

REPORT NUMBER 225-GTL-08-001

**SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 225
CHILD RESTRAINT ANCHORAGE SYSTEMS
LOWER AND TETHER ANCHORAGES**

**COMMERCIAL TRUCK & VAN EQUIPMENT
2008 CHEVROLET UPLANDER
NHTSA NO. C80109**

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SEPTEMBER 2, 2008

FINAL REPORT

PREPARED FOR

**U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVE., SE
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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF COMPLIANCE TEST

A 2008 Chevrolet Uplander was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 225 testing to determine if the vehicle was in compliance with the requirements of the standard. The purpose of this standard is to establish requirements for child restraint anchorage systems to ensure their proper location and strength for the effective securing of child restraints, to reduce the likelihood of the anchorage systems' failure and to increase the likelihood that child restraints are properly secured and thus more fully achieve their potential effectiveness in motor vehicles.

1.1 The test vehicle was a 2008 Chevrolet Uplander. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 1GBDV13W18D172488

B. NHTSA No.: C80109

C. Manufacturer: COMMERCIAL TRUCK & VAN EQUIPMENT, NORCROSS, GA.

D. Manufacture Date: 02/08

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing during the time period August 11-13, 2008.

SECTION 2

COMPLIANCE TEST RESULTS

2.0 TEST RESULTS

All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedures, TP-225-01 dated 11 April 2005.

Based on the test performed, the 2008 CHEVROLET UPLANDER appears to meet the requirements of FMVSS 225 testing.

SECTION 3

COMPLIANCE TEST DATA

3.0 TEST DATA

The following data sheets document the results of testing on the 2008 Chevrolet Uplander.

DATA SHEET 1
SUMMARY OF RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2008 CHEVROLET UPLANDER
 VEH. NHTSA NO: C80109; VIN: 1GBDV13W18D172488
 VEH. BUILD DATE: 02/08; TEST DATE: AUGUST 11, 2008
 TEST LABORATORY: GENERAL TESTING LABORATORIES
 OBSERVERS: GRANT FARRAND, JIMMY LATANE

A. VISUAL INSPECTION OF TEST VEHICLE

Upon receipt for completeness, function, and discrepancies or damage which might influence the testing.

RESULTS: OK FOR TEST

B. REQUIREMENTS FOR CHILD RESTRAINT SYSTEMS AND TETHER ANCHORAGES

	PASS	FAIL
DSP a	<u> X </u>	<u> </u>
DSP b	<u> N/A </u>	<u> N/A </u>
DSP c	<u> N/A </u>	<u> N/A </u>

C. LOCATION OF TETHER ANCHORAGES

	PASS	FAIL
DSP a	<u> X </u>	<u> </u>
DSP b	<u> N/A </u>	<u> N/A </u>
DSP c	<u> N/A </u>	<u> N/A </u>

D. LOWER ANCHORAGE DIMENSIONS

	PASS	FAIL
DSP a	<u> N/A </u>	<u> N/A </u>
DSP b	<u> N/A </u>	<u> N/A </u>
DSP c	<u> N/A </u>	<u> N/A </u>

DATA SHEET 1 CONTINUED
SUMMARY OF RESULTS

E. CONSPICUITY AND MARKING OF LOWER ANCHORAGES

	PASS	FAIL
DSP a	<u>N/A</u>	<u>N/A</u>
DSP b	<u>N/A</u>	<u>N/A</u>
DSP c	<u>N/A</u>	<u>N/A</u>

F. STRENGTH OF TETHER ANCHORAGES

	PASS	FAIL
DSP a	<u>X</u>	<u> </u>
DSP b	<u>N/A</u>	<u>N/A</u>
DSP c	<u>N/A</u>	<u>N/A</u>

G. STRENGTH OF LOWER ANCHORAGES (Forward Force)

	PASS	FAIL
DSP a	<u>N/A</u>	<u>N/A</u>
DSP b	<u>N/A</u>	<u>N/A</u>
DSP c	<u>N/A</u>	<u>N/A</u>

H. STRENGTH OF LOWER ANCHORAGE (Lateral Force)

	PASS	FAIL
DSP a	<u>N/A</u>	<u>N/A</u>
DSP b	<u>N/A</u>	<u>N/A</u>
DSP c	<u>N/A</u>	<u>N/A</u>

I. OWNER'S MANUAL

	PASS	FAIL
	<u> </u>	<u>X</u>

REMARKS:

NOTE:

RECORDED BY: G. Farrand
APPROVED BY: D. Messick

DATE: 08/11/08

DATA SHEET 2
 REQUIREMENTS FOR CHILD RESTRAINT ANCHORAGE SYSTEMS
 AND TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2008 CHEVROLET UPLANDER
 VEH. NHTSA NO: C80109; VIN: 1GBDV13W18D172488
 VEH. BUILD DATE: 02/08; TEST DATE: AUGUST 11, 2008
 TEST LABORATORY: GENERAL TESTING LABORATORIES
 OBSERVERS: GRANT FARRAND, JIMMY LATANE

Number of rows of seats: 1
 Number of rear, forward-facing designated seating positions: 0
 Number of required CRAS (lower anchorages only, for convertibles/school buses): 0
 Number of required tether anchorages (can be additional CRAS): 1
 Is the vehicle a convertible? NO
 Is the vehicle a school bus? NO

Does the vehicle have a CRAS (lower anchorage only, for convertibles/school buses) installed at a front passenger seating position? NO

If NO, skip to next question.

If YES, does the vehicle have rear designated seating positions? _____

If NO, does the vehicle have an air bag on-off switch or a special exemption for no passenger air bag?

If NO = FAIL If YES = PASS

If Yes, does the vehicle meet the requirements of S4.5.4.1 (b) of S208 and have and air bag on-off switch or a special exemption for no passenger air bag? _____

Record the distance between the front and rear seat back: _____

If Distance < 720 mm and vehicle has an air bag on-off switch or special exemption = PASS

If Distance ≥ 720 mm or no air bag on-off switch or no special exemption = FAIL

Does the vehicle have rear designated seating position(s) where the lower bars of a CRAS are prevented from being located because of transmission and/or suspension component interference?

NO

If NO, skip to next question.

If YES, does the vehicle have a tether anchorage at a front passenger seating position?

YES = PASS NO = FAIL (S5(e))

Number of provided CRAS (lower anchorage only, for convertibles/school buses), indicate if a built-in child restraint is counted as a CRAS: 0

Is the number of provided CRAS (lower anchorages only, for convertible/school buses) greater than or equal to the number of required CRAS (lower anchorages only, for convertibles/school buses)?

N/A

YES = PASS NO = FAIL (S4.4(a) or (b) or (c))

DATA SHEET 2 CONTINUED

If the vehicle has 3 or more rows of seats is a CRAS (lower anchorage only for convertibles/school buses) provided in the second row: N/A
 YES = PASS NO = FAIL (S4.4(a)(1))

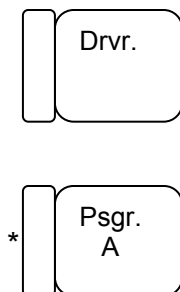
Number of provided tether anchorages (can be additional CRAS) indicate if a built-in child restraint is counted as tether anchorage (NOTE: a built-in child restraint can only be counted toward either the required number of CRAS or tether anchorages, not both): 1

Is the number of provided tether anchorages greater than or equal to the number of required tether anchorages? YES
 YES = PASS NO = FAIL (S4.4 (a) or (b) or (c))

If the vehicle has 3 or more rear dsps and a non-outboard dsp, is a tether anchorage or CRAS provided at a non-outboard dsp? N/A
 YES = PASS NO = FAIL (S4.4 (a)(2))

Are all tether and lower anchorages available for use at all times when the seat is configured for passenger use? YES
 YES = PASS NO = FAIL (S4.6 (b))

Provide a diagram showing the location of lower anchorages and/or tether anchorages.



X = Lower Anchors

***** = Top Tether

RECORDED BY: G. Farrand

DATE: 08/11/08

APPROVED BY: D. Messick

DATA SHEET 3 CONTINUED

DESIGNATED SEATING POSITION: ROW 1 RIGHT SIDE (DSP A)

If the DSP has a flexible tether routing device, after installing SFAD2 record the tether strap tension:
N/A (Must be 60 N \pm 5 N)

If the DSP has a flexible tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
 Greater than or equal to 65mm = PASS Less than 65mm = FAIL

If the DSP has a rigid tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
 Greater than or equal to 100mm = PASS Less than 100mm = FAIL

COMMENTS:

RECORDED BY: G. FarrandDATE: 08/11/07APPROVED BY: D. Messick

DATA SHEET 4
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2008 CHEVROLET UPLANDER
 VEH. NHTSA NO: C80109; VIN: 1GBDV13W18D172488
 VEH. BUILD DATE: 02/08; TEST DATE: AUGUST 13, 2008
 TEST LABORATORY: GENERAL TESTING LABORATORIES
 OBSERVERS: GRANT FARRAND, JIMMY LATANE
 TEST NO: 6048

DESIGNATED SEATING POSITION: ROW 1 RIGHT SIDE (DSP A)

SFAD: 1

Seat Back Angle: 21°

Location of seat back angle measurement: 2D Template

Head Restraint Position: UP

D-ring Position: MID

Force at Point X (lower front crossmember for SFAD2) while securing belts and tether: 135 N

Lap belt tension: 60 N (SFAD 1 only)

Tether strap tension: 61 N

Angle (measured above the horizontal at 500 N): 10°

Separation of tether anchorage at 500 N: NO
 NO = PASS YES = FAIL (S6.3.1)

Force application rate: 577 N/S

Time to reach maximum force (24-30 s): 26 sec.

