REPORT NUMBER 225-GTL-08-008

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

MITSUBISHI MOTORS CORPORATION
2008 MITSUBISHI LANCER, PASSENGER CAR
NHTSA NO. C85603

GENERAL TESTING LABORATORIES, INC.
1623 LEEDSTOWN ROAD
COLONIAL BEACH, VIRGINIA 22443

November 14, 2008

FINAL REPORT

PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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FINAL REPORT ACCEPTANCE BY OVSC:

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16. Abstract Compliance tests were conducted on the subject, 2008 Mitsubishi Lancer Passenger Car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-225-01 for the determination of FMVSS 225 compliance. Test failures identified were as follows: None		
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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF COMPLIANCE TEST

A 2008 Mitsubishi Lancer Passenger Car 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 Mitsubishi Lancer Passenger Car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: JA3AU16U08U036749

B. NHTSA No.: C85603

C. Manufacturer: MITSUBISHI MOTORS CORPORATION

D. Manufacture Date: OCT 2007

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing during the time period October 21-27, 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 Mitsubishi Lancer Passenger Car 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 Mitsubishi Lancer Passenger Car.

DATA SHEET 1
SUMMARY OF RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 21-27, 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	X	
DSP b	X	
DSP c	X	

C. LOCATION OF TETHER ANCHORAGES

	PASS	FAIL
DSP a	X	
DSP b	X	
DSP c	X	

D. LOWER ANCHORAGE DIMENSIONS

	PASS	FAIL
DSP a	X	
DSP b	N/A	N/A
DSP c	X	

DATA SHEET 1 CONTINUED
SUMMARY OF RESULTS

E. CONSPICUITY AND MARKING OF LOWER ANCHORAGES

	PASS	FAIL
DSP a	X	
DSP b	N/A	N/A
DSP c	X	

F. STRENGTH OF TETHER ANCHORAGES

	PASS	FAIL
DSP a	X	
DSP b	X	
DSP c	N/A	N/A

G. STRENGTH OF LOWER ANCHORAGES (Forward Force)

	PASS	FAIL
DSP a	N/A	N/A
DSP b	N/A	N/A
DSP c	X	

H. STRENGTH OF LOWER ANCHORAGE (Lateral Force)

	PASS	FAIL
DSP a	N/A	N/A
DSP b	N/A	N/A
DSP c	N/A	N/A

I. OWNER'S MANUAL PASS: X FAIL:

REMARKS:

NOTE:

RECORDED BY: G. Farrand DATE: 10/27/08
APPROVED BY: D. Messick

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

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 21, 2008
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

Number of rows of seats: 2
Number of rear, forward-facing designated seating positions: 3
Number of required CRAS (lower anchorages only, for convertibles/school buses): 2
Number of required tether anchorages (can be additional CRAS): 3
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: 2

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)?
YES
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): 3

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))

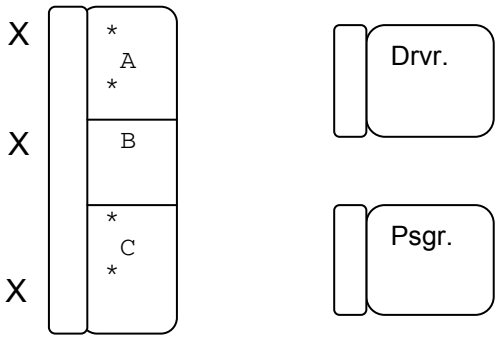
If the vehicle has 3 or more rear dsps and a non-outboard dsp, is a tether anchorage or CRAS provided at a non-outboard dsp? YES

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 = Top Tether
***** = Lower Anchors

RECORDED BY: G. Farrand DATE: 10/21/08

APPROVED BY: D. Messick

DATA SHEET 3
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 21, 2008
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 LEFT, RIGHT AND CENTER POSITIONS

Detailed description of the location of the tether anchorage:
LOCATED ON HAT SHELF BEHIND SEAT BACK.

Based on visual inspection, is the tether anchorage within the shaded zone? YES
If YES = PASS, skip to next section
If NO, After constructing the shaded zone, is the tether anchorage within the shaded zone?

If YES = PASS, skip to next section
If NO, Is it possible to locate a tether anchorage within the shaded zone without removing a seating component?
If YES = FAIL (S6.2.1)
If NO, Is a tether routing device provided?
If YES = PASS
IF NO = FAIL (S6.2.1.2)

Is the tether anchorage recessed? YES
If NO, skip to next question
If YES, is it outside of the tether strap wraparound area? YES
YES = PASS NO = FAIL (S6.2.1)

Does the tether anchorage permit attachment of a tether hook? YES
YES = PASS NO = FAIL (S6.1(a))

Is the tether anchorage accessible without the need for any tools other than a screwdriver or coin?
YES
YES = PASS NO = FAIL (S6.1(b))

After the tether anchorage is accessed, is it ready for use without the need for tools? YES
YES = PASS NO = FAIL (S6.1(c)

Is the tether anchorage sealed to prevent the entry of exhaust fumes into the passenger compartment? YES
YES = PASS NO = FAIL (S6.1(d))

If the DSP has a tether routing device, is it flexible or rigid? N/A

DATA SHEET 3 CONTINUED

DESIGNATED SEATING POSITION: ROW 2 LEFT, RIGHT AND CENTER POSITIONS

If the DSP has a flexible tether routing device, after installing SFAD2 record the tether strap tension:
N/A (Must be 60 N ± 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. Farrand DATE: 10/21/08

APPROVED BY: D. Messick

DATA SHEET 4
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 21, 2008
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

Outboard Lower Anchorage bar diameter: 6.01 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 6.01 mm
6mm ± 0.1mm = PASS Other size = FAIL (S9.1.1(a))

Are the bars straight, horizontal and transverse? YES
YES = PASS NO = FAIL

Length of the straight portion of the bar (outboard lower anchorage): 28 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 28 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 34 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 34 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 12.7°
Angle = 15º±10º = PASS Angle≠15º±10º = FAIL (S9.2.1)

CRF Roll angle: 0.2°
Angle = 0º±5º = PASS Angle≠0º±5º = FAIL (S9.2.1)

CRF Yaw angle: 0.0°
Angle = 0º±10º = PASS Angle≠0º±10º = FAIL (S9.2.1)

Distance between point Z on the CRF and the front surface of outboard anchor bar: 30 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 30 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

DATA SHEET 4 CONTINUED

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

Distance between SgRP and the front surface of outboard anchor bar: 164 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 162 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Based on visual observation, would a 100 N load cause the anchor bar to deform more than 5 mm?
NO

If NO = PASS
If YES = FAIL (S9.1.1(g)), Provide further description of the attachment of the anchor bar:

COMMENTS:

RECORDED BY: G. Farrand DATE: 10/21/08

APPROVED BY: D. Messick

DATA SHEET 4A
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 21, 2008
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Outboard Lower Anchorage bar diameter: 6.02 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 6.01 mm
6mm ± 0.1mm = PASS Other size = FAIL (S9.1.1(a))

Are the bars straight, horizontal and transverse? YES
YES = PASS NO = FAIL

Length of the straight portion of the bar (outboard lower anchorage): 28 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 28 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 34 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 34 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 12.4°
Angle = 15º±10º = PASS Angle≠15º±10º = FAIL (S9.2.1)

CRF Roll angle: 0.2°
Angle = 0º±5º = PASS Angle≠0º±5º = FAIL (S9.2.1)

CRF Yaw angle: 0.0°
Angle = 0º±10º = PASS Angle≠0º±10º = FAIL (S9.2.1)

Distance between point Z on the CRF and the front surface of outboard anchor bar: 30 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 30 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

DATA SHEET 4A CONTINUED

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Distance between SgRP and the front surface of outboard anchor bar: 160 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 158 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Based on visual observation, would a 100 N load cause the anchor bar to deform more than 5 mm?
NO

If NO = PASS
If YES = FAIL (S9.1.1(g)), Provide further description of the attachment of the anchor bar:

COMMENTS:

RECORDED BY: G. Farrand DATE: 10/21/08

APPROVED BY: D. Messick

DATA SHEET 5
CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 21, 2008
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 LEFT AND RIGHT SIDE (DSP A AND C)

MARKING (Circles)

Diameter of the circle: 15.0 mm
Diameter ≥13mm = PASS Diameter <13mm = FAIL (S9.5(a)(1))

Does the circle have words, symbols or pictograms? PICTOGRAM
NO skip to next question
YES, are the meaning of the words, symbols or pictograms explained in the owner's manual? YES
YES = PASS NO = FAIL (S9.5(a)(2))

Where is the circle located? Seat back or seat Cushion: Seat Back

For circles on seat backs, vertical distance from the center of the circle to the center of the anchor bar: 60 mm
Distance between 50&100mm = PASS Other Distance=FAIL (S9.5(a)(3))

For circles on seat cushions, horizontal distance from the center of the circle to the center of the bar: N/A
Distance between 75&125mm= PASS Other Distance=FAIL (S9.5(a)(3))

Lateral distance from the center of the circle to the center of the anchor bar: 0 mm
Distance≤25mm = PASS Distance >25mm = FAIL (S9.5(a)(3))

CONSPICUITY (No Circles)

Is the anchor bar or guide visible when viewed from a point 30º above the horizontal in a vertical longitudinal plane bisecting the anchor bar or guide? N/A
YES = PASS NO = FAIL (S9.5(b))

If there is a guide, is it permanently attached? N/A
YES = PASS NO = FAIL (S9.5(b))

DATA SHEET 5 CONTINUED

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE AND RIGHT SIDE (DSP A & C)

Is there a cap or cover over the anchor bar? N/A

If YES, Is the cap or cover marked with words, symbols or pictograms? _____

If NO = FAIL (S9.5(b))

If YES, is the meaning of the words, symbols or pictograms explained in the owner's manual?

YES = PASS NO = FAIL (S9.5(b))

If NO, there are no requirements for having a cover.

RECORDED BY: G. Farrand DATE: 10/27/08

APPROVED BY: D. Messick

DATA SHEET 6
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 27, 2008
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 6100

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

SFAD: 2

Seat Back Angle: 26º

Location of seat back angle measurement: 2D Template

Head Restraint Position: REMOVED

D-ring Position: N/A

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

Lap belt tension: N/A (SFAD 1 only)

Tether strap tension: 60 N

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

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

Force application rate: 575 N/S

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

Maximum force (14,950 N ± 50 N): 14,905 N

Tested simultaneously with another DSP? NO

COMMENTS:

RECORDED BY: G. FARRAND DATE: 10/27/08

APPROVED BY: D. MESSICK

DATA SHEET 6A
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 27, 2008
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 6102

DESIGNATED SEATING POSITION: ROW 2 CENTER (DSP B)

SFAD: 1

Seat Back Angle: 26º

Location of seat back angle measurement: 2D Template

Head Restraint Position: REMOVED

D-ring Position: N/A

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

Lap belt tension: 60 N (SFAD 1 only)

Tether strap tension: 60 N

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

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

Force application rate: 575 N/S

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

Maximum force (14,950 N ± 50 N): 14,923 N

Tested simultaneously with another DSP? NO

COMMENTS:

RECORDED BY: G. FARRAND DATE: 10/27/08

APPROVED BY: D. MESSICK

DATA SHEET 7
STRENGTH OF LOWER ANCHORAGES (Forward Force)

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 27, 2008
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 6101

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Seat Back Angle: 26º

Location of seat back angle measurement: 2D Template

Head Restraint Position: N/A

Force at lower front crossmember for SFAD2 while tightening rearward extensions: 135 N

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

Force application rate: 423 N/S

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

Maximum force (14,950 N ± 50 N): 10,999 N

Displacement, H1 (at 500N): 0

Displacement, H2 (at maximum load): 48.2 mm

Displacement of Point X: 48.2 mm (H2-H1)
Displacement > 175 mm = FAIL (S9.4.1(a))

Tested simultaneously with another DSP? NO

Distance between adjacent DSP's: 355 mm

COMMENTS:

RECORDED BY: G. FARRAND DATE: 10/27/08

APPROVED BY: D. MESSICK

DATA SHEET 8
OWNER'S MANUAL

VEH. MOD YR/MAKE/MODEL/BODY: 2008 MITSUBISHI LANCER PASSENGER CAR
VEH. NHTSA NO: C85603; VIN: JA3AU16U08U036749
VEH. BUILD DATE: OCT 2007; TEST DATE: OCTOBER 21, 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: YES

PASS X FAIL

Step-by-step instructions for properly attaching a child restraint system's tether strap to the tether anchorage. Diagrams are required. YES

PASS X FAIL

Description of how to properly use the tether anchorage and lower anchor bars: YES

PASS X FAIL

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

PASS X FAIL

COMMENTS:

RECORDED BY: G. Farrand DATE: 10/21/08

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 MITSUBISHI LANCER
NHTSA NO. C85603
FMVSS NO. 225

FIGURE 5.1
LEFT SIDE VIEW OF VEHICLE

2008 MITSUBISHI LANCER
NHTSA NO. C85603
FMVSS NO. 225

FIGURE 5.2
RIGHT SIDE VIEW OF VEHICLE

2008 MITSUBISHI LANCER
NHTSA NO. C85603
FMVSS NO. 225

FIGURE 5.3
¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE

2008 MITSUBISHI LANCER
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FIGURE 5.4
¾ REAR VIEW FROM RIGHT SIDE OF VEHICLE

