MOTOR VEHICLE RESTRAINT SYSTEMS AND BOOSTER SEATS SAFETY REGULATIONS [FEDERAL]

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PART 1 – General

Interpretation
100. Definitions

National Safety Mark
101. Authorization by Minister

Prescribed Classes of Equipment
102. Prescribed classes of equipment

Prescribed Standards
103. CVMSS 213

Restraint System and Booster Seat Information

National Safety Mark
104. No importation without national safety mark

Lower Universal Anchorage System Symbol
105. Lower universal anchorage system symbol

Records
106. Compliance

Registration Systems
107. Information card

Importation

General
108. Declaration

Temporary Importation
109. Declaration before importation
Defect Information

110. Content of notice of defect
111. 111. to 199. reserved

PART 2 – CMVSS 213 - Child Restraint Systems

General

200. Interpretation
201. Restraint of torso and crotch
202. Means of securing forward-facing child restraint system
203. Belts and movable surfaces designed to restrain a child
204. Audible or visible indication
205. Flammability

Belt Buckles and Webbing

206. Conformity with TSD 209
207. Belt buckles
208. Webbing

Contactable Surfaces

209. Contactable surfaces
210. Prohibition
211. Cross-sections of surface
212. Rigid structural elements
213. Surface contactable by head

Testing

214. Inversion testing
215. Dynamic testing
216. Forward-facing child restraint system
217. Rear-facing child restraint system

Information

218. Information
219. Warning — air bag
220. Installation instructions
221. 221. to 299. reserved

PART 3  CMVSS 213.1 - Infant Restraint Systems

General

300. Interpretation
301. Restraint system designed to face the rear
302. Restraint of torso
303. Means of securing restraint system
304. Restraint system with removable base
305. Part designed to restrain an infant
306. Audible or visible indication
307. Flammability

**Belt Buckles and Webbing**
308. Conformity with TSD 209
309. Belt buckles
310. Webbing

**Contactable Surfaces**
311. Contactable surfaces
312. Rigid structural elements
313. Surface contactable by head

**Testing**
314. Inversion testing
315. Dynamic testing

**Information**
316. Information
317. Warning — air bag
318. Installation instructions
319. 319. to 399. reserved

**PART 4 – CMVSS 213.2 - Booster Seats**

**General**
400. Interpretation
401. Means of securing booster seat
402. Audible or visible indication
403. Flammability

**Tether Strap Attachments and Webbing**
404. Conformity with TSD 209
405. Webbing

**Contactable Surfaces**
406. Rigid structural elements

**Testing**
407. Dynamic testing
408. Quasi-static test

**Information**
409. Information
410. Installation instructions
411. 411. to 499. reserved
PART 5 – CMVSS 213.3 - Restraint Systems for Disabled Persons

General
500. Interpretation
501. Restraint of torso and crotch
502. Means of securing restraint system
503. Audible or visible indication
504. Custom restraint system
505. Flammability

Belts, Buckles and Webbing
506. Belts
507. Release mechanism of a belt
508. Conformity with TSD 209
509. Belts or movable surfaces designed to restrain a person — mass-produced restraint systems
510. Belt buckles — mass-produced restraint systems
511. Belt buckles — custom restraint systems
512. Webbing

Contactable Surfaces
513. Removable surfaces
514. Cross-sections of surface
515. Rigid structural elements
516. Surface contactable by head — custom restraint system for a disabled person

Testing
517. Inversion testing
518. Dynamic testing
519. Forward-facing mass-produced restraint system
520. Rear-facing mass-produced restraint system

Information
521. Information — mass-produced restraint systems
522. Warning — school buses
523. Information — custom restraint systems
524. Installation instructions
525. 525. to 599. reserved

PART 6 – CMVSS 213.5 - Restraint Systems for Infants with Special Needs

General
600. Interpretation
601. Restraint system designed to face the rear
602. Torso restraint
603. Means of securing restraint system
604. Restraint system with removable base
605. Car bed
606. Restraint system to be adjustable
607. Audible or visible indication
608. Flammability

Belt Buckles and Webbing
609. Conformity with TSD 209
610. Belt buckles
611. Webbing

Contactable Surfaces
612. Contactable surfaces
613. Rigid structural elements
614. Surface contactable by head

Testing
615. Dynamic testing

Information
616. Information
617. Warning — air bag
618. Installation instructions
619. 619. to 699. reserved

PART 7 – Transitional Provision

Transitional Provision
700. Conformity
SCHEDULE 1
SCHEDULE 2
SCHEDULE 3
SCHEDULE 4
SCHEDULE 5
SCHEDULE 6
SCHEDULE 7
PART 1 – General

Interpretation

Definitions

100. The following definitions apply in these Regulations.


"booster seat" means a removable device designed to be used in a vehicle for seating a person whose mass is at least 18 kg, to ensure that the seat belt assembly fits properly.

"car bed" means a restraint system for an infant with special needs that is designed to restrain the infant in a supine or prone position on a continuous flat surface.

"child" means a person whose mass is more than 10 kg and not more than 30 kg.

"CMVSS" means Canada Motor Vehicle Safety Standard.

"custom restraint system for a disabled person" means a restraint system, other than a mass-produced restraint system, designed for a specific disabled person.

"disabled person" means a person, other than an infant with special needs, who, for orthopaedic reasons or because of the person's build or other physical characteristics, is unable to use an infant restraint system, a child restraint system, a booster seat, a built-in device referred to in item 213.4 of Schedule III to the Motor Vehicle Safety Regulations, or a vehicle seat belt.

"infant" means a person who is unable to walk unassisted and whose mass is not more than 10 kg.

"infant with special needs" means an infant who is unable to use an infant restraint system and

(a) who was born at less than 37 weeks' gestation;

(b) whose mass at birth was less than 2.2 kg; or

(c) who has special breathing needs.

"lower connector system" means a system consisting of two connectors that each fit inside a checking device having the envelope dimensions shown in Figure 9 of Schedule 7, that are attached to the lower part of a restraint system or booster seat in a manner that does not allow for their removal without the use of tools, and that allow the restraint system or booster seat to be securely attached to a lower universal anchorage system of a vehicle.

"lower universal anchorage system" means a device, other than a vehicle seat belt, that is designed to secure the lower portion of a restraint system or booster seat to a vehicle, and that transfers the load from the restraint system or booster seat and its occupant to the vehicle structure or a vehicle seat structure.

"mass-produced" means manufactured, in whatever quantity, using only standard or uniform parts.

"restraint system" means a removable device designed to be used together with the seat of a vehicle in order to restrain an infant, an infant with special needs, a child or a disabled person, but does not include a booster seat or a vehicle seat belt.

"seat orientation reference line" or "SORL" means the horizontal line passing through the plane of symmetry of the standard seat assembly and passing through the Z point as shown in Figures 3 and 4 of Schedule 7.

"standard seat assembly" means the seat that is specified in the drawing package entitled Standard Seat Assembly Specifications for Motor Vehicle Restraint Systems and Booster Seats Safety Regulations Compliance Testing (January 1, 2010), published by the Department of
Transport, and that has seat belt anchorage points and a lower universal anchorage system located as indicated in Figures 3 and 4 of Schedule 7, respectively.

"tether strap" means a device that is fitted with a tether strap hook and secured to the rigid structure of a restraint system or booster seat, and that transfers the load from the restraint system or booster seat and its occupant to the user-ready tether anchorage.

"tether strap hook" means a device that is used to attach a tether strap to a user-ready tether anchorage and that has an interface profile shown in Figure 1 of Schedule 7 or, in the case of a device with integrated adjustment hardware, Figure 2 of Schedule 7.

"torso" means the portion of the body of an anthropomorphic test device or an occupant, excluding the thighs, that

(a) when the device or occupant is seated in a restraint system other than a car bed or in a booster seat, lies between the top of the restraint system seating surface or booster seat seating surface and the top of the shoulders; or

(b) when the device or occupant is seated in a car bed, lies between the top of the continuous flat surface of the car bed and the top of the shoulders.

"TSD 209" means Technical Standards Document No. 209, Seat Belt Assemblies, published by the Department of Transport, as amended from time to time.

"TSD 302" means Technical Standards Document No. 302, Flammability of Interior Materials, published by the Department of Transport, as amended from time to time.

"user-ready tether anchorage" means a device that transfers the tether strap load from a restraint system or booster seat and its occupant to the vehicle structure or a vehicle seat structure, and that is designed to accept a tether strap hook directly, without requiring the installation of any other device.

(2) [Repealed, SOR/2014-307, s. 31]

(3) Classes of vehicles - In these Regulations, "classes of vehicles" refers to those classes of vehicles prescribed by section 4 of the Motor Vehicle Safety Regulations and set out in Schedule III to those Regulations.

(4) Interpretation – restraint system or booster seat - For the purposes of these Regulations, a reference in TSD 209 to webbing, a belt buckle, a tether strap attachment or a related piece of adjustment hardware that is part of a Type 1 seat belt assembly is to be read as a reference to webbing, a belt buckle, a tether strap attachment or a related piece of adjustment hardware that is part of a restraint system or booster seat, as the case may be.

SOR/2013-117, s. 12; SOR/2014-307, s. 31.

National Safety Mark

Authorization by Minister

101. (1) For the purposes of subsection 3(2) of the Act, the Minister may, in the form set out in Schedule 1, authorize a company to apply the national safety mark to a restraint system or booster seat and to any accompanying documentation or any packaging.

(2) Application for authorization - A company that intends to apply the national safety mark to a restraint system or booster seat must apply to the Minister to obtain the authorization referred to in subsection (1).

(3) National safety mark - A company that applies the national safety mark to a restraint system or booster seat must reproduce the national safety mark as shown in Schedule 2,
including the following information, in the locations indicated in that schedule:
(a) the authorization number assigned to the company by the Minister; and
(b) the number or numbers of the CMVSS to which the restraint system or booster seat
conforms, namely,
   (i) 213, in the case of a child restraint system,
   (ii) 213.1, in the case of an infant restraint system,
   (iii) 213.2, in the case of a booster seat,
   (iv) 213.3, in the case of a mass-produced restraint system for disabled persons,
   (v) 213.3, in the case of a custom restraint system for a disabled person that is
designed to be used only in school buses, and
   (vi) 213.5, in the case of a restraint system for infants with special needs.

(4) **Idem** - The national safety mark must be at least 50 mm in diameter and be stitched onto
the restraint system or booster seat, indelibly moulded into or onto it, or indelibly printed
on a label affixed to it in a permanent manner.

(5) **Visibility of national safety mark** - The national safety mark must, when applied to a
restraint system or booster seat, be fully visible.

(6) **Location of national safety mark – removable base** - If a restraint system is
manufactured with a removable base and the seating component of the restraint system is
designed to be used in a vehicle with or without the base, the national safety mark must be
applied to the seating component.

**Prescribed Classes of Equipment**

(PUB) **Prescribed classes of equipment**
Jun
19/13

**102.** For the purposes of subsection 3(2) and sections 4 and 5 of the Act, child restraint
systems, infant restraint systems, booster seats, restraint systems for disabled persons
and restraint systems for infants with special needs are prescribed classes of
equipment.

SOR/2013-117, s. 13.

**Prescribed Standards**

**CVMSS 213**

**103.** (1) Every child restraint system must conform to the applicable standards set out in Part 2,
CVMSS 213 – Child Restraint Systems.

(2) **CVMSS 213.1** - Every infant restraint system must conform to the applicable standards set

(3) **CVMSS 213.2** - Every booster seat must conform to the applicable standards set out in Part
4, CVMSS 213.2 – Booster Seats.

(4) **CVMSS 213.3** - Every restraint system for disabled persons must conform to the applicable

(5) **CVMSS 213.5** - Every restraint system for infants with special needs must conform to the applicable standards set out in Part 6, CMVSS 213.5 – Restraint Systems for Infants with Special Needs.

(6) **Applicable CVMSS** - Every restraint system that is designed to be used as more than one type of restraint system or as a restraint system and booster seat must conform to the standards set out in Parts 2 to 6 that are applicable to each type of restraint system or booster seat for which it is designed to be used.