Maximum force (14,950 N ± 50 N): 14,910 N

Tested simultaneously with another DSP? NO

COMMENTS:

RECORDED BY: G. FARRAND

DATE: 08/13/08

APPROVED BY: D. MESSICK

DATA SHEET 5
OWNER'S MANUAL

VEH. MOD YR/MAKE/MODEL/BODY: 2008 CHEVROLET UPLANDER
 VEH. NHTSA NO: C80109; VIN: 1GBDV13W18D172488
 VEH. BUILD DATE: 02/08; TEST DATE: AUGUST 11, 2008
 TEST LABORATORY: GENERAL TESTING LABORATORIES
 OBSERVERS: GRANT FARRAND, JIMMY LATANE

Description of which DSP's are equipped with tether anchorages and child restraint anchorage systems: NO

PASS _____ FAIL X

Step-by-step instructions for properly attaching a child restraint system's tether strap to the tether anchorage. Diagrams are required. NO

PASS _____ FAIL X

Description of how to properly use the tether anchorage and lower anchor bars: NO

PASS _____ FAIL X

If the lower anchor bars are marked with a circle, an explanation of what the circle indicates as well as any words or pictograms: _____

PASS _____ FAIL _____

COMMENTS: TETHER ANCHORAGE FOR RIGHT FRONT POSITION IS NOT SHOWN OR LISTED.

RECORDED BY: G. Farrand

DATE: 08/12/08

APPROVED BY: D. Messick

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO.	CAL. DATE	NEXT CAL. DATE
COMPUTER	AT&T	486DX266	BEFORE USE	BEFORE USE
LOAD CELL	INTERFACE	215709	01/08	01/09
LINEAR TRANSDUCER	SERVO SYSTEMS	20	BEFORE USE	BEFORE USE
SEAT BELT LOAD CELL	TRANSDUCER	135	BEFORE USE	BEFORE USE
SEAT BELT LOAD CELL	TRANSDUCER	137	BEFORE USE	BEFORE USE
LEVEL	STANLEY	42-449	BEFORE USE	BEFORE USE
FORCE GAUGE	CHATILLON	8761	BEFORE USE	BEFORE USE
CALIPER	N/A	Q9322365	BEFORE USE	BEFORE USE
CRF	MEASUREMENT FIXTURE	GTL CRF	BEFORE USE	BEFORE USE
SFAD 1	FORCE APPLICATION DEVICE	GTL SFAD 1	BEFORE USE	BEFORE USE
SFAD 2	FORCE APPLICATION DEVICE	GLT SFAD 2	BEFORE USE	BEFORE USE

SECTION 5
PHOTOGRAPHS



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.1
LEFT SIDE VIEW OF VEHICLE



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.2
RIGHT SIDE VIEW OF VEHICLE



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.3
¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.4
¾ REAR VIEW FROM RIGHT SIDE OF VEHICLE



GM

INCOMPLETE VEHICLE MANUFACTURED BY
GENERAL MOTORS CORPORATION
DETROIT, MICHIGAN 48243

02/08

GVWR
2650KG(5842LB)

GAWR FRT
1350KG(2976LB)

GAWR RR
1300KG(2866LB)

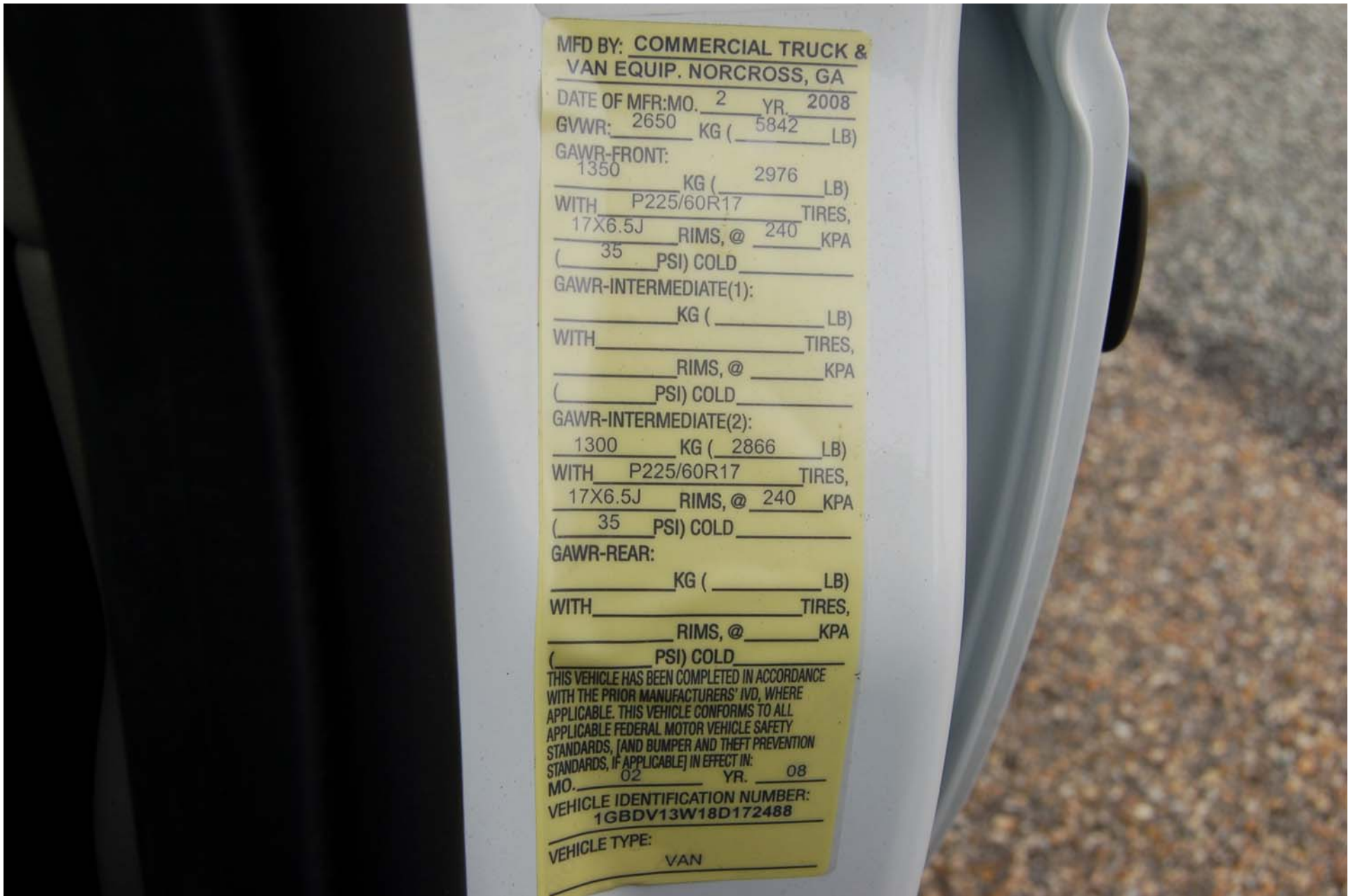
1GBDV13W18D172488

TYPE: INC VEH

MODEL: U12216

2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.5
INCOMPLETE VEHICLE LABEL



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.6
VEHICLE CERTIFICATION LABEL



TIRE AND LOADING INFORMATION

SEATING CAPACITY

TOTAL

2

FRONT

2

REAR

0

The combined weight of occupants and cargo should never exceed **646** Kg or **5797** Lbs.

TIRE	SIZE	COLD TIRE PRESSURE	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
FRONT	17X6.5J	35	
REAR	17X6.5J	35	
SPARE			



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.8
ROW 1, RIGHT SIDE WITH 2-D TEMPLATE



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.9
ROW 1, RIGHT SIDE, TOP TETHER ROUTING



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.10
ROW 1, RIGHT SIDE, TOP TETHER ROUTING



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.11
¾ RIGHT FRONT VIEW OF VEHICLE IN TEST RIG



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.12
¾ LEFT REAR VIEW OF VEHICLE IN TEST RIG



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.13
PRE-TEST, ROW 1, RIGHT SIDE VIEW OF TOP TETHER
ANCHOR



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.14
PRE-TEST, ROW 1, RIGHT SIDE SET-UP



2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.15
POST TEST, ROW 1, RIGHT SIDE



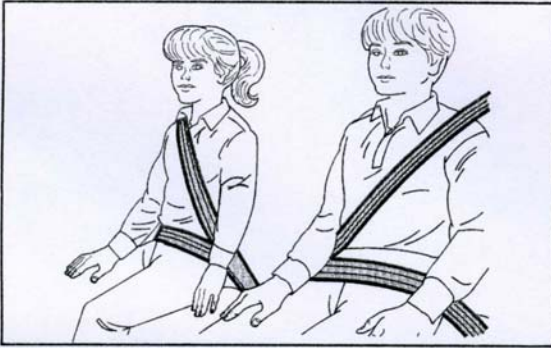
2008 CHEVROLET UPLANDER
NHTSA NO. C80109
FMVSS NO. 225

FIGURE 5.16
POST TEST, ROW 1, RIGHT SIDE TOP TETHER ANCHOR

APPENDIX A
OWNER'S MANUAL RESTRAINT INFORMATION

Child Restraints

Older Children



Older children who have outgrown booster seats should wear the vehicle's safety belts.

