or an exchange of the seat, the owner cannot incur any expenses in returning the seat to Harmony.

Please be reminded of the following requirements:

You are required to submit a draft owner notification letter to this office no less than five days prior to mailing it to the customers. Also, copies of all notices, bulletins, dealer notifications, and other communications that relate to this recall, including a copy of the final owner notification letter and any subsequent owner follow-up notification letter(s), are required to be submitted to this office no later than 5 days after they are originally sent (if they are sent to more than one manufacturer, distributor, dealer, or purchaser/owner).

As stated in Part 573.7, submission of the first of six consecutive quarterly status reports is required within one month after the close of the calendar quarter in which notification to purchasers occurs. Therefore, the first quarterly report will be due on, or before, 30 days after the close of the calendar quarter.

Your contact for this recall will be Sarah Mcshane who may be reached by phone at (202) 366-7401, or by email at sarah.mcshane@dot.gov or through the office email at rmd.odi@dot.gov. We look forward to working with you.

Sincerely,

[redacted]

Jennifer Timian
Chief, Recall Management Division
Office of Defects Investigations
Enforcement

EXHIBIT No. 4

REPORT NUMBER: 213-MGA-18-036

SAFETY COMPLIANCE TESTING FOR FMVSS 213 CHILD RESTRAINT SYSTEMS

Harmony Juvenile Products
Big Boost Deluxe Booster Seat, Model 0304017CBK

PREPARED BY:
MGA Research Corporation
11480 Robertson Drive
Manassas, VA 20109

Report Date: March 12, 2018

FINAL REPORT

PREPARED FOR:
U. S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance
Mail Code: NVS-220, W43-481
1200 New Jersey Avenue, SE
Washington, DC 20590

This publication is distributed by the National Highway Traffic Safety Administration in the interest of information exchange. Opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof.

If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement.

Prepared By: [redacted]

Approved By: [redacted]

Approval Date: March 12, 2018

FINAL REPORT ACCEPTANCE BY OVSC:

Accepted By: [redacted] Digitally signed by ZACHARY R FRASER Date: 2019.05.22 13:14:28 -04'00'

Acceptance Date: _____

Technical Report Documentation Page

1. Report No. 213-MGA-18-036	*2. Government Accession No.*	*3. Recipient's Catalog No.*	
4. Title and Subtitle Final Report of FMVSS 213 Compliance Testing of Harmony Juvenile Products Big Boost Deluxe Booster Seat, Model 0304017CBK		*5. Report Date* March 12, 2018 *6. Performing Organization Code* MGA Research Corporation	
7. Author(s) Matthew James, Project Engineer		*8. Performing Organization Report No.* 213-MGA-18-036	
9. Performing Organization Name and Address MGA Research Corporation 11480 Robertson Drive Manassas, VA 20109		*10. Work Unit No.* *11. Contract or Grant No.* DTNH22-17-D-0080	
12. Sponsoring Agency Name and Address U. S. DEPARTMENT OF TRANSPORTATION National Highway Traffic Safety Administration Enforcement Office of Vehicle Safety Compliance Mail Code: NVS-220, W43-481 1200 New Jersey Avenue, SE Washington, DC 20590		*13. Type of Report and Period Covered* Final Test Report January 10 to February 15, 2018 *14. Sponsoring Agency Code* NVS-220	
15. Supplementary Notes			
16. Abstract Compliance tests were conducted on the Harmony Juvenile Products, Big Boost Deluxe Booster Seat, Model 0304017CBK child restraint systems in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-213-10. Test failures identified were as follows: S5.1.2.1(a) Head Injury Criterion S5.1.2.1(b) Chest Injury Criterion S5.5.2(n) Labeling S5.6.1.7(ii) Printed Instructions for Proper Use S5.8.2(b) Electronic Registration Form S5.8.2(c) Electronic Registration Form			
17. Key Words Compliance Testing Safety Engineering FMVSS 213		*18. Distribution Statement* Copies of this report are available from: National Highway Traffic Safety Admin., Technology Info Services, (NPO-411) (Rm E12-100) 1200 New Jersey Avenue, SE Washington, D.C. 20590 e-mail: tis@nhtsa.dot.gov FAX: 202-493-2833	
19. Security Classif. (of this report) Unclassified	*20. Security Classif. (of this page)* Unclassified	*21. No. of Pages* 79	22. Price

Form DOT F1700.7 (8-72)

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SECTION 1
PURPOSE AND TEST PROCEDURE

PURPOSE

The tests performed are part of the safety compliance program for the National Highway Traffic Safety Administration (NHTSA) by MGA Research Corporation under Contract No. DTNH22-12-D-00274. The purpose of the testing is to determine whether production child restraint systems meet the minimum inspection and dynamic test requirements of TP-213-10, “Child Restraint Systems”.

TEST PROCEDURE

The MGA Research Corporation Test Procedure for FMVSS 213, submitted and approved by the Office of Vehicle Safety Compliance, National Highway Traffic Safety Administration, contains the specific procedures used to conduct this test. This procedure shall not be interpreted to be in conflict with any portion of FMVSS 213 and amendments in effect as noted in the applicable contract.

SECTION 2
INTRODUCTION AND SUMMARY

This report presents all of the FMVSS 213 compliance inspection and test data obtained on the Harmony Juvenile Products Big Boost Deluxe Booster Seat, Model 0304017CBK, child restraint system. The restraint was dynamically tested in the following configurations:

- 3 year old, Hybrid III, forward facing, other configuration, lap and shoulder belt, tether free, and no back booster
- 6 year old, Hybrid III, forward facing, other configuration, lap and shoulder belt, tether free, and no back booster
- 10 year old, Hybrid III, forward facing, other configuration, lap and shoulder belt, tether free, and no back booster

The inspection and/or testing of the Harmony Juvenile Products, Big Boost Deluxe Booster Seat, Model 0304017CBK child restraint failed to meet the following requirement(s) of FMVSS No. 213 when tested in accordance with TP-213-10 in the configurations and conditions documented in this report:

S5.1.2.1(a) Head Injury Criterion

The maximum calculated head injury criterion for a 36 millisecond time interval (HIC36) shall not exceed 1,000. HIC is not calculated when using the 6-year-old weighted and 10-year-old test dummies.

S5.1.2.1(b) Chest Injury Criterion

The chest acceleration shall not exceed 60g for intervals whose cumulative duration is more than 3 milliseconds.

S5.5.2(n) Labeling

The statement "This Restraint is Not Certified for Use in Aircraft" required by this paragraph shall be in red lettering and shall be placed after the certification statement required by S5.5.2(e).

S5.6.1.7(ii) Printed Instructions for Proper Use

One of the following statements, inserting an address and a U.S. telephone number. If a manufacturer opts to provide a Web site on the registration card as permitted in Figure 9a of this section, the manufacturer must include the statement in part (ii): "Child restraints could be recalled for safety reasons. You must register this restraint to be reached in a recall. Send your name, address, e-mail address if available (preceding four words are optional), and the restraint's model number and manufacturing date to (insert address) or call (insert telephone number) or register online at (insert Web site for electronic registration form). For recall information, call the U.S. Government's Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153), or go to http://www.NHTSA.gov".

S5.8.2(b) Electronic Registration Form

No other information shall appear on the electronic registration form, except for information identifying the manufacturer or a link to the manufacturer's home page, a field to confirm submission, and a prompt to indicate any incomplete or invalid fields prior to submission. Accessing the web page that contains the electronic registration form shall not cause additional screens or electronic banners to appear.

S5.8.2(c) Electronic Registration Form

The electronic registration form shall be accessed directly by the web address that the manufacturer printed on the attached registration form. The form must appear on screen when the consumer has inputted the web address provided by the manufacturer, without any further keystrokes on the keyboard or clicks of the mouse.

Restraint system inspection and dynamic sled testing were performed by MGA Research Corporation in Manassas, Virginia. Compliance test data sheets for all tests are found in Section 5 of this report.

SECTION 3

CHILD RESTRAINT SYSTEM IDENTIFICATION

Report No. 213-MGA-18-036

Manufacturer:	Harmony Juvenile Products
Place of Manufacture per S5.5.2(d):	China
Model No.	0304017CBK
Group No.	4

1	Item Code	036-D0304017C-01-6H3FN3FN
	Date of Manufacture	2017 07 23
	Sled Test No.	V18021F
2	Item Code	036-D0304017C-02-3H3FN3FN
	Date of Manufacture	2017 08 06
	Sled Test No.	V18021R
3	Item Code	036-D0304017C-03-TH3FN3FN
	Date of Manufacture	2018 08 06
	Sled Test No.	V18025F

SECTION 4

DYNAMIC TEST RESULTS DATA SUMMARY

Child Restraint System - Harmony Juvenile Products / Big Boost Deluxe Booster Seat / 0304017CBK										
Item Code	Sled Test No.	Dummy and CRS Test Mode*	Lower Anchors Used? Y/N	Tether Used? Y/N	HIC (1000 max)	Chest g clip (60 g max)	Head Excursion (720 mm max - or 813 mm max w/o tether)	Knee Excursion (915 mm max)	Seat Back Angle (70 deg max)	Pass/ Fail
036-D0304017C-01-6H3FN3FN	V18021F	6 yo (FF) (N)	N	N	658	59	506	673	N/A	Pass
036-D0304017C-02-3H3FN3FN	V18021R	3 yo (FF) (N)	N	N	1079	61	437	638	N/A	Fail
036-D0304017C-03-TH3FN3FN	V18025F	10 yo (FF) (N)	N	N	N/A	57	498	741	N/A	Pass

*Test Mode:

RF- Rear facing
FF- Forward facing
SF- Side facing
U- Upright
R- Reclined
B- Backed Booster
N- No Back Booster
F- Flat

SECTION 5
DATA

LABELING

(FMVSS 213, S5.3, S5.5)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

Requirement	Pass/Fail
The labels on the subject child restraint system were inspected and compared to the requirements of FMVSS No. 213 S5.3.1(b) and S5.5, as applicable.	Fail (1)(2)

The following failures were identified:

(1) S5.5.2(n) The required statement is printed with white text.

Remarks:

(2) S5.5.2 The statements required by S5.5.2(e), S 5.5.2(m), and S5.5.2(n) are printed in white lettering on a black background.

Photographs of the labels are included in Section 9.

Recorded by: [redacted] Date: 1/10/2018

PRINTED INSTRUCTIONS FOR PROPER USE

(FMVSS 213, S5.6)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

Requirement	Pass/Fail
The printed instructions accompanying the subject child restraint system were inspected and compared to the requirements of FMVSS No. 213 S5.6, as applicable.	Fail (1)

The following failures were identified:

(1) S5.6.1.7(ii) The required statement is worded incorrectly. It reads:

> **REGISTER YOUR BOOSTER SEAT TODAY!** Booster seats could be recalled for safety reasons. You must register this restraint to be reached in the event of a recall, and to be eligible to receive replacement parts while under warranty.
>
> The model number, serial number and manufacturing date can be found on a label on the underside of your child restraint base.
>
> **Visit http://www.harmonyjuvenile.com/register to register your booster seat online, mail-in the prepaid registration card or send your name, address, the booster seat model number, manufacturing date and date of purchase to:**
>
> **Harmony Juvenile Products**
> **1600 53rd Street**
> **North Bergen, NJ, 07047, USA**
>
> or call: **1-877-306-1001**
>
> or register online:
> **http://www.harmonyjuvenile.com/register**
>
> For recall information,
> call the **U.S. Government's Vehicle Safety Hotline:**
> **1-888-327-4236 (TTY: 1-800-424-9153)**
> or go to: **http://www.NHTSA.gov.**

Photographs of the printed instructions are included in Section 9.

Recorded by: [redacted] Date: 1/10/2018

REGISTRATION FORM

(FMVSS 213, S5.8)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

Requirement	Pass/Fail
The printed registration form accompanying the subject child restraint system and the electronic registration form were inspected and compared to the requirements of FMVSS No. 213 S5.8.	Fail (1)(2)(3)

The following failures were identified:

(1) S5.8.2(b) Additional links that do not lead to the manufacturer's homepage and additional required and optional fields appear on the electronic registration form
(2) S5.8.2(c) The electronic registration form does not appear on screen after inputting the web address provided by the manufacturer. An intermediate webpage appears for the selection of the consumer's country and language.

Remarks:

(3) S5.8.1(b)(2) The word "a" is inserted before "recall, the word "consumer" is replaced with "consumers", and the required 10% screen tint is omitted on the product identification and purchaser information side of the attached registration form.

Recorded by [redacted] Date: 1/10/2018

MAXIMUM CHILD WEIGHT FOR LOWER ANCHOR USE

(S213, S5.5.2(l)(3))

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

For child restraints manufactured on or after February 27, 2015:

Installation Mode	A Max Child Weight is Required for this Installation Mode (Y or N)	Installation Diagram Shown (Y or N)	Max Child Weight Indicated on Installation Diagram (lb)
Rear Facing	N/A	N/A	N/A
Forward Facing	N/A	N/A	N/A

CRS Weight (lb)	Child Weight (CW) Calculation (lb)	Rounded CW Limit permitted under S5.5.2(l)(3)(i)
N/A	Rear Facing 60-CRS Weight = N/A	N/A
	Forward Facing 65-CRS Weight = N/A	N/A

Calculated CW	Rounded CW
15 < CW ≤ 20	20
20 < CW ≤ 25	25
25 < CW ≤ 30	30
30 < CW ≤ 35	35
35 < CW ≤ 40	40
40 < CW ≤ 45	45
45 < CW ≤ 50	50
50 < CW ≤ 55	55
55 < CW ≤ 60	60

Section	Requirement	Pass/Fail
S5.5.2(l)(3)(i)	A maximum child weight is required on an installation diagram when the CRS+child weight is greater than 65 lb for CRS that are used with the internal harness and installed with lower anchors. The maximum weight on the label conforms to the limits established in S5.5.2(l)(3)(i)	N/A
S5.5.2(l)(3)(ii)	For CRS that can be used both forward and rear-facing, either: (1) separate diagrams are provided and labeled; or (2) only one diagram is applicable, provided, and labeled; or (3) two diagrams are applicable and the diagram shown contains the lesser of the permitted weights	N/A

Remarks:

This data sheet is not applicable. The restraint does not have an internal harness.