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FIGURE 5.5
CLOSE-UP VIEW OF VEHICLE CERTIFICATION LABEL

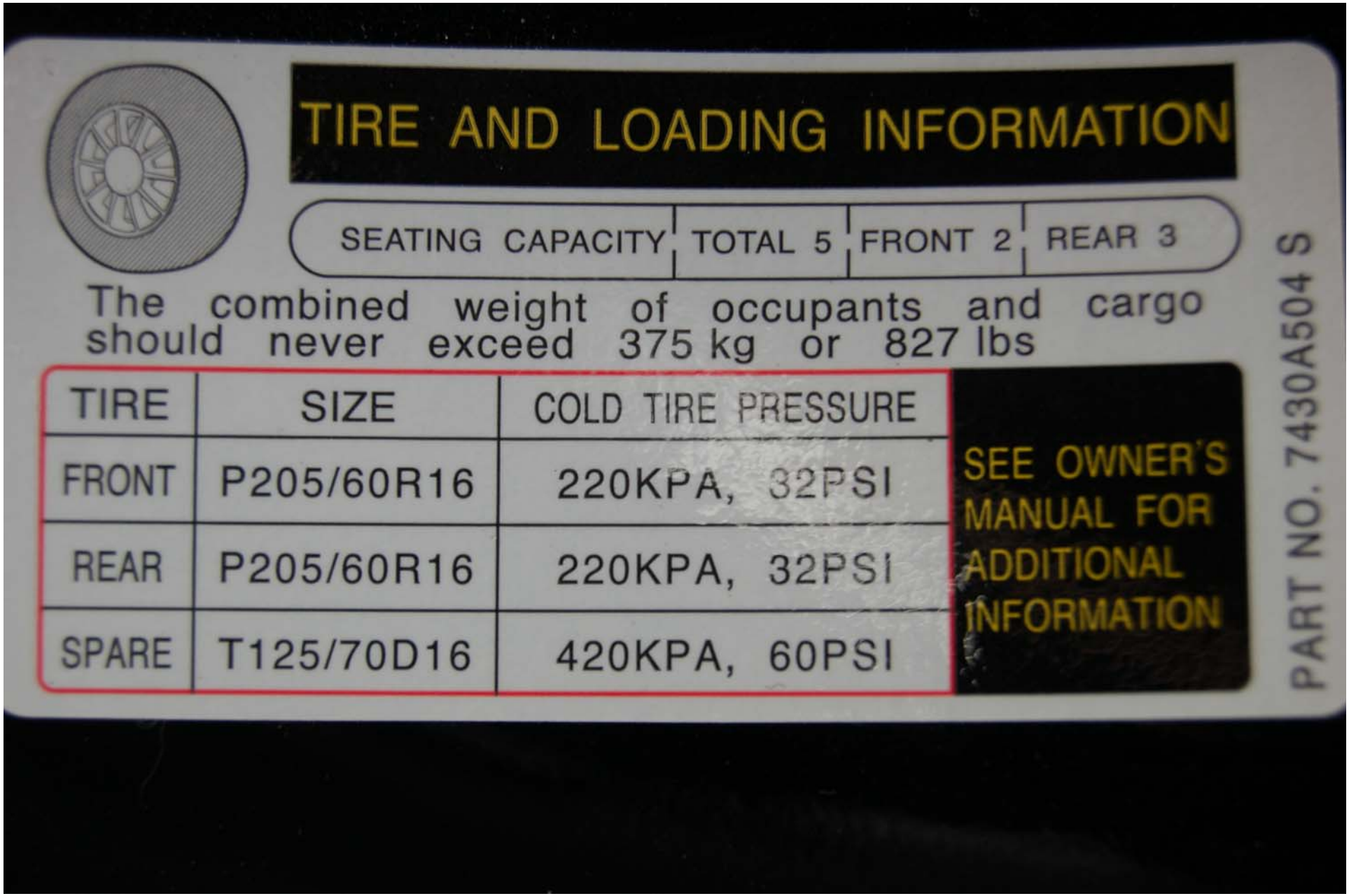

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FIGURE 5.6
CLOSE-UP VIEW OF VEHICLE TIRE INFORMATION LABEL

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FIGURE 5.7
VISIBILITY OF LOWER ANCHORS

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FIGURE 5.8
ROW 2, LEFT SIDE OUTBOARD LOWER ANCHOR

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FIGURE 5.9
ROW 2, LEFT SIDE, INBOARD LOWER ANCHOR PRE-TEST

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FIGURE 5.10
ROW 2, LEFT SIDE, TOP TETHER ANCHOR PRE-TEST

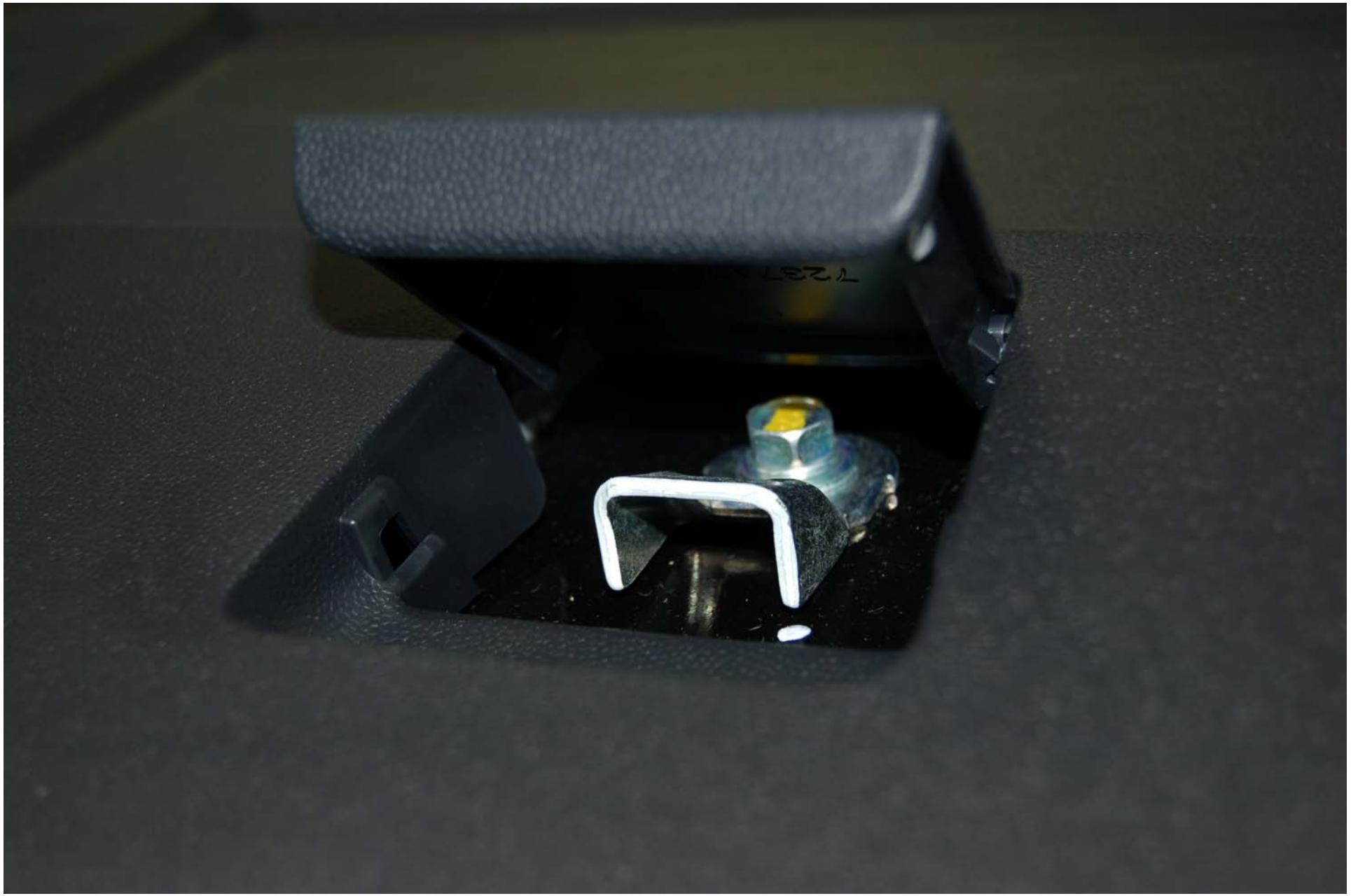

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FIGURE 5.11
ROW 2, CENTER, TOP TETHER ANCHOR PRE-TEST

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FIGURE 5.12
ROW 2, RIGHT SIDE INBOARD LOWER ANCHOR
PRE-TEST

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FIGURE 5.13
ROW 2, RIGHT SIDE OUTBOARD LOWER ANCHOR
PRE-TEST

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FIGURE 5.14
ROW 2, RIGHT SIDE TOP TETHER ANCHOR PRE-TEST

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FIGURE 5.15
OVERALL VIEW OF ROW 2 SEATING POSITIONS,
PRE-TEST

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FIGURE 5.16
ROW 2, LEFT SIDE WITH CRF

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FIGURE 5.17
ROW 2, LEFT SIDE WITH 2-D TEMPLATE

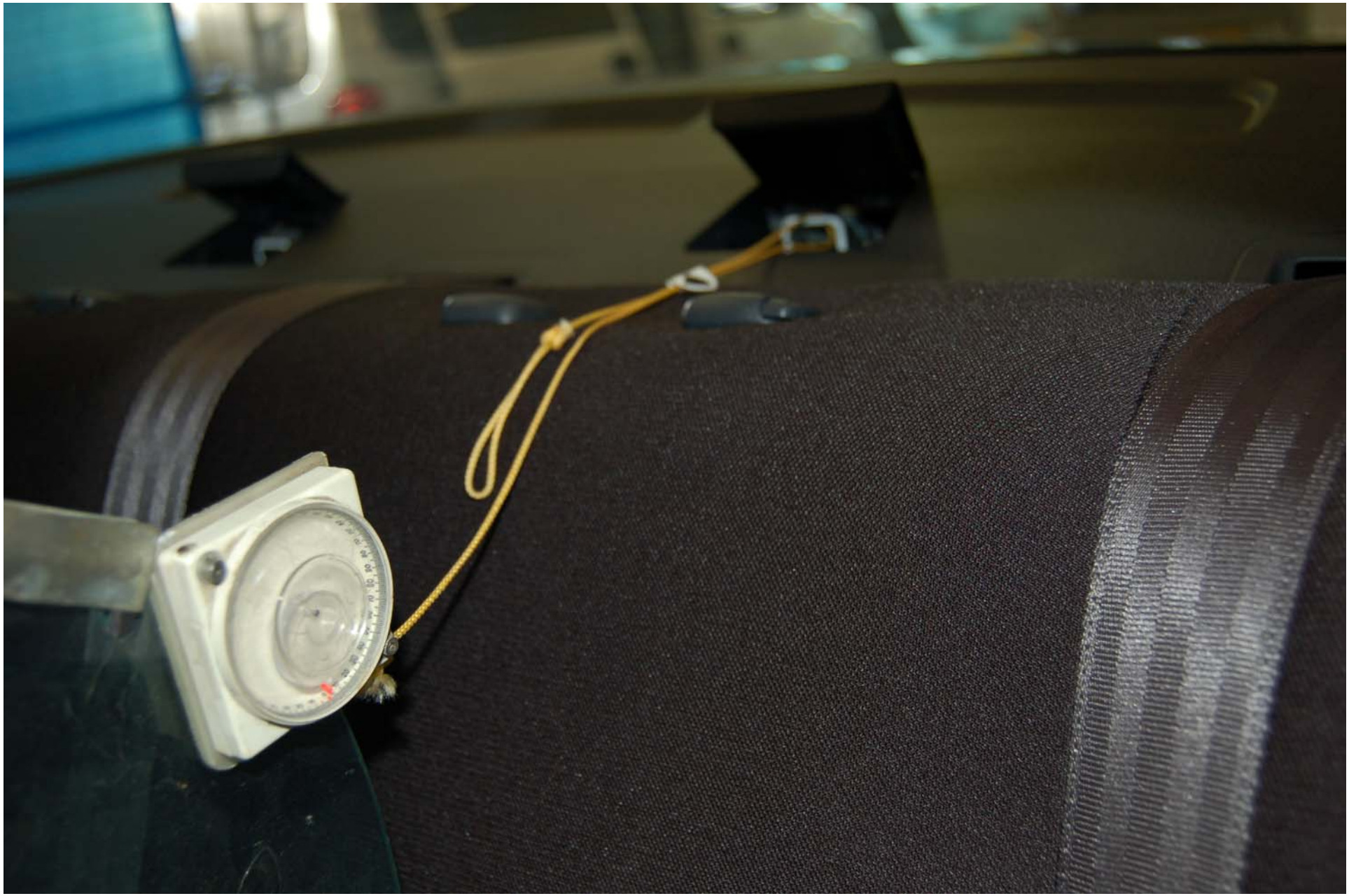

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FIGURE 5.18
ROW 2, LEFT SIDE TOP TETHER ROUTING

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FIGURE 5.19
ROW 2, RIGHT SIDE WITH CRF

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FIGURE 5.20
ROW 2, RIGHT SIDE WITH 2-D TEMPLATE

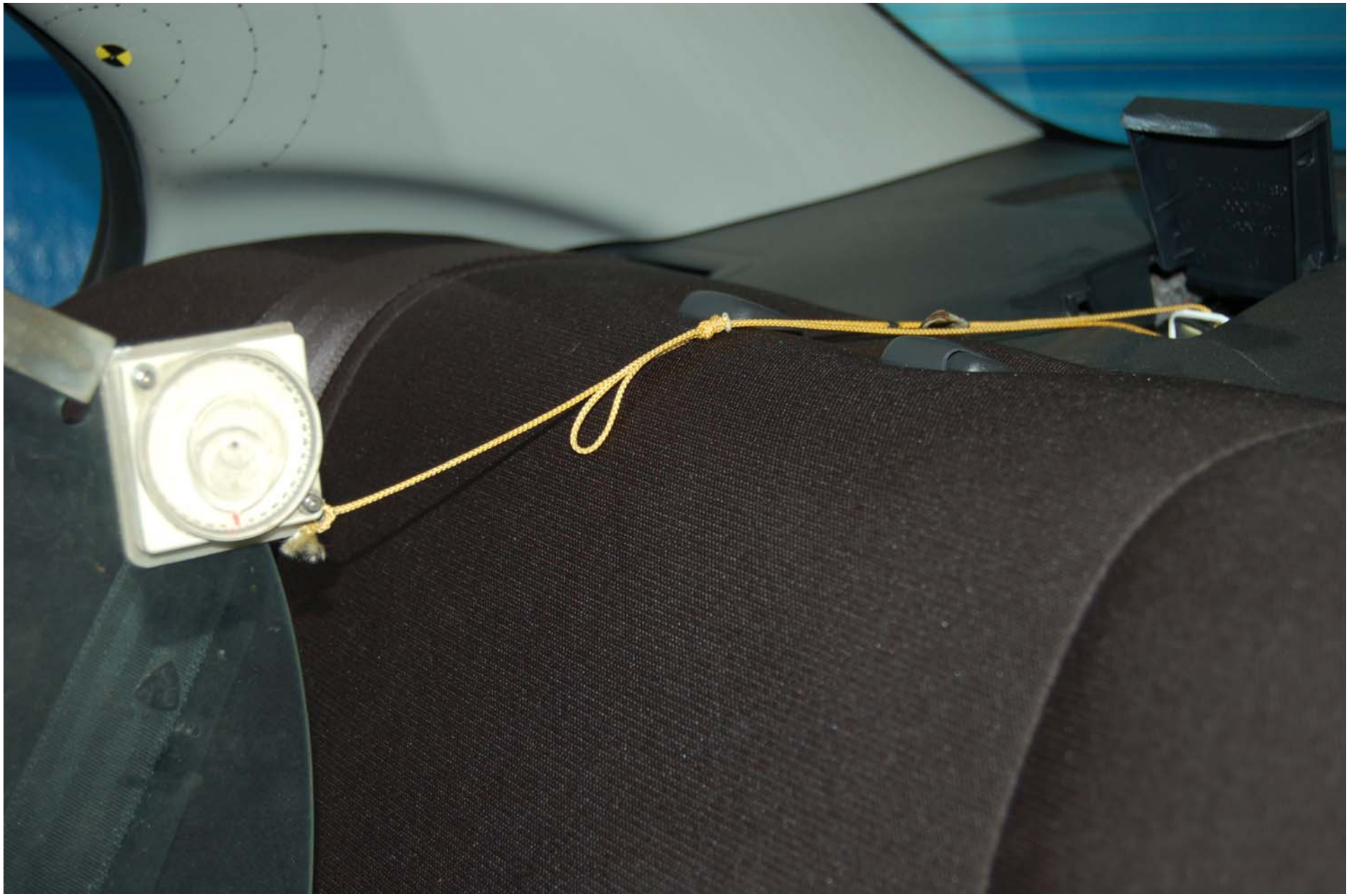

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FIGURE 5.21
ROW 2, RIGHT SIDE TOP TETHER ROUTING