The manufacturer's instructions that come with the booster seat state the weight and height limitations for that booster. Use a booster seat with a lap-shoulder belt until the child passes the below fit test:

- Sit all the way back on the seat. Do the knees bend at the seat edge? If yes, continue. If no, return to the booster seat.
- Buckle the lap-shoulder belt. Does the shoulder belt rest on the shoulder? If yes, continue. If no, try using the rear safety belt comfort guide. See "Rear Safety Belt Comfort Guides" under *Lap-Shoulder Belt* on page 1-37 for more information. If the shoulder belt still does not rest on the shoulder, then return to the booster seat.
- Does the lap belt fit low and snug on the hips, touching the thighs? If yes, continue. If no, return to the booster seat.
- Can proper safety belt fit be maintained for the length of the trip? If yes, continue. If no, return to the booster seat.

Q: What is the proper way to wear safety belts?

A: An older child should wear a lap-shoulder belt and get the additional restraint a shoulder belt can provide. The shoulder belt should not cross the face or neck. The lap belt should fit snugly below the hips, just touching the top of the thighs. This applies belt force to the child's pelvic bones in a crash. It should never be worn over the abdomen, which could cause severe or even fatal internal injuries in a crash.

Also see "Rear Safety Belt Comfort Guides" under *Lap-Shoulder Belt on page 1-37*.

According to accident statistics, children and infants are safer when properly restrained in a child restraint system or infant restraint system secured in a rear seating position.

In a crash, children who are not buckled up can strike other people who are buckled up, or can be thrown out of the vehicle. Older children need to use safety belts properly.

⚠ CAUTION:

Never do this.

Never allow two children to wear the same safety belt. The safety belt can not properly spread the impact forces. In a crash, the two children can be crushed together and seriously injured. A safety belt must be used by only one person at a time.



1-44

⚠ CAUTION:

Never do this.

Never allow a child to wear the safety belt with the shoulder belt behind their back. A child can be seriously injured by not wearing the lap-shoulder belt properly. In a crash, the child would not be restrained by the shoulder belt. The child could move too far forward increasing the chance of head and neck injury. The child might also slide under the lap belt. The belt force would then be applied right on the abdomen. That could cause serious or fatal injuries. The shoulder belt should go over the shoulder and across the chest.



1-45

Infants and Young Children

Everyone in a vehicle needs protection! This includes infants and all other children. Neither the distance traveled nor the age and size of the traveler changes the need, for everyone, to use safety restraints. In fact, the law in every state in the United States and in every Canadian province says children up to some age must be restrained while in a vehicle.

⚠ CAUTION:

Children can be seriously injured or strangled if a shoulder belt is wrapped around their neck and the safety belt continues to tighten. Never leave children unattended in a vehicle and never allow children to play with the safety belts.

Every time infants and young children ride in vehicles, they should have the protection provided by appropriate restraints. Children who are not restrained properly can strike other people, or can be thrown out of the vehicle. In addition, young children should not use the vehicle's adult safety belts alone; they need to use a child restraint.

⚠ CAUTION:

Never do this.

Never hold an infant or a child while riding in a vehicle. Due to crash forces, an infant or a child will become so heavy it is not possible to hold it during a crash. For example, in a crash at only 25 mph (40 km/h), a 12 lb (5.5 kg) infant will suddenly become a 240 lb (110 kg) force on a person's arms. An infant should be secured in an appropriate restraint.

1-46



⚠ CAUTION:

Never do this.

Children who are up against, or very close to, any airbag when it inflates can be seriously injured or killed. Never put a rear-facing child restraint in the right front seat. Secure a rear-facing child restraint in a rear seat.

CAUTION: (Continued)

CAUTION: (Continued)

It is also better to secure a forward-facing child restraint in a rear seat. If you must secure a forward-facing child restraint in the right front seat, always move the front passenger seat as far back as it will go.



1-47

Q: What are the different types of add-on child restraints?

A: Add-on child restraints, which are purchased by the vehicle's owner, are available in four basic types. Selection of a particular restraint should take into consideration not only the child's weight, height, and age but also whether or not the restraint will be compatible with the motor vehicle in which it will be used.

For most basic types of child restraints, there are many different models available. When purchasing a child restraint, be sure it is designed to be used in a motor vehicle. If it is, the restraint will have a label saying that it meets federal motor vehicle safety standards.

The restraint manufacturer's instructions that come with the restraint state the weight and height limitations for a particular child restraint. In addition, there are many kinds of restraints available for children with special needs.

⚠ CAUTION:

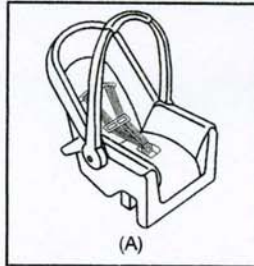
To reduce the risk of neck and head injury during a crash, infants need complete support. This is because an infant's neck is not fully developed and its head weighs so much compared with the rest of its body. In a crash, an infant in a rear-facing child restraint settles into the restraint, so the crash forces can be distributed across the strongest part of an infant's body, the back and shoulders. Infants should always be secured in rear-facing child restraints.

1-48

⚠ CAUTION:

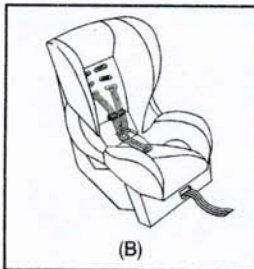
A young child's hip bones are still so small that the vehicle's regular safety belt may not remain low on the hip bones, as it should. Instead, it may settle up around the child's abdomen. In a crash, the belt would apply force on a body area that is unprotected by any bony structure. This alone could cause serious or fatal injuries. To reduce the risk of serious or fatal injuries during a crash, young children should always be secured in appropriate child restraints.

Child Restraint Systems



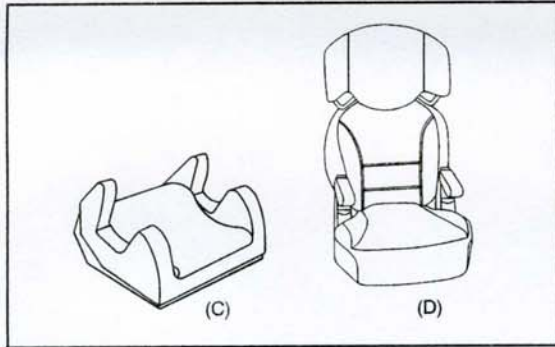
A rear-facing infant seat (A) provides restraint with the seating surface against the back of the infant.

The harness system holds the infant in place and, in a crash, acts to keep the infant positioned in the restraint.



A forward-facing child seat (B) provides restraint for the child's body with the harness.

1-49



A booster seat (C-D) is a child restraint designed to improve the fit of the vehicle's safety belt system. A booster seat can also help a child to see out the window.

Securing an Add-On Child Restraint in the Vehicle

⚠ CAUTION:

A child can be seriously injured or killed in a crash if the child restraint is not properly secured in the vehicle. Secure the child restraint properly in the vehicle using the vehicle's safety belt or LATCH system, following the instructions that came with that child restraint and the instructions in this manual.

1-50

To help reduce the chance of injury, the child restraint must be secured in the vehicle. Child restraint systems must be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt, or by the LATCH system. See *Lower Anchors and Tethers for Children (LATCH)* on page 1-53 for more information. A child can be endangered in a crash if the child restraint is not properly secured in the vehicle.

When securing an add-on child restraint, refer to the instructions that come with the restraint which may be on the restraint itself or in a booklet, or both, and to this manual. The child restraint instructions are important, so if they are not available, obtain a replacement copy from the manufacturer.

Keep in mind that an unsecured child restraint can move around in a collision or sudden stop and injure people in the vehicle. Be sure to properly secure any child restraint in the vehicle — even when no child is in it.

Securing the Child Within the Child Restraint

⚠ CAUTION:

A child can be seriously injured or killed in a crash if the child is not properly secured in the child restraint. Secure the child properly following the instructions that came with that child restraint.

1-51

Where to Put the Restraint

According to accident statistics, children and infants are safer when properly restrained in a child restraint system or infant restraint system secured in a rear seating position.

We recommend that children and child restraints be secured in a rear seat, including: an infant or a child riding in a rear-facing child restraint; a child riding in a forward-facing child seat; an older child riding in a booster seat; and children, who are large enough, using safety belts.

A label on the sun visor says, "Never put a rear-facing child restraint in the front." This is because the risk to the rear-facing child is so great, if the airbag deploys.

CAUTION:

A child in a rear-facing child restraint can be seriously injured or killed if the right front passenger airbag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating airbag. A child in a forward-facing child restraint can be seriously injured or killed if the right front passenger airbag inflates and the passenger seat is in a forward position.

Even if the passenger sensing system has turned off the right front passenger frontal airbag, no system is fail-safe. No one can guarantee that an airbag will not deploy under some unusual circumstance, even though it is turned off.

CAUTION: (Continued)

1-52

CAUTION: (Continued)

Secure rear-facing child restraints in a rear seat, even if the airbag is off. If you secure a forward-facing child restraint in the right front seat, always move the front passenger seat as far back as it will go. It is better to secure the child restraint in a rear seat.

See *Passenger Sensing System* on page 1-85 for additional information.

If the vehicle does not have a rear seat that will accommodate a rear-facing child restraint, a rear-facing child restraint should not be installed in the vehicle, even if the airbag is off.

When securing a child restraint in a rear seating position, study the instructions that came with your child restraint to make sure it is compatible with this vehicle.

Wherever a child restraint is installed, be sure to secure the child restraint properly.