Recorded by: [redacted] Date: 1/10/2018

ATTACHMENT TO ANCHORAGE SYSTEM

(S213, S5.9)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

Section	Requirement	Pass/Fail
S5.9(a)	This add-on child restraint system (excluding car beds, harnesses, and belt-positioning seats) has a permanently attached anchorage system having components that enable the restraint to be securely fastened to the lower anchorages.	Pass
	The anchorage system has components which can only be removed with a tool, such as a screwdriver.	Pass
	Note: If this is a rear-facing child restraint system with a detachable base, then only the base is required to have the components.	N/A
S5.9(b)	This child restraint system has components for attaching the system to a tether anchorage, and those components include a tether hook that conforms to the configuration and geometry specified in Figure 22.	N/A
S5.9(c)	This child restraint system has adjustable components for attaching the system to a tether anchorage or to lower anchors to allow the restraint to be tightened to the vehicle.	Pass
S5.9(d)	If the anchorage system on this child restraint system has components, other than hooks, that enable the restraint to be securely fastened to the lower anchorages, it provides either an indication when each attachment to the lower anchorage becomes fully latched or attached, or provides a visual indication that all attachments to the lower anchorages are fully latched or attached.	N/A
	Visual indications are detectable under normal daylight lighting conditions.	N/A

Remarks:

None

Recorded by: [redacted] Date: 1/10/2018

INSTALLATION

(S213-S5.3)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

Section	Requirement						Pass/Fail
S5.3.1	Add-on child restraints meet either (a) or (b) as appropriate						Pass
S5.3.1(a)	Except for components designed to attach a child restraint anchorage system, this add-on child restraint does not have any means designed for attaching the system to a vehicle seat cushion or vehicle seat back and any component (except belts) that is designed to be inserted between the vehicle seat cushion and vehicle seat back.						Pass
S5.3.1(b)	Harnesses manufactured for use on school bus seats must meet S5.3.1(a) unless labeled appropriately. Refer to the labeling data sheet for the specific requirements.						N/A
S5.3.2	This child restraint system is capable of being installed as required by Table S5.3.2 of FMVSS No. 213. Shaded sections indicate installation means required by standard.						
		Lap Belt	*Lap Belt & Tether (if needed)*	*Lower Anchors*	*Lap & Shoulder Belt*	*Seat back Mount*	
	Harnesses per S5.3.1(b)(1)-(3) and Fig. 12						N/A
	Other Harnesses						N/A
	Car Beds						N/A
	Rear-Facing Restraints						N/A
	Belt Positioning Seats				X		Pass
	Other						N/A
S5.3.3	If a car bed, this child restraint system is designed to be installed laterally.						N/A

Remarks:

None

Recorded by: [redacted] Date: 1/10/2018

MINIMUM HEAD SUPPORT SURFACE

(FMVSS 213, S5.2.1)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

Section	Requirement	
S5.2.1.2	The child restraint system is exempt from S5.2.1.1 if it is a forward facing restraint and the target points on either side of the dummy's head (using the largest test dummy specified in S7, excluding the 6-year-old) is below the top of the test seat.	
S5.2.1.1.(a)	**Maximum Recommended Child Weight**	**Minimum Seat Back Height Required**
	≤ 18 kg (39.7 lb)	500 mm (19.7 in)
	> 18 kg (39.7 lb)	560 mm (22.0 in)
S5.2.1.1(b)	**Side Wing Depth**	**Minimum Back Support Width**
	< 102 mm (4.0 in)	203 mm (8.0 in)
	≥ 102 mm (4.0 in)	152 mm (6.0 in)

The child restraint system is **exempt** from S5.2.1.1 YES

Back Support Height

Manufacturer's Recommended Maximum Child Weight kg (lb)	Measured Height mm (in)	Pass/Fail
50 (110)	N/A	N/A

Back Support Width

Measured Side Wing Depth mm (in)	Measured Width mm (in)	Pass/Fail
N/A	N/A	N/A

Remarks:

None

Recorded by: [redacted] Date: 1/10/2018

TORSO IMPACT PROTECTION

(FMVSS 213, S5.2.2)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

Section	Surface Requirement	Contour Requirement	Other Requirement
S5.2.2.1(a)	Back Support Surface	flat or concave	Continuous surface area of ≥ 85 in²
S5.2.2.1(b)	Side Support Surface	flat or concave	Continuous surface area of ≥ 24 in² for restraints having a recommended child weight ≥ 20 lb
		flat or concave	Continuous surface area of ≥ 48 in² for restraints having a recommended child weight < 20 lb
S5.2.2.1(c)	Horizontal Cross Sections of Surfaces Restraining Torso Forward Movement	flat or concave	
	Vertical Longitudinal Cross Sections of Surfaces Restraining Torso Forward Movement	flat or convex	Radius of curvature ≥ 2 in
S5.2.2.2	Fixed or movable surface forward of dummy		Must be used to restrain dummy and allow compliance with injury & excursion criteria

Support Surface- Results

Surface	Contour	Measured Area	Pass/Fail
Back Support Surface	N/A	N/A	N/A
Side Support Surface	Flat	≥ 24 in²	Pass

Surfaces Restraining Torso Forward Movement- Results

	Contour	Radius of Curvature	Pass/Fail
Horizontal Cross Section	N/A	N/A	Pass
Vertical Cross Section	N/A	N/A	Pass

Fixed or Movable Surfaces Forward of Dummy- Results

Yes/No	Pass/Fail
No	Pass

Remarks:

None

Recorded by: [redacted]

Date: 1/10/2018

PROTRUSION LIMITATION

(FMVSS 213, S5.2.4)

Report No.:	213-MGA-18-036
Test Date:	1/10/2018

Model No.:	0304017CBK

S5.2.4. Any portion of a rigid structural component within or underlying a contactable surface is subject to the protrusion limitations described below.

Test	Compliance Requirement	Result	Pass/Fail
Height	≤ 3/8 in. (9.53 mm)	≤ 3/8 in. (9.53 mm)	Pass
Edge Radius	≥ 1/4 in. (6.35 mm)	≥ 1/4 in. (6.35 mm)	Pass

Remarks:

None

Recorded by: [redacted] Date: 1/10/2018

DYNAMIC IMPACT TEST CONDITIONS - TEST 1

(FMVSS 213, S6.1)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN

Pulse:

Test Configuration (I or II)	I
Nominal Velocity (km/h)	48 (+0/-3)

Laboratory Ambient Conditions During Testing:

Temperature (ºC)	21.2
Relative Humidity (%)	30

Dummy:

Dummy Description	Hybrid III 6 Year Old (Part 572N)
Dummy Serial Number	155

Restraint Installation:

Installed Direction	Forward-Facing
Base Usage	Other Configuration
Attachment Method	Lap and Shoulder Belt
Tether Usage	No
Seat Back Position	Booster without Back
Shoulder Harness Position	N/A
Buckle Harness Position	N/A
Belt Positioning Clip	Installed

Remarks:

Pre-test and post-test photographs are presented in Section 9.

Recorded by: [redacted]

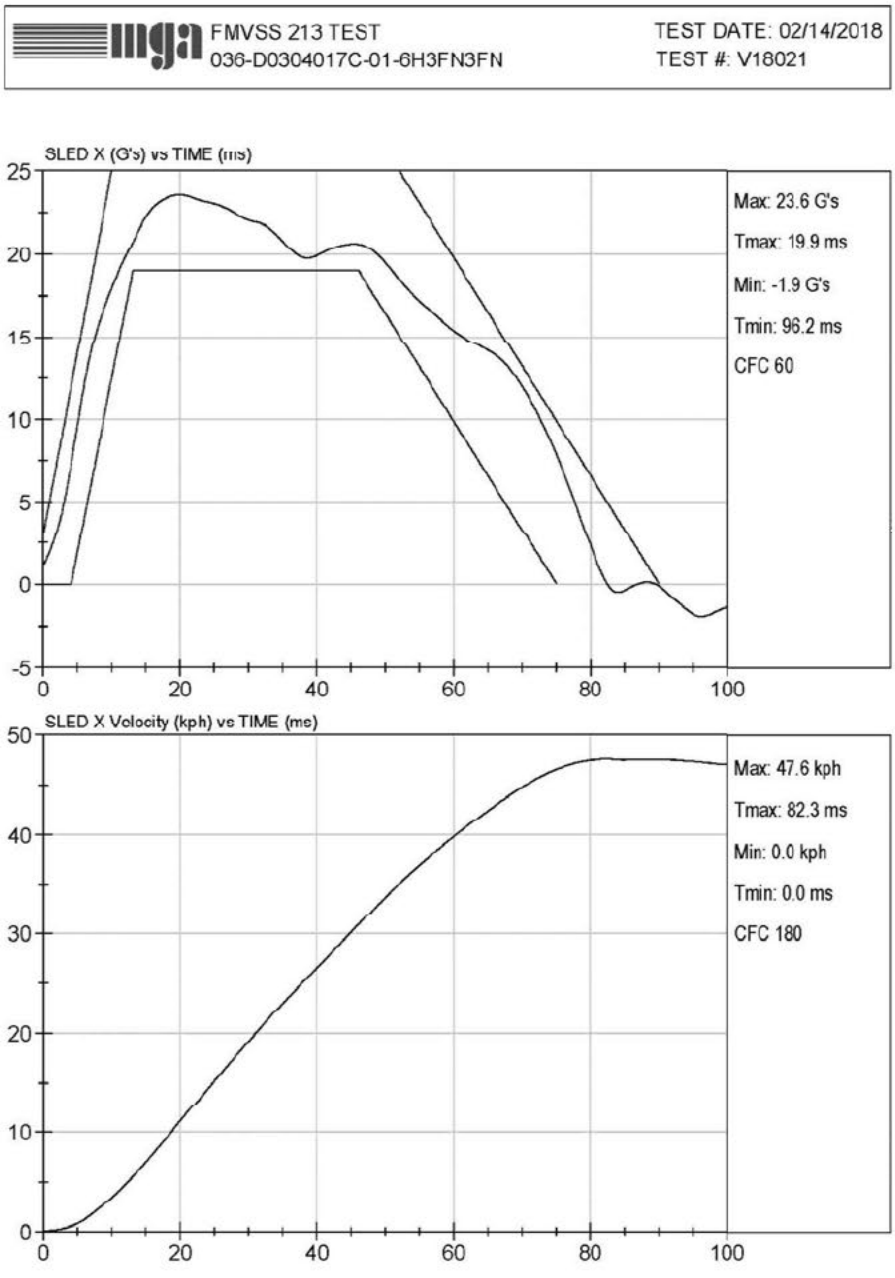
Date: 2/14/2018

DYNAMIC IMPACT SLED PULSE - TEST 1

(FMVSS 213, S6.1)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN



BELT RESTRAINT - TEST 1

(FMVSS 213, S5.4.3)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN

Section	Requirement	Pass/Fail
S5.4.3.1	**Snug Fit of Belts**. Belts that are part of the restraint and designed to restrain the child are adjustable to snugly fit any child of height and weight identified by the manufacturer in accordance with the manufacturer's installation instructions.	N/A

Section	Requirement	Yes/No	Pass/Fail
S5.4.3.2	**Direct Restraint**. Belts impose no loads on the child resulting from the mass of the system or the test seat.		N/A
	This restraint has one or more belts that contact the dummy for restraint.	N/A	If all are "yes," restraint fails S5.4.3.2.
	This restraint has a rigid structure behind the dummy.	N/A	
	The restraint could move relative to the belt.	N/A	

Section	Requirement	Pass/Fail
S5.4.3.3	**Seating Systems**. Except for harnesses and infant restraints for children up to 10 kg (22 lb), each restraint designed for a child in a seated position and having belts shall provide:	N/A
S5.4.3.3(a)	Upper torso restraint (either belts or a shield)	N/A
S5.4.3.3(b)	Lower torso restraint (either belts or a shield)	N/A
S5.4.3.3(c)	Crotch restraint (either a belt attached to the lap belt or a shield)	N/A

Section	Requirement	Pass/Fail
S5.4.3.4	**Harnesses**. Each harness shall:	N/A
S5.4.3.3(a)	Provide upper torso restraint	N/A
S5.4.3.3(b)	Provide lower torso restraint (lap and crotch restraint)	N/A
S5.4.3.3(c)	Prevent standing	N/A

Remarks:

None

Recorded by: [redacted] Date: 2/14/2018

BUCKLE RELEASE - TEST 1

(FMVSS 213, S5.4.3.5, S6.2)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN

Section	Requirement	Measurement	Pass/Fail
S5.4.3.5(a)	**Pre-Impact Release Force—** Releases under 40-62 N (9-14 lb)	N/A	N/A
S5.4.3.5(b)	**Post-Impact Release Force*—** Releases ≤ 71 N (16 lb)	N/A	N/A
S5.4.3.5(c)	**Minimum Surface Area of Buckle-** ≥ 0.6 in^2 (3.9 cm^2)	N/A	N/A
S5.4.3.5(e)	**Buckle Integrity** Shall not release during testing	N/A	N/A

*Not applicable unless determined using the largest test dummy specified in S7 for use in testing the seat.

