Report No.
4454197-062

CHILD RESTRAINT SYSTEM COMPONENT TESTS FMVSS 213

Model No: Way B Pico

SGS North America Inc.
Consumer and Retail
291 Fairfield Avenue
Fairfield, NJ 07004

September 20, 2019

FINAL REPORT

213-SGS-19-062

PREPARED FOR

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVE, SE (ROOM W45-304)
WASHINGTON, D.C. 20590

Report No.: 4454197-062

Prepared by: SGS North America Inc.

Approved by: 
Frank Savino

Date: September 20, 2019

Report Accepted by:

Contract Technical Manager, O.V.S.C.
Office of Vehicle Safety Compliance

Accepted By: 

Acceptance Date: September 20, 2019

1. Report No. 213-SGS-19-062	2. Govt. Accession No.	3. Recipient's Catalog No.
4. Title and Sub-Title CHILD RESTRAINT SYSTEM, COMPONENT PARTS, Model No.: Way B Pico		5. Report Date: September 20, 2019
6. Performing Organization Code SGS-213-19-062		7. Author: Frank Savino, Project Manager
8. Performing Organization Report No. SGS-DOT-213-19-062		9. Performing Organization Name and Address: SGS North America Inc. 291 Fairfield Avenue Fairfield, NJ 07004
10. Work Unit No.		11. Order Number DTNH22-17-D-00079
12. Sponsoring Agency Name and Address: U.S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION ENFORCEMENT OFFICE OF VEHICLE SAFETY COMPLIANCE 1200 NEW JERSEY AVE, SE (ROOM W45-304) WASHINGTON, D.C. 20590		13. Type of report and Period Covered FINAL TEST REPORT July 22 – August 22, 2019
14. Sponsoring Agency Code: NVS-220		15.

16. Abstract

THIS REPORT PRESENTS THE RESULTS OF TESTS PERFORMED IN ACCORDANCE WITH FEDERAL MOTOR VEHICLE SAFETY STANDARD NO. 213 ON CHILD RESTRAINT SYSTEM COMPONENT PARTS.

MODEL NUMBER: Way B Pico
ALL TESTS WERE SATISFACTORILY COMPLETED.

17. Key Words	18. Distribution Statement		
FMVSS No. 213 Child Restraint System Safety Engineering	Copies of this report are available from: National Highway Traffic Safety Administration Technical Information Services, Room 5111 (NPO-411) 1200 New Jersey Avenue, SE (Room E12-100) Washington, DC 20590 email: tis@nhtsa.dot.gov Telephone No. 202-493-2833		
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this Page) Unclassified	21. No. of Pages 38	22. Price

TABLE OF CONTENTS

SECTION 1

PURPOSE AND TEST PROCEDURES

PURPOSE AND TEST PROCEDURES

Purpose: The purpose of this report was to determine if the production child restraint components parts supplied by the National Highway Traffic Safety Administration met the requirements of Federal Motor Vehicle Safety Standard Number 213 - "Child Restraint System".

Test Procedures: The "SGS North America Inc. Laboratories Test Procedure for FMVSS No. 213" dated July 2012 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 No. 213 and amendments in effect as noted in the applicable order.

SECTION 2

INSPECTION DATA AND TEST DATA

INSPECTION AND TEST DATA
FMVSS NO. 213 - CHILD RESTRAINT SYSTEMS

Report No.: 4454197-062

Child Restraint System Identification

Manufacturer:

Name: WayB

Address: 99 Pasadena Ave Ste 11
South Pasadena, CA 91030-9909

Model: Way B Pico

Technicians: Nick Kitov and John Roycraft

Project Manager: Frank Savino

WEBBING PERFORMANCE TESTS (a213-5.4.1)

Report No.: 4454197-062

Test Date: August 12, 2019

Laboratory Ambient Conditions During Testing

Temperature: 73 ° F

Relative Humidity: 50 %

Webbing Usage on Restraint: Harness

Test	Compliance Requirement	Test Result	Pass/Fail
Non-Degraded Webbing (FMVSS 209, S5.1 (b))	New webbing breaking strength, 15,000 N (webbing used to secure CRS to vehicle) or 11,000 N (webbing used to secure child within CRS)	1. 18,050 2. 17,944 3. 17,790 Median: 17,944	Pass
Resistance to Abrasion (FMVSS 209, S4.2(d) & S5.1(d)) Abrasion Cycles Performed 2500 (2500 Required)	Median breaking strength, Newtons (75% of median baseline strength)	1. 16,578 2. 16,618 3. 16,754 Median: 16,618 Strength Retained: 92.6%	Pass
Resistance to Buckle Abrasion (FMVSS 209, S5.3(c)) Abrasion cycles Performed 2500 (2500 Required)	Median breaking strength, Newtons (75% of median baseline strength)	1. N/A 2. N/A 3. N/A Median: N/A	N/A