Keep in mind that an unsecured child restraint can move around in a collision or sudden stop and injure people in the vehicle. Be sure to properly secure any child restraint in the vehicle — even when no child is in it.

Lower Anchors and Tethers for Children (LATCH)

The LATCH system holds a child restraint during driving or in a crash. This system is designed to make installation of a child restraint easier. The LATCH system uses anchors in the vehicle and attachments on the child restraint that are made for use with the LATCH system.

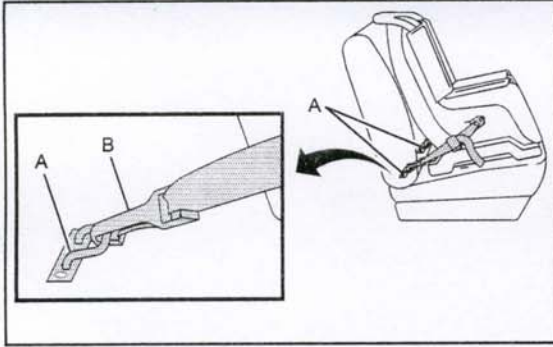
Make sure that a LATCH-compatible child restraint is properly installed using the anchors, or use the vehicle's safety belts to secure the restraint, following the instructions that came with that restraint, and also the instructions in this manual. When installing a child restraint with a top tether, you must also use either the lower anchors or the safety belts to properly secure the child restraint. A child restraint must never be installed using only the top tether and anchor.

In order to use the LATCH system in your vehicle, you need a child restraint that has LATCH attachments. The child restraint manufacturer will provide you with instructions on how to use the child restraint and its attachments. The following explains how to attach a child restraint with these attachments in your vehicle.

Not all vehicle seating positions or child restraints have lower anchors and attachments or top tether anchors and attachments.

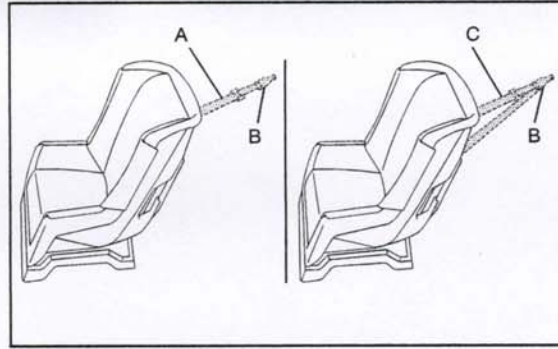
1-53

Lower Anchors



Lower anchors (A) are metal bars built into the vehicle. There are two lower anchors for each LATCH seating position that will accommodate a child restraint with lower attachments (B).

Top Tether Anchor



A top tether (A, C) anchors the top of the child restraint to the vehicle. A top tether anchor is built into the vehicle. The top tether attachment (B) on the child restraint connects to the top tether anchor in the vehicle in order to reduce the forward movement and rotation of the child restraint during driving or in a crash.

Your child restraint may have a single tether (A) or a dual tether (C). Either will have a single attachment (B) to secure the top tether to the anchor.

1-54


Some child restraints that have a top tether are designed for use with or without the top tether being attached. Others require the top tether always to be attached. In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached. Be sure to read and follow the instructions for your child restraint.


If the child restraint does not have a top tether, one can be obtained, in kit form, for many child restraints. Ask the child restraint manufacturer whether or not a kit is available.

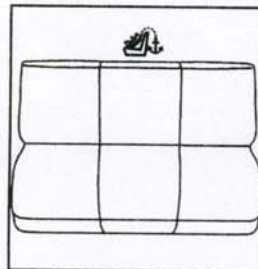
Lower Anchor and Top Tether Anchor Locations




Second Row

 (Top Tether Anchor): Seating positions with top tether anchors.

 (Lower Anchor): Seating positions with two lower anchors.



Third Row

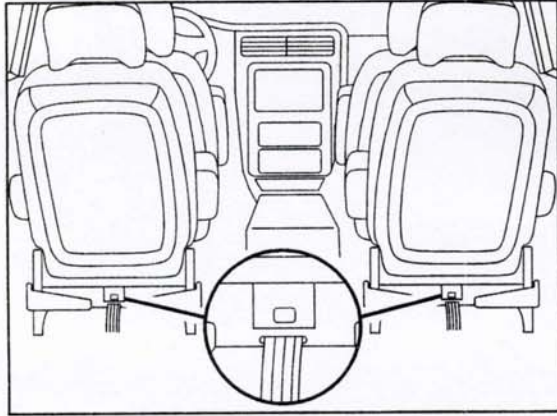
 (Top Tether Anchor): Seating positions with top tether anchors.



To assist you in locating the lower anchors, each seating position with lower anchors has two labels, near the crease between the seatback and the seat cushion.

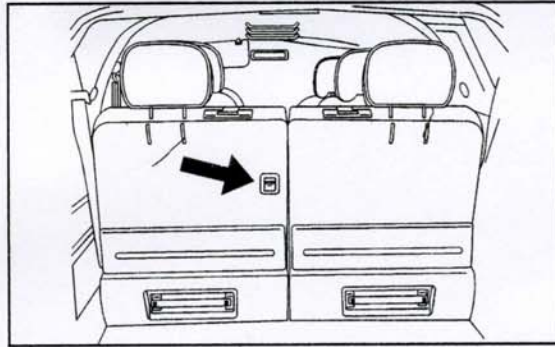
1-55

For the second row seating positions, the top tether anchors are located on the seatback, near the base of each seat. Be sure to use an anchor located on the same side of the vehicle as the seating position where the child restraint will be placed.



Second Row

For the center third row position, if your vehicle has one, the top tether anchor is located on the seatback, near the center of the third row seating position. This anchor can accommodate only one top tether.



Third Row

Do not secure a child restraint in a position without a top tether anchor if a national or local law requires that the top tether be attached, or if the instructions that come with the child restraint say that the top tether must be attached.

Accident statistics show that children are safer if they are restrained in the rear rather than the front seat. See *Where to Put the Restraint on page 1-52* for additional information.

1-56

Securing a Child Restraint Designed for the LATCH System

⚠ CAUTION:

If a LATCH-type child restraint is not attached to anchors, the child restraint will not be able to protect the child correctly. In a crash, the child could be seriously injured or killed. Install a LATCH-type child restraint properly using the anchors, or use the vehicle's safety belts to secure the restraint, following the instructions that came with the child restraint and the instructions in this manual.

⚠ CAUTION:

Do not attach more than one child restraint to a single anchor. Attaching more than one child restraint to a single anchor could cause the anchor or attachment to come loose or even break during a crash. A child or others could be injured. To reduce the risk of serious or fatal injuries during a crash, attach only one child restraint per anchor.

1-57

CAUTION:

Children can be seriously injured or strangled if a shoulder belt is wrapped around their neck and the safety belt continues to tighten. Buckle any unused safety belts behind the child restraint so children cannot reach them. Pull the shoulder belt all the way out of the retractor to set the lock, if your vehicle has one, after the child restraint has been installed.

Notice: Do not let the LATCH attachments rub against the vehicle's safety belts. This may damage these parts. If necessary, move buckled safety belts to avoid rubbing the LATCH attachments.

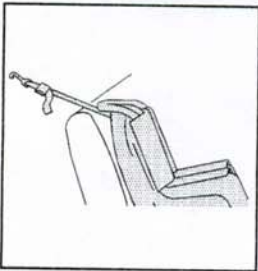
Do not fold the empty rear seat with a safety belt buckled. This could damage the safety belt or the seat. Unbuckle and return the safety belt to its stowed position.

1. Attach and tighten the lower attachments to the lower anchors. If the child restraint does not have lower attachments or the desired seating position does not have lower anchors, secure the child restraint with the top tether and the safety belts. Refer to your child restraint manufacturer instructions and the instructions in this manual.
 - 1.1. Find the lower anchors for the desired seating position.
 - 1.2. Put the child restraint on the seat.
 - 1.3. Attach and tighten the lower attachments on the child restraint to the lower anchors.

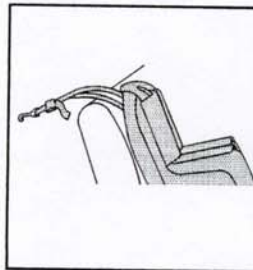
1-58

2. If the child restraint manufacturer recommends that the top tether be attached, attach and tighten the top tether to the top tether anchor, if equipped. Refer to the child restraint instructions and the following steps:

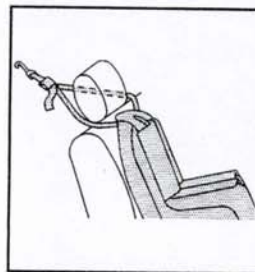
- 2.1. Find the top tether anchor.
- 2.2. Route, attach, and tighten the top tether according to your child restraint instructions and the following instructions:



If the position you are using does not have a headrest or head restraint and you are using a single tether, route the tether over the seatback.

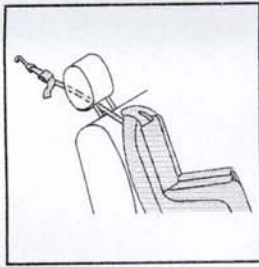


If the position you are using does not have a headrest or head restraint and you are using a dual tether, route the tether over the seatback.



If the position you are using has an adjustable headrest or head restraint and you are using a dual tether, route the tether around the headrest or head restraint.

1-59



If the position you are using has an adjustable headrest or head restraint and you are using a single tether, raise the headrest or head restraint and route the tether under the headrest or head restraint and in between the headrest or head restraint posts.