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FIGURE 5.22
ROW 2, CENTER WITH 2-D TEMPLATE

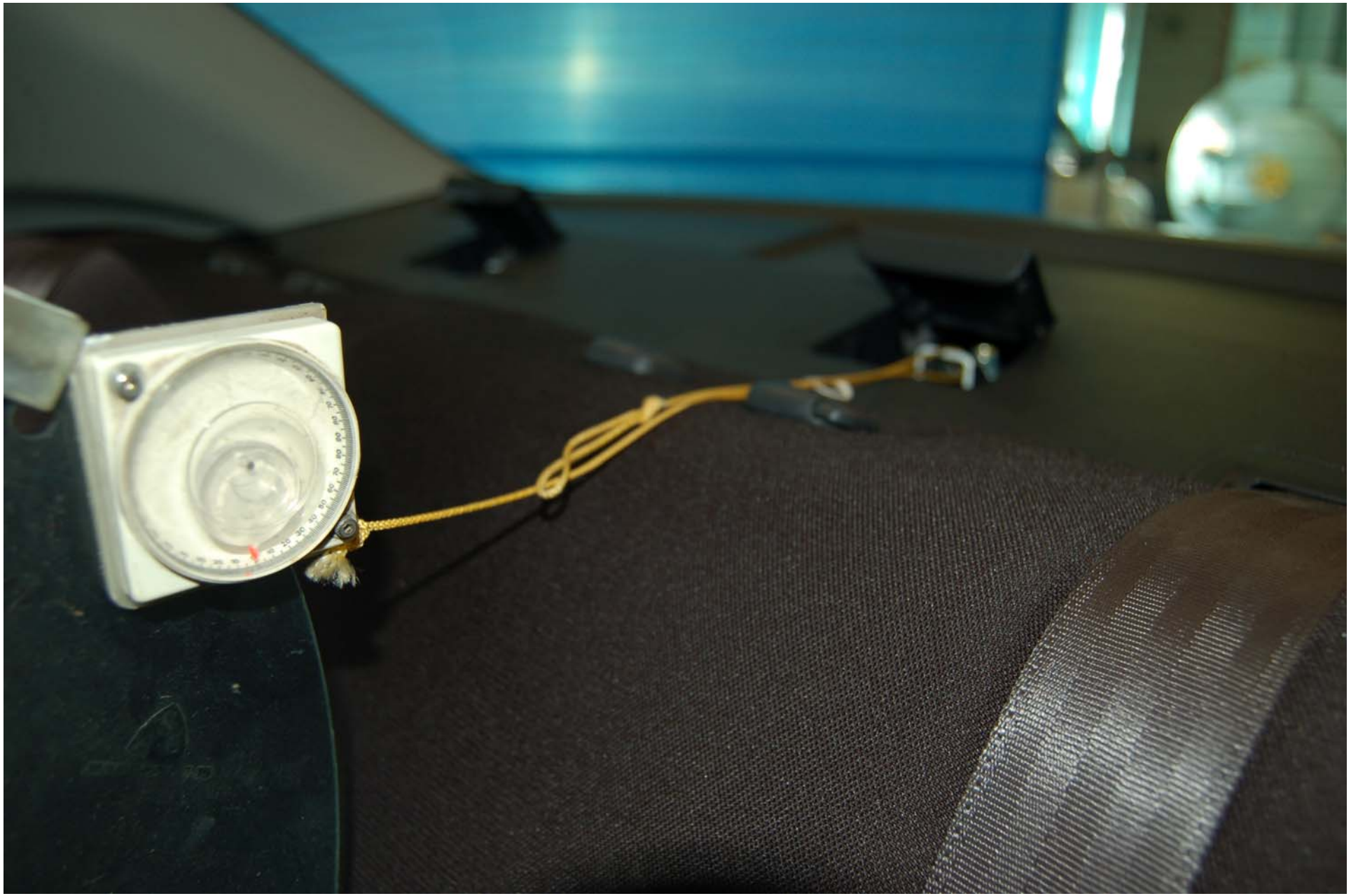

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FIGURE 5.23
ROW 2, CENTER TOP TETHER ROUTING

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FIGURE 5.24
ROW 2, RIGHT SIDE INBOARD CRF MEASUREMENT

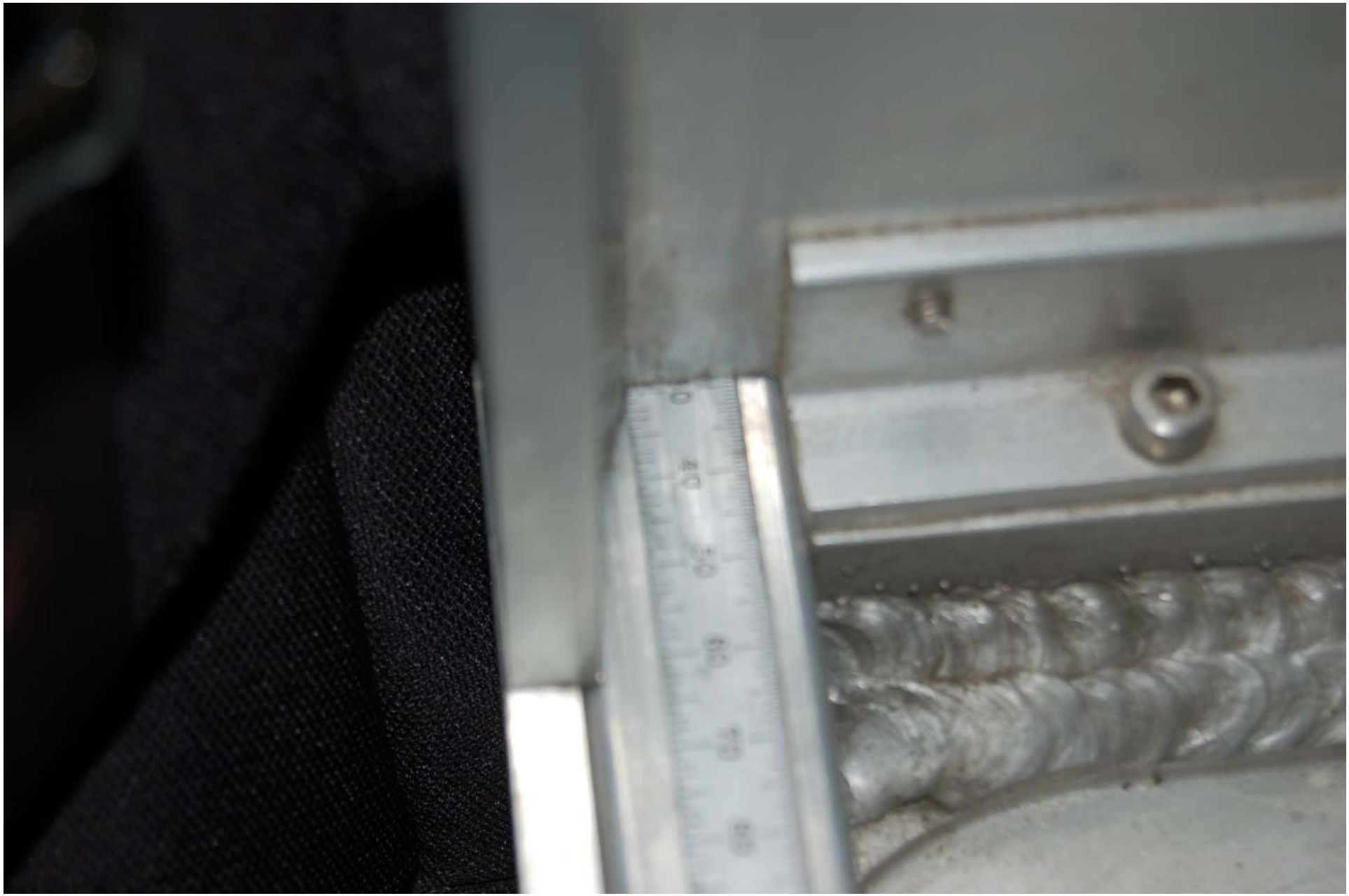

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FIGURE 5.25
ROW 2, RIGHT SIDE OUTBOARD CRF MEASUREMENT

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FIGURE 5.26
ROW 2, LEFT SIDE INBOARD CRF MEASUREMENT

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FIGURE 5.27
ROW 2, LEFT SIDE OUTBOARD CRF MEASUREMENT

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FIGURE 5.28
MEASUREMENT OF SYMBOL