WEBBING PERFORMANCE TESTS (a213-5.4.1) (Continued)

Report No.: 4454197-062

Test Date: August 12, 2019

Test	Compliance Requirement	Test Result	Pass/Fail
Resistance to Light (FMVSS 209, S4.2 (e) & S5.1(e)) Exposure Time 100 Hr. (100 Hours Required)	Median breaking strength, Newtons (60% of median baseline strength)	1. 17,185 2. 17,581 3. 16,966 Median: 17,185 Strength Retained: 95.8%	Pass
	Color Retention >/= No. 2 on the Geometric Gray Scale	1. 5 2. 5 3. 5	Pass
Resistance to Micro-Organisms (FMVSS 209, S4.2 (f), S5.1 (f))	Median breaking strength, Newtons (85% of median baseline strength)	1. N/A 2. N/A 3. N/A Median: N/A	N/A
Width Requirement (FMVSS 213, S5.4.1.3)	Width >/= 38 mm) If webbing contacts the test dummy torso	1. 39.0 2. 39.0 3. 39.0	Pass

Remarks:

Technicians: John Roycraft

Project Manager: Frank Savino

WEBBING PERFORMANCE TESTS (a213-5.4.1)

Report No.: 4454197-062

Test Date: August 12, 2019

Laboratory Ambient Conditions During Testing

Temperature: 73 ° F

Relative Humidity: 50 %

Webbing Usage on Restraint: Latch

Test	Compliance Requirement	Test Result	Pass/Fail
Non-Degraded Webbing (FMVSS 209, S5.1 (b))	New webbing breaking strength, 15,000 N (webbing used to secure CRS to vehicle) or 11,000 N (webbing used to secure child within CRS)	1. 17,764 2. 15,316 3. 15,636 Median: 15,636	Pass
Resistance to Abrasion (FMVSS 209, S4.2(d) & S5.1(d)) Abrasion Cycles Performed 2500 (2500 Required)	Median breaking strength, Newtons (75% of median baseline strength)	1. 17,332 2. 14,640 3. 17,199 Median: 17,199 Strength Retained: 100+%	Pass
Resistance to Buckle Abrasion (FMVSS 209, S5.3(c)) Abrasion cycles Performed 2500 (2500 Required)	Median breaking strength, Newtons (75% of median baseline strength)	1. N/A 2. N/A 3. N/A Median: N/A	N/A

WEBBING PERFORMANCE TESTS (a213-5.4.1) (Continued)

Report No.: 4454197-062

Test Date: August 12, 2019

Test	Compliance Requirement	Test Result	Pass/Fail
Resistance to Light (FMVSS 209, S4.2 (e) & S5.1(e)) Exposure Time 100 Hr. (100 Hours Required)	Median breaking strength, Newtons (60% of median baseline strength)	1. 16,389 2. 15,055 3. 16,331 Median: 16,331 Strength Retained: 100+%	Pass
	Color Retention >/= No. 2 on the Geometric Gray Scale	1. 5 2. 5 3. 5	Pass
Resistance to Micro-Organisms (FMVSS 209, S4.2 (f), S5.1 (f))	Median breaking strength, Newtons (85% of median baseline strength)	1. N/A 2. N/A 3. N/A Median: N/A	N/A
Width Requirement (FMVSS 213, S5.4.1.3)	Width >/= 38 mm) If webbing contacts the test dummy torso	1. 39.0 2. 39.0 3. 39.0	N/A

Remarks:

Technicians: John Roycraft

Project Manager: Frank Savino

WEBBING PERFORMANCE TESTS (a213-5.4.1)