3. Push and pull the child restraint in different directions to be sure it is secure.

Securing a Child Restraint in a Rear Seat Position

When securing a child restraint in a rear seating position, study the instructions that came with the child restraint to make sure it is compatible with this vehicle.

If the child restraint has the LATCH system, see *Lower Anchors and Tethers for Children (LATCH)* on page 1-53 for how and where to install the child restraint using LATCH. If a child restraint is secured in the vehicle using a safety belt and it uses a top tether, *Lower Anchors and Tethers for Children (LATCH)* on page 1-53 for top tether anchor locations.

Do not secure a child seat in a position without a top tether anchor if a national or local law requires that the top tether be anchored, or if the instructions that come with the child restraint say that the top strap must be anchored.

In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached.

If the child restraint does not have the LATCH system, you will be using the safety belt to secure the child restraint in this position. Be sure to follow the instructions that came with the child restraint. Secure the child in the child restraint when and as the instructions say.

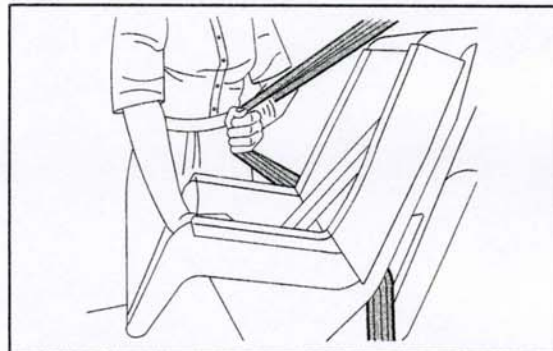
1-60

If more than one child restraint needs to be installed in the rear seat, be sure to read *Where to Put the Restraint* on page 1-52.

1. Put the child restraint on the seat.
2. Pick up the latch plate, and run the lap and shoulder portions of the vehicle's safety belt through or around the restraint. The child restraint instructions will show you how.

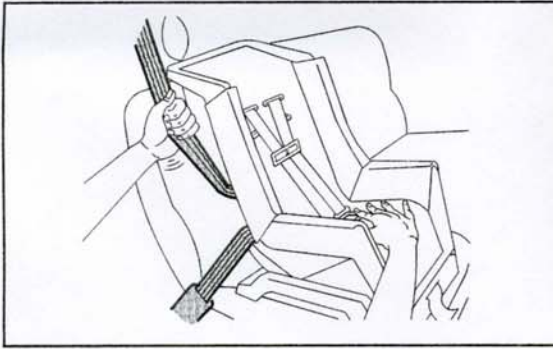


3. Push the latch plate into the buckle until it clicks. Position the release button on the buckle so that the safety belt could be quickly unbuckled if necessary.



4. Pull the rest of the shoulder belt all the way out of the retractor to set the lock.

1-61



5. To tighten the belt, push down on the child restraint, pull the shoulder portion of the belt to tighten the lap portion of the belt and feed the shoulder belt back into the retractor. When installing a forward-facing child restraint, it may be helpful to use your knee to push down on the child restraint as you tighten the belt.

6. If the child restraint has a top tether, follow the child restraint manufacturer's instructions regarding the use of the top tether. See *Lower Anchors and Tethers for Children (LATCH)* on page 1-53 for more information.
7. Push and pull the child restraint in different directions to be sure it is secure.

To remove the child restraint, unbuckle the vehicle safety belt and let it return to the stowed position. If the top tether is attached to a top tether anchor, disconnect it.

1-62

Securing a Child Restraint in the Right Front Seat Position

Your vehicle has airbags. A rear seat is a safer place to secure a forward-facing child restraint. See *Where to Put the Restraint* on page 1-52.

In addition, your vehicle has a passenger sensing system which is designed to turn off the right front passenger's frontal airbag and seat-mounted side impact airbag (if equipped) under certain conditions. See *Passenger Sensing System* on page 1-85 and *Passenger Airbag Status Indicator* on page 3-38 for more information on this, including important safety information.

A label on your sun visor says, "Never put a rear-facing child seat in the front." This is because the risk to the rear-facing child is so great, if the airbag deploys.

⚠ CAUTION:

A child in a rear-facing child restraint can be seriously injured or killed if the right front passenger airbag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating airbag. A child in a forward-facing child restraint can be seriously injured or killed if the right front passenger airbag inflates and the passenger seat is in a forward position.

Even if the passenger sensing system has turned off the right front passenger frontal airbag, no system is fail-safe. No one can guarantee that an airbag will not deploy under some unusual circumstance, even though it is turned off.

Secure rear-facing child restraints in a rear seat, even if the airbag is off. If you secure a forward-facing child restraint in the right front seat, always move the front passenger seat as far back as it will go. It is better to secure the child restraint in a rear seat.

See *Passenger Sensing System* on page 1-85 for additional information.

1-63

If your vehicle does not have a rear seat that will accommodate a rear-facing child restraint, we recommend that rear-facing child restraints not be transported in your vehicle, even if the airbag is off.

If your child restraint has the LATCH system, see *Lower Anchors and Tethers for Children (LATCH)* on page 1-53 for how to install your child restraint using LATCH. If you secure a child restraint using a safety belt and it uses a top tether, see *Lower Anchors and Tethers for Children (LATCH)* on page 1-53 for top tether anchor locations.

Do not secure a child seat in a position without a top tether anchor if a national or local law requires that the top tether be anchored, or if the instructions that come with the child restraint say that the top strap must be anchored.

In Canada, the law requires that forward-facing child restraints have a top tether, and that the tether be attached.

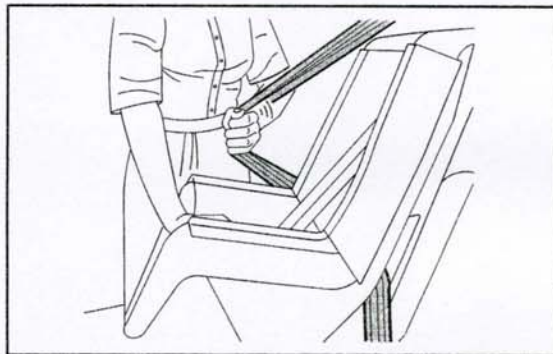
You will be using the lap-shoulder belt to secure the child restraint in this position. Follow the instructions that came with the child restraint.

1. Move the seat as far back as it will go before securing the forward-facing child restraint.
When the passenger sensing system has turned off the right front passenger's frontal airbag and seat-mounted side impact airbag (if equipped), the off indicator on the passenger airbag status indicator should light and stay lit when you start the vehicle. See *Passenger Airbag Status Indicator* on page 3-38.
2. Put the child restraint on the seat.
3. Pick up the latch plate, and run the lap and shoulder portions of the vehicle's safety belt through or around the restraint. The child restraint instructions will show you how.

1-64

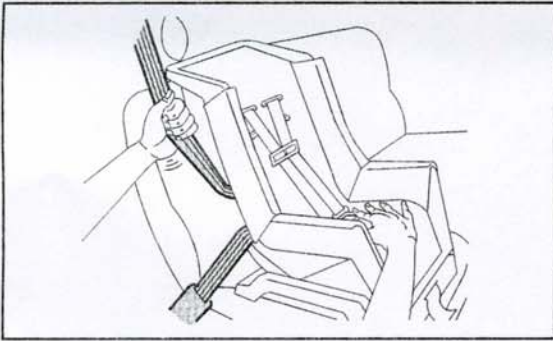


4. Push the latch plate into the buckle until it clicks. Make sure the release button is positioned so you would be able to unbuckle the safety belt quickly if necessary.



5. Pull the rest of the shoulder belt all the way out of the retractor to set the lock.

1-65



6. To tighten the belt, push down on the child restraint, pull the shoulder portion of the belt to tighten the lap portion of the belt and feed the shoulder belt back into the retractor. If you are using a forward-facing child restraint, you may find it helpful to use your knee to push down on the child restraint as you tighten the belt.
7. If your vehicle does not have a rear seat and your child restraint has a top tether, follow the child restraint manufacturer's instructions regarding the use of the top tether. See *Lower Anchors and Tethers for Children (LATCH)* on page 1-53 for more information.
8. Push and pull the child restraint in different directions to be sure it is secure.

1-66

If the airbag or airbags are off, the off indicator in the passenger airbag status indicator will come on and stay on when the vehicle is started.

If a child restraint has been installed and an indicator is lit, turn the vehicle off. Remove the child restraint from the vehicle and reinstall the child restraint.

If, after reinstalling the child restraint and restarting the vehicle, the on indicator is still lit, is still not lit, check to make sure that the vehicle's seatback is not pressing the child restraint into the seat cushion. If this happens, slightly recline the vehicle's seatback and adjust the seat cushion if possible. Also make sure the child restraint is not trapped under the vehicle head restraint. If this happens, adjust the head restraint.

Remove any additional material from the seat such as blankets, cushions, seat covers, seat heaters or seat massagers before reinstalling or securing the child restraint.

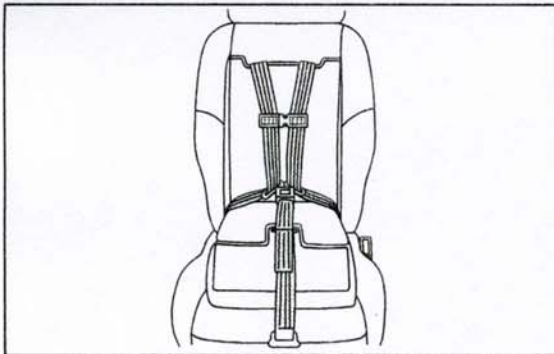
If the off symbol is still not lit, secure the child in the child restraint in a rear seat position in the vehicle, if one is available, and check with your dealer/retailer.