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FIGURE 5.29
ROW 2, LEFT SIDE CRF PITCH MEASUREMENT

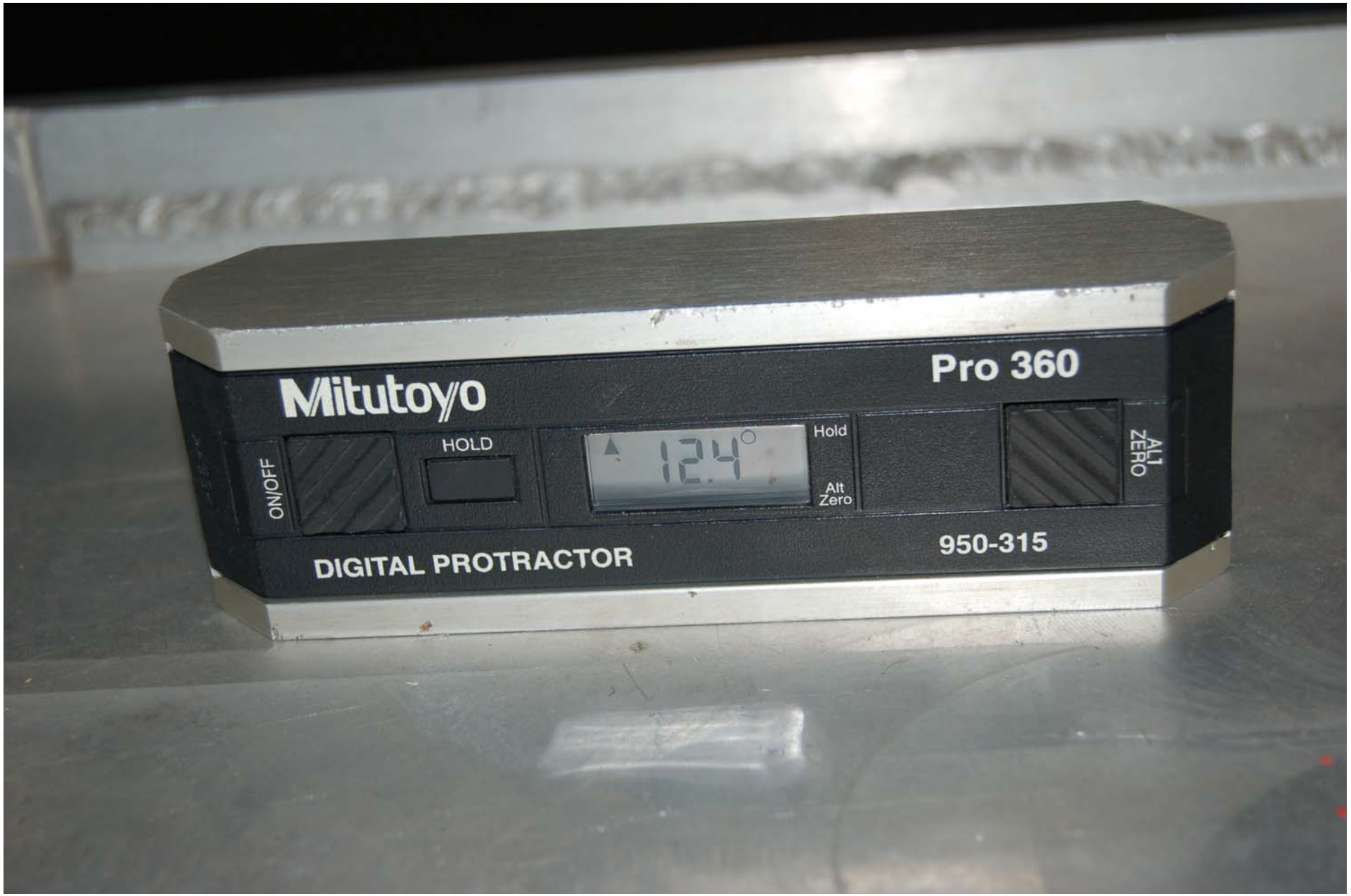

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FIGURE 5.30
ROW 2, RIGHT SIDE CRF PITCH MEASUREMENT

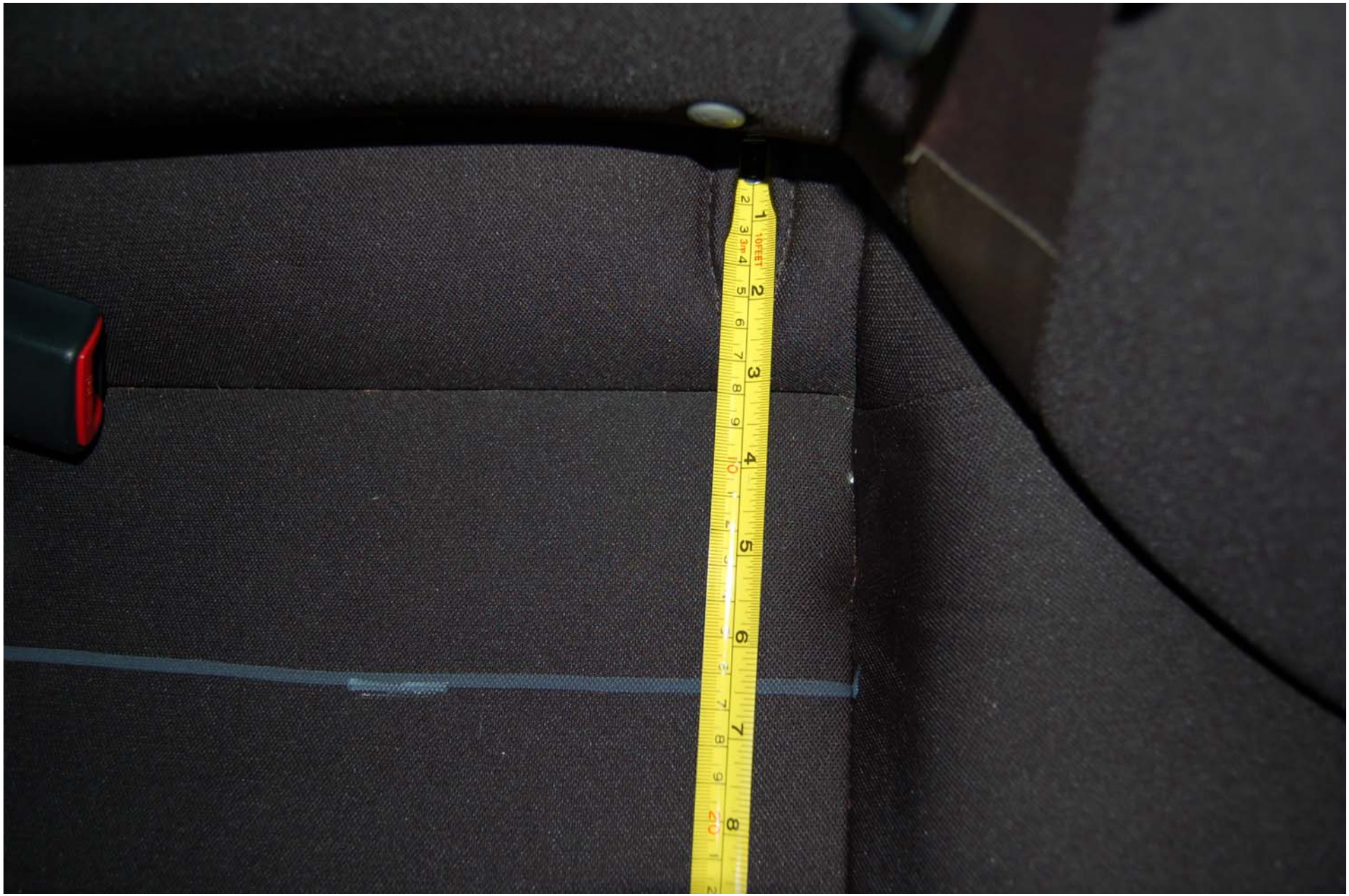

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FIGURE 5.31
ROW 2, LEFT SIDE OUTBOARD SRP MEASUREMENT

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FIGURE 5.32
ROW 2, LEFT SIDE INBOARD SRP MEASUREMENT

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FIGURE 5.33
ROW 2, RIGHT SIDE OUTBOARD SRP MEASUREMENT

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FMVSS NO. 225

FIGURE 5.34
ROW 2, RIGHT SIDE INBOARD SRP MEASUREMENT

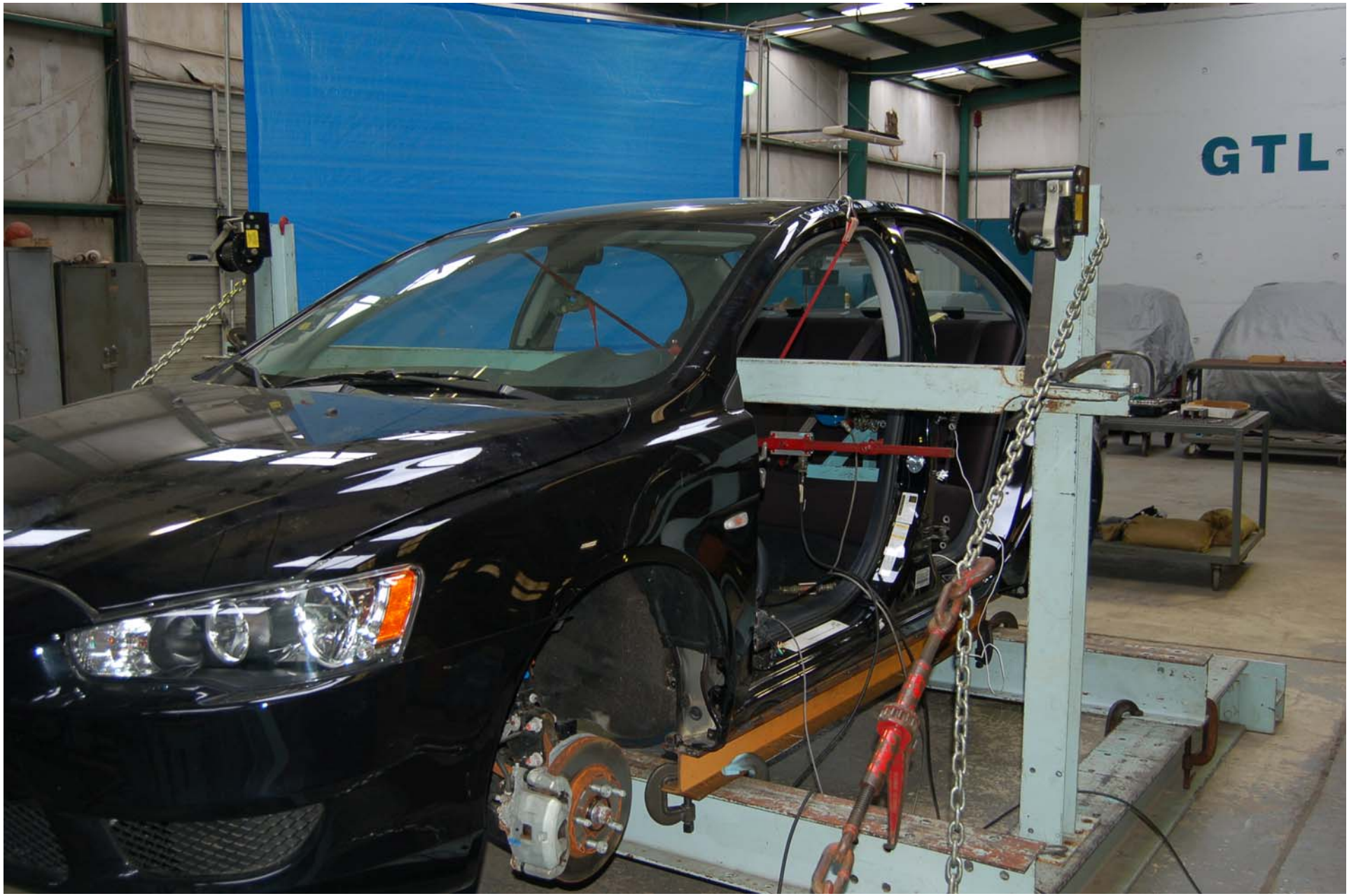

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FIGURE 5.35
¾ LEFT FRONT VIEW OF VEHICLE IN TEST RIG

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FIGURE 5.36
¾ RIGHT FRONT VIEW OF VEHICLE IN TEST FIXTURE

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FIGURE 5.37
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2

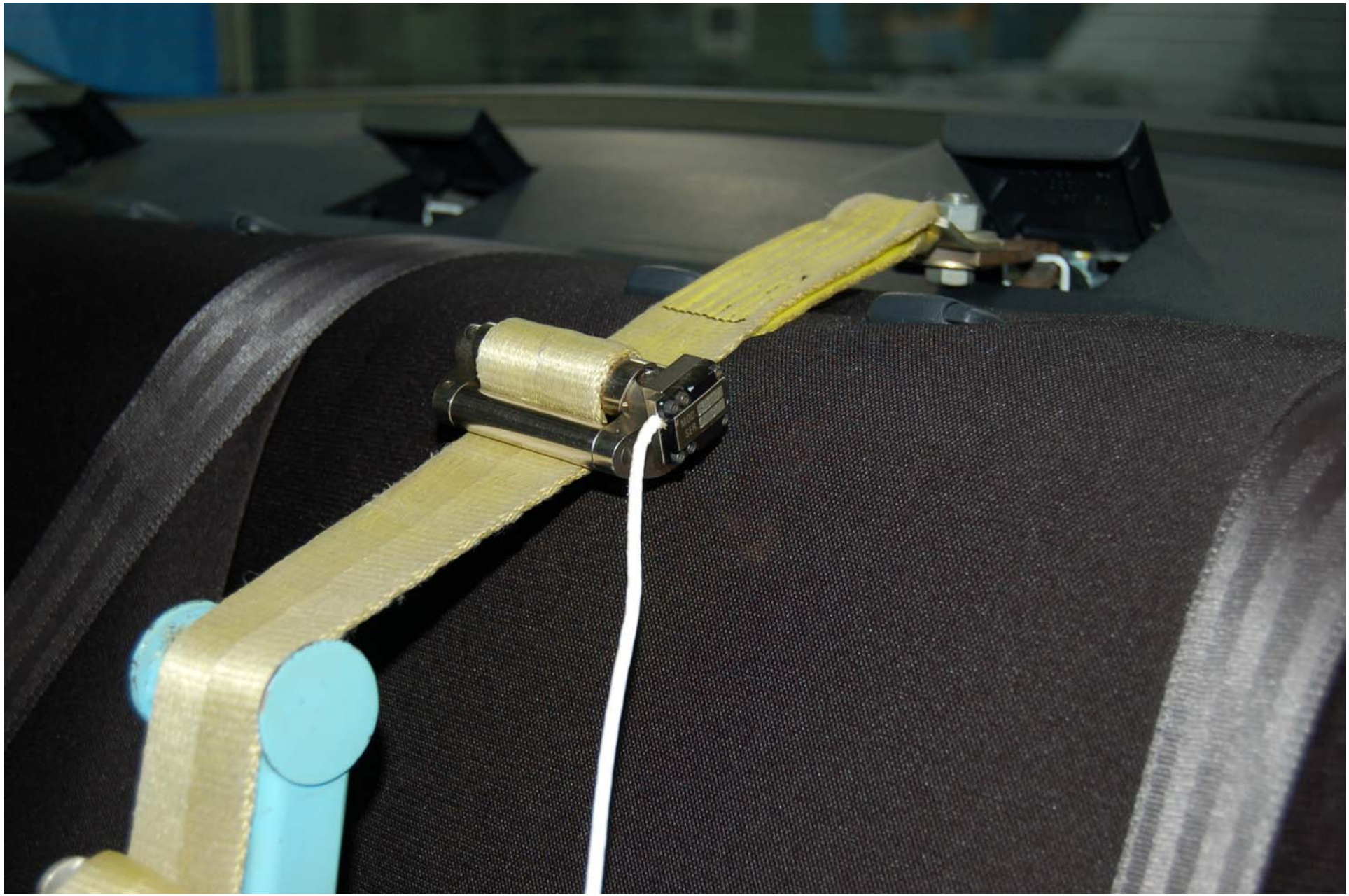

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FIGURE 5.38
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2

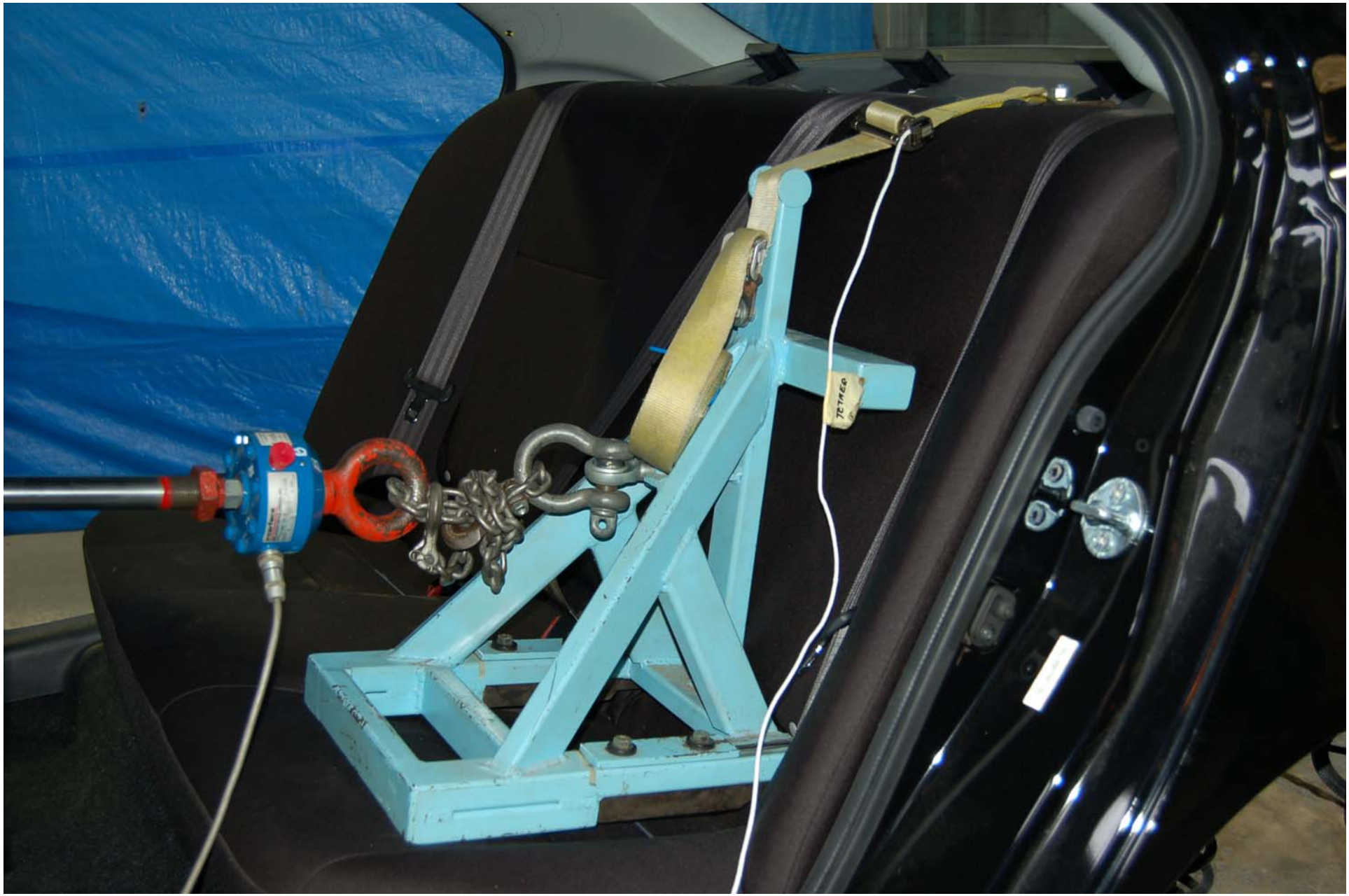

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FIGURE 5.39
POST TEST ROW 2, LEFT SIDE WITH SFAD 2