**Restraint System and Booster Seat Information**

**National Safety Mark**

**No importation without national safety mark**

104. A company must not import into Canada a restraint system other than a custom restraint system for a disabled person that is not designed to be used only in school buses, or a booster seat, unless the company has applied the national safety mark to the restraint system or booster seat.

**Lower Universal Anchorage System Symbol**

**Lower universal anchorage system symbol**

105. Every restraint system or booster seat that is equipped with a lower connector system must bear the lower universal anchorage system symbol shown in Schedule 3, on a background of contrasting colour, on or near the lower connector system, and the symbol must be fully visible to a person installing the restraint system or booster seat when the restraint system or booster seat is positioned in the vehicle.

**Records**

**Compliance**

106. (1) For each restraint system or booster seat to which the national safety mark is applied or that is imported into Canada, a company must maintain in writing or in readily readable electronic form the records referred to in paragraph 5(1)(g) of the Act that show that the restraint system or booster seat conforms to all prescribed standards applicable to it, and retain those records for at least five years after the day on which the restraint system or booster seat is manufactured or imported.

(2) **Idem** - If the records referred to in subsection (1) are maintained by a person on behalf of the company, the company must keep the name and address of the person.
(3) **Request by inspector** - At the request in writing of an inspector, a company must send to the inspector a copy of the records referred to in subsection (1), in either official language, within 30 working days after the day on which the request is mailed.

### Registration Systems

**Information card**

107. (1) For the purpose of maintaining the registration system referred to in paragraph 5(1)(h) of the Act, a company must provide to each person who purchases a restraint system or booster seat an information card, in both official languages, that

(a) permits the purchaser to provide to the company or to a duly authorized representative of the company, at no cost, the purchaser's name, mailing address and email address, the model name and number of the restraint system or booster seat, the date of purchase and the date of manufacture; and

(b) includes a safety message concerning the importance of providing the information.

(2) **Information to be included in registration system** - The registration system maintained by a company in accordance with paragraph 5(1)(h) of the Act must consist of the information provided to the company under paragraph (1)(a), and that information must be used only for the purposes of paragraph 5(1)(h) of the Act.

(3) **Minimum retention period** - The information in the registration system maintained by a company in relation to a restraint system or booster seat must be kept for at least five years after the day on which the restraint system or booster seat is purchased.

### Importation

**General**

**Declaration**

108. For the purposes of paragraph 5(1)(b) of the Act, a company that imports into Canada a restraint system or booster seat must make, at the nearest customs office that is open for business, a declaration signed by the company's duly authorized representative that contains the following information:

(a) the name of the manufacturer of the restraint system or booster seat;

(b) the name and address of the company importing the restraint system or booster seat;

(c) [Repealed, SOR/2013-117, s. 14]

(d) a statement from the manufacturer or its duly authorized representative that the restraint system or booster seat conforms to the prescribed standards applicable on the date of manufacture;

(e) the model name and number of the restraint system or booster seat;

(f) the number of restraint systems and the number of booster seats imported at the same time; and
Temporary Importation

Declaration before importation

109. For the purposes of paragraph 7(1)(a) of the Act, a person who imports into Canada a restraint system or booster seat, or the person’s duly authorized representative, must file with the Minister, before importation, a duly completed declaration in the form prescribed in Schedule 4.

Defect Information

Content of notice of defect

May 15/15

110. (1) A notice of defect required to be given under section 10 of the Act must contain the following information:
   (a) the name and address of the company giving the notice of defect;
   (b) the name of the manufacturer of the restraint system or booster seat;
   (c) the model name and number of each restraint system or booster seat for which the notice of defect is given and the prescribed class of equipment to which it belongs, the period during which the restraint system or booster seat was manufactured, and any other information necessary to permit the identification of the restraint system or booster seat;
   (d) the estimated percentage of restraint systems or booster seats that potentially contain the defect;
   (e) a description of the defect;
   (f) an evaluation of the risk to the safety of persons that arises from the defect;
   (g) a statement of the measures to be taken to correct the defect;
   (h) any conditions affecting the correction of the defect; and
   (i) the number, title or other identification assigned by the company to the notice of defect.

(2) Notice requirements - The notice of defect must be given in writing and, when it is to be given to a person other than the Minister, must be
   (a) in both official languages; or
   (b) in the person's official language of choice, if it is known.

(3) Prescribed person - For the purposes of subsection 10(1) of the Act, the person who obtained the restraint system or booster seat from the company is a prescribed person.

(4) Notice within 60 days - The notice of defect must be given to the current owner and to the person who obtained the restraint system or booster seat from the company as soon as possible after the company becomes aware of the defect, but no later than 60 days after the day on which the company becomes aware of it.

(5) Report - A company must, within 30 days after the day on which it gives a notice of defect to the Minister under paragraph 10(1)(a) of the Act, submit to the Minister a
report containing, in addition to the information required by subsection (1), the following information:

(a) the number of restraint systems and the number of booster seats for which the notice of defect was given and the number of those restraint systems and booster seats in each prescribed class of equipment;

(b) a chronology of the principal events that led to the determination of the existence of the defect;

(c) copies of all notices, bulletins and other circulars issued by the company in respect of the defect; and

(d) a detailed description of the nature of the defect and of its location on the restraint system or booster seat, with any related diagrams or illustrations.

(6) **Quarterly reports** - After submitting the report referred to in subsection (5), a company must, for a period of two years after the day on which it gives the notice of defect to the Minister, submit to the Minister quarterly reports containing the following information:

(a) the number, title or other identification assigned by the company to the notice of defect;

(b) the revised number of restraint systems and the revised number of booster seats for which the notice of defect was given, if applicable;

(c) the dates on which notices of defect were given to the current owners of the affected restraint systems or booster seats;

(d) the number of restraint systems and the number of booster seats inspected by or at the direction of the company;

(e) the number of restraint systems and the number of booster seats found on inspection to contain the defect; and

(f) a statement setting out the manner in which the company disposed of the defective parts, restraint systems or booster seats.

SOR/2013-117, s. 15; SOR/2015-111, s. 3.

111. to 199. reserved

111. [111 to 199 reserved]
PART 2 – CMVSS 213 - Child Restraint Systems

General

Interpretation


Restraint of torso and crotch

201. Every child restraint system must, when the anthropomorphic test device is positioned in the restraint system in accordance with subsection 4.4.2 or 4.5.2 of Test Method 213,

(a) restrain the upper torso by means of
   (i) in the case of a forward-facing restraint system,
      (A) belts passing over each shoulder, or
      (B) a fixed or movable surface that conforms to the requirements of section 211, or
   (ii) in the case of a rear-facing restraint system, belts passing over each shoulder;

(b) restrain the lower torso by means of
   (i) a pelvic restraint making an angle of at least 45° but not more than 90° with the seating surface of the restraint system at the pelvic restraint attachment points, or
   (ii) a fixed or movable surface that conforms to the requirements of section 211; and

(c) in the case of a forward-facing restraint system, restrain the crotch by means of
   (i) a crotch belt that is connectable to the pelvic restraint or to any other device used to restrain the lower torso, or
   (ii) a fixed or movable surface that conforms to the requirements of section 211.

Means of securing forward-facing child restraint system

202. (1) Every forward-facing child restraint system must be designed to be secured to a vehicle by means of a vehicle seat belt together with the tether strap provided with the restraint system, without using any other means of attachment; and

(b) by means of a lower connector system together with the tether strap provided with the restraint system, without using any other means of attachment.

(2) Rear-facing child restraint system - Subject to subsection (3), every rear-facing child restraint system must be designed to be secured to a vehicle by means of a vehicle seat belt, without using any other means of attachment; and

(b) by means of a lower connector system, without using any other means of attachment.
Rear-facing child restraint system with tether strap - If a rear-facing child restraint system is equipped with a tether strap and the manufacturer recommends its use, the restraint system must be designed to be secured to a vehicle
(a) by means of the tether strap together with a vehicle seat belt, without using any other means of attachment; and
(b) by means of the tether strap together with a lower connector system, without using any other means of attachment.

Belts and movable surfaces designed to restrain a child

203. Every belt or movable surface that is part of a child restraint system and that is designed to restrain a child must be adjustable to snugly fit a child whose mass and height are within the ranges indicated in the statement referred to in paragraph 218(1)(d), when the child is positioned in the restraint system in accordance with the instructions referred to in paragraph 220(1)(c) and the restraint system is adjusted in accordance with the instructions referred to in paragraph 220(1)(d).

Audible or visible indication

204. Every child restraint system must provide a clear, audible indication when each connector in a lower connector system is securely attached to the lower universal anchorage system or a clear, visual indication that each connector is securely attached to the lower universal anchorage system.

Flammability

205. Every child restraint system must be constructed only of materials that conform to the requirements of TSD 302.

SOR/2013-117, s. 23.

Belt Buckles and Webbing

Conformity with TSD 209

206. Every belt buckle and related piece of adjustment hardware and every tether strap attachment and related piece of adjustment hardware that are part of a child restraint system must conform to the requirements of S4.3(a)(2) and (b) of TSD 209.

Belt buckles

207. Every belt buckle that is fitted on a belt designed to restrain a child in a child restraint system must
(a) under the conditions set out in section 3 of Test Method 213,
   (i) not release when any force of less than 40 N is applied, and
   (ii) release when a force of at least 40 N but not more than 62 N is applied;
(b) under the conditions set out in section 5 of Test Method 213, release when a force of not more than 71 N is applied;
(c) conform to the requirements of S4.3(d)(2) of TSD 209, except that the surface area of a belt buckle designed for push-button application must be at least 385
(d) conform to the requirements of S4.3(g) of TSD 209; and
(e) not release during the dynamic tests specified in section 4 of Test Method 213.
SOR/2013-117, s. 24.

Webbing 208. Any webbing that is designed to secure a child restraint system to a user-ready tether anchorage or to a lower universal anchorage system, or to restrain a child within the restraint system,
(a) when tested in accordance with S5.1(b) of TSD 209, before being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, for resistance to light as specified in S5.1(e) of TSD 209 or for resistance to micro-organisms as specified in S5.1(f) of TSD 209, have a breaking strength of
(i) at least 15 000 N, in the case of webbing designed to secure the restraint system to the user-ready tether anchorage or to the lower universal anchorage system, or
(ii) at least 11 000 N, in the case of webbing designed to restrain a child within the restraint system;
(b) when tested in accordance with S5.1(b) of TSD 209, after being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, have a breaking strength of at least 75% of its initial breaking strength;
(c) conform to the requirements respecting breaking strength set out in S4.2(e) and (f) of TSD 209.
(d) if contactable by the torso when the restraint system is tested in accordance with section 4 of Test Method 213, have a width of not less than 38 mm, measured as specified in S5.1(a) of TSD 209.
SOR/2013-117, s. 16.

Contactable Surfaces

Contactable surfaces

209. Every child restraint system must provide
(a) for the support of the child's back, a continuous surface that is flat or concave and has an area of not less than 54 800 mm²; and
(b) for the support of the sides of the child's torso, continuous surfaces that are flat or concave and have an area of not less than 30 500 mm² each.

Prohibition

210. A child restraint system must not have any surface directly in front of the child, unless the surface is designed to limit the forward movement of the child.

Cross-sections of surface

211. Every horizontal cross-section of a surface of a child restraint system that is designed to limit the forward movement of a child must be flat or concave, and every vertical longitudinal cross-section of that surface must be flat or convex with a radius of curvature
of the underlying structure of not less than 50 mm.

Rigid structural elements

212. Any rigid structural element underlying a contactable surface of a child restraint system must not have
(a) a protrusion, with any padding or flexible overlay material removed, of more than 9.5 mm; or
(b) an exposed edge with a radius of less than 6.4 mm.

Surface contactable by head

213. Every surface of a child restraint system that is contactable by the head of an anthropomorphic test device positioned in the restraint system in accordance with subsection 4.4.2 or 4.5.2 of Test Method 213 must be covered with slow-recovery, energy-absorbing material that, when tested in accordance with section 6 of Test Method 213, has
(a) a resistance of not less than 4 kPa but not more than 70 kPa at 25% of compression-deflection resistance;
(b) a thickness of not less than 12 mm, if the material has a resistance of not less than 12 kPa but not more than 70 kPa at 25% of compression-deflection resistance; and
(c) a thickness of not less than 19 mm, if the material has a resistance of not less than 4 kPa but less than 12 kPa at 25% of compression-deflection resistance.