To remove the child restraint, unbuckle the vehicle's safety belt and let it go back all the way. If the top tether is attached to a top tether anchor, disconnect it.

Built-In Child Restraint

WARNING! DEATH or SERIOUS INJURY can occur:

- Follow all instruction on the child restraint and in the vehicle's owner's manual.



If your vehicle has this feature, the built-in child restraint is located in the passenger-side position in the second row.

This child restraint system conforms to all applicable Federal Motor Vehicle Safety Standards.

Use only with children who weigh between 22 and 40 lbs (10 and 18 kg) and whose height is between 33.5 and 40 in (850 and 1 016 mm). Use only with children whose shoulders are below the shoulder belt slots for the harness system and who are capable of sitting upright alone.

The child should also be at least one year old. It is important to use a rear-facing infant restraint until the child is at least one year old. A rear-facing restraint gives the infant's head, neck and body the support they would need in a crash. See *Older Children* on page 1-43 or *Infants and Young Children* on page 1-46.

1-67

A child whose weight is over 40 lbs (18 kg), whose height is over 40 in (1 016 mm) or whose shoulders are above the shoulder belt slots for the harness system, should be restrained in an add-on booster seat appropriate for the child's size. See *Child Restraint Systems* on page 1-49. Once the booster seat is outgrown, the child should sit on the vehicle's regular seat and use the vehicle's safety belts.

⚠ CAUTION:

Using the vehicle's built-in child restraint as a booster seat for a larger child could cause injury to the child in a sudden stop or crash. A child whose weight is over 40 lbs (18 kg), whose height is over 40 in (1 016 mm) or whose shoulders are above the shoulder belt slots for the harness system should use a restraint system that is appropriate for their size, either an add-on booster seat or the vehicle's safety belt. See *Child Restraint Systems* on page 1-49 or *Older Children* on page 1-43.

Securing a Child in the Built-In Child Restraint

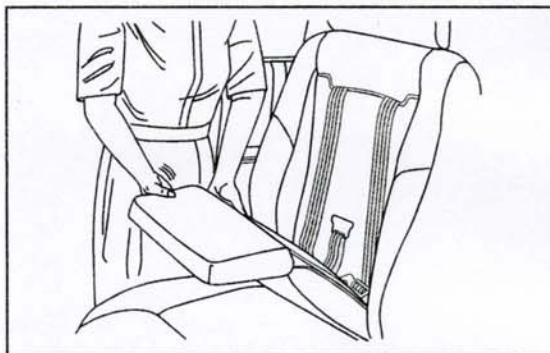


1. Raise the head restraint until the lower edge of the head restraint is even with the top of the seatback.

1-68

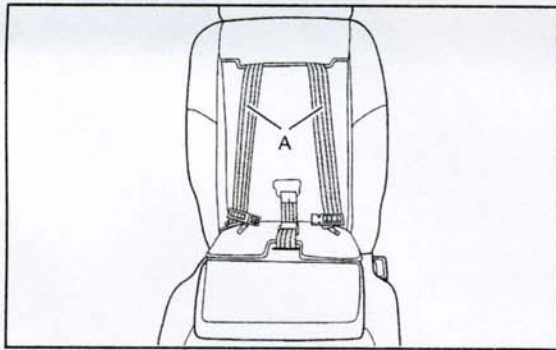


2. Rotate the head restraint rearward until it touches the top of the seatback. Make sure there is no gap between the lower edge of the head restraint and the top of the seatback.



3. Lower the child restraint cushion.

1-69



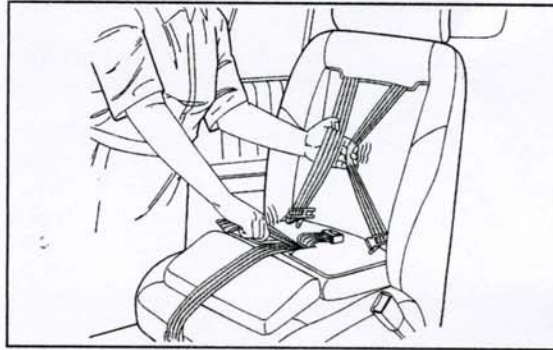
You will be using the child restraint's harness (A) to secure your child. Do not use the vehicle's safety belts.

⚠ CAUTION:

Using the vehicle's regular safety belts on a child seated on the built-in child restraint cushion can cause serious injury to the child in a sudden stop or crash. Secure the child using the built-in child restraint's harness.

WARNING: FAILURE TO FOLLOW THE MANUFACTURER'S INSTRUCTIONS ON THE USE OF THIS CHILD RESTRAINT SYSTEM CAN RESULT IN YOUR CHILD STRIKING THE VEHICLE'S INTERIOR DURING A SUDDEN STOP OR CRASH.

SNUGLY ADJUST THE BELTS PROVIDED WITH THIS CHILD RESTRAINT AROUND YOUR CHILD.



- Before placing the child in the child restraint, add slack to the shoulder harness. Pull the black shoulder harness release strap firmly. At the same time pull both shoulder harness straps through the slots in the seatback as shown.

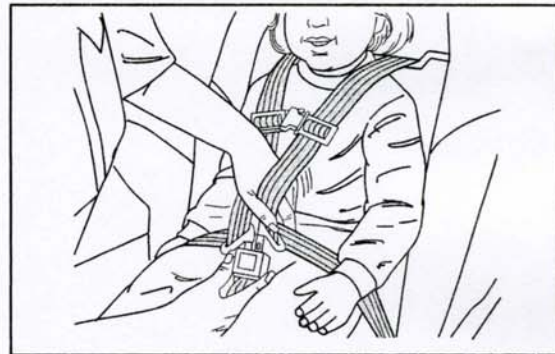
1-70

- Place the child on the child restraint cushion.



- Select only one side of the harness. Place the harness over the child's shoulder.
- Push the latch plate (A) into the buckle until it clicks. Be sure the buckle is free of any foreign objects that may prevent you from securing the latch plates. If you can not secure a latch plate, see your dealer/retailer for service before using the child restraint.

- Place the other side of the harness over the child's shoulder.
- Push the latch plate into the buckle until it clicks.



- Pull up on the latch plates to make sure they are secure.

1-71



⚠ CAUTION:

A built-in child restraint harness that is not properly adjusted can cause injury to the child in a sudden stop or collision. A harness that is loose, twisted, worn improperly or improperly fastened will not be able to restrain the child's upper body. Make sure the harness is adjusted correctly. Fastening the clip is not a substitute for adjusting the harness so that it is snug.

11. Now fasten the left and right halves of the shoulder harness clip together. The clip can be easily pulled apart and is designed to pull apart during a collision.

1-72



12. Pull the shoulder harness adjustment strap (A) firmly until the harness is snugly adjusted around the child. You should not be able to put more than two fingers between the harness and the child's chest. Make sure the harness and buckle strap are not twisted.

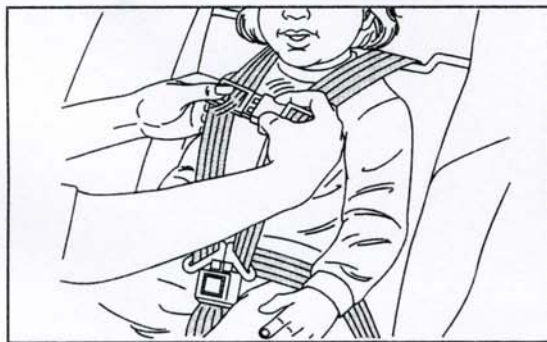


13. Adjust the position of the harness on the child's shoulder by moving the clip along the harness until it is level with the child's armpits. On each side of the harness, the shoulder part should be centered on the child's shoulder. The harness should be away from the child's face and neck, but not falling from the child's shoulders.

If you expect that the child will sleep while riding, you can recline the seatback. See *Bucket Seats* on page 1-6.

1-73

Removing the Child from the Built-In Child Restraint



1. Unfasten the shoulder harness clip.

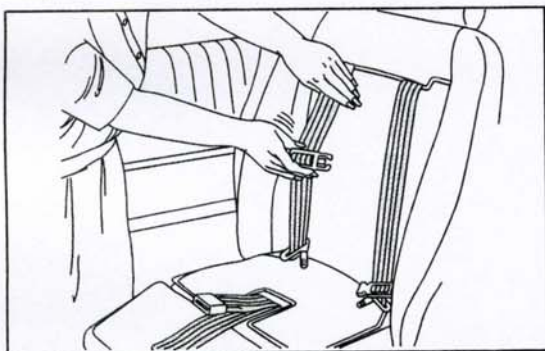


2. Unlatch the harness by pushing the button on the buckle.
3. Move one side of the harness off the child's shoulder.
4. Move the other side of the harness off the child's shoulder.
5. Remove the child from the child restraint cushion.

1-74

Storing the Built-In Child Restraint

Always properly store the built-in child restraint before using the vehicle's lap-shoulder belt.