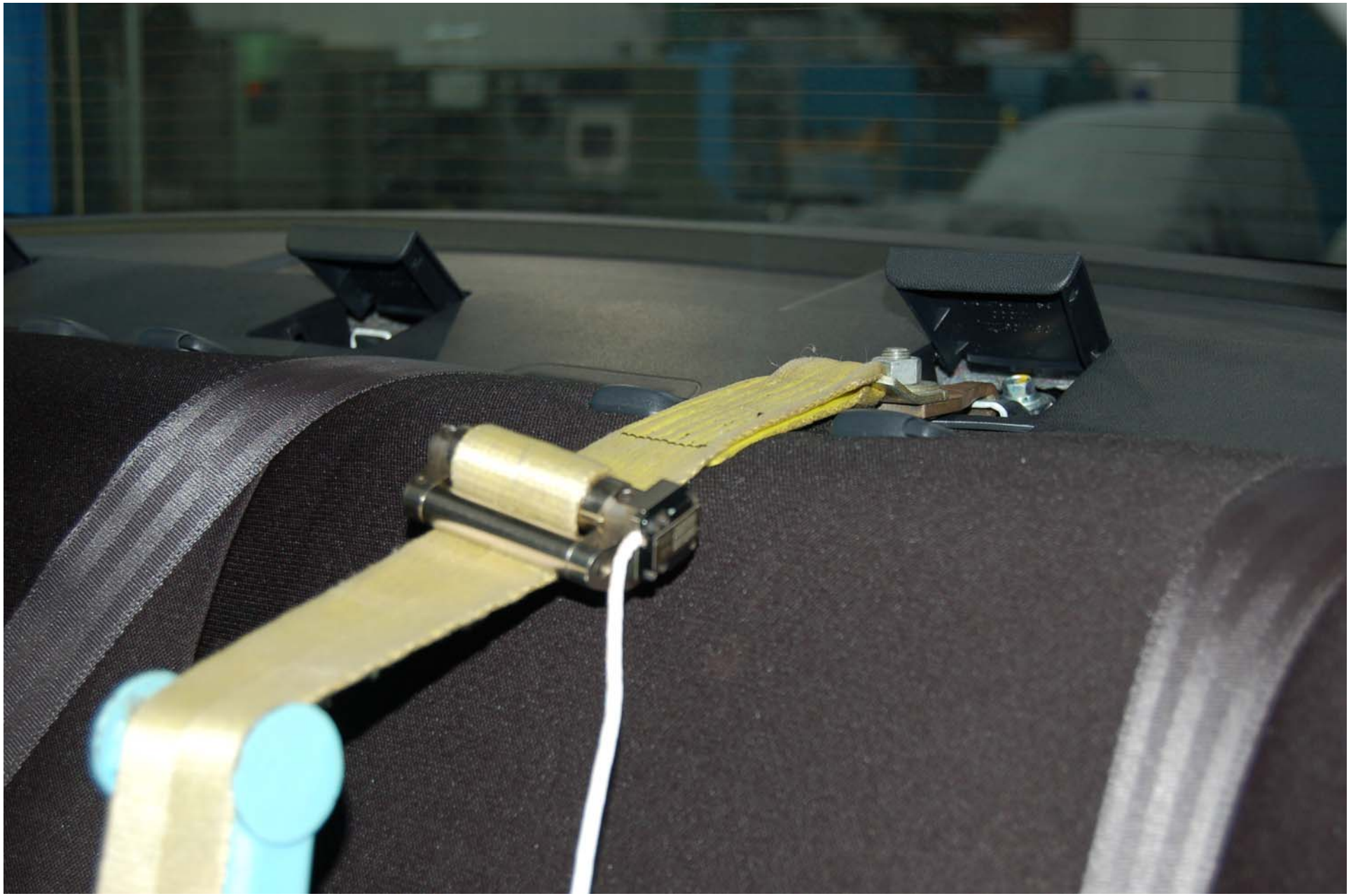

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FIGURE 5.40
POST TEST ROW 2, LEFT SIDE WITH SFAD 2

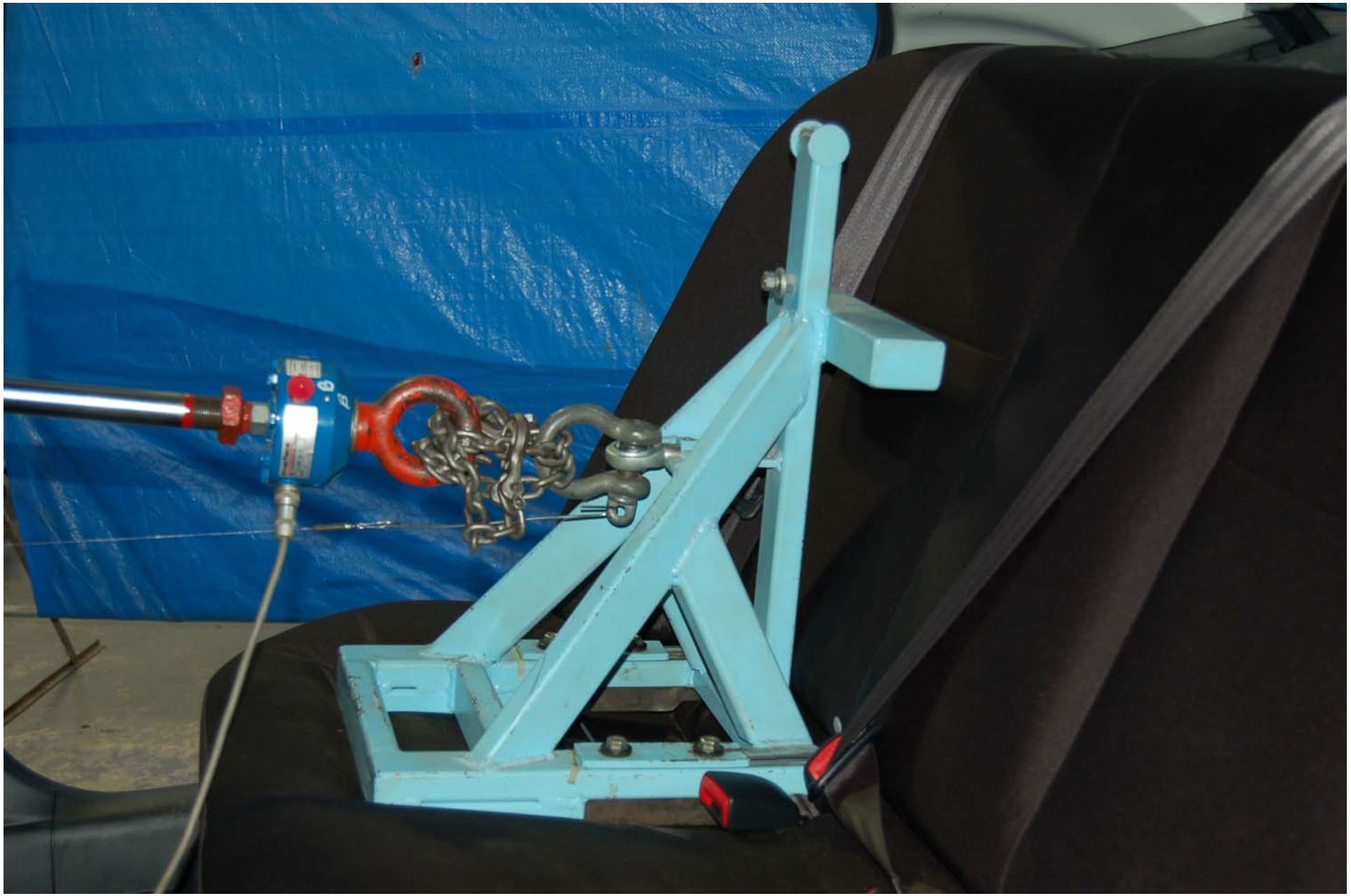

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FIGURE 5.41
PRE-TEST ROW 2, RIGHT SIDE WITH SFAD 2

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FIGURE 5.42
POST TEST ROW 2, RIGHT SIDE WITH SFAD 2

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FIGURE 5.43
PRE-TEST ROW 2, CENTER WITH SFAD 1

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FMVSS NO. 225

FIGURE 5.44
PRE-TEST ROW 2, CENTER WITH SFAD 1

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FIGURE 5.45
POST TEST ROW 2, CENTER WITH SFAD 1

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FIGURE 5.46
POST TEST ROW 2, CENTER WITH SFAD 1

APPENDIX A
OWNER'S MANUAL RESTRAINT INFORMATION

Child restraint systems

N00407100554

When transporting infants or small children in your vehicle, an appropriate child restraint system must always be used. This is required by law in the U.S. and Canada.
Child restraint systems specifically designed for infants and small children are offered by several manufacturers. Choose only a child restraint system with a label certifying that it complies with Federal Motor Vehicle Safety Standard 213 (FMVSS 213) or Motor Vehicle Restraint Systems and Booster Cushions Safety Regulations (RSSR). Look for the manufacturer's statement of compliance on the box and child restraint system itself.

The child restraint system should be appropriate for your child's weight and height, and should properly fit your vehicle's seat.
For detail information, refer to the instruction manual accompanying the child restraint system.

Guidelines for child restraint system selection

All children should be properly restrained in a restraint device that offers the maximum protection for their size and age.
Be sure to check local, state, or provincial requirements for child size and age that may vary from the recommendations listed below.

- Children less than 1 year old and children less than 20 pounds (9 kg) MUST ride in a rear-facing child safety seat that MUST ONLY be used in the rear seat.
- Children older than 1 year of age and who weigh less than 40 pounds (18 kg) or who are less than 40 inches (100 cm) tall must be in a forward-facing restraint used only in the rear seat.
- Children who weigh more than 40 pounds (18 kg) or who are more than 40 inches (100 cm) tall, regardless of age, should use a suitable child seat or a booster seat in the rear seat until the vehicle's lap/shoulder belt fits them properly.

⚠ WARNING

- **All children must be seated in the rear seat, and properly restrained.**
  Accident statistics show that children of all sizes and ages are safer when properly restrained in the rear seat, rather than in the front seat.

⚠ WARNING

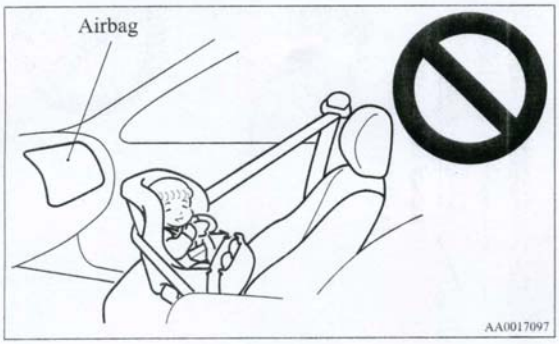
- **Any child who is too large to use a child restraint system should ride in the rear seat and wear the lap and shoulder belt properly. The shoulder belt must be positioned over the shoulder and across the chest, not across their neck, and with the lap belt positioned low on the child's hips, not across their stomach. If necessary, a booster seat should be used to help achieve a proper seat belt fit. Follow the booster seat manufacturer's instructions. Only use a booster seat that is certified as complying with Federal Motor Vehicle Safety Standards or Motor Vehicle Restraint Systems and Booster Cushions Safety Regulations.**

⚠ WARNING

- **Never hold an infant or child in your arms or on your lap when riding in this vehicle, even when you are wearing your seat belt. Never place any part of the seat belt you are wearing around an infant or child. Failure to follow these simple instructions creates a risk of serious injury or death to your child in the event of an accident or sudden stop.**

⚠ WARNING

- **Your vehicle is also equipped with a front passenger airbag.**
  Never put REAR-FACING CHILD RESTRAINT SYSTEMS or INFANT RESTRAINT SYSTEMS in the front passenger seat. This places the infant too close to the passenger airbag. During deployment of the airbag, the infant can be seriously injured or killed. Rear-facing child restraint systems or infant restraint systems must only be used in the rear seat.