Report No.: 4454197-062

Test Date: August 12, 2019

Laboratory Ambient Conditions During Testing

Temperature: 73 ° F

Relative Humidity: 50 %

Webbing Usage on Restraint: Tether

Test	Compliance Requirement	Test Result	Pass/Fail
Non-Degraded Webbing (FMVSS 209, S5.1 (b))	New webbing breaking strength, 15,000 N (webbing used to secure CRS to vehicle) or 11,000 N (webbing used to secure child within CRS)	1. 17,550 2. 18,434 3. 17,923 Median: 17,923	Pass
Resistance to Abrasion (FMVSS 209, S4.2(d) & S5.1(d)) Abrasion Cycles Performed 2500 (2500 Required)	Median breaking strength, Newtons (75% of median baseline strength)	1. 17,197 2. 17,694 3. 16,596 Median: 17,197 Strength Retained: 95.9%	Pass
Resistance to Buckle Abrasion (FMVSS 209, S5.3(c)) Abrasion cycles Performed 2500 (2500 Required)	Median breaking strength, Newtons (75% of median baseline strength)	1. N/A 2. N/A 3. N/A Median: N/A	N/A

WEBBING PERFORMANCE TESTS (a213-5.4.1) (Continued)

Report No.: 4454197-062

Test Date: August 12, 2019

Test	Compliance Requirement	Test Result	Pass/Fail
Resistance to Light (FMVSS 209, S4.2 (e) & S5.1(e)) Exposure Time 100 Hr. (100 Hours Required)	Median breaking strength, Newtons (60% of median baseline strength)	1. 17,520 2. 17,298 3. 16,962 Median: 17,298 Strength Retained: 96.5%	Pass
	Color Retention >/= No. 2 on the Geometric Gray Scale	1. 5 2. 5 3. 5	Pass
Resistance to Micro-Organisms (FMVSS 209, S4.2 (f), S5.1 (f))	Median breaking strength, Newtons (85% of median baseline strength)	1. N/A 2. N/A 3. N/A Median: N/A	N/A
Width Requirement (FMVSS 213, S5.4.1.3)	Width >/= 38 mm) If webbing contacts the test dummy torso	1. 38.0 2. 38.0 3. 38.0	N/A

Remarks:

Technicians: John Roycraft

Project Manager: Frank Savino

BELT BUCKLE AND ADJUSTMENT HARDWARE
PERFORMANCE TESTS (S213-S5.4.2/S209-S4.3)

Report No.: 4454197-062

Test Date: August 22, 2019 **Item Code:** Way B Pico

Laboratory Ambient Conditions During Testing

Temperature: 73 °F

Relative Humidity: 50 %

Test	Compliance Requirement	Test Result	Pass/Fail
Corrosion Resistance (FMVSS 209), (S4.3.(a) (2)) Exposure Time 24 Hours (24 Hours Required) Drying Time 1 Hour (1 Hour Required)	No Corrosion (NC)	1. NC 2. NC 3. NC	Pass Pass Pass
Push Buttons S213; S5.4.3.5 (c)	Area ≥ 0.6 sq. in.)	0.79	Pass
	Linear Dimensions	Dia 1.00 in	N/A
Lever Release	Cylinder Insertion	N/A	N/A
Other	Two-finger Access	N/A	N/A

BELT BUCKLE AND ADJUSTMENT HARDWARE
PERFORMANCE TESTS (S213-S5.4.2/S209-S4.3) (Continued)

Report No.: 4454197-062

Test	Compliance Requirement	Test Result	Pass/Fail
Buckle Latch (FMVSS 209 S4.3(g)) Follows ***Corrosion Resistance*** Cycles 200 (200 Required)	No Functional Deterioration (NFD)	1. NFD 2. NFD 3. NFD	1. Pass 2. Pass 3. Pass

Buckle Latch (FMVSS 209 S4.3(g)) ***Corrosion Resistance*** metal to metal buckles Note: Cycle Button; Perform manual latching and unlatching prior to partial engagement test. Measurements truncated to one decimal place.	Partial Engagement Separation Force <5 lb.	Test Result As Received (Results in Pounds)		Test Result After ***Corrosion Resistance***	
		Front	Reverse	Front	Reverse
		Sample 1 1) P 2) P 3) P	Sample 1 1) P 2) P 3) P	Sample 1 1) P 2) P 3) P	Sample 1 1) P 2) P 3) P
		Sample 2 1) P 2) P 3) P	Sample 2 1) P 2) P 3) P	Sample 2 1) P 2) P 3) P	Sample 2 1) P 2) P 3) P
		Sample 3 1) P 2) P 3) P	Sample 3 1) P 2) P 3) P	Sample 3 1) P 2) P 3) P	Sample 3 1) P 2) P 3) P

Remarks: P = Pass

Although the buckles do not latch with the tongues in the reverse position, one or both of the tongues can become partially engaged in this position.