1. Move both latch plates and both sides of the shoulder harness clip to the bottom of the harness straps.

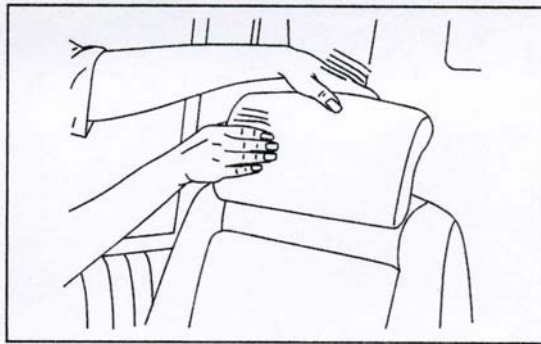


2. Fold the child restraint cushion and leg rest up into the seatback.
3. Press the child restraint cushion firmly into the seatback.

1-75



4. Then press the leg rest firmly into the seatback, and secure it by pressing the upper corners against the fastener strips on the seatback.



5. Rotate the head restraint forward and push it all the way down.

Just like the other restraint systems in your vehicle, your built-in child restraint needs to be periodically checked and may need to have parts replaced after a crash. See *Checking the Restraint Systems* on page 1-92 and *Replacing Restraint System Parts After a Crash* on page 1-93.

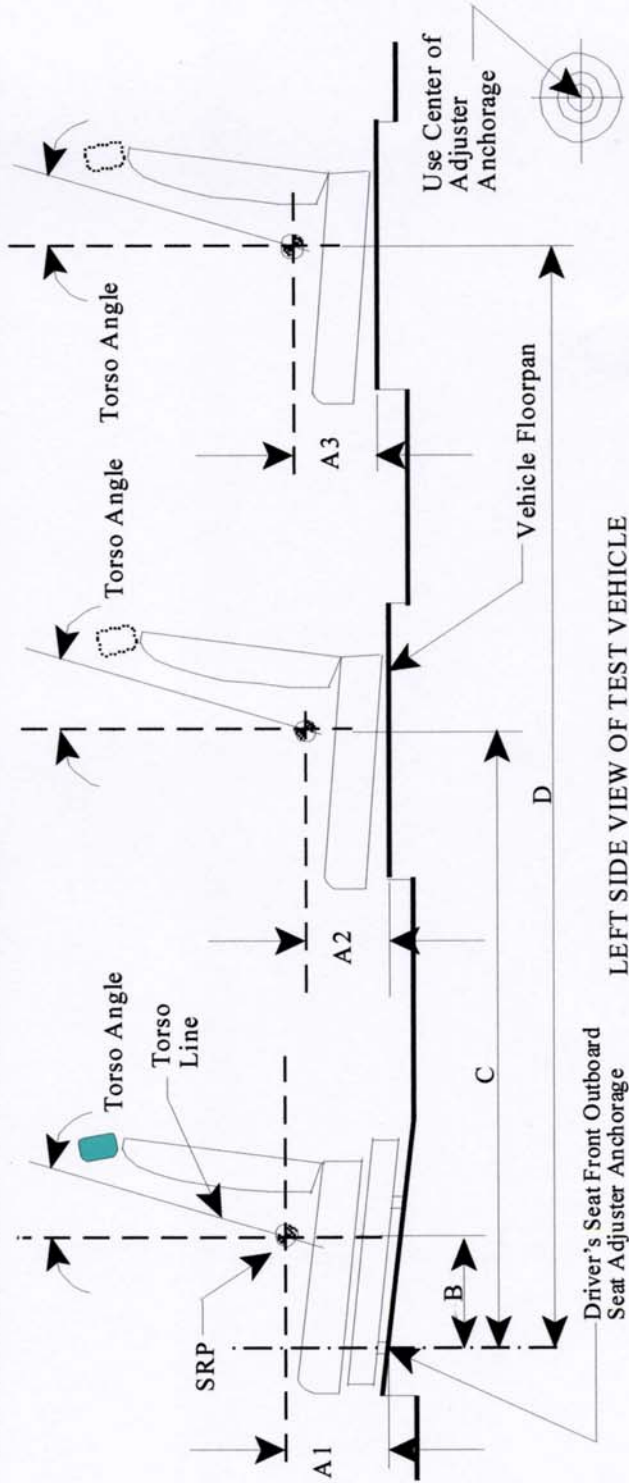
APPENDIX B
MANUFACTURER'S DATA

SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA

FMVSS No. 225
(All dimensions in mm¹)

MODEL YEAR: __2008__ / MAKE: CHEVY / MODEL: __UPLANDER__ / BODY STYLE: __Regular and extended wheel base

SEAT STYLE: FRONT ROW: bucket seats / SECOND ROW: regular and extended standard, removable modular buckets, extended wheel base LT removable captain's chairs with armrests / THIRD ROW: 50/50 split folding seat



LEFT SIDE VIEW OF TEST VEHICLE

Table 1. Seating Positions¹ and Torso Angles

	Left (Driver Side)	Center (if any)	Right
A1	307.4 mm	N/A	307.4 mm
A2	319.7 mm	N/A	319.7 mm
A3	323.3 mm	323.3 mm	323.3 mm
B	212.2 mm	N/A	212.2 mm
.C	1052.2 mm	N/A	1052.2 mm
D	1884.2 mm	1884.2 mm	1884.2 mm
Torso Angle (degree)	22°	N/A	22°
	Front Row		
	Second Row	21.° bucket/23.3 captain	21.° bucket/23.3 captain
	Third Row	21.°	21.°

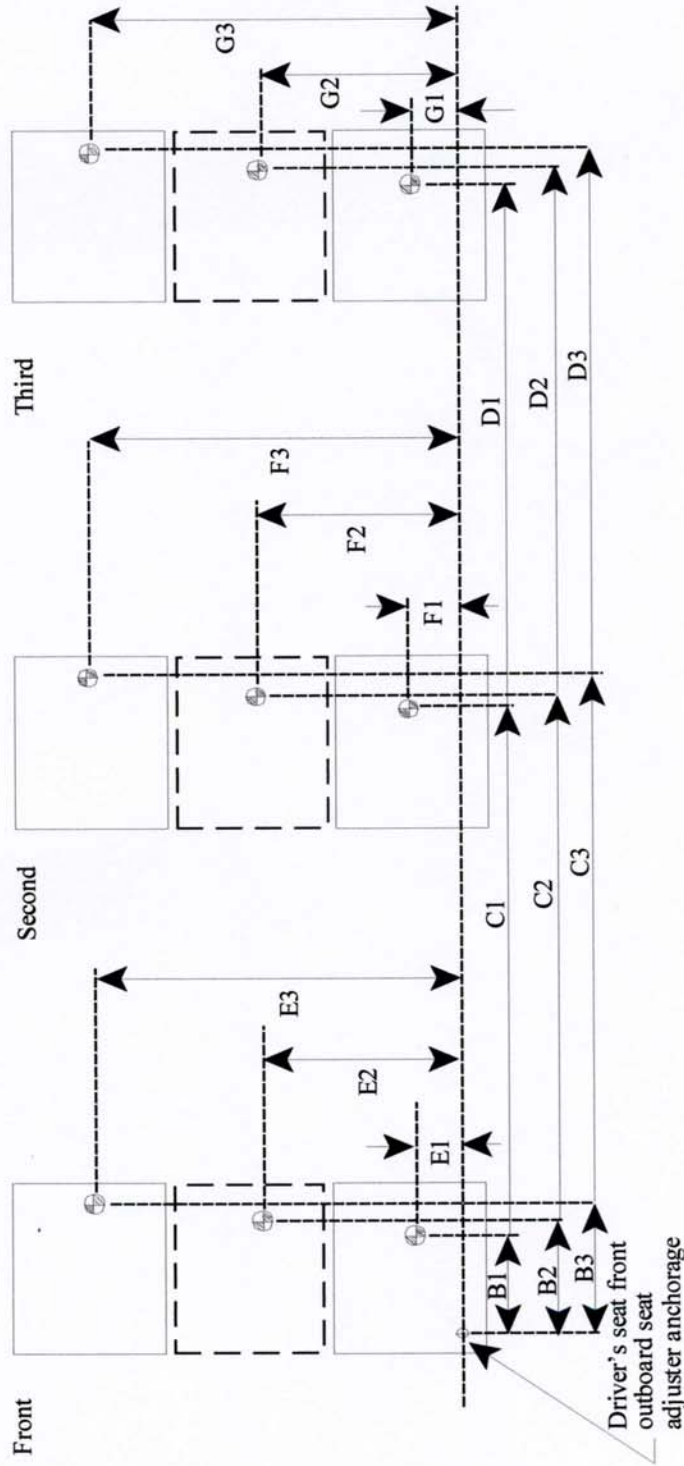
Note: All dimensions are in mm. If not, provide the unit used.