⚠ WARNING

- **FRONT-FACING CHILD RESTRAINT SYSTEMS should be used in the rear seat whenever possible. If they must be used in the front passenger seat, move the seat to the most rearward position and make sure the child stays in the child restraint system, properly restrained. Failure to follow these instructions could result in serious injury or death to the child.**

⚠ WARNING

- **It is important to use an approved rear-facing infant restraint until the infant is one year old (unless the infant outgrows the seat sooner). This allows the infant's neck and spine to develop enough to support the weight of their head in the event of an accident.**
- **When installing a child restraint system, follow the instructions provided by the manufacturer and follow the directions in this manual. Failure to do so can result in serious injury or death to your child in an accident or sudden stop.**
- **After installation, push and pull the child restraint system back and forth, and side to side, to see that it is firmly secured. If the child restraint system is not installed securely, it may cause injury to the child or other occupants in the event of an accident or sudden stop.**
- **When not in use, keep your child restraint system secured with the seat belt, or remove it from the vehicle, in order to prevent it from being thrown around inside the vehicle during an accident.**

NOTE

- Before purchasing a child restraint system, try installing it in the rear seat to make sure there is a good fit. Because of the location of the seat belt buckles and the shape of the seat cushion, it may be difficult to securely install some manufacturer's child restraint systems.
  If the child restraint system can be pulled forward or to either side easily on the seat cushion after the seat belt has been tightened, choose another manufacturer's child restraint system.
  Depending on the seating position in the vehicle and the child restraint system that you have, the child restraint system can be attached using one of the following two methods:
  - To the lower anchorage in the rear seat ONLY if the child restraint system is compatible with the LATCH system (See page 2-26).
  - To the seat belt (See page 2-29).

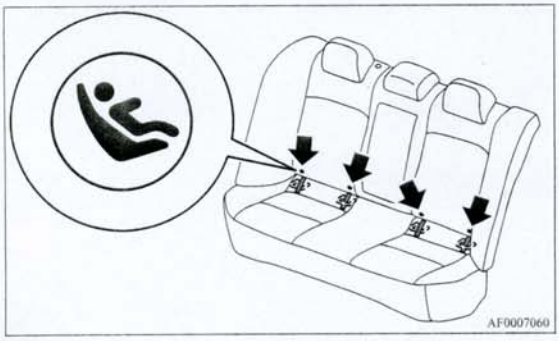
Installing a child restraint system using the LATCH (Lower Anchors and Tethers for children) system

N00418800102

Lower anchor locations

The outboard seating positions in the rear seat of your vehicle are equipped with lower anchors for attaching child restraint systems compatible with the LATCH system.

2



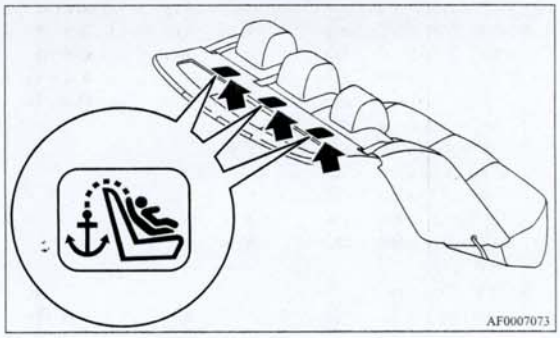
NOTE

- The symbols on the seatback show the location of the lower anchor points.

Tether anchor locations

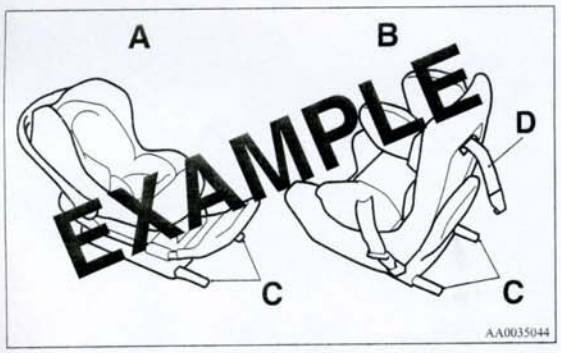
N00418900116

Your vehicle has 3 attachment points on the rear shelf, located behind the top of your rear seat. These are for securing a child restraint system tether strap to each of the 3 rear seating positions in your vehicle.



Examples of child restraint systems compatible with the LATCH system

N00419000169



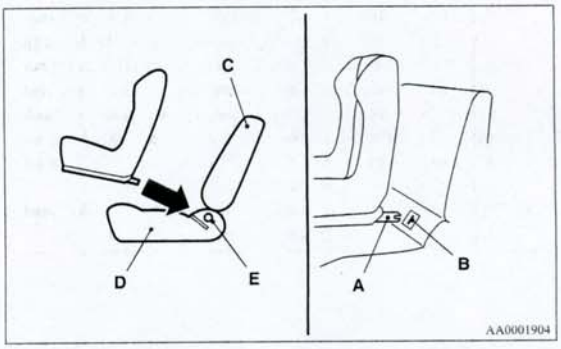
A- Rear-facing child restraint system
B- Front-facing child restraint system
C- Child restraint system lower anchor connectors
D- Tether strap
(These are only examples.)

Using the LATCH system

N00419100157

1. In order to securely fasten the tether strap, remove the head restraint from the location where you wish to install the child restraint system.
2. Push the anchor connectors (A) on the child restraint system into the slits (B) in accordance with the instructions provided by the child restraint system manufacturer. Remember, the lower anchors (E) provided with your vehicle are designed to secure suitable child restraint systems compatible with the LATCH system in the rear seat only.

2



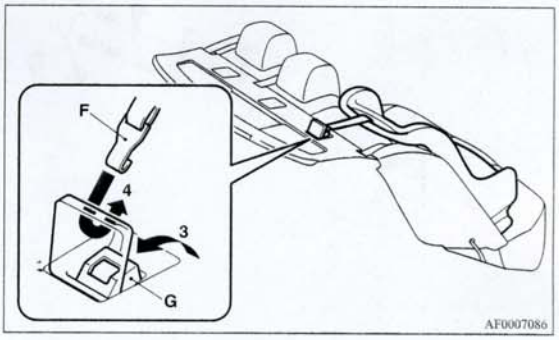
A- Connector
B- Slit
C- Vehicle seatback
D- Vehicle seat cushion
E- Lower anchor

NOTE
- In order to secure a child restraint system compatible with the LATCH system, use the lower anchor points in the outboard positions of the rear seat. It is not necessary to use the vehicle's seat belt. The vehicle's seat belt, however, MUST be used to secure a child restraint system in the center position of the rear seat.

⚠ WARNING
- **If there is any foreign material in or around the lower anchors, remove it before installing the child restraint system. Also, make sure the seat belt is away from, not looped through or otherwise interfering with, the child restraint system. If foreign matter is not removed and/or the seat belt interferes with the child restraint system, the child restraint system will not be secured properly, could detach and move forward in the event of sudden braking or an accident, and could result in injury to the child or other vehicle occupants.**
- **When the vehicle is moving, do not adjust the seat where the child restraint system is installed.**

2

3. Open the cover for the tether anchor by pulling it back with your hand as illustrated below (3).
4. Latch the tether strap hook (F) of the child restraint system to the anchor (G) as illustrated below (4) and tighten the top tether strap so it is securely fastened.



5. Push and pull the child restraint system in all directions to be sure it is firmly secured.

⚠ WARNING
- **Child restraint system tether anchors are designed only to withstand loads from correctly fitted child restraint systems. Under no circumstances are they to be used for adult seat belts, or harnesses, or for attaching other items or equipment to the vehicle.**

Installing a child restraint system using the seat belt (with emergency/automatic locking mechanism)

N00407300307

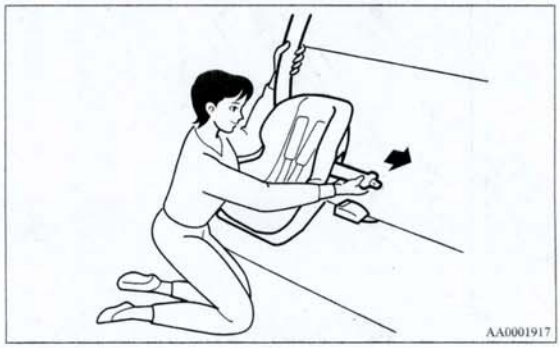
With the exception of the driver, the seat belt in all other seating positions can be converted from normal Emergency Locking Retractor (ELR) mode to Automatic Locking Retractor (ALR) mode. This means that when you pull the seat belt fully out of the retractor, the retractor will switch to its ALR child restraint installation function. Always use the ALR child restraint installation function when you install a child restraint system using the seat belt.

Children 12 years old and under should always be restrained in the rear seat, whenever possible, although the front passenger seat belt can also be converted to ALR mode.

⚠ WARNING
- **When you install a child restraint system using the seat belt, always make sure the retractor has been switched to the ALR child restraint installation function. The ALR function will keep the child restraint system tightly secured to the seat.**
  Failure to convert the retractor to the ALR function may allow the child restraint system to move forward during sudden braking or an accident, resulting in serious injury or death to the child or other occupants.

Installation

1. Place the child restraint system in the rear seating position.
2. Route the seat belt through the child restraint system according to the instructions provided by the child restraint system manufacturer. Then insert the seat belt latch plate into the buckle. Make sure you hear a "click" when you insert the latch plate into the buckle.

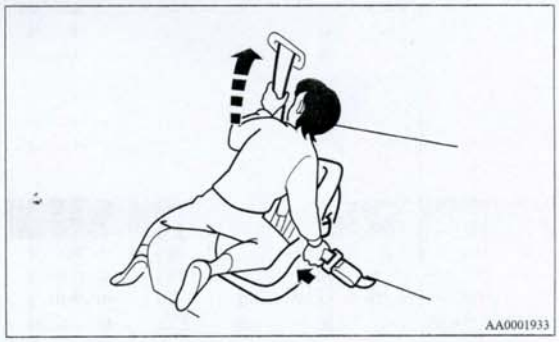


2

3. To activate the ALR child restraint installation function, slowly pull the shoulder part of the belt all the way out of the retractor until it stops. Then let the belt feed back into the retractor.

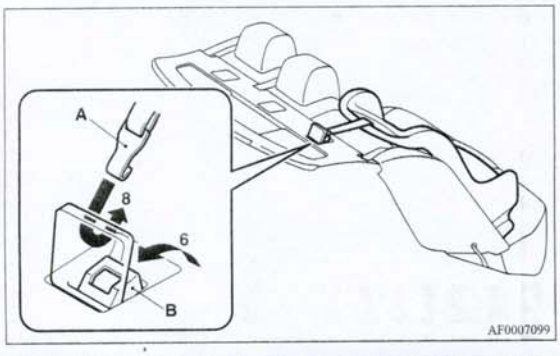
4. After the belt has retracted, tug on it. If the belt is in the ALR function, you will not be able to pull it out. If the webbing can be pulled out from retractor, the ALR function has not been activated and you will need to repeat steps 3 and 4.

5. After confirming that the belt is locked, grab the shoulder part of the belt near the buckle and pull up to remove any slack from the lap part of the belt allowing the slack to feed into the retractor. Remember, if the lap belt portion is not tight, the child restraint system will not be secure. It may help to put your weight on the child restraint system and/or push on its seatback while pulling up on the belt (see illustration).



If your child restraint system requires the use of a tether strap, fasten the tether strap in accordance with the following procedures.

6. Open the cover from the tether anchor installation point by pulling it back with your hand as illustrated below (6).
7. Remove the head restraint from the location in which you wish to install a child restraint system.
8. Latch the tether strap hook (A) of the child restraint system to the tether anchor (B) as illustrated below (8) and tighten the top tether strap so it is securely fastened.



⚠ WARNING

- **Child restraint system tether anchors are designed only to withstand loads from correctly fitted child restraint systems. Under no circumstances are they to be used for adult seat belts, or harnesses, or for attaching other items or equipment to the vehicle.**

9. Before putting your child in the restraint, push and pull the restraint in all directions to be sure it is firmly secured. Do this before each use. If the child restraint system is not firmly secure, repeat steps 1 through 8.
10. To remove a child restraint system from the vehicle and deactivate the ALR mode, remove the child from the restraint. Unlatch the buckle. Then remove the belt from the restraint and let the belt fully retract.

Children who have outgrown child restraint systems

N00407600445

Children who have outgrown a child restraint system should be seated in the rear seat and wear the seat belt. If the shoulder belt crosses their face or neck, and/or the lap belt crosses their stomach, a commercially available booster seat must be used, to raise the child so that the shoulder belt crosses their shoulder and the lap belt remains positioned low across their hips. The booster seat should fit the vehicle seat and have a label certifying compliance with Federal Motor Vehicle Safety Standards or Motor Vehicle Restraint Systems and Booster Cushions Safety Regulations.

2

⚠ WARNING

- **Any child who is too small to properly wear a seat belt must be properly restrained in an appropriate child restraint system, to reduce their risk of serious injury or death in an accident.**
- **A child should never be left unattended in, or unsupervised, around your vehicle. When you leave the vehicle always take the child out as well.**
- **Children can die from heat stroke if left or trapped inside the vehicle, especially on hot days.**
- **Keep your vehicle locked and the trunk lid closed when not in use. Keep your vehicle keys away from children.**
- **Never allow children to play in the trunk of your vehicle.**

Maintenance and inspection of seat belts

N00407000221

The seat belt webbing may be cleaned with mild soap or detergent solution. Do not use an organic solvent. Allow the belts to dry in the shade. Do not allow them to retract until completely dry. Do not attempt to bleach or re-dye the belts. The color may rub off and the webbing strength may be affected.

Regularly check your seat belt buckles and their release mechanisms for positive engagement and release of the latch plate. Check the retractors for automatic locking when in the Automatic Locking Retractor function.

The entire seat belt assembly should be replaced if the webbing shows any obvious cuts, tears, increase in thickness in any section of the webbing from broken fibers, or severe fading from sunlight. All of these conditions indicate a weakening of the belt, which may adversely affect seat belt performance in an accident.

⚠ WARNING

- **Do not attempt to repair or replace any part of the seat belt assemblies. This work should be done by an authorized Mitsubishi Motors dealer. Failure to have an authorized Mitsubishi Motors dealer perform the work could reduce the effectiveness of the belts and could result in a serious injury or death in an accident.**

Supplemental Restraint System (SRS) - airbag

N00407700521

This vehicle is equipped with a Supplemental Restraint System (SRS), which includes airbags for the driver and passengers.

The SRS front airbags are designed to supplement the primary protection of the driver and front passenger seat belt systems by providing those occupants with protection against head and chest injuries in certain moderate to severe frontal collisions. The SRS front airbags, together with sensors at the front of the vehicle and sensors attached to the front seats, form an advanced airbag system.

The SRS driver's knee airbag is designed to supplement the primary protection of the driver's seat belt system. It can stop the forward movement of the driver's lower legs and provide increased overall body protection in certain moderate to severe frontal collisions.