Technicians: Nick Kitov
Project Manager: Frank Savino

BELT BUCKLE AND ADJUSTMENT HARDWARE
PERFORMANCE TESTS (S213-S5.4.2/S209-S4.3)

Report No.: 4454197-062

Test Date: August 22, 2019 **Item Code:** Way B Pico

Laboratory Ambient Conditions During Testing

Temperature: 73 °F

Relative Humidity: 50 %

Test	Compliance Requirement	Test Result	Pass/Fail
Temperature Resistance (FMVSS 209), (S4.3.(b)) Exposure Time 24 Hours (24 Hours Required) Drying Time 1 Hour (1 Hour Required)	No Functional Deterioration (NFD)	1. NFD 2. NFD 3. NFD	Pass Pass Pass
Push Buttons S213; S5.4.3.5 (c)	Area ≥ 0.6 sq. in.)	0.79	Pass
	Linear Dimensions	Dia 1.00 in	N/A
Lever Release	Cylinder Insertion	N/A	N/A
Other	Two-finger Access	N/A	N/A

BELT BUCKLE AND ADJUSTMENT HARDWARE
PERFORMANCE TESTS (S213-S5.4.2/S209-S4.3) (Continued)

Report No.: 4454197-062

Test	Compliance Requirement	Test Result	Pass/Fail
Buckle Latch (FMVSS 209 S4.3(g)) Follows ***Temperature Resistance*** Cycles 200 (200 Required))	No Functional Deterioration (NFD)	1. NFD 2. NFD 3. NFD	1. Pass 2. Pass 3. Pass

Buckle Latch (FMVSS 209 S4.3(g)) ***Temperature Resistance*** metal to metal buckles Note: Cycle Button; Perform manual latching and unlatching prior to partial engagement test. Measurements truncated to one decimal place.	Partial Engagement Separation Force <5 lb.	Test Result As Received (Results in Pounds)		Test Result After ***Temperature Resistance***	
		Front	Reverse	Front	Reverse
		Sample 1 1) P 2) P 3) P	Sample 1 1) P 2) P 3) P	Sample 1 1) P 2) P 3) P	Sample 1 1) P 2) P 3) P
		Sample 2 1) P 2) P 3) P	Sample 2 1) P 2) P 3) P	Sample 2 1) P 2) P 3) P	Sample 2 1) P 2) P 3) P
		Sample 3 1) P 2) P 3) P	Sample 3 1) P 2) P 3) P	Sample 3 1) P 2) P 3) P	Sample 3 1) P 2) P 3) P

Remarks: P = Pass

Although the buckles do not latch with the tongues in the reverse position, one or both of the tongues can become partially engaged in this position.

Technicians: Nick Kitov
Project Manager: Frank Savino

APPENDIX A

EQUIPMENT LIST AND CALIBRATION

SGS NORTH AMERICA INC.
TEST EQUIPMENT

NO.	ITEM	MANUFACTURER	MODEL	SERIAL NO.	CAL. PERIOD	DATE OF LAST CAL.	ACCURACY	REMARKS
			WEBBING TESTING					
1	Steel Ruler	Products Engineering	262-000	481610452	1 Year	7/19	+/-0.01 inch	Webbing Width
2	Hex-Bar Abrader	U.S. Testing	---	---	1Year*	8/19	---	*Timer-Counter Assembly and Weights
3	Weatherometer	Atlas Electric Co.	CXW	CB-12295	1 Year*	7/19	+/-1%	*Temp. and Voltage Meters
4	Weatherometer	Atlas Electric Co.	CXW	CB-1214	1 Year*	7/19	+/-1%	*Temp. and Voltage Meters
5	Weatherometer	Atlas Electric Co.	XW-WT	W0-3009	1 Year*	7/19	+/-1%	*Temp. and Voltage Meters
6	Color Change - Gray Scale	AATCC	---	---	---	---	---	Visual Comparison
7	Universal Testing Machine	Instron	1115	4742	1 Year	2/19	+/-1%	Webbing Strength
8	Universal Testing Machine	Instron	TTC	4344	1 Year	6/19	+/-1%	Webbing Strength
9	2″ Split Drum Grips	U.S. Testing Co.	---	---	---	---	---	Instron Fixture