Remarks:

None

Recorded by: [redacted]

Date: 2/14/2018

SYSTEM INTEGRITY - TEST 1

(FMVSS 213, S5.1.1)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN

S5.1.1 When dynamically tested, the child restraint system shall:

Section	Requirement	Pass/Fail
S5.1.1(a)	**Structural Integrity-** Exhibit no complete separation of any load bearing structural element	Pass
	Exhibit no partial separation exposing surfaces with a radius of less than ¼ in (9.53 mm)	Pass
	Exhibit no partial separation exposing surfaces with protrusions greater than 3/8 in (6.35 mm)	Pass
S5.1.1(b)(1)	**Adjustment Position-** Remain in the same adjustment position during the test that it was in immediately before the test	Pass
S5.1.1(b)(2)(ii)	**Exposed Openings-** Have no exposed opening larger than ¼ inch (9.53 mm) before the test become smaller during the testing as a result of the movement of the seating surface relative to the restraint system as a whole	Pass
S5.1.1(c)	**Seating Surface Angle-** Forward facing restraints do not allow the angle between the system's back support surface and seating surface to be less than 45 degrees at the completion of the test.	N/A

Remarks:

None

Recorded by: [redacted]

Date: 2/14/2018

INJURY CRITERIA - TEST 1

(FMVSS 213, S5.1.2)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN

Section	Requirement
S5.1.2.1(a)	**Head Injury Criterion**- The maximum calculated head injury criterion for a 36 millisecond time interval (HIC36) shall not exceed 1,000. HIC is not calculated when using the 6-year-old weighted and 10-year-old test dummies.
S5.1.2.1(b)	**Chest Injury Criterion**- The chest acceleration shall not exceed 60g for intervals whose cumulative duration is more than 3 milliseconds.

Head Injury Criterion Results

Calculated HIC36	Pass/Fail
658	Pass

Chest Injury Criterion Results

Max acceleration lasting 3 ms (g)	Pass/Fail
59	Pass

Remarks:

None

Recorded by: [redacted]

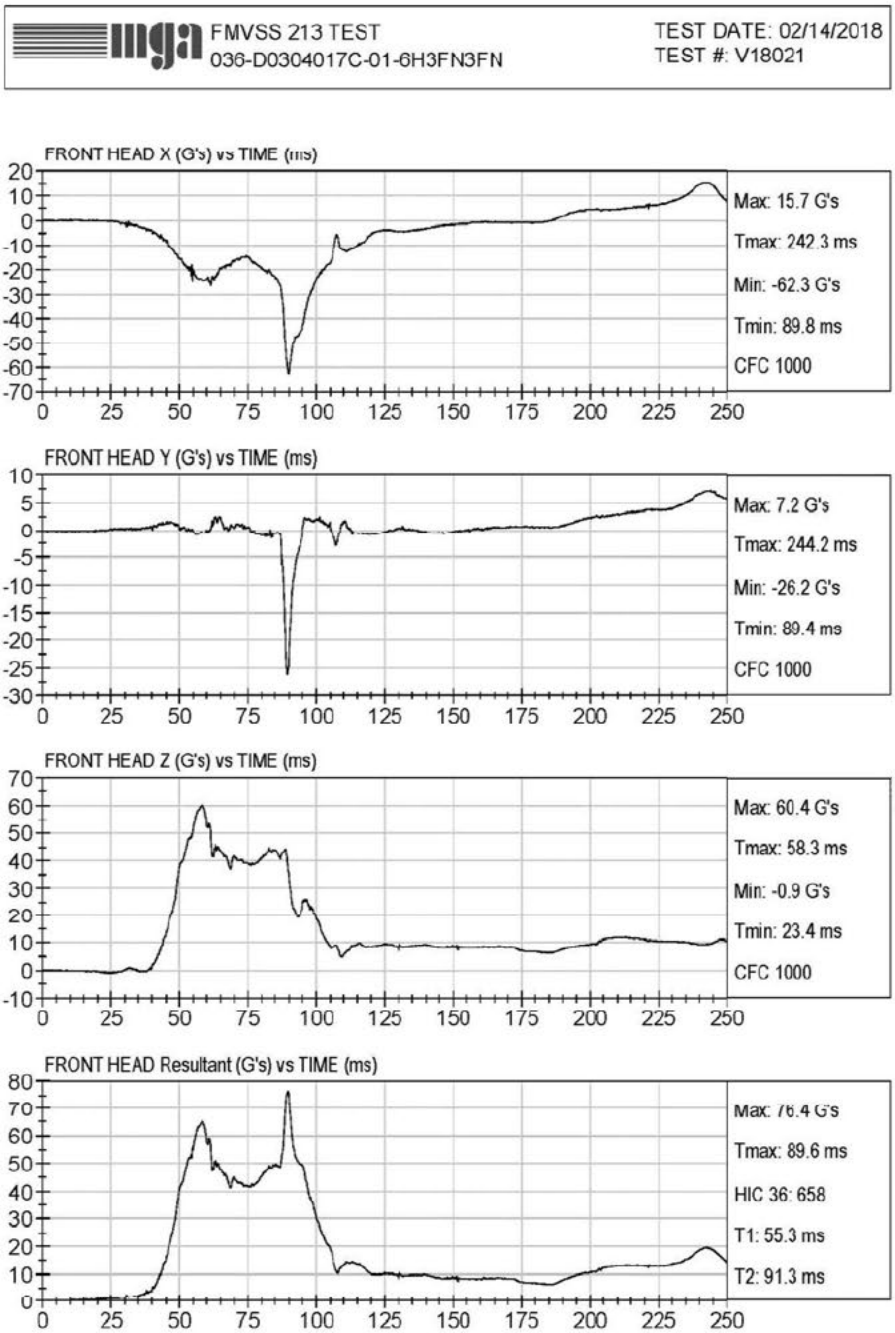
Date: 2/14/2018

INJURY CRITERIA - HEAD ACCELERATION PLOTS - TEST 1

(FMVSS 213, S5.1.2)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN



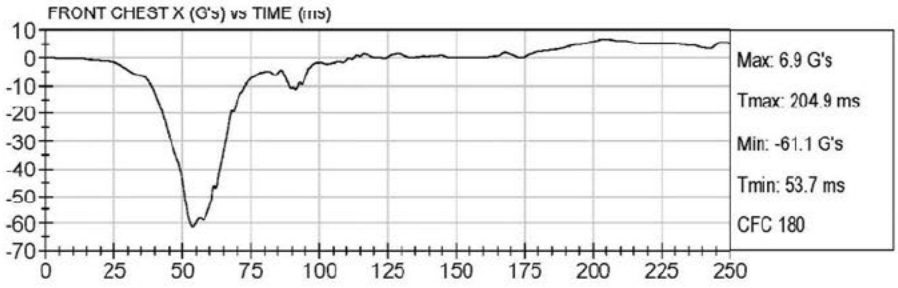
INJURY CRITERIA - CHEST ACCELERATION PLOTS - TEST 1

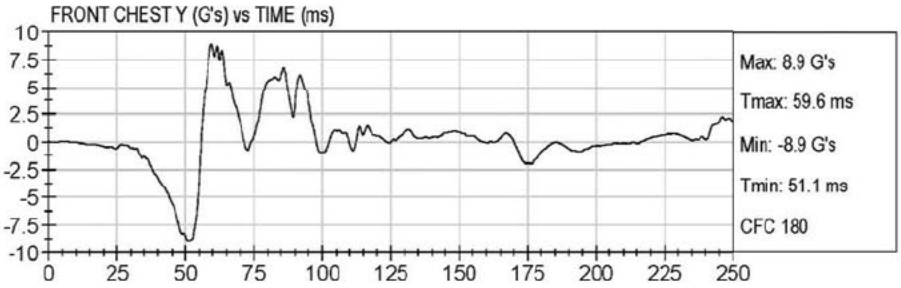
(FMVSS 213, S5.1.2)

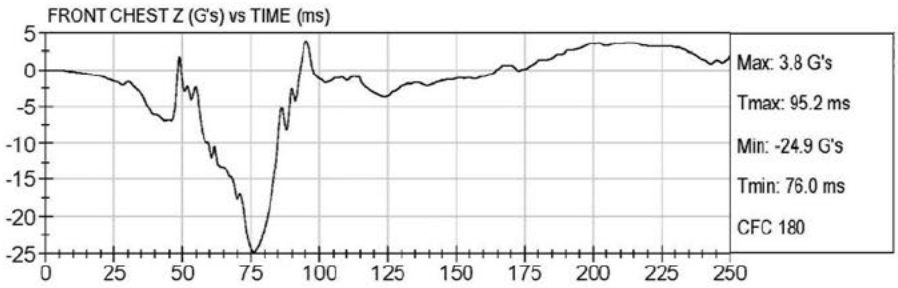
Report No.:	213-MGA-18-036
Test Date:	2/14/2018

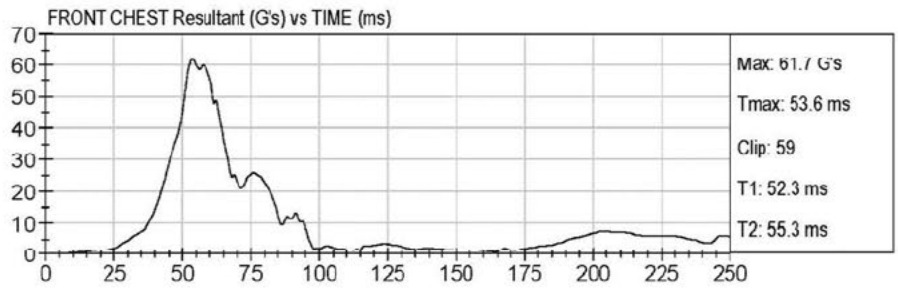
Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN











OCCUPANT EXCURSION - TEST 1

(FMVSS 213, S5.1.3, S5.1.4, S5.2.1.1(c))

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021F
Item Code	036-D0304017C-01-6H3FN3FN

FORWARD-FACING RESTRAINTS

Section	Requirement	Measurement	Pass/Fail
S5.1.3.1	***Torso retention***—CRS shall retain the torso within system		Pass
S5.1.3.1(a)(1)	***Head excursion***- ≤ 720 mm (28 in) with tether ≤ 813 mm (32 in) no tether	506 mm (19.9 in)	Pass
S5.1.3.1(a)(2)	***Knee target excursion***- ≤ 915 mm (36 in)	673 mm (26.5 in)	Pass
S5.2.1.1(c)	***Head-torso angle***- rearward change ≤ 45º	≤ 45º	Pass

REAR-FACING RESTRAINTS

Section	Requirement	Measurement	Pass/Fail
S5.1.3.2	***Torso retention***—CRS shall retain the torso within system		N/A
S5.1.3.2	***Head target excursion***-Not beyond restraint's top and forward edge		N/A
S5.1.4	***Back support angle***- Angle between the back support surface and the vertical ≤ 70º	N/A	N/A
S5.2.1.1(c)	***Head-torso angle***- rearward change ≤ 45º	N/A	N/A

Remarks:

Excursion camera locations (distance forward of point Z) = 813 mm, camera speeds = 1,000 frames per second, and lens focal lengths = 15 mm.

Recorded by: [redacted]

Date: 2/14/2018

DYNAMIC IMPACT TEST CONDITIONS - TEST 2

(FMVSS 213, S6.1)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN

Pulse:

Test Configuration (I or II)	I
Nominal Velocity (km/h)	48 (+0/-3)

Laboratory Ambient Conditions During Testing:

Temperature (ºC)	21.2
Relative Humidity (%)	30

Dummy:

Dummy Description	Hybrid III 3 Year Old (Part 572P)
Dummy Serial Number	031

Restraint Installation:

Installed Direction	Forward-Facing
Base Usage	Other Configuration
Attachment Method	Lap and Shoulder Belt
Tether Usage	No
Seat Back Position	Booster without Back
Shoulder Harness Position	N/A
Buckle Harness Position	N/A
Belt Positioning Clip	Installed

Remarks:

Pre-test and post-test photographs are presented in Section 9.