The SRS side airbags (if so equipped) and the curtain airbags (if so equipped) are also designed to supplement the seat belts. The SRS side airbags provide the driver and front passenger with protection against chest injuries by deploying the bag on the side impacted in moderate to severe side impact collisions. The SRS curtain airbags provide the driver and passengers on the front seat and rear outboard seat with protection against head injuries by deploying a bag on the side impacted in moderate to severe side impact collisions.

The SRS airbags are NOT a substitute for use of the seat belts. For maximum protection in all types of accidents, seat belts must ALWAYS be worn by everyone who drives or rides in this vehicle (with infants and small children in an appropriate child restraint system in the rear seat, and older children buckled in the rear seat). Refer to "Child restraint systems" on page 2-22.

⚠ WARNING

- **IT IS VERY IMPORTANT TO ALWAYS WEAR YOUR SEAT BELT PROPERLY EVEN WITH AN AIRBAG.**
  - **Seat belts help keep the driver and passengers properly positioned. This reduces the risk of injury in all collisions, and reduces the risk of serious injuries or death when the airbags inflate.**
    During sudden braking just before a collision, an unrestrained or improperly restrained driver or passengers can move forward into direct contact with, or within close proximity to, the airbag when it begins to inflate.
    The beginning stage of airbag inflation is the most forceful and can cause serious injuries or death if the occupant comes in contact with the airbag at this time.
  - **Seat belts reduce the risk of injury in rollovers, rear impact collisions, and in lower-speed frontal collisions, because the airbags are not designed to inflate in those situations.**
  - **Seat belts reduce the risk of being thrown from your vehicle in a collision or rollover.**

2

⚠ WARNING

- **IT IS VERY IMPORTANT TO BE PROPERLY SEATED.**
  - **A driver or front passenger sitting too close to the steering wheel or instrument panel during airbag deployment can be seriously injured or killed.**
  - **Airbags inflate very quickly and with great force. If the driver and front passenger are not properly seated and restrained, the airbag may not provide the proper protection and can cause serious injuries or death when it inflates.**
  - **To reduce the risk to the driver of serious injury or death due to a deploying driver's airbag, always properly wear your seat belt and adjust the driver's seat as far back as possible, maintaining a position that still allows the driver to have good control of the steering wheel, brake, accelerator, and other vehicle controls.**
  - **To reduce the risk to the front passenger of serious injury or death from a deploying passenger's airbag, make sure the passenger always wears the seat belt properly, remains seated upright and all the way back in the seat, and positions the seat as far back as possible.**
  - **Seat all infants and children in the rear seat, properly restrained in an appropriate child restraint system.**

⚠ WARNING

- **Airbags inflate very quickly and with great force. Do not sit on the edge of the seat or sit with your lower legs too close to the instrument panel, or lean your head or chest close to the steering wheel or the instrument panel.**
- **Do not put your feet or legs on or against the instrument panel.**

2

⚠ WARNING

- **Infants and small children should never ride unrestrained, or lean against the instrument panel. They should never ride held in your arms or on your lap. They can be seriously injured or killed in an accident, especially when the airbags inflate. Infants and children should be properly seated in the rear seat in an appropriate child restraint system. Refer to "Child restraint systems" on page 2-22.**

⚠ WARNING

- **NEVER put REAR-FACING CHILD RESTRAINT SYSTEMS or INFANT RESTRAINT SYSTEMS in the front passenger seat. This places the infant too close to the passenger airbag. During deployment of the airbag, the infant can be seriously injured or killed.**
  Rear-facing child restraint systems or infant restraint systems must only be used in the rear seat.

2

⚠ WARNING

- **FRONT-FACING CHILD RESTRAINT SYSTEMS should be used in the rear seat whenever possible. If they must be used in the front passenger seat, move the seat to the most rearward position and make sure the child stays in the child restraint system, properly restrained. Failure to follow these instructions could result in serious injury or death to the child.**

2

⚠ WARNING

- **Older children should be seated in the rear seat with their seat belt properly worn, and with an appropriate booster seat if needed.**
  Refer to "Children who have outgrown child restraint systems" on page 2-32.

APPENDIX B

MANUFACTURER'S DATA

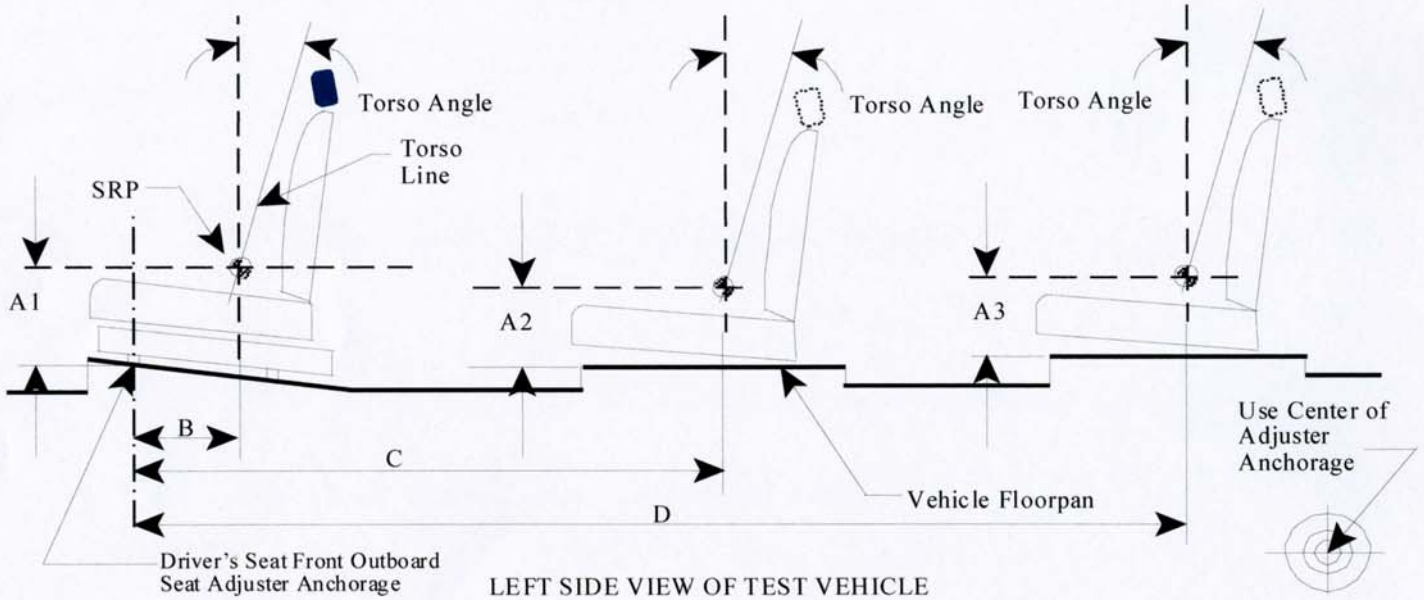
SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA

FMVSS No. 225

(All dimensions in mm[1])

MODEL YEAR: 2008 MY / MAKE: Mitsubishi / MODEL: Lancer / BODY STYLE: 4-Door Sedan

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Bench / THIRD ROW: Not applicable



LEFT SIDE VIEW OF TEST VEHICLE

#: As for accessible point, please refer to attachment 6.

Table 1. Seating Positions[1] and Torso Angles

		Left (Driver Side)	Center (if any)	Right
A1		(Driver) 182	N/A	(Front Passenger) 182
A2		207	237 (With ARMREST) 242(W/O ARMREST)	207
A3		N/A	N/A	N/A
B		355	N/A	355
C		1149	1139 (With ARMREST) 1154 (W/O ARMREST)	1149
D		N/A	N/A	N/A
Torso Angle (degree)	Front Row	19	N/A	19
	Second Row	27	18 (With ARMREST) 27 (W/O ARMREST)	27
	Third Row	N/A	N/A	N/A

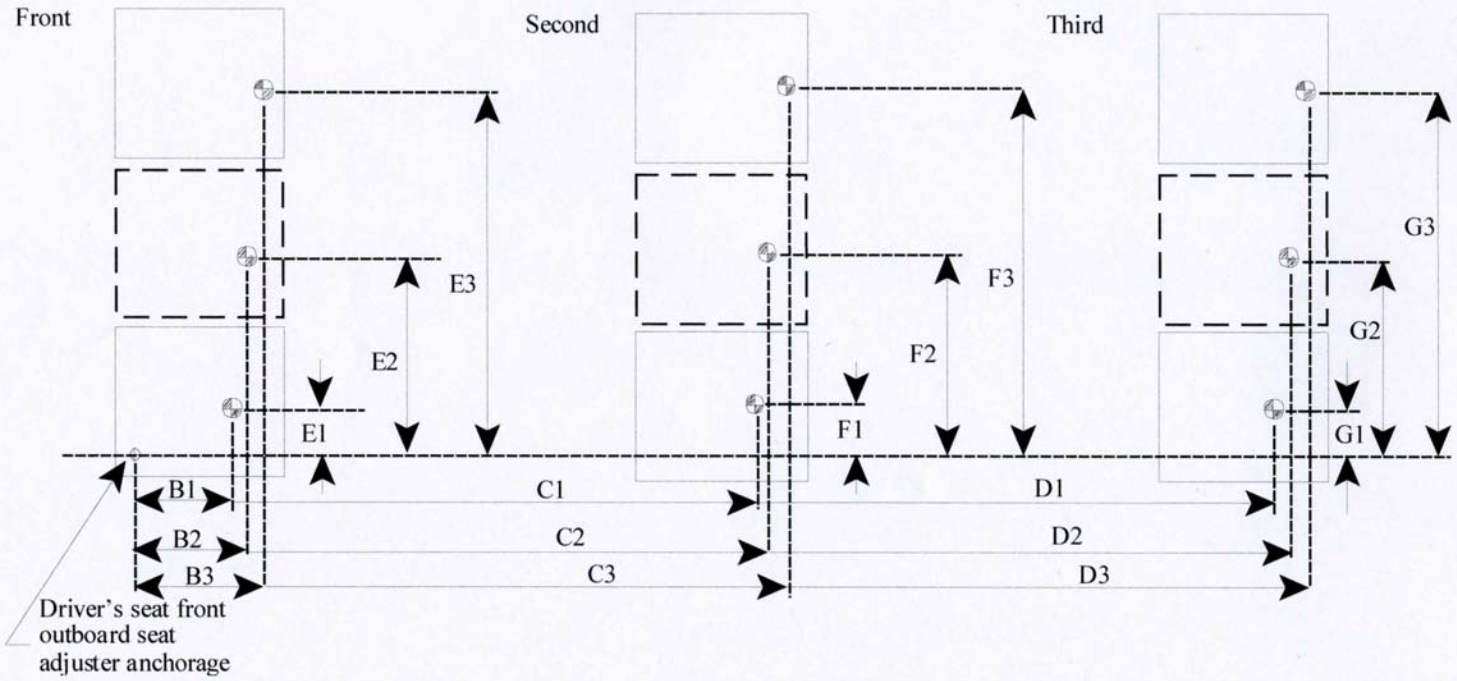
Note: All dimensions are in mm. If not, provide the unit used.

SEATING REFERENCE POINT

FMVSS No. 225
(All dimensions in mm)

MODEL YEAR: 2008 MY / MAKE: Mitsubishi / MODEL: Lancer / BODY STYLE: 4-Door Sedan

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Bench / THIRD ROW: Not applicable



FORM – 225

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	355
	E1	217.5
	B2	N/A
	E2	N/A
	B3	355
	E3	932.5
Second Row	C1	1149
	F1	240
	C2	1139 (With ARMREST) 1154 (W/O ARMREST)
	F2	575
	C3	1149
	F3	910
Third Row	D1	N/A
	G1	N/A
	D2	N/A
	G2	N/A
	D3	N/A
	G3	N/A

Note: Use the center of anchorage.

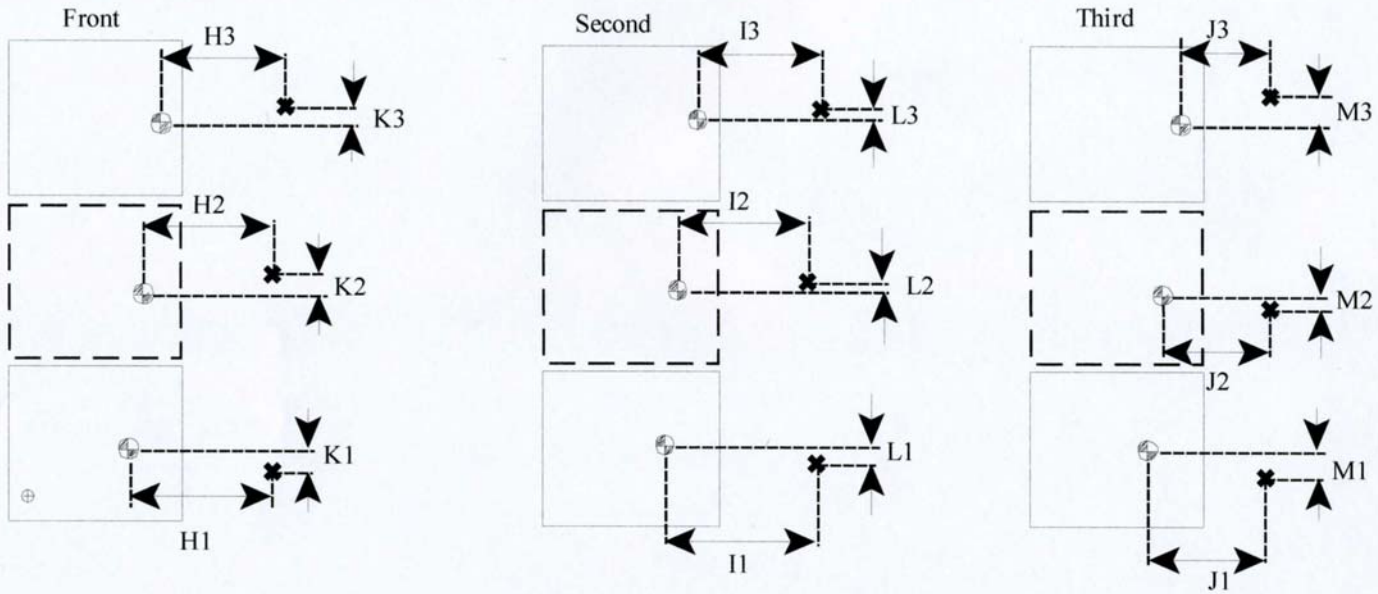
TETHER ANCHORAGE LOCATIONS

FMVSS No. 225

(All dimensions in mm)