SGS NORTH AMERICA INC.
TEST EQUIPMENT

NO.	ITEM	MANUFACTURER	MODEL	SERIAL NO.	CAL. PERIOD	DATE OF LAST CAL.	ACCURACY	REMARKS
			BUCKLE TESTING					
10	Salt Spray Chamber	Singleton Corp.	SCCH22	SCCH22-21947	---	---	---	Checked daily in accordance with ASTM B-117
11	Temperature Recorder	Honeywell	DR4300	14W47C4000 000849615	1 Year	7/19	+/- 5°F	Monitor Salt Spray Temperature
12	Temperature Humidity Chamber	Blue-M	FR-386PBX	AA278	1Year	4/19	+/-2°C +/-5% R.H	Temperature-Humidity Exposure
13	Temperature Humidity Chamber	Blue-M	LR-386B-MP1	L3-122	1 Year	1/19	+/-2°C +/-5% R.H	Temperature-Humidity Exposure
14	Temperature Chamber	Despatch	52392 V29	037-15	1 Year	4/19	+/-2°C +/-5% R.H	Temperature Exposure
15	Pushbutton Latch Fixture	U.S. Testing	---	---	1 Year*	7/19	---	Force checked prior to use. *Timer Counter
			STANDARD LABORATORY CONDITIONING					
16	Temperature / Humidity Recorder	Dickson	TH800	07150222	1Year	8/18	+/-2°F +/-5% R.H.	Monitor Room Conditioning

APPENDIX B

INTERPRETATION AND/OR DEVIATIONS FROM FMVSS NO. 213

NO INTERPRETATIONS OR DEVIATIONS FROM FMVSS NO. 213

APPENDIX C

PHOTOGRAPHS

LISTS OF PHOTOGRAPHS

The following section identifies photographed testing equipment.

The following section identifies photographs of the seat.