Testing

Inversion testing

214. A child restraint system that is subjected to an inversion test in accordance with section 7 of Test Method 213 must not fall out of the aircraft passenger seat belt, and the anthropomorphic test device must not fall out of the restraint system, at any time during the rotation or three-second immobilisation period referred to in that section.

Dynamic testing

215. (1) A child restraint system that is subjected to a dynamic test in accordance with section 4 of Test Method 213 must, when in any adjustment position for which there is no warning under subparagraph 218(1)(e)(iii),
(a) exhibit no complete separation of any load-bearing structural element, and no partial separation exposing a surface with
   (i) a protrusion of more than 9.5 mm, or
   (ii) a radius of less than 6.4 mm;
(b) remain in the same adjustment position during the test as it was in immediately before the test began;
(c) except in the case of a restraint system tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012), limit the resultant acceleration at the location of the accelerometer mounted in the upper thorax of the anthropomorphic test device to not more than 60 g, except for
(d) except in the case of a restraint system tested with the anthropomorphic test
device specified in subpart S, part 572, chapter V, title 49 of the *Code of Federal
Regulations* of the United States (revised as of October 1, 2012), limit the
resultant acceleration of the centre of gravity of the head of the anthropomorphic
test device during the movement of the head towards the front of the vehicle to
not more than 80 g, except for intervals of not more than 3 ms, unless it is
established that any resultant acceleration above 80 g is caused by another part of
the anthropomorphic test device striking its head;

(e) subject to subsection 216(2), limit the movement of the head of the
anthropomorphic test device towards the rear of the restraint system by means of
a continuous seat back that is an integral part of the restraint system; and

(f) subject to subsection 216(2), limit the rotation of the head of the
anthropomorphic test device towards the rear of the restraint system, in its
midsagittal plane, by means of a continuous seat back that is an integral part of
the restraint system, so that the angle between the head and the torso is at no time
during the test more than 45° as compared to the angle between the head and the
torso prior to the test.

(2) **Continuous seat back** - The continuous seat back referred to in paragraphs (1)(e) and
(f) must have

(a) a height

   (i) of at least 500 mm, in the case of a child restraint system recommended by
       the manufacturer for use by a child whose mass is 18 kg or less, or

   (ii) of at least 560 mm, in the case of a child restraint system recommended by
       the manufacturer for use by a child whose mass is more than 18 kg; and

(b) a width of at least 200 mm, measured in the horizontal plane at the height
    specified in paragraph (a).

(3) **Measurement of height – paragraph (2)(a)** - The height referred to in paragraph
    (2)(a) must be measured in a plane parallel to the surface of the seat back of the child
    restraint system and orthogonal to the vertical longitudinal plane passing through the
    longitudinal centreline of the restraint system, from the lowest point of the restraint
    system's seating surface that is contacted by the buttocks of the seated anthropomorphic
    test device.

(4) **Exception** - Despite paragraph (2)(b), if the child restraint system provides surfaces for
    the support of the sides of the torso, and those surfaces extend at least 100 mm forward
    from the padded surface of the portion of the restraint system provided for the support
    of the head of the anthropomorphic test device, the restraint system may have a
    continuous seat back width of not less than 150 mm, measured in the horizontal plane at
    the height referred to in paragraph (2)(a).

(5) **Belt** - Every belt that is part of a child restraint system and that is designed to restrain a
    child in the restraint system must not, when subjected to a dynamic test in accordance
    with section 4 of Test Method 213, impose on the anthropomorphic test device any
    loads that result from the mass of the restraint system or the mass of the seat back of the
    standard seat assembly.

SOR/2013-117, s. 25.

**Forward-facing child restraint system**

216. (1) A forward-facing child restraint system that is subjected to a dynamic test in
accordance with section 4 of Test Method 213 must not, when in any adjustment
position for which there is no warning under subparagraph 218(1)(e)(iii),

(a)
except in the case of a restraint system tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012), allow any portion of the head of the anthropomorphic test device to pass through the vertical transverse plane — shown as the forward excursion limit in Figures 5 and 6 of Schedule 7 — that is 720 mm forward of the Z point on the standard seat assembly, measured along the SORL;

(b) except in the case of a restraint system tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012), allow either knee pivot point to pass through the vertical transverse plane — shown as the forward excursion limit in Figures 5 and 6 of Schedule 7 — that is 915 mm forward of the Z point on the standard seat assembly, measured along the SORL; and

(c) allow the angle between the restraint system's back support surface and seating surface to be less than 45° at the completion of the test.

(2) Exception - A forward-facing child restraint system is not required to conform to the requirements of paragraphs 215(1)(e) and (f) if the target point located on either side of the head of the heaviest of the anthropomorphic test devices used in the dynamic test — other than an anthropomorphic test device specified in subpart I, N or S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012) — and located on the transverse axis passing through the centre of mass of the device's head and perpendicular to the head's midsagittal plane is below a horizontal plane tangent to the top of the standard seat assembly when the anthropomorphic test device is positioned in the restraint system in accordance with subsection 4.4.2 or 4.5.2 of Test Method 213 and the restraint system is installed on the standard seat assembly in accordance with subsection 4.4.1 or 4.5.1 of Test Method 213.

SOR/2013-117, s. 25.

Rear-facing child restraint system

217. A rear-facing child restraint system that is subjected to a dynamic test in accordance with section 4 of Test Method 213 must, when in any adjustment position for which there is no warning under subparagraph 218(1)(e)(iii),

(a) retain the torso of the anthropomorphic test device within the restraint system, and not allow any portion of the target points on either side of the device's head, located on the transverse axis passing through the centre of mass of the device's head and perpendicular to the head's midsagittal plane, to pass at any time, during or immediately after the test, either through the transverse orthogonal planes formed by the extension of the seat back frontal surface plane of the restraint system and by the plane that passes through the uppermost point of the restraint system, as shown in Figure 7 of Schedule 7, or through the vertical transverse plane passing through point X on the standard seat assembly, as shown in Figure 8 of Schedule 7; and

(b) not allow the angle between the vertical and the back and head support surface, measured 240 mm above the seating surface, to be more than 70° at any time during the test.

Information
Information

218. (1) Every child restraint system must have stitched onto it, indelibly moulded into or onto it, or indelibly printed on a label affixed to it in a permanent manner, the following information:

(a) the name of the company that manufactured, imported or sold the restraint system and the address of its principal place of business;

(b) the model name and number of the restraint system;

(c) the date of manufacture of the restraint system, as shown in Schedule 5, with the year, month and day above the corresponding wording in both official languages;

(d) a statement indicating — in units based on the International System of Units followed by the corresponding imperial units in parentheses — the mass and height range of the children for whom the manufacturer recommends the restraint system when it is used in a forward-facing and, where applicable, a rear-facing position;

(e) a warning indicating

(i) if the restraint system can be used in a forward-facing position, that it must be secured to the vehicle as shown in the installation instructions by means of the tether strap provided with the restraint system and by either of the following means:

(A) a lower connector system, if the restraint system is installed in a seating position that is equipped with a lower universal anchorage system, or

(B) a vehicle seat belt, if the restraint system is installed in a seating position that is not equipped with a lower universal anchorage system,

(ii) if the restraint system can be used in a rear-facing position, that it must be secured to the vehicle as shown in the installation instructions by either of the following means and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap:

(A) a lower connector system, if the restraint system is installed in a seating position that is equipped with a lower universal anchorage system, or

(B) a vehicle seat belt, if the restraint system is installed in a seating position that is not equipped with a lower universal anchorage system,

(iii) if the restraint system is not designed to be used at certain adjustment positions, that those adjustment positions must not be used,

(iv) if the restraint system is equipped with belts for restraining a child, that the belts must be snugly adjusted around the child, and

(v) if the restraint system is equipped with a fixed or movable surface for restraining the child and also requires the use of belts to restrain the child, that the surface alone is not sufficient to restrain the child;

(f) if the restraint system can be used in a forward-facing position, an installation diagram that shows the restraint system

(i) installed in a forward-facing position as recommended by the manufacturer in a seating position that is equipped only with a lap belt, and secured to the vehicle by means of the belt and by means of the tether strap,

(ii) installed in a forward-facing position as recommended by the manufacturer in a seating position that is equipped only with a continuous-loop lap and shoulder belt, and secured to the vehicle by means of the belt and by means of the tether strap, and

(iii) installed in a forward-facing position as recommended by the manufacturer in a seating position that is equipped with a lower universal anchorage system, and secured to the vehicle by means of a lower connector system and by
means of the tether strap; and

(g) if the restraint system can be used in a rear-facing position, an installation diagram that shows the restraint system

(i) installed in a rear-facing position as recommended by the manufacturer in a seating position that is equipped only with a lap belt, and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap,

(ii) installed in a rear-facing position as recommended by the manufacturer in a seating position that is equipped only with a continuous-loop lap and shoulder belt, and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap, and

(iii) installed in a rear-facing position as recommended by the manufacturer in a seating position that is equipped with a lower universal anchorage system, and secured to the vehicle by means of a lower connector system and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap.

(2) Official languages and print size - The information referred to in subsection (1) must be in both official languages and in characters of at least 10 points, except for the words "year/année", "month/mois" and "day/jour" under the date of manufacture, which may be in characters of at least 8 points.

(3) Visibility of information - The information referred to in paragraphs (1)(d) to (g) must be fully visible at all times, even when the restraint system is occupied.

Warning — air bag

219. (1) Every child restraint system that can be used in a rear-facing position must bear the air bag warning label shown in Schedule 6, and the label must conform to the requirements of that schedule.

(2) Idem - The label referred to in subsection (1) must be affixed in a permanent manner at either of the following locations and be fully visible to a person installing the restraint system:

(a) on the side of the restraint system that will face the right front passenger door when the restraint system is facing rearward; or

(b) at the location where the child's head would rest or adjacent to that location.

Installation instructions

220. (1) Every child restraint system must be accompanied by printed instructions, in both official languages, that set out a step-by-step procedure, including diagrams, for

(a) installing and securing the restraint system in a vehicle;

(b) installing the restraint system in an aircraft passenger seat referred to in subsection 2.1.2 of Test Method 213;

(c) positioning a child in the restraint system; and

(d) adjusting every part of the restraint system that is designed to restrain the child.

(2) Idem - The instructions referred to in paragraph (1)(a) must state that the restraint system, even when unoccupied, must be firmly secured to the vehicle.

(3) Idem - The instructions must
(a) specify the classes of vehicles, the seating positions and the types of vehicle seat belts with which the restraint system may or may not be used;
(b) specify that the restraint system may be used with a lower universal anchorage system; and
(c) explain the primary consequences of not following the warnings appearing on the restraint system.

(4) **Storage of instructions** - Every child restraint system must have a place for the storage of instructions.

221. **to 299. reserved**

221. [221 to 299 reserved]
PART 3  CMVSS 213.1 - Infant Restraint Systems

General

Interpretation


SOR/2013-117, s. 22.

Restraint system designed to face the rear

301. Every infant restraint system must be designed to face the rear of the vehicle.

Restraint of torso

302. Every infant restraint system must, when the anthropomorphic test device is positioned in the restraint system in accordance with subsection 4.5.2 or 4.6.2 of Test Method 213.1,
(a) restrain the upper torso by means of belts passing over each shoulder; and
(b) restrain the lower torso.

Means of securing restraint system

303. (1) Subject to subsection (2), every infant restraint system must be designed to be secured to a vehicle
(a) by means of a vehicle seat belt in such a manner that the belt will not impose directly on the infant any loads that result from the mass of the restraint system, and without using any other means of attachment; and
(b) by means of a lower connector system, without using any other means of attachment.