Recorded by: [redacted]

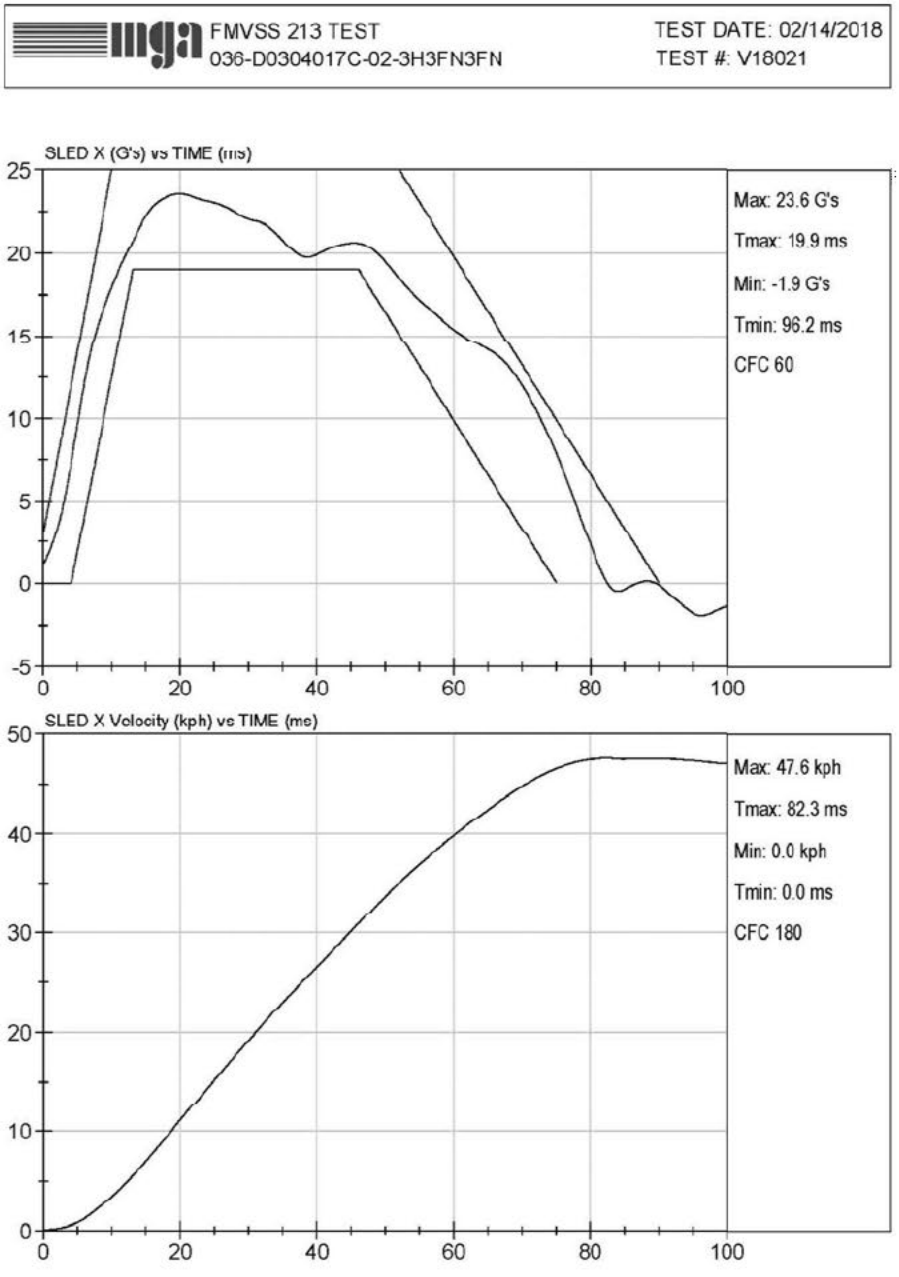
Date: 2/14/2018

DYNAMIC IMPACT SLED PULSE - TEST 2

(FMVSS 213, S6.1)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN



BELT RESTRAINT - TEST 2

(FMVSS 213, S5.4.3)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN

Section	Requirement	Pass/Fail
S5.4.3.1	**Snug Fit of Belts**. Belts that are part of the restraint and designed to restrain the child are adjustable to snugly fit any child of height and weight identified by the manufacturer in accordance with the manufacturer's installation instructions.	N/A

Section	Requirement	Yes/No	Pass/Fail
S5.4.3.2	**Direct Restraint**. Belts impose no loads on the child resulting from the mass of the system or the test seat.		N/A
	This restraint has one or more belts that contact the dummy for restraint.	N/A	If all are "yes," restraint fails S5.4.3.2.
	This restraint has a rigid structure behind the dummy.	N/A	
	The restraint could move relative to the belt.	N/A	

Section	Requirement	Pass/Fail
S5.4.3.3	**Seating Systems**. Except for harnesses and infant restraints for children up to 10 kg (22 lb), each restraint designed for a child in a seated position and having belts shall provide:	N/A
S5.4.3.3(a)	Upper torso restraint (either belts or a shield)	N/A
S5.4.3.3(b)	Lower torso restraint (either belts or a shield)	N/A
S5.4.3.3(c)	Crotch restraint (either a belt attached to the lap belt or a shield)	N/A

Section	Requirement	Pass/Fail
S5.4.3.4	**Harnesses**. Each harness shall:	N/A
S5.4.3.3(a)	Provide upper torso restraint	N/A
S5.4.3.3(b)	Provide lower torso restraint (lap and crotch restraint)	N/A
S5.4.3.3(c)	Prevent standing	N/A

Remarks:

None

Recorded by: [redacted] Date: 2/14/2018

BUCKLE RELEASE - TEST 2

(FMVSS 213, S5.4.3.5, S6.2)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN

Section	Requirement	Measurement	Pass/Fail
S5.4.3.5(a)	**Pre-Impact Release Force—** Releases under 40-62 N (9-14 lb)	N/A	N/A
S5.4.3.5(b)	**Post-Impact Release Force*—** Releases ≤ 71 N (16 lb)	N/A	N/A
S5.4.3.5(c)	**Minimum Surface Area of Buckle-** ≥ 0.6 in^2 (3.9 cm^2)	N/A	N/A
S5.4.3.5(e)	**Buckle Integrity** Shall not release during testing	N/A	N/A

*Not applicable unless determined using the largest test dummy specified in S7 for use in testing the seat.

Remarks:

None

Recorded by: [redacted]

Date: 2/14/2018

SYSTEM INTEGRITY - TEST 2

(FMVSS 213, S5.1.1)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN

S5.1.1 When dynamically tested, the child restraint system shall:

Section	Requirement	Pass/Fail
S5.1.1(a)	**Structural Integrity-** Exhibit no complete separation of any load bearing structural element	Pass
	Exhibit no partial separation exposing surfaces with a radius of less than ¼ in (9.53 mm)	Pass
	Exhibit no partial separation exposing surfaces with protrusions greater than 3/8 in (6.35 mm)	Pass
S5.1.1(b)(1)	**Adjustment Position-** Remain in the same adjustment position during the test that it was in immediately before the test	Pass
S5.1.1(b)(2)(ii)	**Exposed Openings-** Have no exposed opening larger than ¼ inch (9.53 mm) before the test become smaller during the testing as a result of the movement of the seating surface relative to the restraint system as a whole	Pass
S5.1.1(c)	**Seating Surface Angle-** Forward facing restraints do not allow the angle between the system's back support surface and seating surface to be less than 45 degrees at the completion of the test.	N/A

Remarks:

None

Recorded by: [redacted]

Date: 2/14/2018

INJURY CRITERIA - TEST 2

(FMVSS 213, S5.1.2)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN

Section	Requirement
S5.1.2.1(a)	**Head Injury Criterion**- The maximum calculated head injury criterion for a 36 millisecond time interval (HIC36) shall not exceed 1,000. HIC is not calculated when using the 6-year-old weighted and 10-year-old test dummies.
S5.1.2.1(b)	**Chest Injury Criterion**- The chest acceleration shall not exceed 60g for intervals whose cumulative duration is more than 3 milliseconds.

Head Injury Criterion Results

Calculated HIC36	Pass/Fail
1079	Fail

Chest Injury Criterion Results

Max acceleration lasting 3 ms (g)	Pass/Fail
61	Fail

Remarks:

None

Recorded by: [redacted]

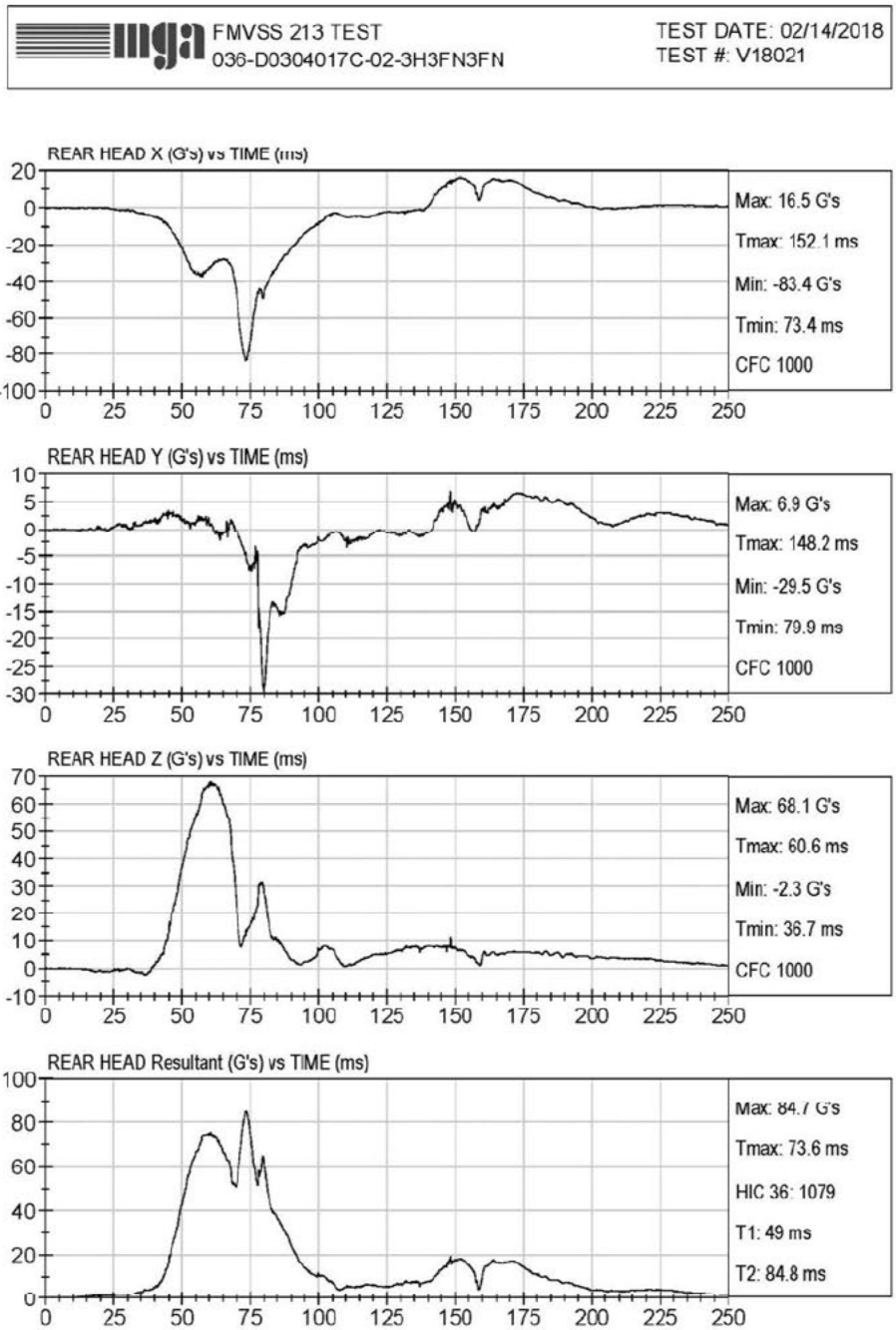
Date: 2/14/2018

INJURY CRITERIA - HEAD ACCELERATION PLOTS - TEST 2

(FMVSS 213, S5.1.2)

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN



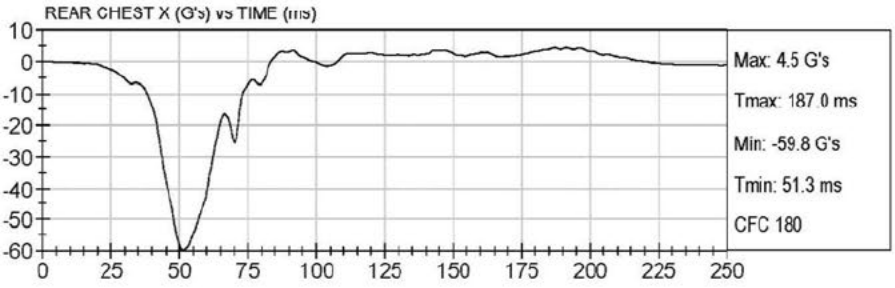
INJURY CRITERIA - CHEST ACCELERATION PLOTS - TEST 2

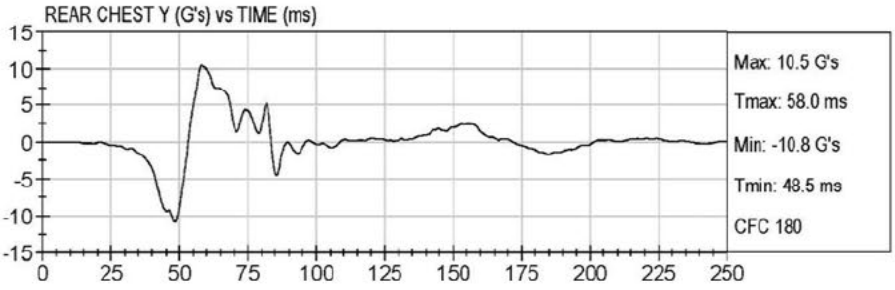
(FMVSS 213, S5.1.2)

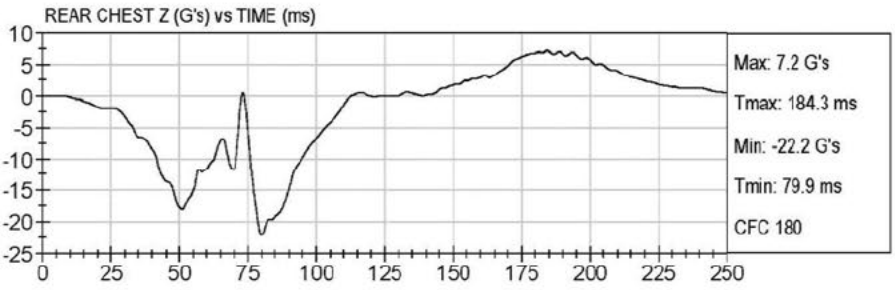
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Test Date:	2/14/2018

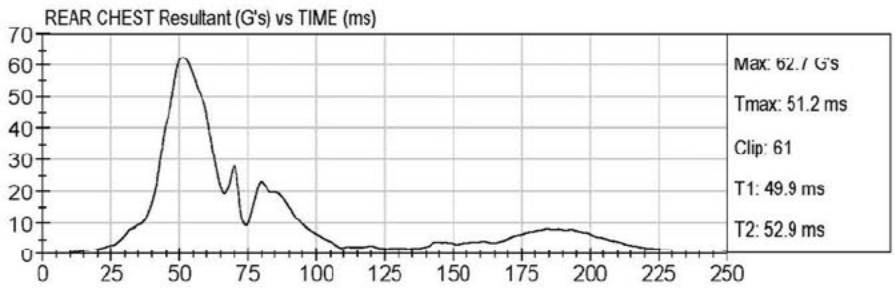
Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN











OCCUPANT EXCURSION - TEST 2

(FMVSS 213, S5.1.3, S5.1.4, S5.2.1.1(c))

Report No.:	213-MGA-18-036
Test Date:	2/14/2018

Sled Test No.	V18021R
Item Code	036-D0304017C-02-3H3FN3FN

FORWARD-FACING RESTRAINTS

Section	Requirement	Measurement	Pass/Fail
S5.1.3.1	***Torso retention***—CRS shall retain the torso within system		Pass
S5.1.3.1(a)(1)	***Head excursion***- ≤ 720 mm (28 in) with tether ≤ 813 mm (32 in) no tether	437 mm (17.2 in)	Pass
S5.1.3.1(a)(2)	***Knee target excursion***- ≤ 915 mm (36 in)	638 mm (25.1 in)	Pass
S5.2.1.1(c)	***Head-torso angle***- rearward change ≤ 45º	≤ 45º	Pass

REAR-FACING RESTRAINTS

Section	Requirement	Measurement	Pass/Fail
S5.1.3.2	***Torso retention***—CRS shall retain the torso within system		N/A
S5.1.3.2	***Head target excursion***-Not beyond restraint's top and forward edge		N/A
S5.1.4	***Back support angle***- Angle between the back support surface and the vertical ≤ 70º	N/A	N/A
S5.2.1.1(c)	***Head-torso angle***- rearward change ≤ 45º	N/A	N/A

Remarks:

Excursion camera locations (distance forward of point Z) = 813 mm, camera speeds = 1,000 frames per second, and lens focal lengths = 15 mm.