SEATING REFERENCE POINT

FMVSS No. 225
(All dimensions in mm)

MODEL YEAR: __2008__ / MAKE: CHEVY / MODEL: __UPLANDER__ / BODY STYLE: __Regular and extended wheel base

SEAT STYLE: FRONT ROW: bucket seats / SECOND ROW: regular and extended standard, removable modular buckets, extended wheel base LT removable captain's chairs with armrests/ THIRD ROW: 50/50 split folding seat



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Table 2. Seating Reference Point and Tether Anchorage Locations

Seating Reference Point (SRP)		Distance from Driver's front outboard seat adjuster anchorage ¹
Front Row	B1	212.2 mm
	E1	173 mm
	B2	N/A
	E2	N/A
	B3	212.2 mm
	E3	963 mm
Second Row Captain Chairs	C1	1052.2 mm
	F1	97 mm
	C2	1052.2 mm
	F2	1039 mm
Second Row Modular buckets	C1	1052.2 mm
	F1	97 mm
	C2	1052.2 mm
	F2	568 mm
Third Row	D1	1884.2 mm
	G1	206.1 mm
	D2	1884.2 mm
	G2	568 mm
	D3	1884.2 mm
	G3	930 mm

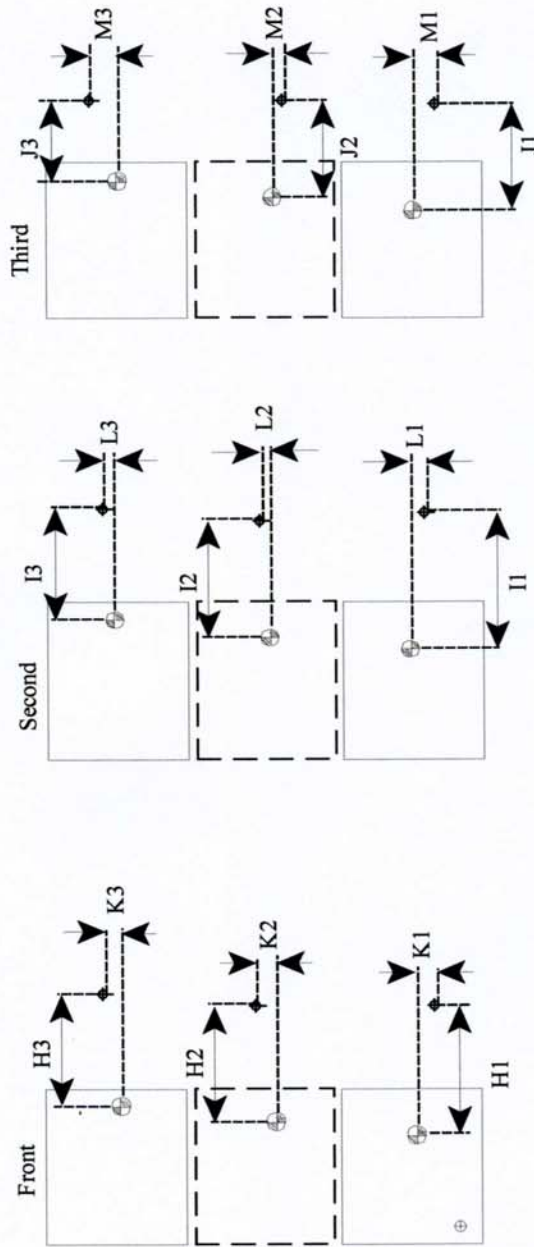
Note: Use the center of anchorage.

TETHER ANCHORAGE LOCATIONS

FMVSS No. 225
(All dimensions in mm)

MODEL YEAR: __2008_ / MAKE: CHEVY / MODEL: __UPLANDER_ / BODY STYLE: _Regular and extended wheel base

SEAT STYLE: FRONT ROW: bucket seats / SECOND ROW: regular and extended standard, removable modular buckets, extended wheel base LT removable captain's chairs with armrests/ THIRD ROW: 50/50 split folding seat



⊕: SRP
⊕: Tether anchorage

Note: The location shall be measured at the center of anchorage.

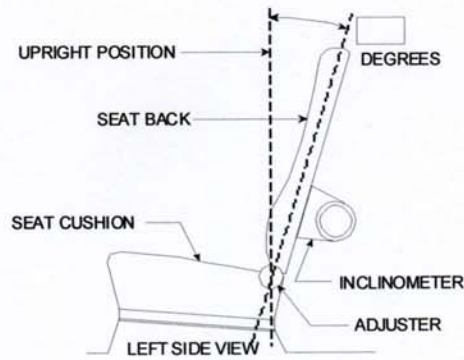
Table 3. Seating Reference Point and Tether Anchorage Locations

Seating Reference Point (SRP)	Distance from SRP	
Front Row	H1	N/A
	K1	N/A
	H2	N/A
	K2	N/A
	H3	N/A
	K3	N/A
Second Row Captain and modular buckets	I1	224.9 mm
	L1	0.0 mm
	I2	N/A
	L2	N/A
	I3	224.9 mm
	L3	0.0 mm
Third Row	J1	N/A
	M1	N/A
	J2	295.7mm
	M2	26.9 mm
	J3	N/A
	M3	N/A

Note: Use the center of anchorage.

NOMINAL DESIGN RIDING POSITION

For adjustable driver, passenger, 2nd row and 3rd row seat backs, describe how to position the inclinometer to measure the seat back angle. Include a description of the location of the seat back adjustment latch detent if applicable. Indicate if applicable, how the detents are numbered (Is the first detent "0" or "1"?). Indicate if the seat back angle is measured with the dummy in the seat.



Seat back angle for driver's seat = 22.5 degrees.

Measurement Instructions:

 Inclinometer placed on the outboard of the seat back structure

Seat back angle for passenger's seat = 22.5 degrees.

Measurement Instructions:

 Inclinometer placed on the outboard of the seat back structure

Seat back angle for 2nd row seat = 23.3 degrees for captain seat, 21.1 degrees for bucket.

Measurement Instructions:

 Inclinometer placed on the outboard of the seat back structure

Seat back angle for 3rd row seat = 21.1 degrees.

Measurement Instructions:

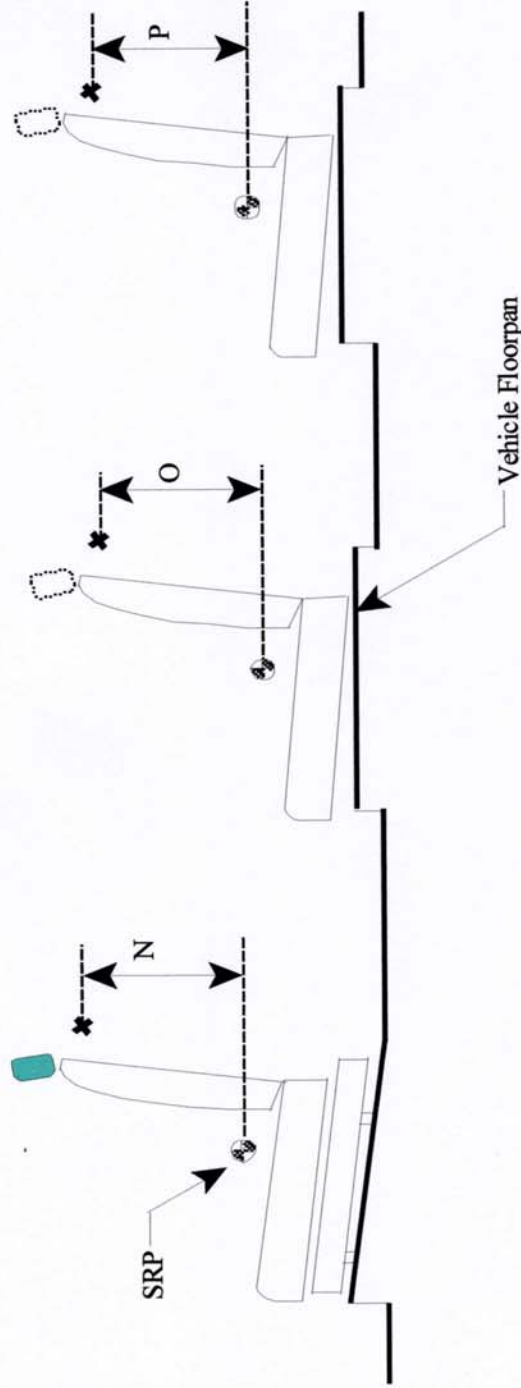
 Inclinometer placed on the outboard of the seat back structure

TETHER ANCHORAGE LOCATIONS - VERTICAL

FMVSS No. 225
(All dimensions in mm)

MODEL YEAR: __2008__ / MAKE: CHEVY / MODEL: __UPLANDER__ / BODY STYLE: __Regular and extended wheel base

SEAT STYLE: FRONT ROW: bucket seats / SECOND ROW: regular and extended standard, removable modular buckets, extended wheel base LT removable captain's chairs with armrests / THIRD ROW: 50/50 split folding seat



LEFT SIDE VIEW OF TEST VEHICLE

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Table 4. Vertical Dimension For The Tether Anchorage

Seating Row	Vertical Distance from Seating Reference Point	
Front Row	N1 (Driver)	N/A
	N2 (Center)	N/A
	N3 (Right)	N/A
Second Row	O1 (Left)	- 127.9 mm
	O2 (Center)	N/A
	O3 (Right)	- 127.9 mm
Third Row	P1 (Left)	N/A
	P2 (Center)	225.5 mm
	P3 (Right)	N/A

Note: All dimensions are in mm. If not, provide the unit anchorage.

For each vehicle, provide the following information:

How many designated seating positions exist in the vehicle? There are seven designated seating positions.

1. How many designated seating positions are equipped with lower anchorages and tether anchorages? Specify which position(s). There are two seating positions with both lower anchorages and upper tethers. The second row captain and bucket seats have latch in both seating positions, there is an optional integral child seat for the passenger side.
2. How many designated seating positions are equipped with tether anchorages? Specify which positions(s).

There are three designated seating positions with tethers. They exist for both second row seating options as well as in the third row center position.

3. Lower Anchorages Marking and Conspicuity: Whether the anchorages are certified to S9.5(a) or S9.5(b) of FMVSS No. 225.
The lower anchors are marked and conform to S9.5(a).

APPENDIX C
PLOTS

GTL 6048, NHTSA C80109.

225, Child Restraint, Top Tether, Pass.