(2) Restraint system with tether strap - If an infant restraint system is equipped with a tether strap and the manufacturer recommends its use, the restraint system must be designed to be secured to a vehicle
(a) by means of the tether strap together with a vehicle seat belt in such a manner that the belt will not impose directly on the infant any loads that result from the mass of the restraint system, and without using any other means of attachment; and
(b) by means of the tether strap together with a lower connector system, without using any other means of attachment.

Restraint system with removable base

304. If an infant restraint system is manufactured with a removable base and the seating component of the restraint system is designed to be used in a vehicle with or without the base, the restraint system must be equipped with a lower connector system on the base.

Part designed to restrain an infant
Every part of an infant restraint system that is designed to restrain an infant must be adjustable to snugly fit an infant whose mass and height are within the ranges indicated in the statement referred to in paragraph 316(1)(d), when the infant is positioned in the restraint system in accordance with the instructions referred to in paragraph 318(1)(c) and the restraint system is adjusted in accordance with the instructions referred to in paragraph 318(1)(d).

**Audible or visible indication**

Every infant restraint system must provide a clear, audible indication when each connector in a lower connector system is securely attached to the lower universal anchorage system or a clear, visual indication that each connector is securely attached to the lower universal anchorage system.

**Flammability**

Every infant restraint system must be constructed only of materials that conform to the requirements of TSD 302.

SOR/2013-117, s. 23.

**Belt Buckles and Webbing**

**Conformity with TSD 209**

Every belt buckle and related piece of adjustment hardware and every tether strap attachment and related piece of adjustment hardware that are part of an infant restraint system must conform to the requirements of S4.3(a)(2) and (b) of TSD 209.

**Belt buckles**

Every belt buckle that is fitted on a belt designed to restrain an infant in an infant restraint system must

(a) under the conditions set out in section 3 of Test Method 213.1,
   (i) not release when any force of less than 40 N is applied, and
   (ii) release when a force of at least 40 N but not more than 62 N is applied;

(b) under the conditions set out in section 5 of Test Method 213.1, release when a force of not more than 71 N is applied;

(c) conform to the requirements of S4.3(d)(2) of TSD 209, except that the surface area of a belt buckle designed for push-button application must be at least 385 mm$^2$;

(d) conform to the requirements of S4.3(g) of TSD 209; and

(e) not release during the dynamic tests specified in section 4 of Test Method 213.1.

SOR/2013-117, s. 24.

**Webbing**

Any webbing that is designed to secure an infant restraint system to a user-ready tether anchorage or to a lower universal anchorage system, or to restrain an infant within the restraint system, must

(a)
when tested in accordance with S5.1(b) of TSD 209, before being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, for resistance to light as specified in S5.1(e) of TSD 209 or for resistance to micro-organisms as specified in S5.1(f) of TSD 209, have a breaking strength of
(i)  at least 15 000 N in the case of webbing designed to secure the restraint system to the user-ready tether anchorage or to the lower universal anchorage system, or
(ii)  at least 11 000 N in the case of webbing designed to restrain an infant within the restraint system;
(b)  when tested in accordance with S5.1(b) of TSD 209, after being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, have a breaking strength of at least 75% of its initial breaking strength;
(c)  conform to the requirements respecting breaking strength set out in S4.2(e) and (f) of TSD 209; and
(d)  if contactable by the torso when the restraint system is tested in accordance with section 4 of Test Method 213.1, have a width of not less than 38 mm, measured as specified in S5.1(a) of TSD 209.
SOR/2013-117, s. 17.

Contactable Surfaces

Contactable surfaces

311.  Every infant restraint system must provide
(a)  for the support of the infant's back, a continuous surface that is flat or concave and has an area of not less than 54 800 mm\(^2\); and
(b)  for the support of the sides of the infant's torso, continuous surfaces that are flat or concave and have an area of not less than 30 500 mm\(^2\) each.

Rigid structural elements

312.  Any rigid structural element underlying a contactable surface of an infant restraint system must not have
(a)  a protrusion, with any padding or flexible overlay material removed, of more than 9.5 mm; or
(b)  an exposed edge with a radius of less than 6.4 mm.

Surface contactable by head

313.  Every surface of an infant restraint system that is contactable by the head of an anthropomorphic test device positioned in the restraint system in accordance with subsection 4.5.2 or 4.6.2 of Test Method 213.1 must be covered with slow-recovery, energy-absorbing material that, when tested in accordance with section 6 of Test Method 213.1, has
(a)  a resistance of not less than 4 kPa but not more than 70 kPa at 25% of compression-deflection resistance;
(b)
a thickness of not less than 12 mm, if the material has a resistance of not less than 12 kPa but not more than 70 kPa at 25% of compression-deflection resistance; and
(c) a thickness of not less than 19 mm, if the material has a resistance of not less than 4 kPa but less than 12 kPa at 25% of compression-deflection resistance.

Testing

Inversion testing

314. An infant restraint system that is subjected to an inversion test in accordance with section 7 of Test Method 213.1 must not fall out of the aircraft passenger seat belt, and the anthropomorphic test device must not fall out of the restraint system, at any time during the rotation or three-second immobilization period referred to in that section.

Dynamic testing

315. (1) An infant restraint system that is subjected to a dynamic test in accordance with section 4 of Test Method 213.1 must, if the adjustment position of each component of the restraint system is in accordance with the manufacturer's instructions,
(a) exhibit no complete separation of any load-bearing structural element, and no partial separation exposing a surface with
(i) a protrusion of more than 9.5 mm, or
(ii) a radius of less than 6.4 mm;
(b) remain in the same adjustment position during the test as it was in immediately before the test began, except that, if the restraint system has a means of automatically repositioning the seating surface to allow the anthropomorphic test device to move from a reclined position to a more upright position and back to a reclined position during the test, the seating surface does not have to remain in the same adjustment position during the test as it was in immediately before the test began;
(c) limit the resultant acceleration at the location of the accelerometer mounted in the upper thorax of the anthropomorphic test device to not more than 60 g, except for intervals of not more than 3 ms;
(d) limit the resultant acceleration of the centre of gravity of the head of the anthropomorphic test device during the movement of the head towards the front of the vehicle to not more than 80 g, except for intervals of not more than 3 ms, unless it is established that any resultant acceleration above 80 g is caused by another part of the anthropomorphic test device striking its head;
(e) retain the torso of the anthropomorphic test device within the restraint system, and not allow any portion of the target points on either side of the device's head, located on the transverse axis passing through the centre of mass of the device's head and perpendicular to the head's midsagittal plane, to pass at any time, during or immediately after the test, either through the transverse orthogonal planes formed by the extension of the seat back frontal surface plane of the restraint system and by the plane that passes through the uppermost point of the restraint system, as shown in Figure 7 of Schedule 7, or through the vertical transverse plane passing through point X on the standard seat assembly, as shown in Figure 8 of Schedule 7;
not allow the angle between the vertical and the back and head support surface, measured 240 mm above the seating surface, to be more than 70° at any time during the test;

(g) limit the movement of the head of the anthropomorphic test device towards the rear of the restraint system by means of a continuous seat back that is an integral part of the restraint system; and

(h) limit the rotation of the head of the anthropomorphic test device towards the rear of the restraint system, in its midsagittal plane, by means of a continuous seat back that is an integral part of the restraint system, so that the angle between the head and the torso is at no time during the test more than 45° as compared to the angle between the head and the torso prior to the test.

(2) **Dynamic testing — levelling device** - An infant restraint system that is subjected to a dynamic test in accordance with section 4 of Test Method 213.1 must conform to the requirements of paragraphs (1)(a) and (b) if the restraint system is equipped with a levelling device and the adjustment position of each component of the restraint system, except the levelling device, is in accordance with the manufacturer's instructions.

(3) **Continuous seat back** - The continuous seat back referred to in paragraphs (1)(g) and (h) must

(a) have a height of at least 500 mm;

(b) have a width of at least 200 mm, measured in the horizontal plane at the height specified in paragraph (a); and

(c) not impose any loads on the top of the head of the anthropomorphic test device during the dynamic test referred to in subsection (1).

(4) **Measurement of height — paragraph (3)(a)** - The height referred to in paragraph (3)(a) must be measured in a plane parallel to the surface of the seat back of the infant restraint system and orthogonal to the vertical longitudinal plane passing through the longitudinal centreline of the restraint system, from the lowest point of the restraint system's seating surface that is contacted by the buttocks of the seated anthropomorphic test device.

(5) **Exception** - Despite paragraph (3)(b), if the infant restraint system provides surfaces for the support of the sides of the torso, and those surfaces extend at least 100 mm forward from the padded surface of the portion of the restraint system provided for the support of the head of the anthropomorphic test device, the restraint system may have a continuous seat back width of not less than 150 mm, measured in the horizontal plane at the height specified in paragraph (3)(a).

(6) **Restraint system with means of automatic repositioning** - If an infant restraint system that has a means of automatically repositioning the seating surface is subjected, in any adjustment position, to a dynamic test in accordance with section 4 of Test Method 213.1, an opening that is exposed and larger than 6.4 mm before the test must not become smaller during the test as a result of the movement of the seating surface relative to the other parts of the restraint system.

**Information**

**316.** Every infant restraint system must have stitched onto it, indelibly moulded into or onto it, or indelibly printed on a label affixed to it in a permanent manner, the following information:
(a) the name and principal place of business of the company that manufactured, imported or sold the restraint system;
(b) the model name and number of the restraint system;
(c) the date of manufacture of the restraint system, as shown in Schedule 5, with the year, month and day above the corresponding wording in both official languages;
(d) a statement indicating — in units based on the International System of Units followed by the corresponding imperial units in parentheses — the mass and height range of the infants for whom the manufacturer recommends the restraint system;
(e) a warning indicating
   (i) that the restraint system must be used only in a forward-facing seating position equipped with a vehicle seat belt or a lower universal anchorage system,
   (ii) that the restraint system must be in a rear-facing position when it is used for an infant,
   (iii) that the restraint system must be secured to the vehicle as shown in the installation instructions by either of the following means and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap:
      (A) a lower connector system, if the restraint system is installed in a seating position that is equipped with a lower universal anchorage system, or
      (B) a vehicle seat belt, if the restraint system is installed in a seating position that is not equipped with a lower universal anchorage system, and
   (iv) if the restraint system is equipped with belts for restraining an infant, that the belts must be snugly adjusted around the infant; and
(f) an installation diagram that shows the restraint system
   (i) installed as recommended by the manufacturer in a seating position that is equipped only with a lap belt, and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap,
   (ii) installed as recommended by the manufacturer in a seating position that is equipped only with a continuous-loop lap and shoulder belt, and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap, and
   (iii) installed as recommended by the manufacturer in a seating position that is equipped with a lower universal anchorage system, and secured to the vehicle by means of a lower connector system and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap.

(2) Official languages and print size - The information referred to in subsection (1) must be in both official languages and in characters of at least 10 points, except for the words "year/année", "month/mois" and "day/jour" under the date of manufacture, which may be in characters of at least 8 points.

(3) Visibility of information - The information referred to in paragraphs (1)(d) to (f) must be fully visible at all times, even when the restraint system is occupied, whether the restraint system is installed with or without a removable base.

Warning — air bag
317. (1) Every infant restraint system must bear the air bag warning label shown in Schedule 6, and the label must conform to the requirements of that schedule.

(2) **Idem** - The label referred to in subsection (1) must be affixed in a permanent manner at either of the following locations and be fully visible to a person installing the restraint system:

(a) on the side of the restraint system that will face the right front passenger door when the restraint system is facing rearward; or

(b) at the location where the infant’s head would rest or adjacent to that location.

**Installation instructions**

318. (1) Every infant restraint system must be accompanied by printed instructions, in both official languages, that set out a step-by-step procedure, including diagrams, for

(a) installing and securing the restraint system in a vehicle;

(b) installing the restraint system in an aircraft passenger seat referred to in subsection 2.1.2 of Test Method 213.1;

(c) positioning an infant in the restraint system; and

(d) adjusting every part of the restraint system that is designed to restrain the infant.

(2) **Idem** - The instructions referred to in paragraph (1)(a) must state that the restraint system, even when unoccupied, must be firmly secured to the vehicle.