Recorded by: [redacted]

Date: 2/14/2018

DYNAMIC IMPACT TEST CONDITIONS - TEST 3

(FMVSS 213, S6.1)

Report No.:	213-MGA-18-036
Test Date:	2/15/2018

Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN

Pulse:

Test Configuration (I or II)	I
Nominal Velocity (km/h)	48 (+0/-3)

Laboratory Ambient Conditions During Testing:

Temperature (ºC)	21.1
Relative Humidity (%)	37

Dummy:

Dummy Description	Hybrid III 10 Year Old (Part 572T)
Dummy Serial Number	D021

Restraint Installation:

Installed Direction	Forward-Facing
Base Usage	Other Configuration
Attachment Method	Lap and Shoulder Belt
Tether Usage	No
Seat Back Position	Booster without Back
Shoulder Harness Position	N/A
Buckle Harness Position	N/A
Belt Positioning Clip	Installed

Remarks:

Pre-test and post-test photographs are presented in Section 9.

Recorded by: [redacted]

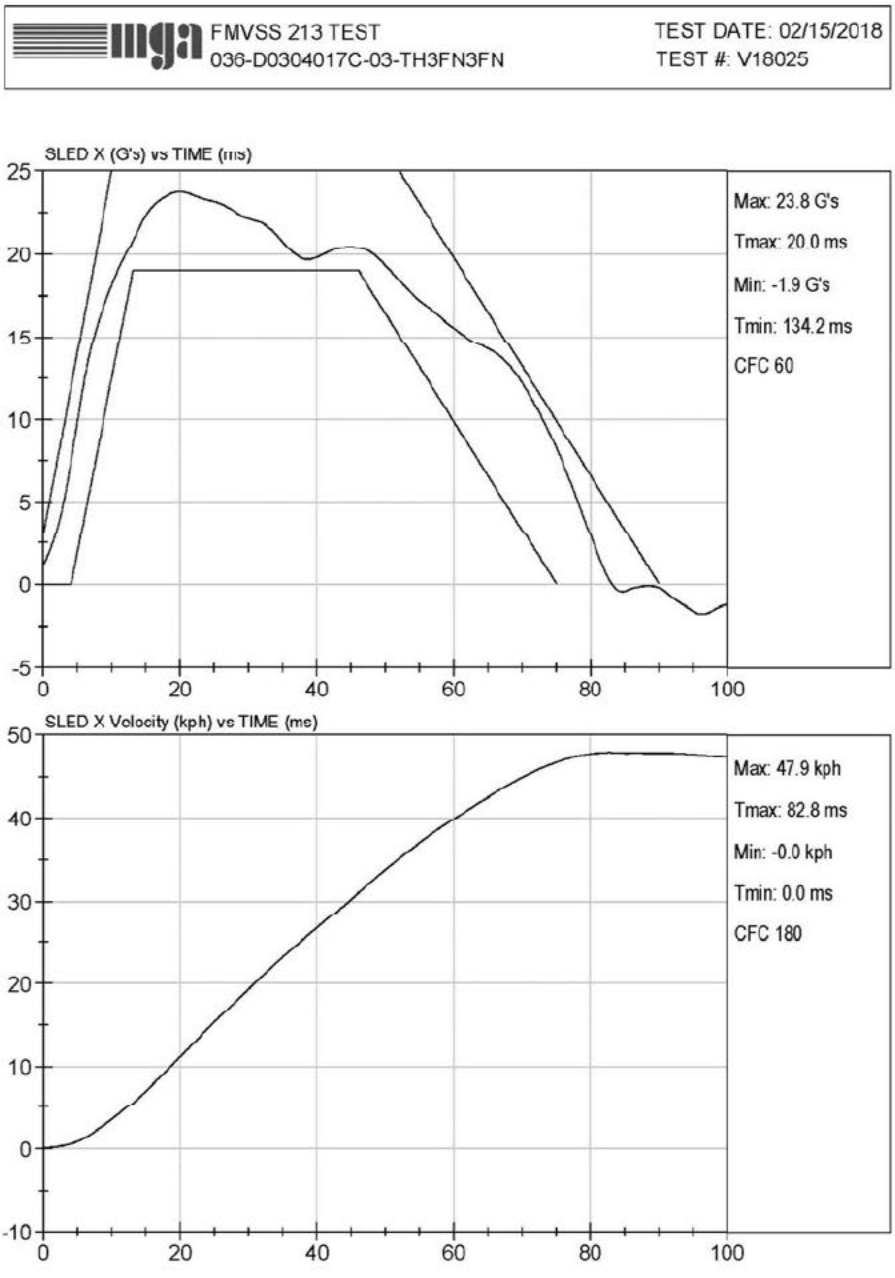
Date: 2/15/2018

DYNAMIC IMPACT SLED PULSE - TEST 3

(FMVSS 213, S6.1)

Report No.:	213-MGA-18-036
Test Date:	2/15/2018

Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN



BELT RESTRAINT - TEST 3

(FMVSS 213, S5.4.3)

Report No.:	213-MGA-18-036
Test Date:	2/15/2018

Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN

Section	Requirement	Pass/Fail
S5.4.3.1	**Snug Fit of Belts**. Belts that are part of the restraint and designed to restrain the child are adjustable to snugly fit any child of height and weight identified by the manufacturer in accordance with the manufacturer's installation instructions.	N/A

Section	Requirement	Yes/No	Pass/Fail
S5.4.3.2	**Direct Restraint**. Belts impose no loads on the child resulting from the mass of the system or the test seat.		N/A
	This restraint has one or more belts that contact the dummy for restraint.	N/A	If all are "yes," restraint fails S5.4.3.2.
	This restraint has a rigid structure behind the dummy.	N/A	
	The restraint could move relative to the belt.	N/A	

Section	Requirement	Pass/Fail
S5.4.3.3	**Seating Systems**. Except for harnesses and infant restraints for children up to 10 kg (22 lb), each restraint designed for a child in a seated position and having belts shall provide:	N/A
S5.4.3.3(a)	Upper torso restraint (either belts or a shield)	N/A
S5.4.3.3(b)	Lower torso restraint (either belts or a shield)	N/A
S5.4.3.3(c)	Crotch restraint (either a belt attached to the lap belt or a shield)	N/A

Section	Requirement	Pass/Fail
S5.4.3.4	**Harnesses**. Each harness shall:	N/A
S5.4.3.3(a)	Provide upper torso restraint	N/A
S5.4.3.3(b)	Provide lower torso restraint (lap and crotch restraint)	N/A
S5.4.3.3(c)	Prevent standing	N/A

Remarks:

None

Recorded by: [redacted] Date: 2/15/2018

BUCKLE RELEASE - TEST 3

(FMVSS 213, S5.4.3.5, S6.2)

Report No.:	213-MGA-18-036
Test Date:	2/15/2018

Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN

Section	Requirement	Measurement	Pass/Fail
S5.4.3.5(a)	**Pre-Impact Release Force—** Releases under 40-62 N (9-14 lb)	N/A	N/A
S5.4.3.5(b)	**Post-Impact Release Force*—** Releases ≤ 71 N (16 lb)	N/A	N/A
S5.4.3.5(c)	**Minimum Surface Area of Buckle-** ≥ 0.6 in^2 (3.9 cm^2)	N/A	N/A
S5.4.3.5(e)	**Buckle Integrity** Shall not release during testing	N/A	N/A

*Not applicable unless determined using the largest test dummy specified in S7 for use in testing the seat.

Remarks:

None

Recorded by: [redacted] Date: 2/15/2018

SYSTEM INTEGRITY - TEST 3

(FMVSS 213, S5.1.1)

Report No.:	213-MGA-18-036
Test Date:	2/15/2018

Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN

S5.1.1 When dynamically tested, the child restraint system shall:

Section	Requirement	Pass/Fail
S5.1.1(a)	**Structural Integrity-** Exhibit no complete separation of any load bearing structural element	Pass
	Exhibit no partial separation exposing surfaces with a radius of less than ¼ in (9.53 mm)	Pass
	Exhibit no partial separation exposing surfaces with protrusions greater than 3/8 in (6.35 mm)	Pass
S5.1.1(b)(1)	**Adjustment Position-** Remain in the same adjustment position during the test that it was in immediately before the test	Pass
S5.1.1(b)(2)(ii)	**Exposed Openings-** Have no exposed opening larger than ¼ inch (9.53 mm) before the test become smaller during the testing as a result of the movement of the seating surface relative to the restraint system as a whole	Pass
S5.1.1(c)	**Seating Surface Angle-** Forward facing restraints do not allow the angle between the system's back support surface and seating surface to be less than 45 degrees at the completion of the test.	N/A

Remarks:

None

Recorded by: [redacted]

Date: 2/15/2018

INJURY CRITERIA - TEST 3

(FMVSS 213, S5.1.2)

Report No.:	213-MGA-18-036
Test Date:	2/15/2018

Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN

Section	Requirement
S5.1.2.1(a)	**Head Injury Criterion**- The maximum calculated head injury criterion for a 36 millisecond time interval (HIC36) shall not exceed 1,000. HIC is not calculated when using the 6-year-old weighted and 10-year-old test dummies.
S5.1.2.1(b)	**Chest Injury Criterion**- The chest acceleration shall not exceed 60g for intervals whose cumulative duration is more than 3 milliseconds.

Head Injury Criterion Results

Calculated HIC36	Pass/Fail
N/A	N/A

Chest Injury Criterion Results

Max acceleration lasting 3 ms (g)	Pass/Fail
57	Pass

Remarks:

None

Recorded by: [redacted]

Date: 2/15/2018

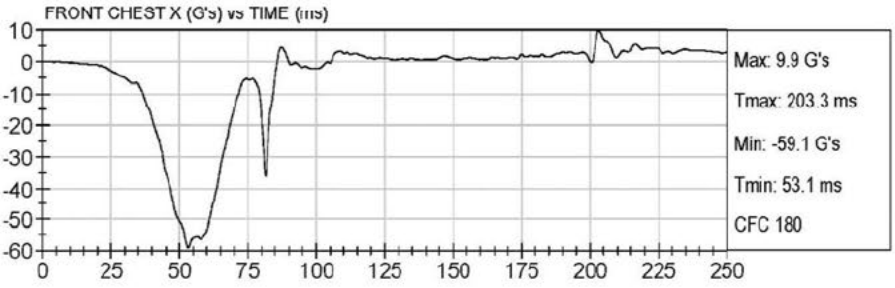
INJURY CRITERIA - CHEST ACCELERATION PLOTS - TEST 3

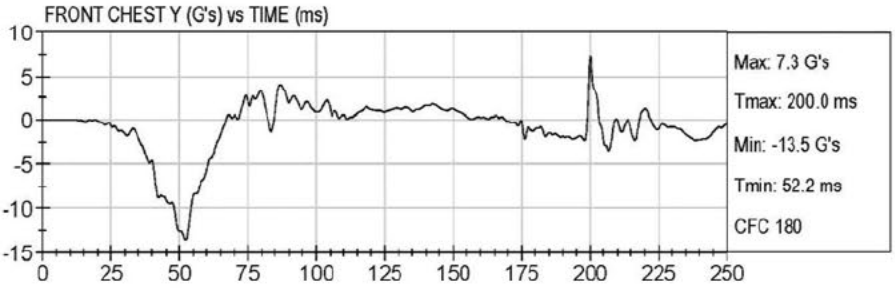
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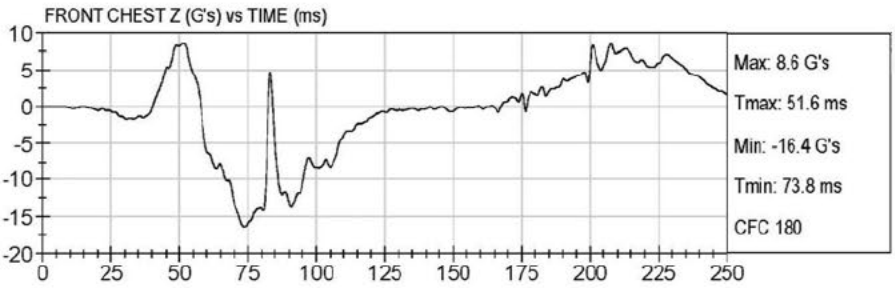
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Test Date:	2/15/2018