C - 2

C-3

Temperature/Humidity Chamber

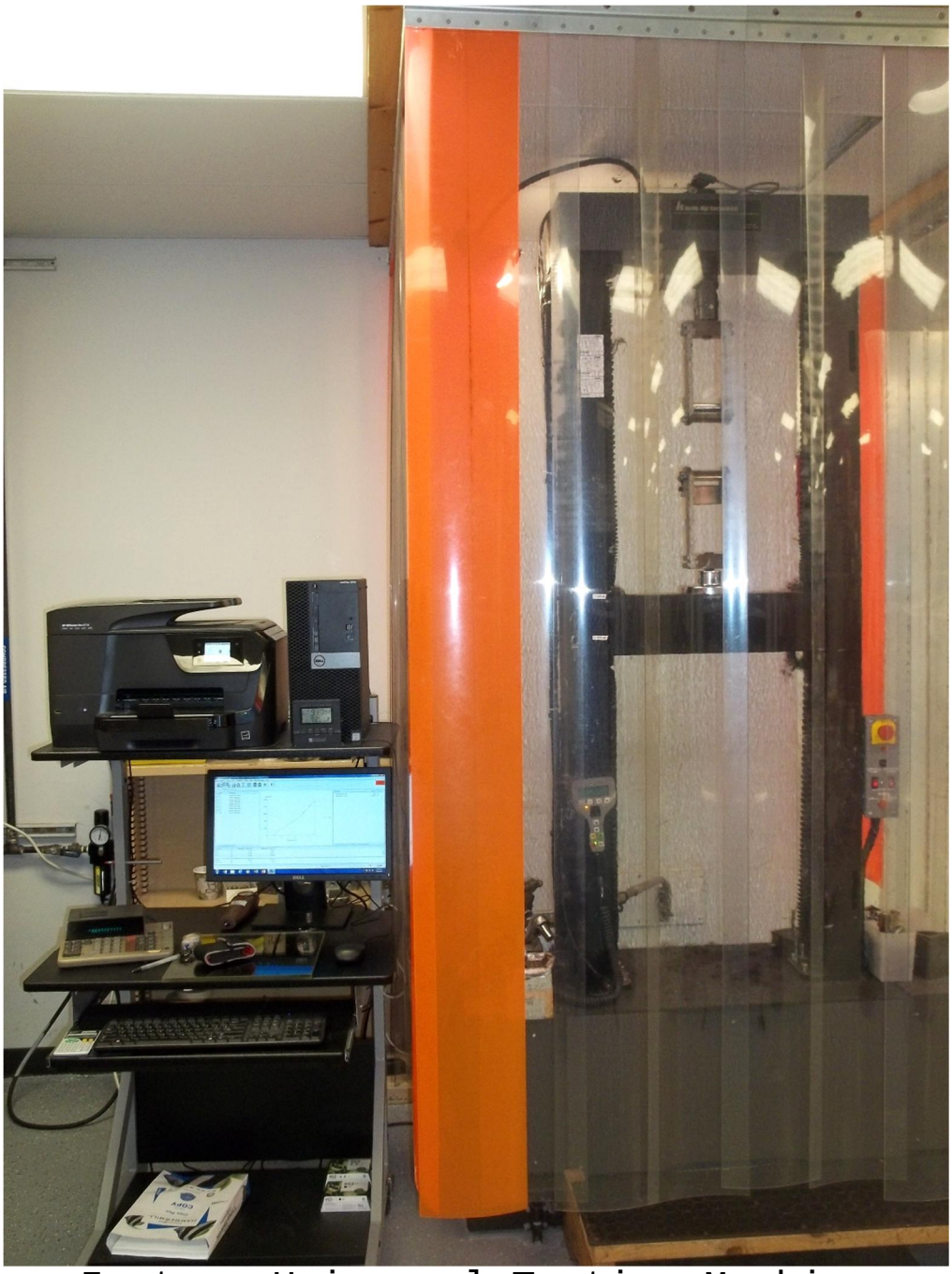
C-4

Temperature Chamber

C-5

Button Cycling Apparatus

C-6

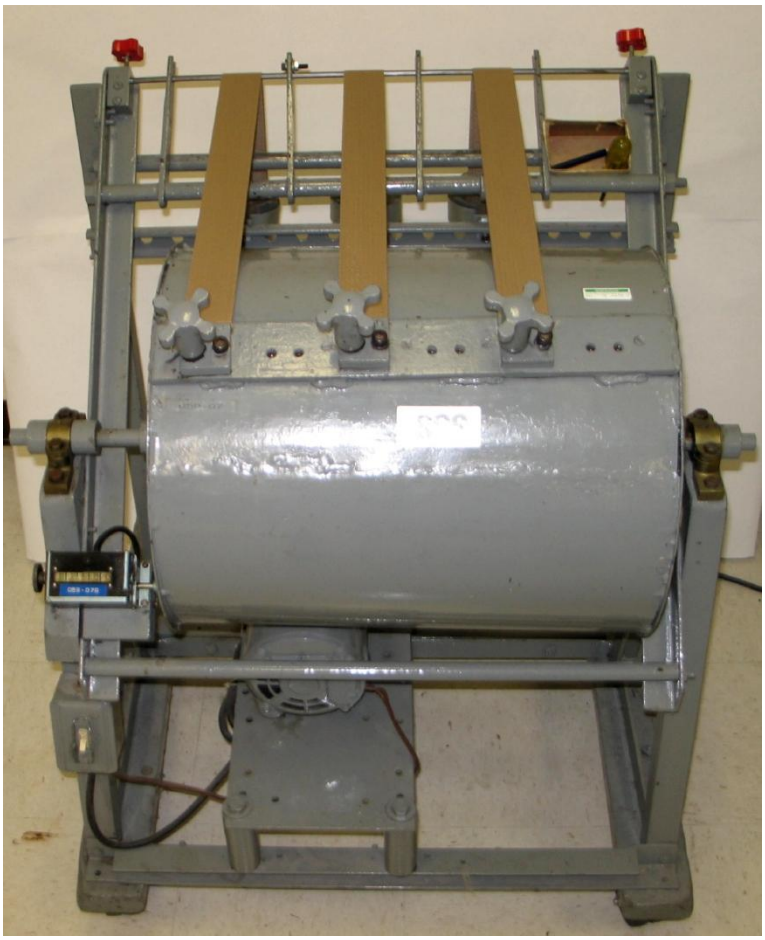


Instron Universal Testing Machine

C-7

Weatherometer

C-8

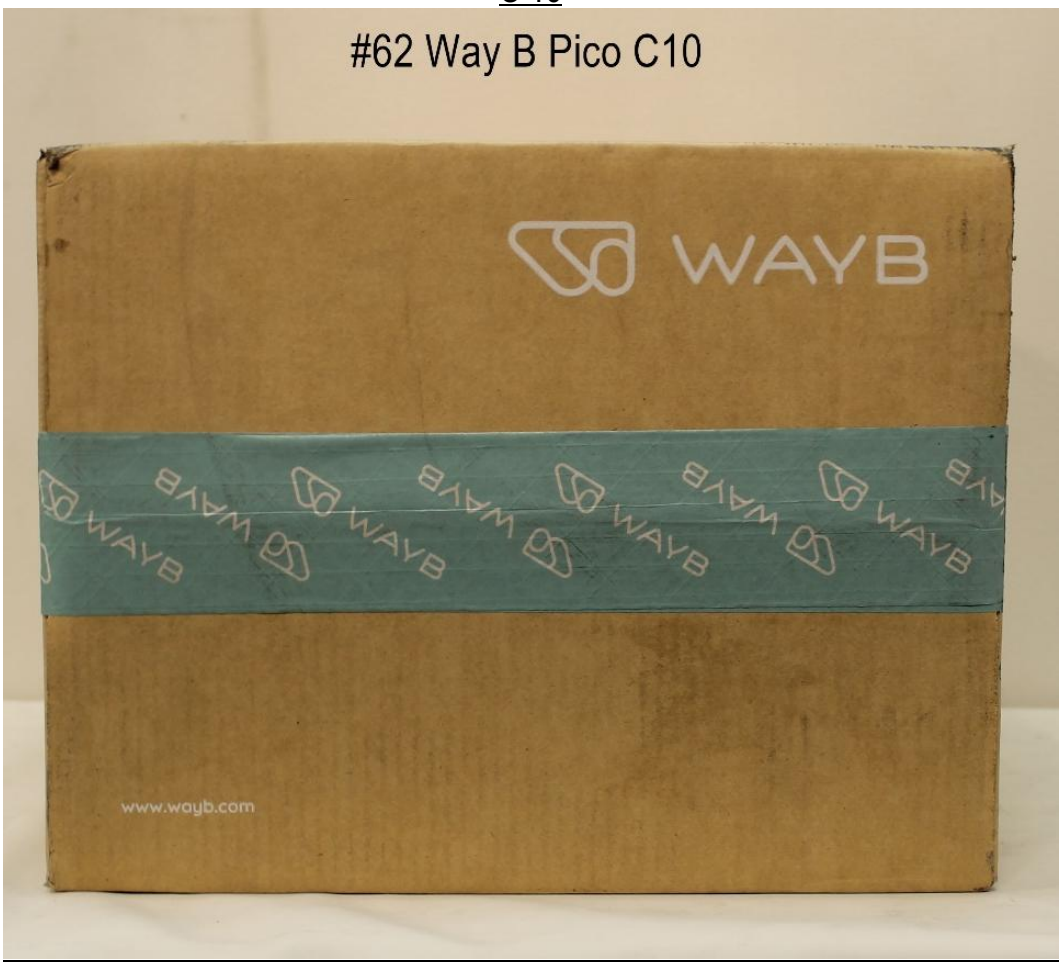


Hex Bar Abrasion Apparatus

C-9


#62 Way B Pico C9
WAYB
7877 2464 7425
WAYB
Jet
Pico
on-the-go car seat

C-10



C-11

C-12

C-13

C-14

FOR YOUR CHILD'S CONTINUED SAFETY

Please take a few moments to promptly fill out and return the attached card.

Although child restraint systems undergo testing and evaluation, it is possible that a child restraint could be recalled.

In case of recall, we can reach you only if we have your name and address, so please send in the card or register online to be on our recall list.

Please fill this card out and mail it NOW or register online at http://www.wayb.com/pages/register while you are thinking about it.

This card is already addressed and we've paid the postage.

Tear off and mail this part.

Consumer: Just fill in your name and address and e-mail address (Optional). Please print.

Your First Name:

Your Last Name:

Your Street Address:

City:

State:

Zip Code:

E-mail Address (Optional):

CHILD RESTRAINT REGISTRATION CARD

Model Name	PICO
Model Number	CSTPI - JT - 001
Manufactured In (YYYY/MM/DD)	2019 MAR 28
Serial Number	PI-AA 007578

PPCS030-2