(3) **Idem** - The instructions must

(a) specify the classes of vehicles, the seating positions and the types of vehicle seat belts with which the restraint system may or may not be used;

(b) specify that the restraint system may be used with a lower universal anchorage system;

(c) if the restraint system has a means of automatically repositioning the seating surface, specify that the ability of the restraint system to change position must not be impeded;

(d) explain the primary consequences of not following the warnings appearing on the restraint system; and

(e) if the restraint system is manufactured with a removable base and the seating component of the restraint system is designed to be used in a vehicle with or without the base, specify whether the restraint system must be used with or without the base when the restraint system is installed in an aircraft passenger seat.

(4) **Storage of instructions** - Every infant restraint system must have a place for the storage of instructions.

319. to 399. reserved

319. [319 to 399 reserved]
PART 4 – CMVSS 213.2 - Booster Seats

General

**Interpretation**

400. In this Part, "Test Method 213.2" means Test Method 213.2 — Booster Seats (May 2012), published by the Department of Transport.

SOR/2013-117, s. 22.

Means of securing booster seat

401. (1) Subject to subsection (2), every booster seat must be designed to be secured to a vehicle

(a) by means of a vehicle seat belt, without using any other means of attachment; and

(b) if the booster seat is equipped with a lower connector system and the manufacturer recommends its use, by means of the lower connector system, without using any other means of attachment.

(2) **Booster seat with tether strap** - If the booster seat is equipped with a tether strap and the manufacturer recommends its use, the booster seat must be designed to be secured to a vehicle

(a) by means of the tether strap together with a vehicle seat belt, without using any other means of attachment; and

(b) if the booster seat is equipped with a lower connector system and the manufacturer recommends its use, by means of the tether strap together with the lower connector system, without using any other means of attachment.

(3) **Forward movement of torso** - A booster seat must not have any part that limits the forward movement of the torso during frontal impact.

Audible or visible indication

402. Every booster seat that is equipped with a lower connector system must provide a clear, audible indication when each connector in a lower connector system is securely attached to the lower universal anchorage system or a clear, visual indication that each connector is securely attached to the lower universal anchorage system.

Flammability

403. Every booster seat must be constructed only of materials that conform to the requirements of TSD 302.

SOR/2013-117, s. 23.

Tether Strap Attachments and Webbing

Conformity with TSD 209
Every tether strap attachment and related piece of adjustment hardware that is part of a booster seat must conform to the requirements of S4.3(a)(2) and (b) of TSD 209.

**Webbing**

Any webbing that is designed to secure a booster seat to a user-ready tether anchorage or to a lower universal anchorage system must

(a) when tested in accordance with S5.1(b) of TSD 209, before being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, for resistance to light as specified in S5.1(e) of TSD 209 or for resistance to micro-organisms as specified in S5.1(f) of TSD 209, have a breaking strength of at least 15,000 N;

(b) when tested in accordance with S5.1(b) of TSD 209, after being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, have a breaking strength of at least 75% of its initial breaking strength; and

(c) conform to the requirements respecting breaking strength set out in S4.2(e) and (f) of TSD 209.

**Contactable Surfaces**

**Rigid structural elements**

Any rigid structural element underlying a contactable surface of a booster seat must not have

(a) a protrusion, with any padding or flexible overlay material removed, of more than 9.5 mm; or

(b) an exposed edge with a radius of less than 6.4 mm.

**Testing**

A booster seat that is subjected to a dynamic test in accordance with section 3 of Test Method 213.2 must, when in any adjustment position, exhibit no complete separation of any load-bearing structural element, and no partial separation exposing a surface with

(i) a protrusion of more than 9.5 mm, or

(ii) a radius of less than 6.4 mm;

(b) remain in the same adjustment position during the test as it was in immediately before the test began, except a component of the booster seat used to ensure that the vehicle seat belt is adjusted as recommended by the manufacturer;

(c) except in the case of a booster seat tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012), limit the resultant acceleration at the location of the accelerometer mounted in the upper thorax of the anthropomorphic test device to not more than 60 g, except for
(AM) Jun 19/13

except in the case of a booster seat tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012), limit the resultant acceleration of the centre of gravity of the head of the anthropomorphic test device during the movement of the head towards the front of the vehicle to not more than 80 g, except for intervals of not more than 3 ms, unless it is established that any resultant acceleration above 80 g is caused by another part of the anthropomorphic test device striking its head;

except in the case of a booster seat tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012), not allow any portion of the head of the anthropomorphic test device to pass through the vertical transverse plane — shown as the forward excursion limit in Figures 5 and 6 of Schedule 7 — that is 813 mm forward of the Z point on the standard seat assembly, measured along the SORL; and

except in the case of a booster seat tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the Code of Federal Regulations of the United States (revised as of October 1, 2012), not allow either knee pivot point to pass through the vertical transverse plane — shown as the forward excursion limit in Figures 5 and 6 of Schedule 7 — that is 915 mm forward of the Z point on the standard seat assembly, measured along the SORL.

(SUB) Quasi-static test

Jun 19/13

408. A booster seat that is subjected to a quasi-static test in accordance with section 4 of Test Method 213.2 must not deflect more than 25 mm.

SOR/2013-117, s. 19.

Information

409. (1) Every booster seat must have stitched onto it, indelibly moulded into or onto it, or indelibly printed on a label affixed to it in a permanent manner, the following information:

(a) the name and principal place of business of the company that manufactured, imported or sold the booster seat;

(b) the model name and number of the booster seat;

(c) the date of manufacture of the booster seat, as shown in Schedule 5, with the year, month and day above the corresponding wording in both official languages;

(d) a statement indicating that the booster seat must be used only by persons whose mass is at least 18 kg;

(e) a statement indicating — in units based on the International System of Units followed by the corresponding imperial units in parentheses — the mass and height range of the persons for whom the manufacturer recommends the booster seat; and

(f)
an installation diagram that shows the booster seat occupant restrained to the vehicle by means of a continuous-loop lap and shoulder belt and the booster seat installed as recommended by the manufacturer, and
(i) if the booster seat is equipped with a tether strap and the manufacturer recommends its use, the booster seat secured to the vehicle by means of the tether strap, and
(ii) if the booster seat is equipped with a lower connector system and the manufacturer recommends its use, the booster seat secured to the vehicle by means of the lower connector system.

(2) Official languages and print size - The information referred to in subsection (1) must be in both official languages and in characters of at least 10 points, except for the words "year/année", "month/mois" and "day/jour" under the date of manufacture, which may be in characters of at least 8 points.

(3) Visibility of information - The information referred to in paragraphs (1)(d) to (f) must be fully visible at all times, even when the booster seat is occupied.

Installation instructions

410. (1) Every booster seat must be accompanied by printed instructions, in both official languages, that set out a step-by-step procedure, including diagrams, for
(a) installing and securing the booster seat in a vehicle;
(b) positioning a person in the booster seat; and
(c) adjusting every part of the booster seat.

(2) Idem - The instructions referred to in paragraph (1)(a) must state that the booster seat, even when unoccupied, must be firmly secured to the vehicle.

(3) Idem - The instructions must
(a) specify the classes of vehicles, the seating positions and the types of vehicle seat belts with which the booster seat may or may not be used;
(b) specify whether the booster seat may be used with a lower universal anchorage system; and
(c) explain the primary consequences of not following the warnings appearing on the booster seat.

(4) Storage of instructions - Every booster seat must have a place for the storage of instructions.

411. to 499. reserved

411. [411 to 499 reserved]
PART 5 – CMVSS 213.3 - Restraint Systems for Disabled Persons

General

Interpretation


SOR/2013-117, s. 22.

Restraint of torso and crotch

501. Every restraint system for disabled persons must

(a) restrain the upper torso by means of

(i) in the case of a forward-facing restraint system,

(A) belts passing over each shoulder, or

(B) a fixed or movable surface that conforms to the requirements of section 514, or

(ii) in the case of a rear-facing restraint system, belts passing over each shoulder;

(b) restrain the lower torso by means of

(i) a pelvic restraint making an angle of at least 45° but not more than 90° with the seating surface of the restraint system at the pelvic restraint attachment points, or

(ii) a fixed or movable surface that conforms to the requirements of section 514; and

(c) in the case of a forward-facing restraint system, restrain the crotch by means of

(i) a crotch belt that is connectable to the pelvic restraint or to any other device used to restrain the lower torso, or

(ii) a fixed or movable surface that conforms to the requirements of section 514.

Means of securing restraint system

502. (1) Subject to subsection (2), every mass-produced restraint system for disabled persons must be designed to be secured to a vehicle

(a) by means of a vehicle seat belt, without using any other means of attachment;

(b) if the restraint system is equipped with a lower connector system and the manufacturer recommends its use, by means of the lower connector system, without using any other means of attachment.

(2) Restraint system with tether strap - If the mass-produced restraint system for disabled persons is equipped with a tether strap and the manufacturer recommends its use, the restraint system must be designed to be secured to a vehicle

(a)
by means of the tether strap together with a vehicle seat belt, without using any other means of attachment; and
(b) if the restraint system is equipped with a lower connector system and the manufacturer recommends its use, by means of the tether strap together with the lower connector system, without using any other means of attachment.

Audible or visible indication

503. Every mass-produced restraint system for disabled persons that is equipped with a lower connector system must provide a clear, audible indication when each connector in a lower connector system is securely attached to the lower universal anchorage system or a clear, visual indication that each connector is securely attached to the lower universal anchorage system.

Custom restraint system

504. (1) Every custom restraint system for a disabled person, other than a custom restraint system for a disabled person that is designed to be used only in school buses, must be designed to be secured to a vehicle by means of a vehicle seat belt together with the tether strap provided with the restraint system, without using any other means of attachment.

(2) Custom restraint system — school buses - Every custom restraint system for a disabled person that is designed to be used only in school buses must be designed to be secured to a school bus by either or both of the following means:
(a) a vehicle seat belt together with the tether strap provided with the restraint system, without using any other means of attachment; and
(b) belts that wrap around a school bus seat or seat back, without using any other means of attachment.

Flammability

505. Every restraint system for disabled persons must be constructed only of materials that conform to the requirements of TSD 302.

SOR/2013-117, s. 23.

Belts, Buckles and Webbing

Belts

506. Every belt that is part of a restraint system for disabled persons and that is designed to restrain a disabled person must not impose on the person any loads that result from the mass of the restraint system.

Release mechanism of a belt

507. Every release mechanism of a belt used in a restraint system for disabled persons must
(a) be easy to locate and to operate and be readily accessible to a person assisting the disabled person;
(b) be designed to minimize the possibility of accidental release; and
Conformity with TSD 209

508. Every belt buckle and related piece of adjustment hardware and every tether strap attachment and related piece of adjustment hardware that are part of a restraint system for disabled persons must conform to the requirements of S4.3(a)(2) and (b) of TSD 209.

Belt buckles — mass-produced restraint systems

510. Every belt buckle that is fitted on a belt designed to restrain a disabled person in a mass-produced restraint system for disabled persons must

(a) under the conditions set out in section 3 of Test Method 213.3,
   (i) not release when any force of less than 40 N is applied, and
   (ii) release when a force of at least 40 N but not more than 62 N is applied;

(b) under the conditions set out in section 5 of Test Method 213.3, release when a force of not more than 71 N is applied;

(c) conform to the requirements of S4.3(d)(2) of TSD 209, except that the surface area of a belt buckle designed for push-button application must be at least 385 mm$^2$;

(d) conform to the requirements of S4.3(g) of TSD 209; and

(e) not release during the dynamic tests specified in section 4 of Test Method 213.3.

SOR/2013-117, s. 24.

Belt buckles — custom restraint systems

511. Every belt buckle that is fitted on a belt designed to restrain a disabled person in a custom restraint system for a disabled person must

(a) under the conditions set out in section 6 of Test Method 213.3,
   (i) not release when any force of less than 40 N is applied, and
   (ii) release when a force of at least 40 N but not more than 71 N is applied;

(b) conform to the requirements of S4.3(d)(2) of TSD 209, except that the surface area of a belt buckle designed for push-button application must be at least 385 mm$^2$; and

(c) conform to the requirements of S4.3(g) of TSD 209.