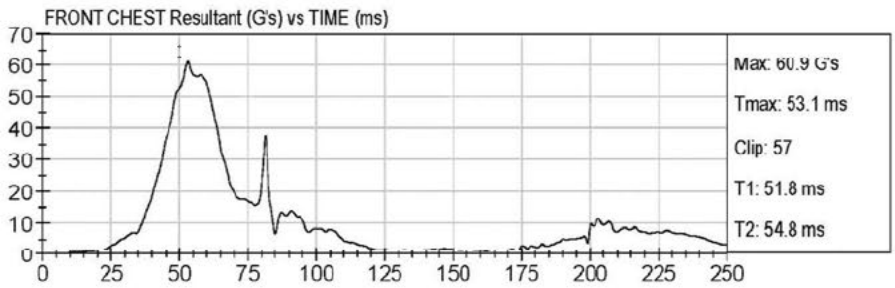
Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN











OCCUPANT EXCURSION - TEST 3

(FMVSS 213, S5.1.3, S5.1.4, S5.2.1.1(c))

Report No.:	213-MGA-18-036
Test Date:	2/15/2018

Sled Test No.	V18025F
Item Code	036-D0304017C-03-TH3FN3FN

FORWARD-FACING RESTRAINTS

Section	Requirement	Measurement	Pass/Fail
S5.1.3.1	***Torso retention***—CRS shall retain the torso within system		Pass
S5.1.3.1(a)(1)	***Head excursion***- ≤ 720 mm (28 in) with tether ≤ 813 mm (32 in) no tether	498 mm (19.6 in)	Pass
S5.1.3.1(a)(2)	***Knee target excursion***- ≤ 915 mm (36 in)	741 mm (29.2 in)	Pass
S5.2.1.1(c)	***Head-torso angle***- rearward change ≤ 45º	≤ 45º	Pass

REAR-FACING RESTRAINTS

Section	Requirement	Measurement	Pass/Fail
S5.1.3.2	***Torso retention***—CRS shall retain the torso within system		N/A
S5.1.3.2	***Head target excursion***-Not beyond restraint's top and forward edge		N/A
S5.1.4	***Back support angle***- Angle between the back support surface and the vertical ≤ 70º	N/A	N/A
S5.2.1.1(c)	***Head-torso angle***- rearward change ≤ 45º	N/A	N/A

Remarks:

Excursion camera locations (distance forward of point Z) = 813 mm, camera speeds = 1,000 frames per second, and lens focal lengths = 15 mm.

Recorded by: [redacted]

Date: 2/14/2018

SECTION 6

INTERPRETATION AND/OR DEVIATIONS FROM FMVSS 213

There were no deviations from FMVSS 213.

SECTION 7

TEST CONFIGURATION CODES

The following table explains the code used to describe the test configurations in this report. For example, the test configuration code 12CFNLFU indicates that the child restraint sled test was conducted using a 12-month old CRABI dummy, installed in the forward facing direction with no optional base, the latch system, no tether, and in the upright position.

Dummy Description	**NIN –** Newborn Infant, CAMI
	12C – 12 MO, CRABI
	3H3 – 3 YO, Hybrid III
	6H2 – 6YO Hybrid II
	6H3 – 6YO, Hybrid III
	6W3 – 6 YO, Weighted Hybrid III
	TH3 – 10 YO, Hybrid III
Installed Direction	**R –** Rear Facing
	F – Forward Facing
	S – Faces Sideways (Carbeds)
Base Usage	**B –** Optional Base Used with Infant CRS
	N – All Other Configurations
Attachment Method	**L –** LATCH
	2 – Lap Belt
	3 – Lap and Shoulder Belt
	M – Seat Back Mount
Tether Usage	**T –** Tether
	F – Tether Free
Seat Back Position	**U –** Upright
	R – Reclined
	B – Booster with Back
	N – Booster without Back
	F – Flat

SECTION 8
INSTRUMENTATION CALIBRATION

CERTIFICATION INSTRUMENTATION

Sled Accelerometers	S/N	Manufacturer	Model Number	Calibration Date	Due Date
Primary	1452976	Honeywell	JTF 060-F482-05	12/13/17	6/13/18
Redundant	1318820	Honeywell	JTF 060-F482-05	12/13/17	6/13/18

Temperature/Humidity Logger	S/N	Manufacturer	Model Number	Calibration Date	Due Date
Accuracy 0.5°F, 2% RH	11012026	Veriteq	SP-2000-20R	11/30/17	11/30/18

Force Gauge	S/N	Manufacturer	Model Number	Calibration Date	Due Date
100 lb, Accuracy ± 0.1 lb	213343	Wagner	FDIX100	9/19/17	9/19/18

Scale	S/N	Manufacturer	Model Number	Calibration Date	Due Date
100 lb, Accuracy ± 0.1 lb	16394186GM	Ohaus	D100QL	5/16/17	5/16/18

Inclinometer	S/N	Manufacturer	Model Number	Calibration Date	Due Date
Accuracy ± 0.1°	25101	Pro 360	Pro 360	1/24/18	7/24/18

Caliper	S/N	Manufacturer	Model Number	Calibration Date	Due Date
6 in, Accuracy ± .001in	2G199506	Brown & Sharpe	590090	11/17/17	5/17/18

Tape Measurers	S/N	Manufacturer	Model Number	Calibration Date	Due Date
8 m/26 ft	0011	Stanley	33-428	11/20/17	11/20/18
8 m/26 ft	0012	Stanley	33-428	11/20/17	11/20/18

TEST DUMMY INSTRUMENTATION

SERIAL NUMBER 031

Sensor		S/N	Manufacturer	Model Number	Calibration Date	Due Date
Head Accelerometers	X	P79880	Endevco	7264C-2KTZ-2-360M17	11/27/17	5/29/18
	Y	P79881	Endevco	7264C-2KTZ-2-360M17	11/27/17	5/29/18
	Z	P79882	Endevco	7264C-2KTZ-2-360M17	11/27/17	5/29/18
Chest Accelerometers	X	P82659	Endevco	7264C-2KTZ-2-360M17	11/27/17	5/29/18
	Y	P82660	Endevco	7264C-2KTZ-2-360M17	11/27/17	5/29/18
	Z	P86944	Endevco	7264C-2KTZ-360M17	11/27/17	5/29/18

SERIAL NUMBER 155

Sensor		S/N	Manufacturer	Model Number	Calibration Date	Due Date
Head Accelerometers	X	P79723	Endevco	7264C-2KTZ-2-360M17	12/15/17	6/15/18
	Y	P84426	Endevco	7264C-2KTZ-360M17	12/15/17	6/15/18
	Z	P84428	Endevco	7264C-2KTZ-360M17	12/15/17	6/15/18
Chest Accelerometers	X	P88330	Endevco	7264C-2KTZ-360M17	12/15/17	6/15/18
	Y	P88331	Endevco	7264C-2KTZ-360M17	12/15/17	6/15/18
	Z	P88332	Endevco	7264C-2KTZ-360M17	12/15/17	6/15/18

SERIAL NUMBER D021

Sensor		S/N	Manufacturer	Model Number	Calibration Date	Due Date
Chest Accelerometers	X	P79575	Endevco	7264C-2KTZ-2-360M17	11/29/17	5/29/18
	Y	P79577	Endevco	7264C-2KTZ-2-360M17	11/29/17	5/29/18
	Z	P79578	Endevco	7264C-2KTZ-2-360M17	11/29/17	5/29/18

SECTION 9
PHOTOGRAPHS

SLED BUCK - STANDARD BENCH SEAT AND CONFIGURATION
Report No.: 213-MGA-18-036
Item Code: 036-D0304017C-01-6H3FN3FN
Item Code: 036-D0304017C-02-3H3FN3FN
Item Code: 036-D0304017C-03-TH3FN3FN





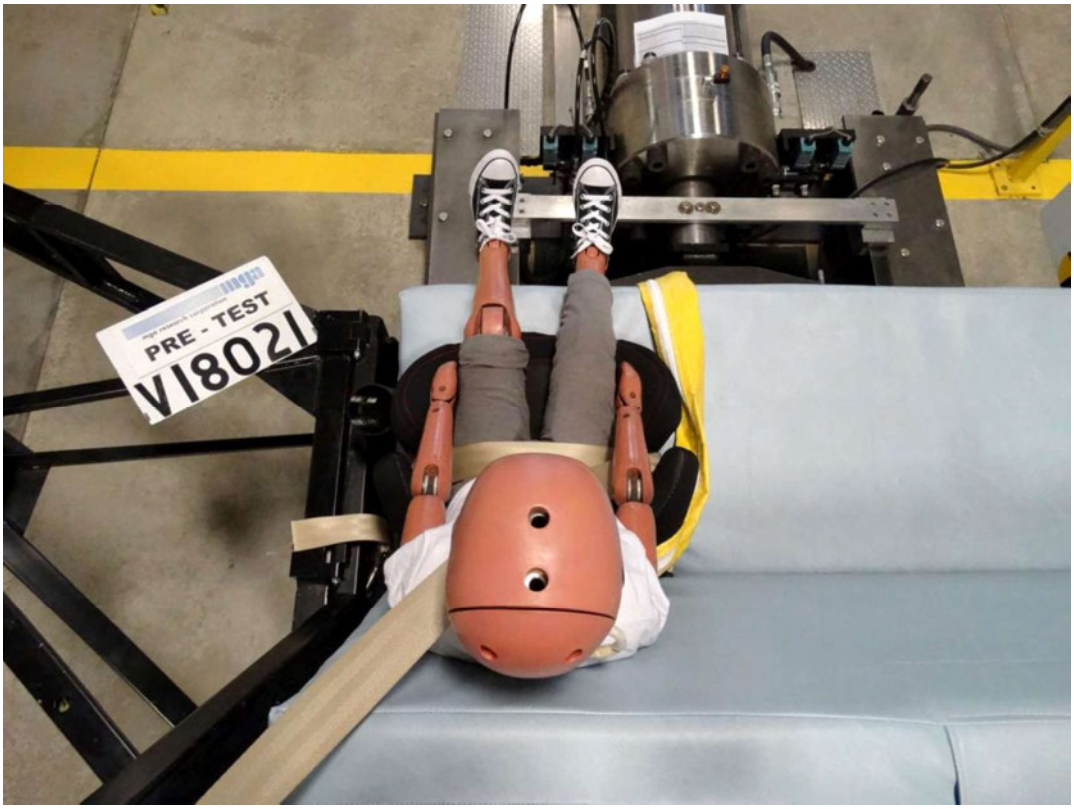

PRE - TEST
V18021


Sled Test Facility
PRE - TEST
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PRE - TEST
V18021