SOR/2013-117, s. 24.

Webbing

512. Any webbing that is designed to secure a restraint system for disabled persons to a user-ready tether anchorage or to a lower universal anchorage system, or to restrain a disabled person within the restraint system, must

(c) not be of the hook and loop fastener type (for example, a Velcro-type fastener).
when tested in accordance with S5.1(b) of TSD 209, before being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, for resistance to light as specified in S5.1(e) of TSD 209 or for resistance to micro-organisms as specified in S5.1(f) of TSD 209, have a breaking strength of

(i) at least 15 000 N, in the case of webbing designed to secure the restraint system to the user-ready tether anchorage or to the lower universal anchorage system, or

(ii) at least 11 000 N, in the case of webbing designed to restrain a disabled person within the restraint system;

(b) when tested in accordance with S5.1(b) of TSD 209, after being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, have a breaking strength of at least 75% of its initial breaking strength;

(c) conform to the requirements respecting breaking strength set out in S4.2(e) and (f) of TSD 209;

(d) in the case of a custom restraint system for a disabled person, have a width of not less than 38 mm, measured as specified in S5.1(a) of TSD 209, if contactable by the torso of a disabled person when the person is positioned in the restraint system; and

(e) in the case of a mass-produced restraint system for disabled persons, have a width of not less than 38 mm, measured as specified in S5.1(a) of TSD 209, if contactable by the torso of a disabled person when the person is positioned in the restraint system in accordance with the instructions referred to in paragraph 524(1)(b) and the restraint system is adjusted in accordance with the instructions referred to in paragraph 524(1)(c).

SOR/2013-117, s. 20.

Contactable Surfaces

Removable surfaces

513. A surface of a restraint system for disabled persons that is placed in front of the disabled person must be removable when the restraint system is installed in a vehicle, unless the surface is designed to restrain the person.

Cross-sections of surface

514. Every horizontal cross-section of a surface of a restraint system for disabled persons that is designed to limit the forward movement of a disabled person must be flat or concave, and every vertical longitudinal cross-section of that surface must be flat or convex with a radius of curvature of the underlying structure of not less than 50 mm.

Rigid structural elements

515. Any rigid structural element underlying a contactable surface of a restraint system for disabled persons must not have

(a) a protrusion, with any padding or flexible overlay material removed, of more than 9.5 mm; or

(b) an exposed edge with a radius of less than 6.4 mm.

SOR/2013-117, s. 20.
Surface contactable by head — custom restraint system for a disabled person

516. (1) Every surface of a custom restraint system for a disabled person that is contactable by the head of a disabled person when the person is positioned in the restraint system must be covered with slow-recovery, energy-absorbing material that, when tested in accordance with section 7 of Test Method 213.3, has
   (a) a resistance of not less than 4 kPa but not more than 70 kPa at 25% of compression-deflection resistance;
   (b) a thickness of not less than 12 mm, if the material has a resistance of not less than 12 kPa but not more than 70 kPa at 25% of compression-deflection resistance; and
   (c) a thickness of not less than 19 mm, if the material has a resistance of not less than 4 kPa but less than 12 kPa at 25% of compression-deflection resistance.

517. (2) Surface contactable by head — mass-produced restraint system for disabled persons - Every surface of a mass-produced restraint system for disabled persons that is contactable by the head of a disabled person when the person is positioned in the restraint system in accordance with the instructions referred to in paragraph 524(1)(b) and the restraint system is adjusted in accordance with the instructions referred to in paragraph 524(1)(c) must be covered with slow-recovery, energy-absorbing material that, when tested in accordance with section 7 of Test Method 213.3, has
   (a) a resistance of not less than 4 kPa but not more than 70 kPa at 25% of compression-deflection resistance;
   (b) a thickness of not less than 12 mm, if the material has a resistance of not less than 12 kPa but not more than 70 kPa at 25% of compression-deflection resistance; and
   (c) a thickness of not less than 19 mm, if the material has a resistance of not less than 4 kPa but less than 12 kPa at 25% of compression-deflection resistance.

Testing

Inversion testing

517. If a restraint system for disabled persons is designed to be used in an aircraft, it must, when subjected to an inversion test in accordance with section 8 of Test Method 213.3, conform to the following requirements:
   (a) the restraint system must not fall out of the aircraft passenger seat belt at any time during the rotation or three-second immobilization period referred to in that section; and
   (b) the anthropomorphic test device must not fall out of the restraint system at any time during the rotation or three-second immobilization period referred to in that section.

Dynamic testing

518. (1) A mass-produced restraint system for disabled persons that is subjected to a dynamic test in accordance with section 4 of Test Method 213.3 must, when in any adjustment position for which there is no warning under subparagraph 521(1)(f)(ii),
   (a) exhibit no complete separation of any load-bearing structural element, and no partial separation exposing a surface with
      (i) a protrusion of more than 9.5 mm, or
      (ii) a radius of less than 6.4 mm;
(b) remain in the same adjustment position during the test as it was in immediately before the test;

(c) except in the case of a restraint system tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the *Code of Federal Regulations* of the United States (revised as of October 1, 2012), limit the resultant acceleration at the location of the accelerometer mounted in the upper thorax of the anthropomorphic test device to not more than 60 g, except for intervals of not more than 3 ms; and

(d) except in the case of a restraint system tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the *Code of Federal Regulations* of the United States (revised as of October 1, 2012), limit the resultant acceleration of the centre of gravity of the head of the anthropomorphic test device during the movement of the head towards the front of the vehicle to not more than 80 g, except for intervals of not more than 3 ms, unless it is established that any resultant acceleration above 80 g is caused by another part of the anthropomorphic test device striking its head.

(2) **Dynamic testing — levelling device** - A rear-facing mass-produced restraint system for disabled persons that is subjected to a dynamic test in accordance with section 4 of Test Method 213.3 must conform to the requirements of paragraphs (1)(a) and (b) if the restraint system is equipped with a levelling device and

(a) the adjustment position of the levelling device is not in accordance with the manufacturer's instructions; and

(b) the other components of the restraint system are in any adjustment position for which there is no warning under subparagraph 521(1)(f)(ii).

SOR/2013-117, s. 25.

**Forward-facing mass-produced restraint system**

519. A forward-facing mass-produced restraint system for disabled persons that is subjected to a dynamic test in accordance with section 4 of Test Method 213.3 must not, when in any adjustment position for which there is no warning under subparagraph 521(1)(f)(ii),

(a) except in the case of a restraint system tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the *Code of Federal Regulations* of the United States (revised as of October 1, 2012), allow any portion of the head of the anthropomorphic test device to pass through the vertical transverse plane — shown as the forward excursion limit in Figures 5 and 6 of Schedule 7 — that is 915 mm forward of the Z point on the standard seat assembly, measured along the SORL; and

(i) 720 mm forward of the Z point on the standard seat assembly in the case of a restraint system designed to be used by a person whose mass is not more than 30 kg, and

(ii) 813 mm forward of the Z point on the standard seat assembly for a restraint system designed to be used by a person whose mass is more than 30 kg;

(b) except in the case of a restraint system tested with the anthropomorphic test device specified in subpart S, part 572, chapter V, title 49 of the *Code of Federal Regulations* of the United States (revised as of October 1, 2012), allow either knee pivot point to pass through the vertical transverse plane — shown as the forward excursion limit in Figures 5 and 6 of Schedule 7 — that is 915 mm forward of the Z point on the standard seat assembly, measured along the SORL; and

(c) allow the angle between the restraint system's back support surface and seating surface to be less than 45° at the completion of the test.
Rear-facing mass-produced restraint system

520. A rear-facing mass-produced restraint system for disabled persons that is subjected to a dynamic test in accordance with section 4 of Test Method 213.3 must, when in any adjustment position for which there is no warning under subparagraph 521(1)(f)(ii),

(a) retain the torso of the anthropomorphic test device within the restraint system, and not allow any portion of the target points on either side of the device's head, located on the transverse axis passing through the centre of mass of the device's head and perpendicular to the head's midsagittal plane, to pass at any time, during or immediately after the test, either through the transverse orthogonal planes formed by the extension of the seat back frontal surface plane of the restraint system and by the plane that passes through the uppermost point of the restraint system, as shown in Figure 7 of Schedule 7, or through the vertical transverse plane passing through point X on the standard seat assembly, as shown in Figure 8 of Schedule 7; and

(b) not allow the angle between the vertical and the back and head support surface, measured 240 mm above the seating surface, to be more than 70° at any time during the test.

Information

Information — mass-produced restraint systems

521. (1) Every mass-produced restraint system for disabled persons must have stitched onto it, indelibly moulded into or onto it, or indelibly printed on a label affixed to it in a permanent manner, the following information:

(a) the name and principal place of business of the company that manufactured, imported or sold the restraint system;

(b) the model name and number of the restraint system;

(c) the date of manufacture of the restraint system, as shown in Schedule 5, with the year, month and day above the corresponding wording in both official languages;

(d) a statement indicating — in units based on the International System of Units followed by the corresponding imperial units in parentheses — the mass and height range of the persons for whom the manufacturer recommends the restraint system when it is used in a forward-facing and, where applicable, a rear-facing position;

(e) a statement indicating whether the restraint system conforms to the inversion test requirements referred to in section 517;

(f) a warning indicating

(i) that the restraint system is designed for use by a disabled person,

(ii) if the restraint system is not designed to be used at certain adjustment positions or with trays or tables or certain webbing assemblies, that those adjustment positions, trays, tables or webbing assemblies must not be used,

(iii) if the restraint system is equipped with a lower connector system and is to be used by a disabled person with a mass of 30 kg or less, that the restraint system must be secured to the vehicle as shown in the installation instructions by either of the following means and, if the restraint system is equipped with a
tether strap and the manufacturer recommends its use, by means of the tether strap:

(A) the lower connector system, if the restraint system is installed in a seating position that is equipped with a lower universal anchorage system, or

(B) a vehicle seat belt, if the restraint system is installed in a seating position that is not equipped with a lower universal anchorage system,

(iv) if the restraint system is equipped with a lower connector system or a tether strap and is to be used by a disabled person with a mass of more than 30 kg, that the restraint system must be secured to the vehicle by means of a vehicle seat belt only,

(v) if the restraint system is not equipped with a lower connector system, that the restraint system must be secured to the vehicle as shown in the installation instruction by means of a vehicle seat belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap,

(vi) if the restraint system is equipped with belts for restraining a disabled person, that the belts provided with the restraint system must be snugly adjusted around the person, and

(vii) if the restraint system is equipped with a fixed or movable surface for restraining the disabled person and belts for restraining the disabled person, that the surface alone is not sufficient to restrain the person; and

(g) an installation diagram that shows the restraint system

(i) installed as recommended by the manufacturer in a seating position that is equipped only with a lap belt and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap,

(ii) installed as recommended by the manufacturer in a seating position that is equipped only with a continuous-loop lap and shoulder belt, and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap, and

(iii) if the restraint system is equipped with a lower connector system, installed as recommended by the manufacturer in a seating position that is equipped with a lower universal anchorage system, and secured to the vehicle by means of the lower connector system and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap.

(2) **Official languages and print size** - The information referred to in subsection (1) must be in both official languages and in characters of at least 10 points, except for the words "year/année", "month/mois" and "day/jour" under the date of manufacture, which may be in characters of at least 8 points.

(3) **Visibility of information** - The information referred to in paragraphs (1)(d) to (g) must be fully visible at all times, even when the restraint system is occupied.

**Warning — school buses**

**522. (1)** Every custom restraint system for a disabled person that is designed to be used only in school buses must bear the school bus restraint system warning label shown in Schedule 6, and the label must conform to the requirements of that schedule.