PRE - TEST
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V18021F

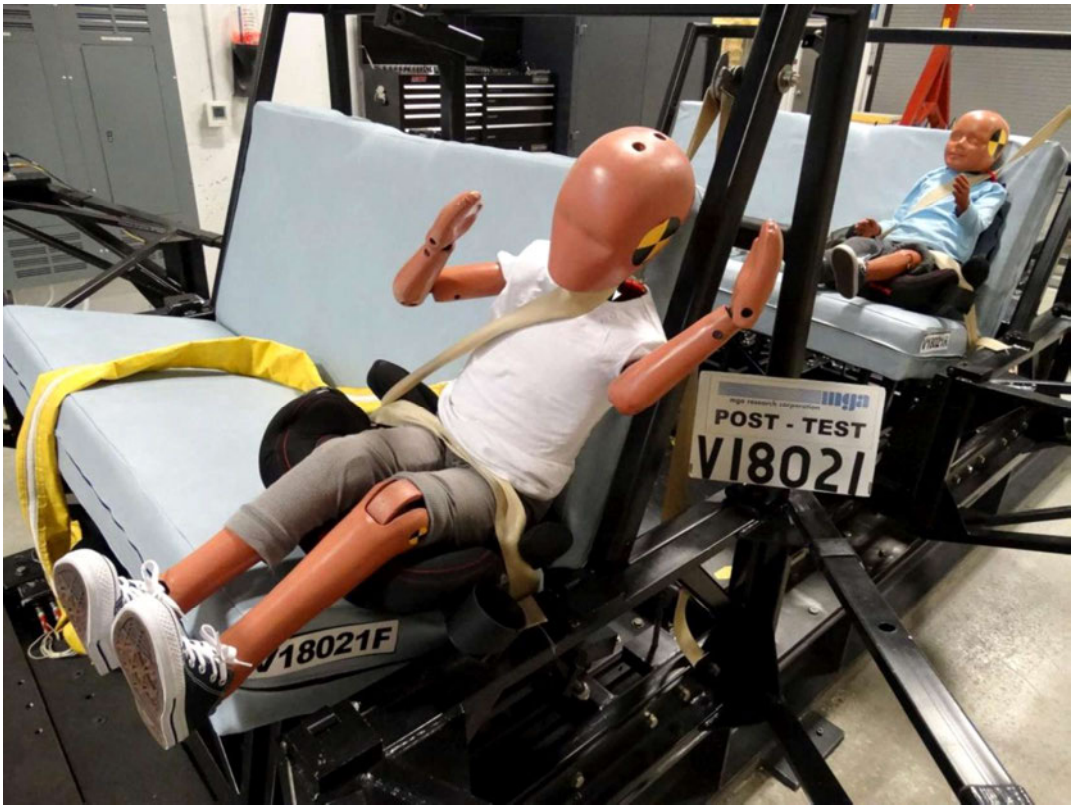

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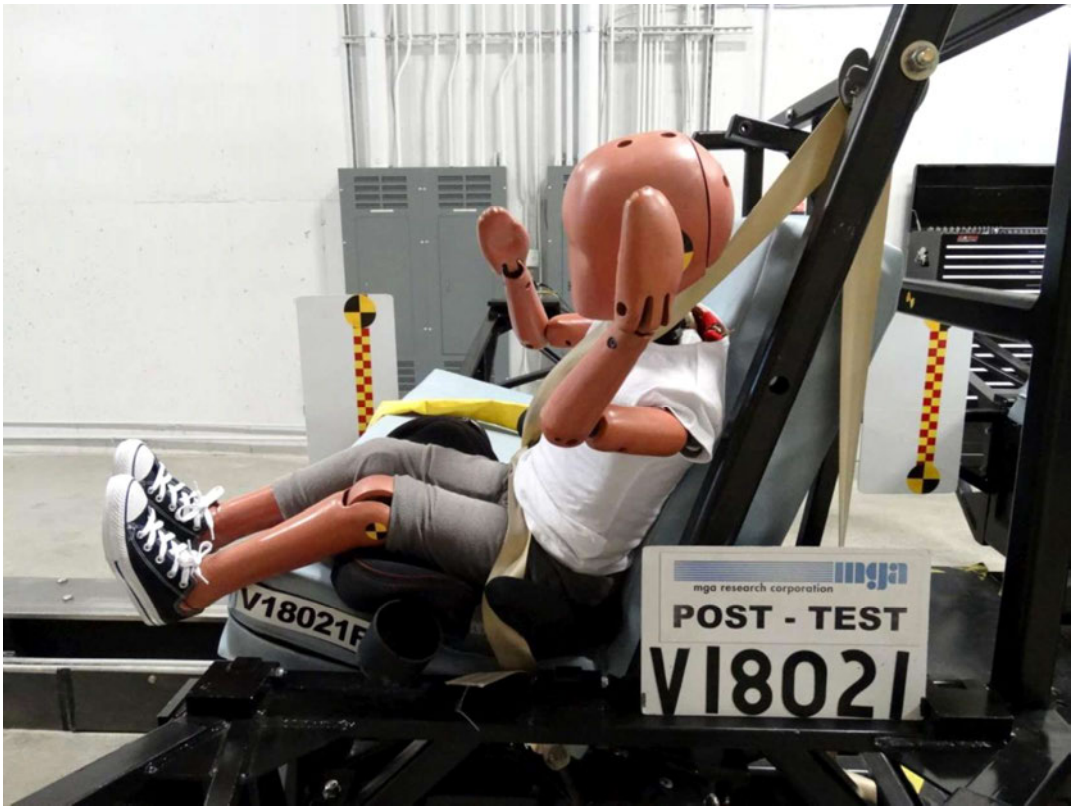

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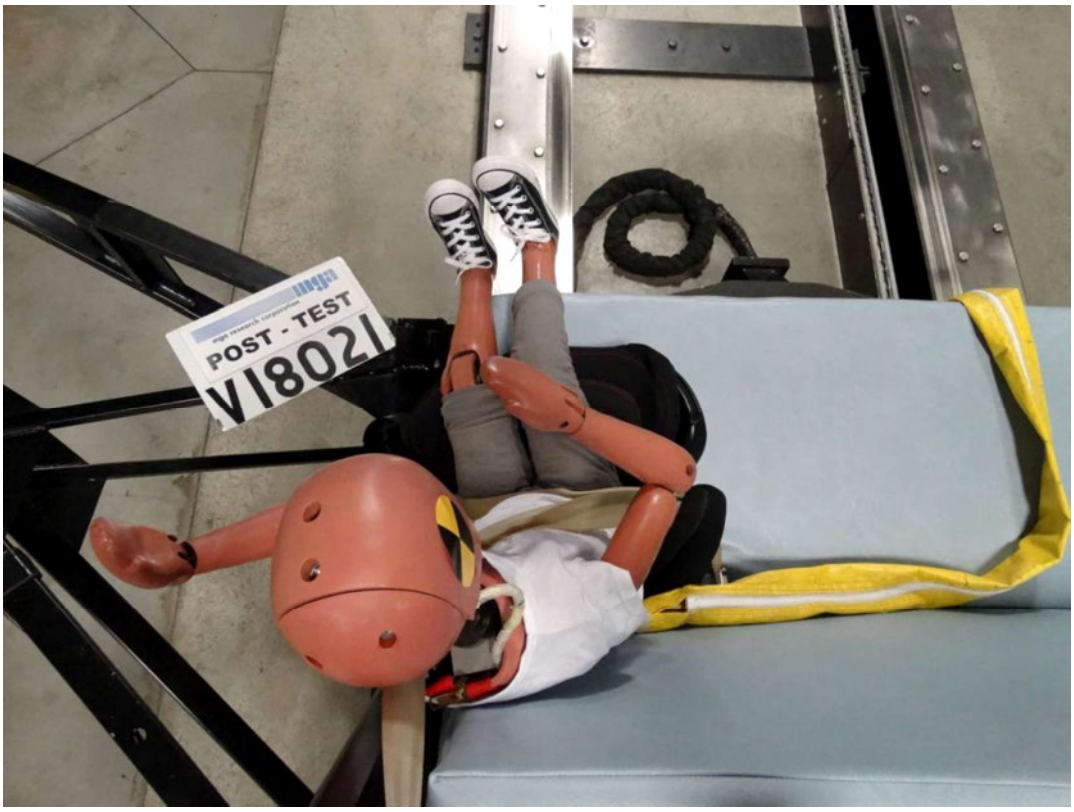

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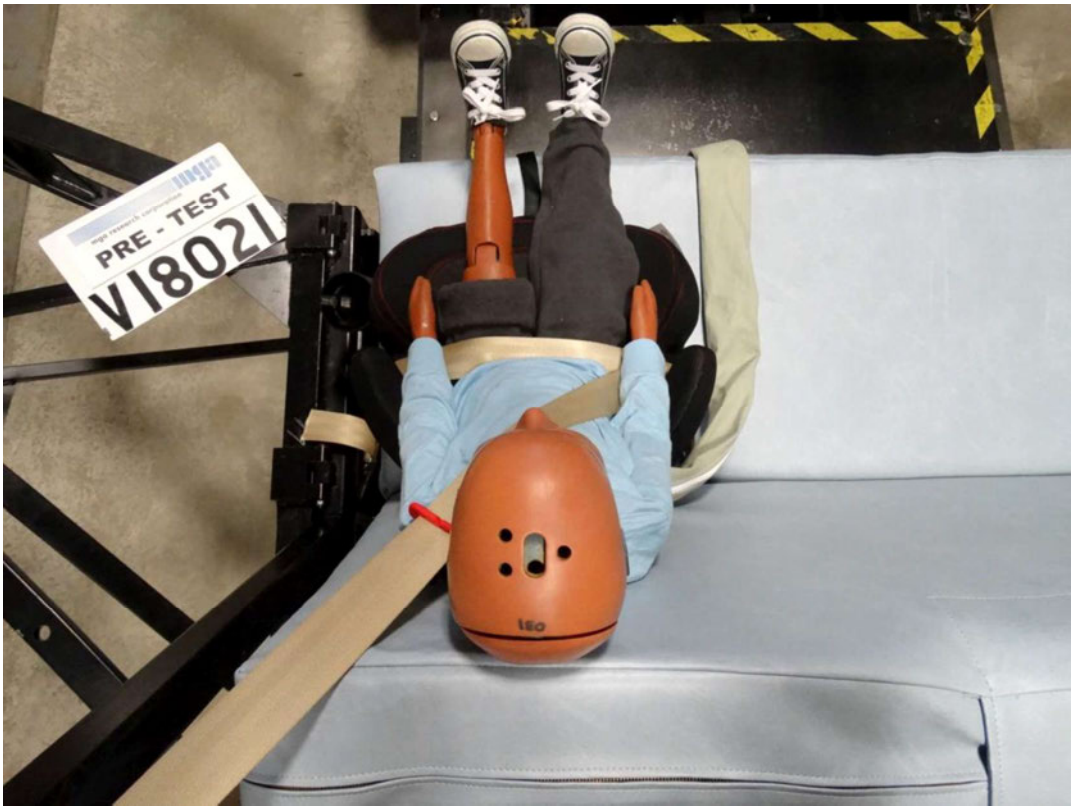

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V18021


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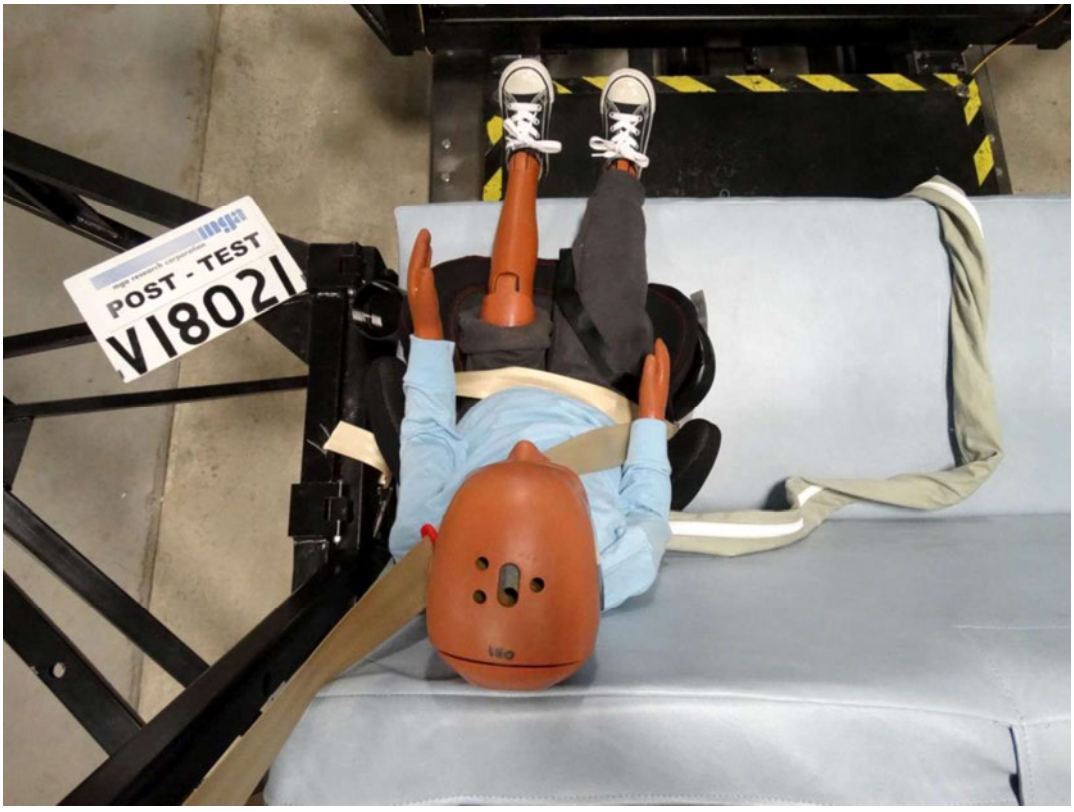

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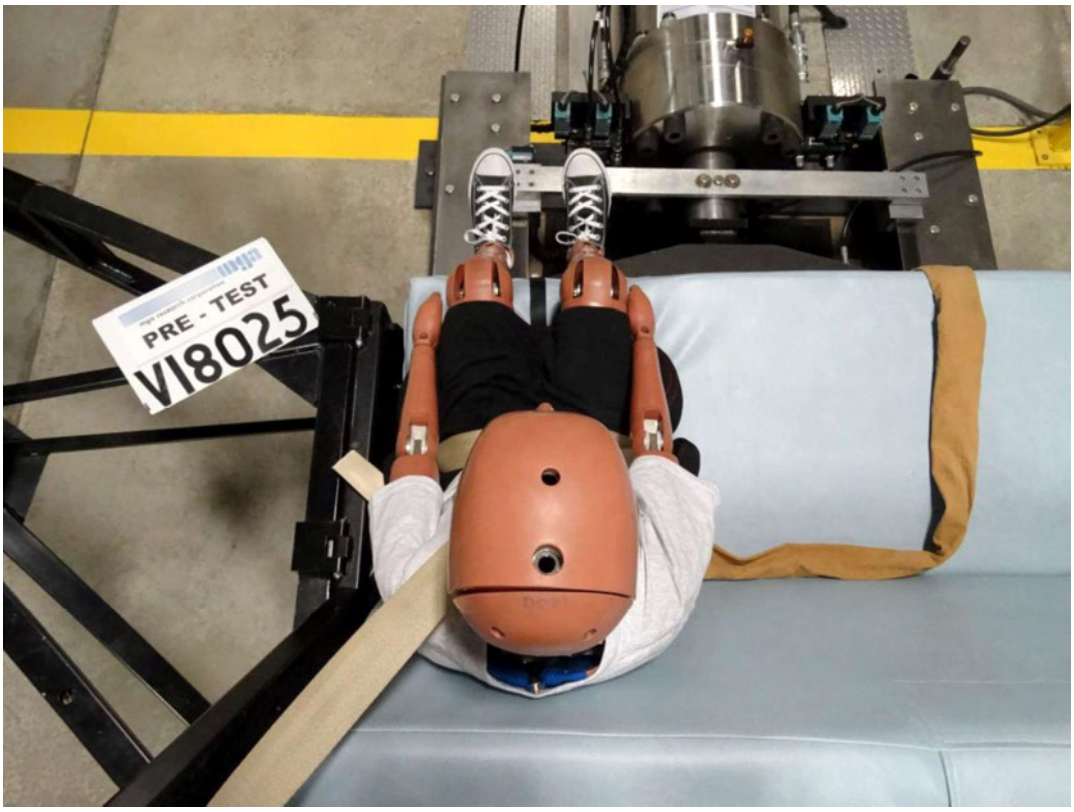