(2)
**Information — custom restraint systems**

**523.** Every custom restraint system for a disabled person must be accompanied by a document, in both official languages, that contains the following information:

- (a) a statement that the restraint system must be used only by the person for whom the restraint system was designed;
- (b) the name and principal place of business of the company that manufactured, imported or sold the restraint system;
- (c) the date of manufacture of the restraint system, as shown in Schedule 5, with the year, month and day above the corresponding wording in both official languages;
- (d) except in the case of a custom restraint system for a disabled person that is designed to be used only in school buses, a statement that the restraint system conforms to the prescribed standards applicable on the date of manufacture;
- (e) a statement indicating whether the restraint system conforms to the inversion test requirements referred to in section 517;
- (f) if the restraint system is designed to be used with a tether strap, a statement that the tether strap must be properly attached to the vehicle and indicating how to attach the tether strap;
- (g) a warning indicating
  - (i) if the restraint system is not designed to be used at certain adjustment positions or with trays or tables or certain webbing assemblies, that those adjustment positions, trays, tables or webbing assemblies must not be used,
  - (ii) if the restraint system has a belt with a hook and loop fastener (for example, a Velcro-type fastener) that is designed to restrain a disabled person, that the fastener alone is not sufficient to restrain the disabled person, and that only belts that include buckles must be used to restrain the person, and
  - (iii) if the restraint system is designed to restrain a disabled person by means of a fixed or movable surface and by means of belts, that the surface alone is not sufficient to restrain the person.

**Installation instructions**

**524.** (1) Every mass-produced restraint system for disabled persons must be accompanied by printed instructions, in both official languages, that set out a step-by-step procedure, including diagrams, for

- (a) installing and securing the restraint system in a vehicle;
- (b) positioning a disabled person in the restraint system; and
- (c) adjusting every part of the restraint system that is designed to restrain the person.

(2) **Idem** - The instructions referred to in paragraph (1)(a) must state that the restraint system, even when unoccupied, must be firmly secured to the vehicle.

(3) **Idem** - The instructions must

- (a) specify the classes of vehicles, the seating positions and the types of vehicle seat belts with which the restraint system may or may not be used;
- (b) specify whether the restraint system may be used with a lower universal anchorage system;
(c) explain the primary consequences of not following the warnings appearing on the
restraint system;

(d) if the restraint system conforms to the inversion test requirements of section 517,
provide a step-by-step procedure, including diagrams, for installing the restraint
system in an aircraft passenger seat referred to in subsection 2.1.2 of Test Method
213.3, for restraining a disabled person in the restraint system when it is installed in
the seat, and for adjusting the restraint system to fit the person; and

(e) if the restraint system conforms to the inversion test requirements of section 517 and
is manufactured with a removable base, and the seating component of the restraint
system is designed to be used in a vehicle with or without the base, specify whether
the restraint system must be used with or without the base in an aircraft passenger
seat.

(4) **Storage of instructions** - Every mass-produced restraint system for disabled persons must
have a place for the storage of instructions.

525. to 599. reserved

525. [525 to 599 reserved]
PART 6 – CMVSS 213.5 - Restraint Systems for Infants with Special Needs

General

Interpretation

600. In this Part, "Test Method 213.5" means Test Method 213.5 — Restraint Systems for Infants with Special Needs (May 2012), published by the Department of Transport.

SOR/2013-117, s. 22.

Restraint system designed to face the rear

601. Every restraint system for infants with special needs must be designed to face the rear of the vehicle, except that a car bed must be designed to rest on the vehicle's rear bench seat so that its longitudinal axis is perpendicular to the vertical longitudinal plane passing through the longitudinal axis of the vehicle.

Torso restraint

602. Every restraint system for infants with special needs must, when the anthropomorphic test device is positioned in the restraint system in accordance with, in the case of a car bed, subsection 4.5.2 or 4.6.2 of Test Method 213.5 or, in the case of all other restraint systems for infants with special needs, subsection 4.5.3 or 4.6.3 of Test Method 213.5,

(a) restrain the upper torso by means of belts passing over each shoulder; and

(b) restrain the lower torso.

Means of securing restraint system

603. (1) Subject to subsection (2), every restraint system for infants with special needs must be designed to be secured to a vehicle

(a) by means of a vehicle seat belt in such a manner that the belt will not impose directly on the infant any loads that result from the mass of the restraint system, and without using any other means of attachment; and

(b) if the restraint system is equipped with a lower connector system, by means of the lower connector system, without using any other means of attachment.

(2) Restraint system with tether strap - If a restraint system for infants with special needs is equipped with a tether strap and the manufacturer recommends its use, the restraint system must be designed to be secured to a vehicle

(a) by means of the tether strap together with a vehicle seat belt in such a manner that the belt will not impose directly on the infant any loads that result from the mass of the restraint system, and without using any other means of attachment; and

(b) if the restraint system is equipped with a lower connector system, by means of the tether strap together with the lower connector system, without using any other means of attachment.
Restraint system with removable base

604. If a restraint system for infants with special needs is equipped with a lower connector system and is manufactured with a removable base, and the seating component of the restraint system is designed to be used in a vehicle with or without the base, the restraint system must be equipped with the lower connector system on the base.

Car bed

605. Every car bed must

(a) provide restraint against the sideways movement of the infant's head towards the front of the vehicle by means of a head restraint; and

(b) have, in the shell of the car bed, a means of minimizing, when the car bed is installed in a vehicle in accordance with the manufacturer's instructions, any loads to the top of the infant's head in case of a side impact.

Restraint system to be adjustable

606. Every part of a restraint system for infants with special needs that is designed to restrain an infant must be adjustable to snugly fit an infant whose mass and height are within the ranges indicated in the statement referred to in paragraph 616(1)(d), when the infant is positioned in the restraint system in accordance with the instructions referred to in paragraph 618(1)(b) and the restraint system is adjusted in accordance with the instructions referred to in paragraph 618(1)(c).

Audible or visible indication

607. A restraint system for infants with special needs that is equipped with a lower connector system must provide a clear, audible indication when each connector in a lower connector system is securely attached to the lower universal anchorage system or a clear, visual indication that each connector is securely attached to the lower universal anchorage system.

Flammability

(AM) Jun 19/13

608. Every restraint system for infants with special needs must be constructed only of materials that conform to the requirements of TSD 302.

SOR/2013-117, s. 23.

Belt Buckles and Webbing

Conformity with TSD 209

609. Every belt buckle and related piece of adjustment hardware and every tether strap attachment and related piece of adjustment hardware that are part of a restraint system for infants with special needs must conform to the requirements of S4.3(a)(2) and (b) of TSD 209.

Belt buckles
Every belt buckle that is fitted on a belt designed to restrain an infant in a restraint system for infants with special needs must
(a) under the conditions set out in section 3 of Test Method 213.5,
   (i) not release when any force of less than 40 N is applied, and
   (ii) release when a force of at least 40 N but not more than 62 N is applied;
(b) under the conditions set out in section 5 of Test Method 213.5, release when a force of not more than 71 N is applied;
(c) conform to the requirements of S4.3(d)(2) of TSD 209, except that the surface area of a belt buckle designed for push-button application must be at least 385 mm\(^2\);
(d) conform to the requirements of S4.3(g) of TSD 209; and
(e) not release during the dynamic tests specified in section 4 of Test Method 213.5.

Any webbing that is designed to secure a restraint system for infants with special needs to a user-ready tether anchorage or to a lower universal anchorage system, or to restrain an infant with special needs within the restraint system, must
(a) when tested in accordance with S5.1(b) of TSD 209, before being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, for resistance to light as specified in S5.1(e) of TSD 209 or for resistance to micro-organisms as specified in S5.1(f) of TSD 209, have a breaking strength of
   (i) at least 15 000 N, in the case of webbing designed to secure the restraint system to the user-ready tether anchorage or to the lower universal anchorage system, or
   (ii) at least 11 000 N, in the case of webbing designed to restrain an infant with special needs within the restraint system;
(b) when tested in accordance with S5.1(b) of TSD 209, after being tested for resistance to abrasion as specified in S5.1(d) or S5.3(c) of TSD 209, have a breaking strength of at least 75% of its initial breaking strength;
(c) conform to the requirements respecting breaking strength set out in S4.2(e) and (f) of TSD 209; and
(d) if contactable by the torso when the restraint system is tested in accordance with section 4 of Test Method 213.5, have a width of not less than 38 mm, measured as specified in S5.1(a) of TSD 209.

Contactable Surfaces

Every restraint system for infants with special needs, other than a car bed must provide
(a) for the support of the infant's back, a continuous surface that is flat or concave and has an area of not less than 54 800 mm\(^2\); and
(b) for the support of the sides of the infant's torso, continuous surfaces that are flat or concave and have an area of not less than 30 500 mm\(^2\) each.

(2) Contactable surfaces — car bed - Every car bed must provide
(a) for the support of the infant's back and legs, a continuous surface that is flat or concave and has an area of not less than 71 250 mm$^2$; and
(b) for the support of the sides of the infant's torso and legs, continuous surfaces that are flat or concave and have an area of not less than 39 650 mm$^2$ each.

**Rigid structural elements**

613. Any rigid structural element underlying a contactable surface of a restraint system for infants with special needs must not have
(a) a protrusion, with any padding or flexible overlay material removed, of more than 9.5 mm; or
(b) an exposed edge with a radius of less than 6.4 mm.

**Surface contactable by head**

614. Every surface of a restraint system for infants with special needs that is contactable by the head of an anthropomorphic test device positioned in the restraint system in accordance with, in the case of a car bed, subsection 4.5.2 or 4.6.2 of Test Method 213.5 or, in the case of all other restraint systems for infants with special needs, subsection 4.5.3 or 4.6.3 of Test Method 213.5 must be covered with slow-recovery, energy-absorbing material that, when tested in accordance with section 6 of Test Method 213.5, has
(a) a resistance of not less than 4 kPa but not more than 70 kPa at 25% of compression-deflection resistance;
(b) a thickness of not less than 12 mm, if the material has a resistance of not less than 12 kPa but not more than 70 kPa at 25% of compression-deflection resistance; and
(c) a thickness of not less than 19 mm, if the material has a resistance of not less than 4 kPa but less than 12 kPa at 25% of compression-deflection resistance.

**Testing**

**Dynamic testing**

615. (1) A restraint system for infants with special needs that is subjected to a dynamic test in accordance with section 4 of Test Method 213.5 must, if the adjustment position of each component of the restraint system is in accordance with the manufacturer's instructions,
(a) exhibit no complete separation of any load-bearing structural element, and no partial separation exposing a surface with
   (i) a protrusion of more than 9.5 mm, or
   (ii) a radius of less than 6.4 mm;
(b) in the case of a restraint system other than a car bed, remain in the same adjustment position during the test as it was in immediately before the test began, except that, if the restraint system has a means of automatically repositioning the seating surface to allow the anthropomorphic test device to move from a reclined position to a more upright position and back to a reclined position during the test, the seating surface does not have to remain in the same adjustment position during the test as it was in
immediately before the test began;

(c) in the case of a restraint system other than a car bed, retain the torso of the anthropomorphic test device within the restraint system, and not allow any portion of the target points on either side of the device's head, located on the transverse axis passing through the centre of mass of the device's head and perpendicular to the head's midsagittal plane, to pass at any time, during or immediately after the test, through the transverse orthogonal planes formed by the extension of the seat back frontal surface plane of the restraint system and by the plane that passes through the uppermost point of the restraint system, as shown in Figure 7 of Schedule 7, or through the vertical transverse plane passing through point X on the standard seat assembly, as shown in Figure 8 of Schedule 7;

(d) in the case of a restraint system other than a car bed, not allow the angle between the vertical and the back and head support surface, measured 240 mm above the seating surface, to be more than 70° at any time during the test;

(e) in the case of a restraint system other than a car bed, limit the movement of the head of the anthropomorphic test device towards the rear of the restraint system by means of a continuous seat back that is an integral part of the restraint system;

(f) in the case of a restraint system other than a car bed, limit the rotation of the head of the anthropomorphic test device towards the rear of the restraint system, in its midsagittal plane, by means of a continuous seat back that is an integral part of the restraint system, so that the angle between the head and the torso is at no time during the test more than 45° as compared to the angle between the head and the torso prior to the test; and

(g) in the case of a car bed, retain the head, neck and torso of the anthropomorphic test device within the confines of the car bed.

(2) **Dynamic testing — levelling device** - A restraint system for infants with special needs that is equipped with a levelling device and that is subjected to a dynamic test in accordance with section 4 of Test Method 213.5 must conform to the requirements of paragraphs (1)(a) and (b) if the adjustment position of each component of the restraint system, except the levelling device, is in accordance with the manufacturer's instructions.

(3) **Continuous seat back** - The continuous seat back referred to in paragraphs (1)(e) and (f) must

(a) have a height of at least 500 mm;

(b) have a width of at least 200 mm, measured in the horizontal plane at the height specified in paragraph (a); and

(c) not impose any loads on the top of the head of the anthropomorphic test device during the dynamic test referred to in subsection (1).

(4) **Measurement of height — paragraph 3(a)** - The height referred to in paragraph (3)(a) must be measured in a plane parallel to the surface of the seat back of the restraint system for infants with special needs and orthogonal to the vertical longitudinal plane passing through the longitudinal centreline of the restraint system, from the lowest point of the restraint system's seating surface that is contacted by the buttocks of the seated anthropomorphic test device.

(5) **Exception** - Despite paragraph (3)(b), if the restraint system for infants with special needs provides surfaces for the support of the sides of the torso, and those surfaces extend at least 100 mm forward from the padded surface of the portion of the restraint system provided for the support of the head of the anthropomorphic test device, the restraint system may have a continuous seat back width of not less than 150 mm, measured in the horizontal plane at the height specified in paragraph (3)(a).
Restraint system with means of automatic repositioning - If a restraint system for infants with special needs that has a means of automatically repositioning the seating surface is subjected, in any adjustment position, to a dynamic test in accordance with section 4 of Test Method 213.5, an opening that is exposed and larger than 6.4 mm before the test must not become smaller during the test as a result of the movement of the seating surface relative to the other parts of the restraint system.

Information

616. (1) Every restraint system for infants with special needs must have stitched onto it, indelibly moulded into or onto it, or indelibly printed on a label affixed to it in a permanent manner, the following information:

(a) the name and principal place of business of the company that manufactured, imported or sold the restraint system;
(b) the model name and number of the restraint system;
(c) the date of manufacture of the restraint system, as shown in Schedule 5, with the year, month and day above the corresponding wording in both official languages;
(d) a statement indicating — in units based on the International System of Units followed by the corresponding imperial units in parentheses — the mass and height range of the infants for whom the manufacturer recommends the restraint system;
(e) a warning indicating

(i) that the restraint system must be used only in a forward-facing seating position equipped with a vehicle seat belt or, if the restraint system is equipped with a lower connector system, in a forward-facing seating position equipped with a vehicle seat belt or a lower universal anchorage system,
(ii) that the restraint system must be in a rear-facing position, except that a car bed must be used in a flat position along the vehicle's rear bench seat with the head of the infant towards the centre of the vehicle,
(iii) if the restraint system is equipped with a lower connector system, that the restraint system must be secured to the vehicle as shown in the installation instructions by either of the following means and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap:
   (A) the lower connector system, if the restraint system is installed in a seating position that is equipped with a lower universal anchorage system, or
   (B) a vehicle seat belt, if the restraint system is installed in a seating position that is not equipped with a lower universal anchorage system,
(iv) if the restraint system is not equipped with a lower connector system, that the restraint system must be secured to the vehicle as shown in the installation instructions by means of a vehicle seat belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap, and
(v) if the restraint system is equipped with belts for restraining an infant, that the belts must be snugly adjusted around the infant; and
(f) an installation diagram that shows the restraint system

(i) installed as recommended by the manufacturer in a seating position that is equipped only with a lap belt and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap,

(ii) installed as recommended by the manufacturer in a seating position that is equipped only with a continuous-loop lap and shoulder belt, and secured to the vehicle by means of the belt and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap, and

(iii) if the restraint system is equipped with a lower connector system, installed as recommended by the manufacturer in a seating position that is equipped with a lower universal anchorage system, and secured to the vehicle by means of the lower connector system and, if the restraint system is equipped with a tether strap and the manufacturer recommends its use, by means of the tether strap.

(2) **Official languages and print size** - The information referred to in subsection (1) must be in both official languages and in characters of at least 10 points, except for the words "year/année", "month/mois" and "day/jour" under the date of manufacture, which may be in characters of at least 8 points.

(3) **Visibility of information** - The information referred to in paragraphs (1)(d) to (f) must be fully visible at all times, even when the restraint system is occupied, whether the restraint system is installed with or without a removable base.

**Warning — air bag**

617. (1) Every restraint system for infants with special needs must bear the air bag warning label shown in Schedule 6, and the label must conform to the requirements of that schedule.

(2) **Idem** - The label referred to in subsection (1) must be affixed in a permanent manner at either of the following locations and be fully visible to a person installing the restraint system:

(a) on the side of the restraint system that will face the right front passenger door when the restraint system is facing rearward; or

(b) at the location where the infant’s head would rest or adjacent to that location.

**Installation instructions**

618. (1) Every restraint system for infants with special needs must be accompanied by printed instructions, in both official languages, that set out a step-by-step procedure, including diagrams, for

(a) installing and securing the restraint system in a vehicle;

(b) positioning an infant with special needs in the restraint system; and

(c) adjusting every part of the restraint system that is designed to restrain the infant.

(2) **Idem** - The instructions referred to in paragraph (1)(a) must state that the restraint system, even when unoccupied, must be firmly secured to the vehicle.

(3) **Idem** - The instructions must

(a) specify the classes of vehicles, the seating positions and the types of vehicle seat belts with which the restraint system may or may not be used;

(b)
specify whether the restraint system may be used with a lower universal anchorage system;
(c) if the restraint system has a means of automatically repositioning the seating surface, specify that the ability of the restraint system to change position must not be impeded; and
(d) explain the primary consequences of not following the warnings appearing on the restraint system.

(4) **Storage of instructions** - Every restraint system for infants with special needs must have a place for the storage of instructions.

619. to 699. reserved

619. [619 to 699 reserved]
PART 7 – Transitional Provision

Transitional Provision

Conformity

Until December 31, 2011, the restraint systems and booster seats referred to in these Regulations may, instead of conforming to the requirements of these Regulations, conform to the requirements of the Motor Vehicle Restraint Systems and Booster Cushions Safety Regulations as they read on the day before the day on which these Regulations came into force and as they were modified in their application by the Order Modifying the Operation of the Motor Vehicle Restraint Systems and Booster Cushions Safety Regulations and the Motor Vehicle Safety Regulations, which came into effect on May 1, 2009 and was published in the Canada Gazette, Part I, on May 9, 2009.

SOR/2010-279, s. 1.
MINISTERIAL AUTHORIZATION

Pursuant to the Motor Vehicle Safety Act and the Motor Vehicle Restraint Systems and Booster Seats Safety Regulations,

[company name and address]

is authorized to use and apply the national safety mark, and the authorization number ______________, to any restraint system or booster seat of a class referred to in section 102 of the Motor Vehicle Restraint Systems and Booster Seats Safety Regulations, on condition that the restraint system or booster seat conforms to all the applicable Canada Motor Vehicle Safety Standards.

The national safety mark and the authorization number are applied at the following premises:

[identification of the premises]

This ministerial authorization expires on _____________________

Issued in Ottawa on ___________, 20____

_____________________________________________

for the Minister of Transport
SCHEDULE 2  
(Subsection 101(3))

NATIONAL SAFETY MARK

Note: Replace XXXX with one or more of the following numbers, as applicable: 213, 213.1, 213.2, 213.3 and 213.5.

Replace YYY with the authorization number assigned by the Minister.
SCHEDULE 3

(Subsection 105)

LOWER UNIVERSAL ANCHORAGE SYSTEM SYMBOL
SCHEDULE 4

(Subsection 109)

DECLARATION OF IMPORTATION FOR EXHIBITION, DEMONSTRATION, EVALUATION OR TESTING PURPOSES

1. Name of the manufacturer of the restraint system or booster seat:
   ______________________________________________________________

2. Name and address of the person importing the restraint system or booster seat:
   ______________________________________________________________

3. The make and the model name or number of the restraint system or booster seat:
   ______________________________________________________________

4. The date that the restraint system or booster seat is presented for importation:
   ______________________________________________________________

I, the undersigned ______________________________________,

(Authorized representative)

declare that the information set out in this declaration is true and that the restraint system or booster seat

(a) will be used in Canada solely for purposes of exhibition, demonstration, evaluation or testing, pursuant to paragraph 7(1)(a) of the Motor Vehicle Safety Act; and

(b) will remain in Canada for not longer than one year or a period that the Minister specifies.*

Signature of authorized representative ____________________________

Date __________________________

*Note: Subsection 7(5) of the Motor Vehicle Safety Act prohibits a person who makes the declaration referred to in paragraph 7(1)(a) of that Act to use or dispose of a restraint system or booster seat in a manner contrary to the terms of the declaration.
# SCHEDULE 5

(Paragraphs 218(1)(c), 316(1)(c), 409(1)(c), 521(1)(c), 523(c) and 616(1)(c))

**DATE OF MANUFACTURE**

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SCHEDULE 6
(Subsections 219(1), 317(1), 522(1) and 617(1))

AIR BAG WARNING LABEL

SCHOOL BUS RESTRAINT SYSTEM WARNING LABEL

Requirements:

1. The message area containing the warning statement must be at least 30 cm²
2. The warning statement must be in characters of at least 10 points
3. The pictogram must be at least 30 mm in diameter

Note: Drawings not to scale
SCHEDULE 7

(Subsection 100(1), paragraphs 216(1)(a) and (b), 217(a), 315(1)(e), 407(e) and (f), 519(a) and (b), 520(a) and 615(1)(c))

Figure 1 — Interface Profile of Tether Strap Hook

Notes:

1. Dimensions in mm, except where otherwise indicated
2. Drawing not to scale
Figure 2 — Interface Profile of Tether Strap Hook with Integrated Adjustment Hardware

Notes:

1. Dimensions in mm, except where otherwise indicated
2. Drawing not to scale
Figure 3 — Three-dimensional Schematic View of Standard Seat Assembly Indicating Location of Seat Belt Anchorage Points

Notes:

1. Dimensions in mm, except where otherwise indicated
2. Drawing not to scale
3. Lap belt anchorage points and continuous-loop lap and shoulder belt lower anchorage points are symmetrically located with respect to the SORL
Figure 4 — Three-dimensional Schematic View of Standard Seat Assembly Indicating Location of Lower Universal Anchorage System

Notes:

1. Dimensions in mm, except where otherwise indicated
2. Transverse horizontal distance between the centre of the bars and the vertical plane containing the SORL is 140 mm
Figure 5 — Side View of Standard Seat Assembly Indicating Location of Seat Belt Anchorage Points

Notes:

1. Dimensions in mm, except where otherwise indicated
2. Drawing not to scale
3. User-ready tether anchorage point on rear package shelf located on the vertical longitudinal plane containing the SORL or located 544 mm right or left of the vertical longitudinal plane containing the SORL
Figure 6 — Side View of Standard Seat Assembly Indicating Location of Lower Universal Anchorage System

Notes:

1. Dimensions in mm, except where otherwise indicated
2. Drawing not to scale
3. User-ready tether anchorage point on rear package shelf located on the vertical longitudinal plane containing the SORL or located 544 mm right or left of the vertical longitudinal plane containing the SORL
4. Lower universal anchorage system bars located 102 mm forward of the Z point and 323 mm upward from floor
Figure 7 — Forward and Upper Excursion Limits for any Portion of Target Point on Either Side of Anthropomorphic Test Device Head

Note:
The illustrated limits move during dynamic testing
Figure 8 — Point X on Vertical Plane of Standard Seat Assembly

[Diagram showing Point X on a vertical plane of a standard seat assembly, labeled as follows: Head of the anthropomorphic test device, Point X, Back of standard seat assembly, Vertical plane]
Figure 9 — Rear and Side View of Checking Device for Lower Connector System - Envelope Dimensions

Notes:

1. Dimensions in mm, except where otherwise indicated
2. Drawing not to scale