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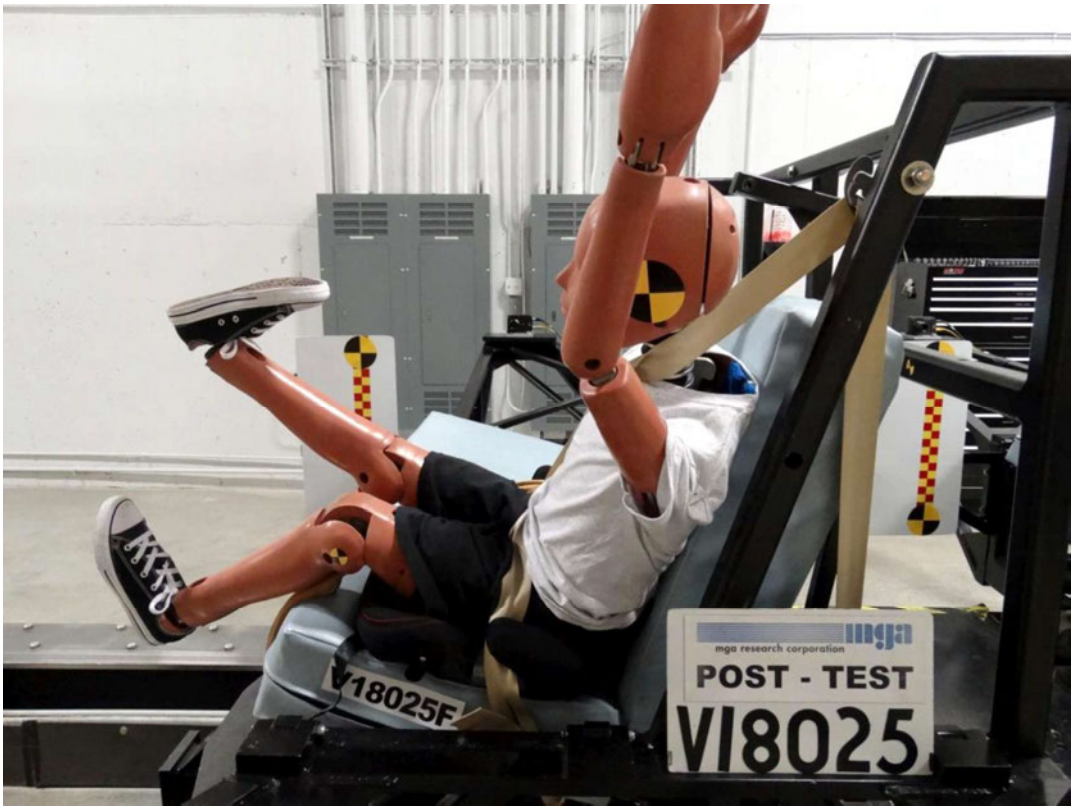

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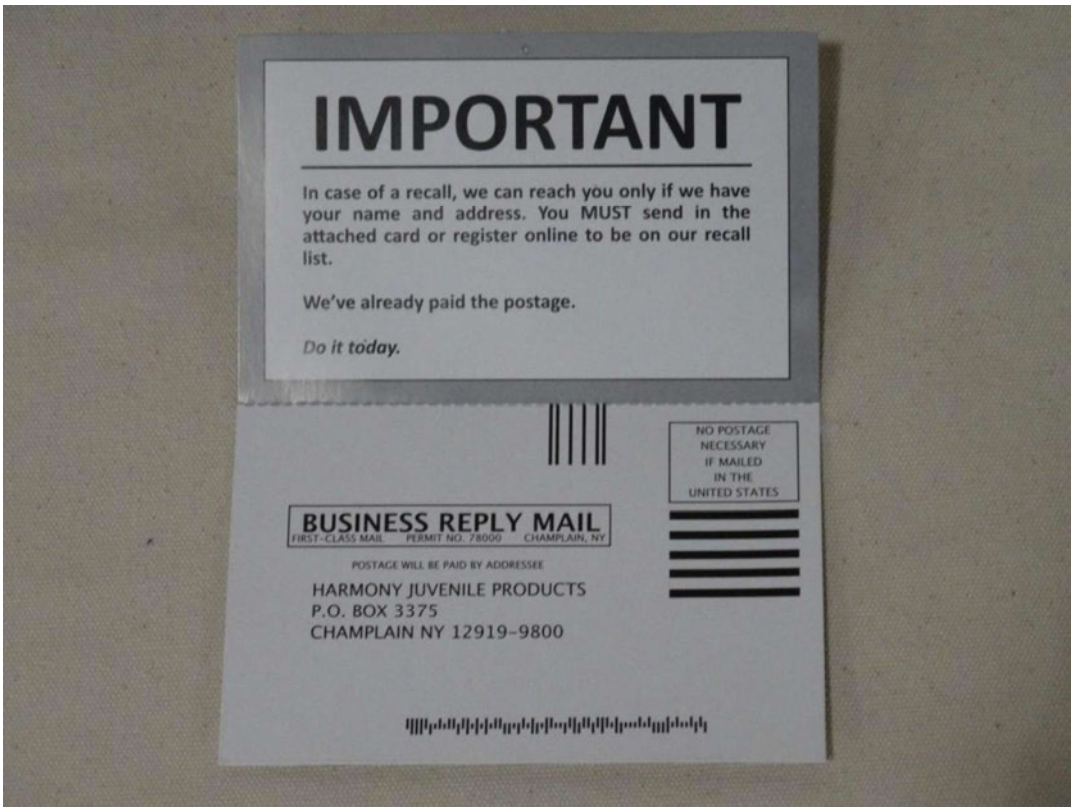

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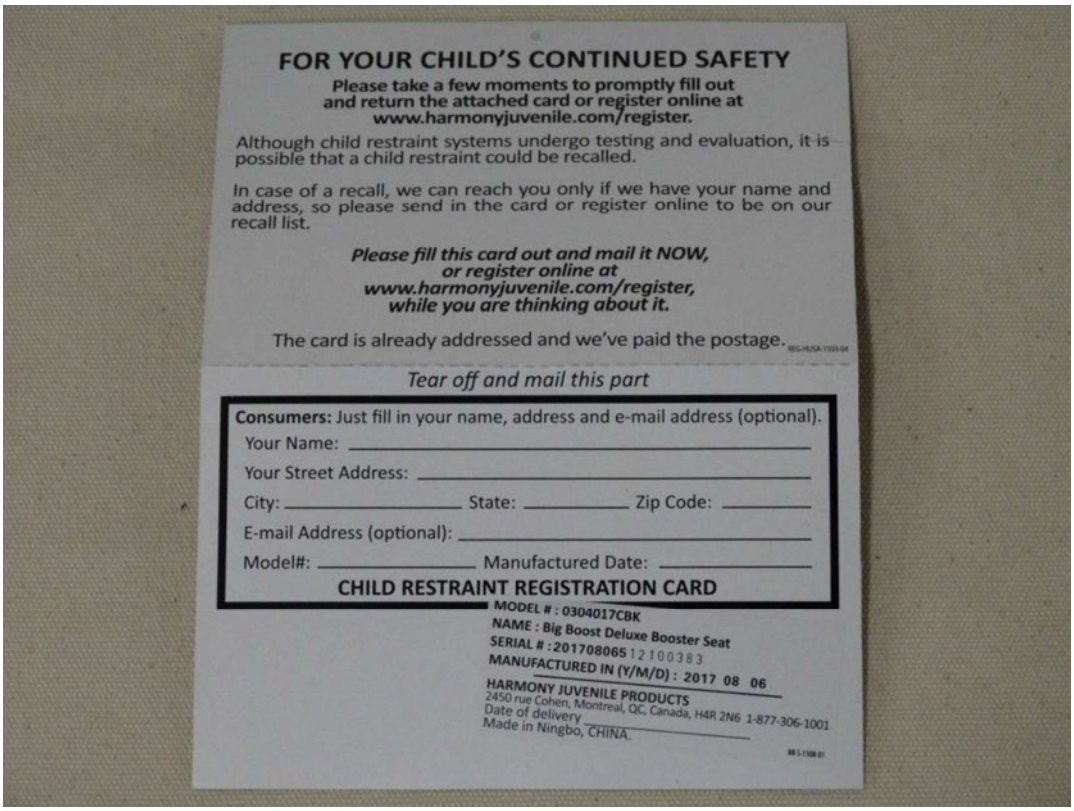

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Item Code: 036-D0304017C-01-6H3FN3FN
Item Code: 036-D0304017C-02-3H3FN3FN
Item Code: 036-D0304017C-03-TH3FN3FN





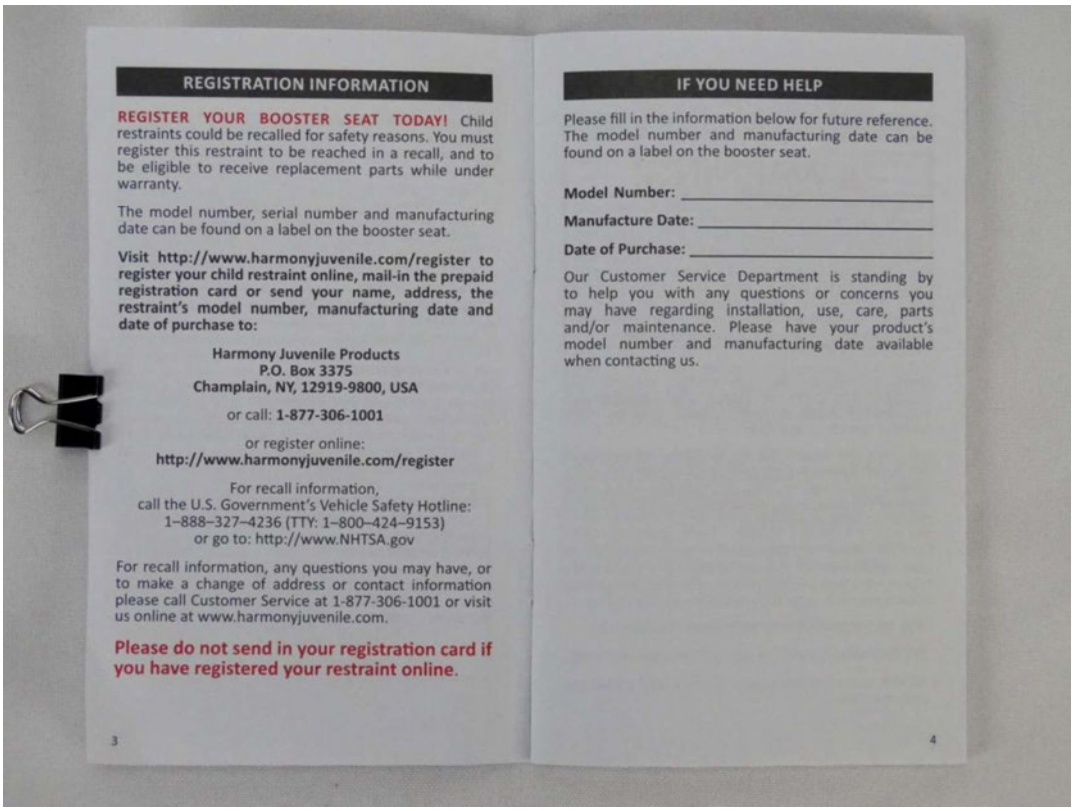
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Item Code: 036-D0304017C-02-3H3FN3FN
Item Code: 036-D0304017C-03-TH3FN3FN





LABELS

Item Code: 036-D0304017C-01-6H3FN3FN
Item Code: 036-D0304017C-02-3H3FN3FN
Item Code: 036-D0304017C-03-TH3FN3FN



REGISTRATION INFORMATION

REGISTER YOUR BOOSTER SEAT TODAY! Child restraints could be recalled for safety reasons. You must register this restraint to be reached in a recall, and to be eligible to receive replacement parts while under warranty.

The model number, serial number and manufacturing date can be found on a label on the booster seat.

Visit http://www.harmonyjuvenile.com/register to register your child restraint online, mail-in the prepaid registration card or send your name, address, the restraint's model number, manufacturing date and date of purchase to:

Harmony Juvenile Products
P.O. Box 3375
Champlain, NY, 12919-9800, USA

or call: **1-877-306-1001**

or register online:
http://www.harmonyjuvenile.com/register

For recall information,
call the U.S. Government's Vehicle Safety Hotline:
1–888–327–4236 (TTY: 1–800–424–9153)
or go to: http://www.NHTSA.gov

For recall information, any questions you may have, or to make a change of address or contact information please call Customer Service at 1-877-306-1001 or visit us online at www.harmonyjuvenile.com.

Please do not send in your registration card if you have registered your restraint online.

3

IF YOU NEED HELP

Please fill in the information below for future reference. The model number and manufacturing date can be found on a label on the booster seat.

Model Number: _____

Manufacture Date: _____

Date of Purchase: _____

Our Customer Service Department is standing by to help you with any questions or concerns you may have regarding installation, use, care, parts and/or maintenance. Please have your product's model number and manufacturing date available when contacting us.

4



MODEL # : 0304017CBK
NAME : Big Boost Deluxe Booster Seat
SERIAL # : 201708065 12100383
MANUFACTURED IN (Y/M/D) : 2017 08 06

HARMONY JUVENILE PRODUCTS
2450 rue Cohen, Montreal, QC, Canada, H4R 2N6 1-877-306-1001
Date of delivery _____
Made in Ningbo, CHINA.

BB-S-1508-01

Item Code: 036-D0304017C-01-6H3FN3FN
Item Code: 036-D0304017C-02-3H3FN3FN
Item Code: 036-D0304017C-03-TH3FN3FN





Item Code: 036-D0304017C-01-6H3FN3FN
Item Code: 036-D0304017C-02-3H3FN3FN
Item Code: 036-D0304017C-03-TH3FN3FN





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LABELS

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LABELS

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Item Code: 036-D0304017C-02-3H3FN3FN

Item Code: 036-D0304017C-03-TH3FN3FN