MODEL YEAR: 2008 MY / MAKE: Mitsubishi / MODEL: Lancer / BODY STYLE: 4-Door Sedan

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Bench / THIRD ROW: Not applicable



⊕: SRP

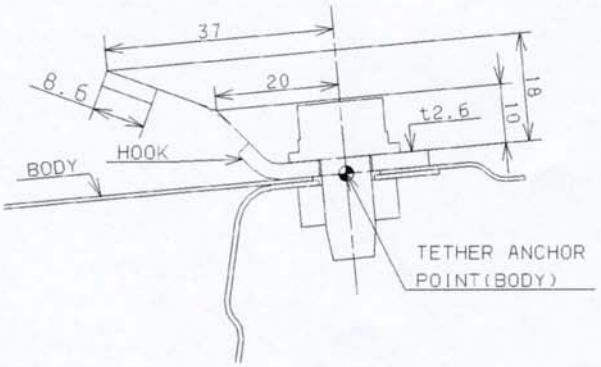
✖: Tether anchorage

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

Table 3. Seating Reference Point and Tether Anchorage Locations

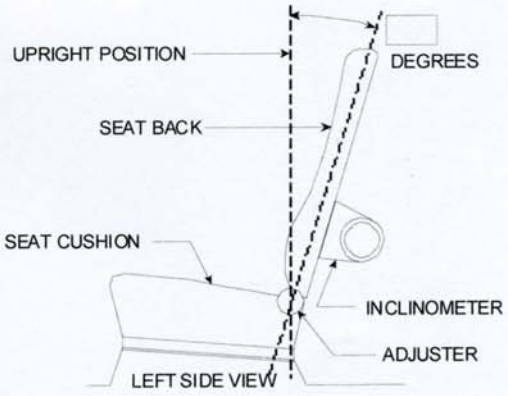
Seating Reference Point (SRP)	Distance from SRP	
Front Row	H1	N/A
	K1	N/A
	H2	N/A
	K2	N/A
	H3	N/A
	K3	N/A
Second Row	I1	641
	L1	-5
	I2	651 (With ARMREST) 636 (W/O ARMREST)
	L2	0
	I3	641
	L3	-5
Third Row	J1	N/A
	M1	N/A
	J2	N/A
	M2	N/A
	J3	N/A
	M3	N/A

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 = N/A (*) degrees.

(*) There is no plane or straight portion to position the inclinometer on seat properly.

Measurement Instructions:

Adjust to 2nd latch detent, counting the first forward detent as "0"

Seat back angle for passenger's seat = N/A (*) degrees.

Measurement Instructions:

Same as driver's seat.

Seat back angle for 2nd row seat = N/A degrees.

Measurement Instructions:

Not applicable (2nd row seat is not adjustable for seat back angle.)

Seat back angle for 3rd row seat = N/A degrees.

Measurement Instructions:

Not applicable

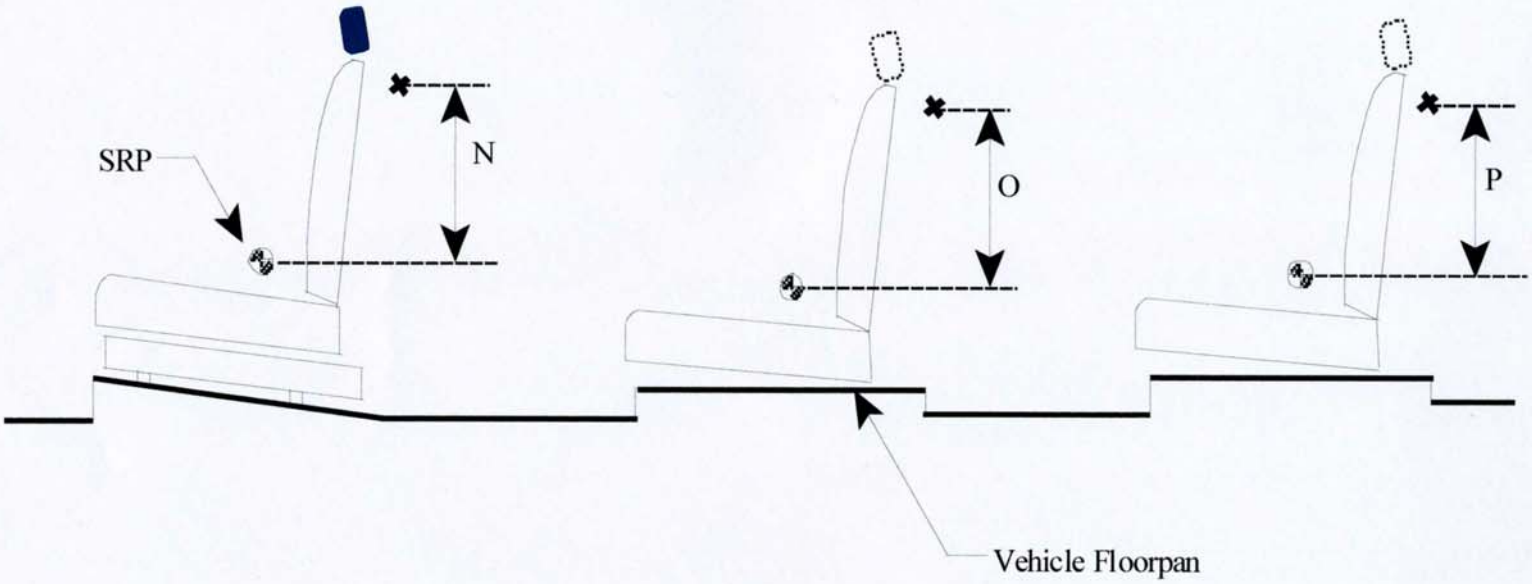
TETHER ANCHORAGE LOCATIONS - VERTICAL

FMVSS No. 225

(All dimensions in mm)

MODEL YEAR: 2008 MY / MAKE: Mitsubishi / MODEL: Lancer / BODY STYLE: 4-Door Sedan

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Bench / THIRD ROW: Not applicable



LEFT SIDE VIEW OF TEST VEHICLE

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)	500
	O2 (Center)	470 (With ARMREST) 465 (W/O ARMREST)
	O3 (Right)	500
Third Row	P1 (Left)	N/A
	P2 (Center)	N/A
	P3 (Right)	N/A

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

For each vehicle, provide the following information:

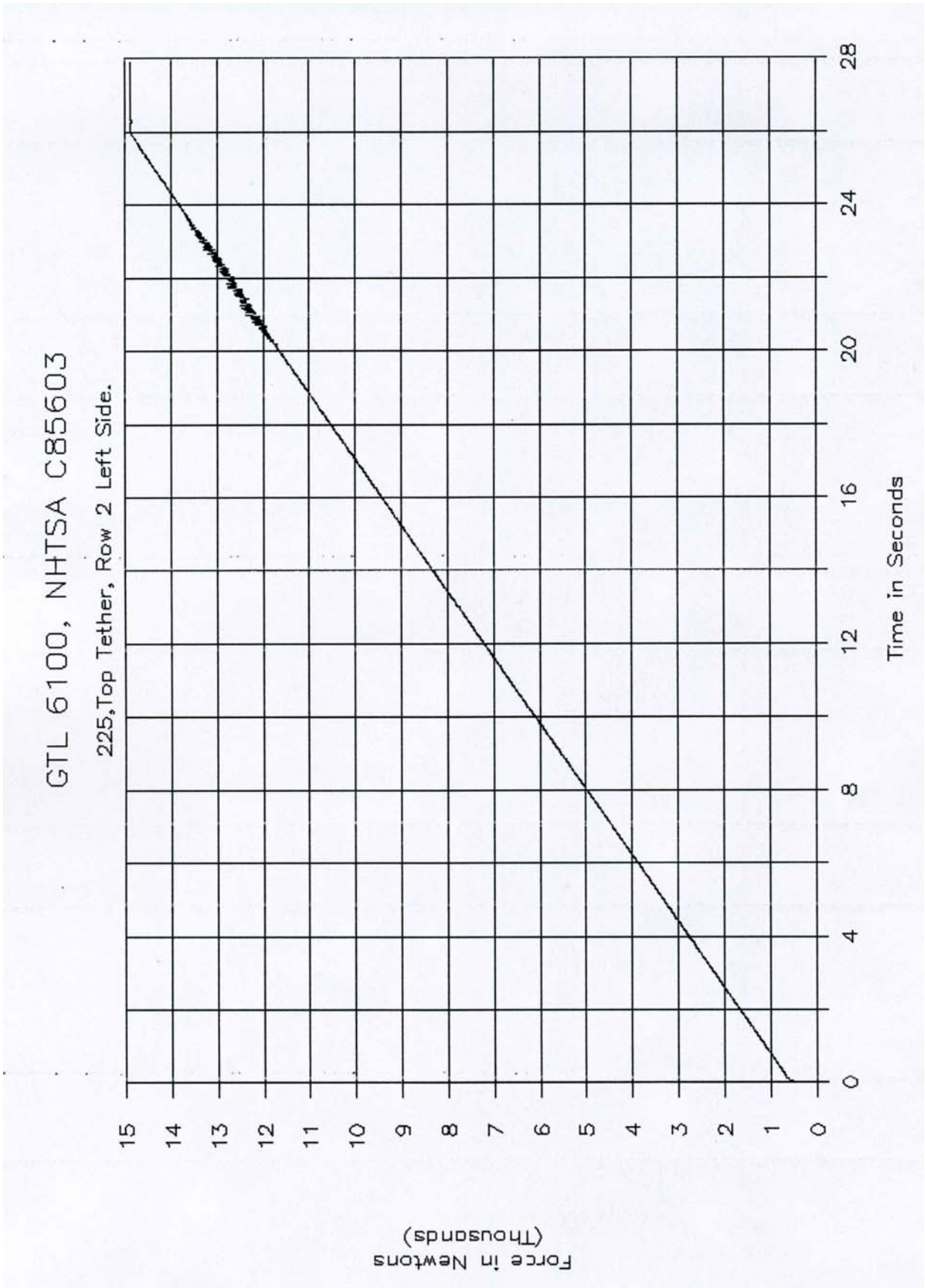
1. How many designated seating positions exist in the vehicle?
   Answer: 5 positions

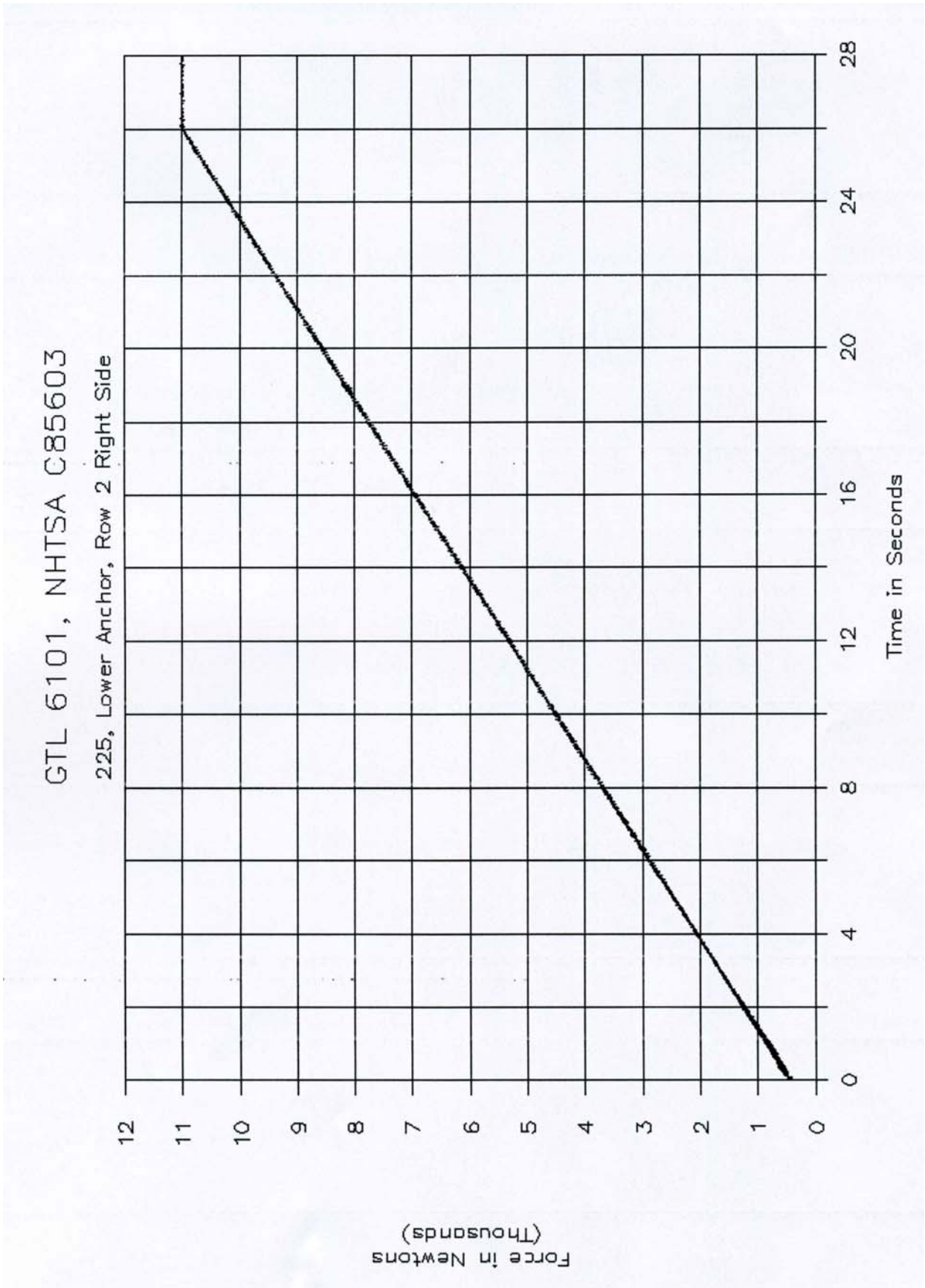
2. How many designated seating positions are equipped with lower anchorages and tether anchorages? Specify which position(s).
   Answer: 2 positions, 2nd row LH & RH side

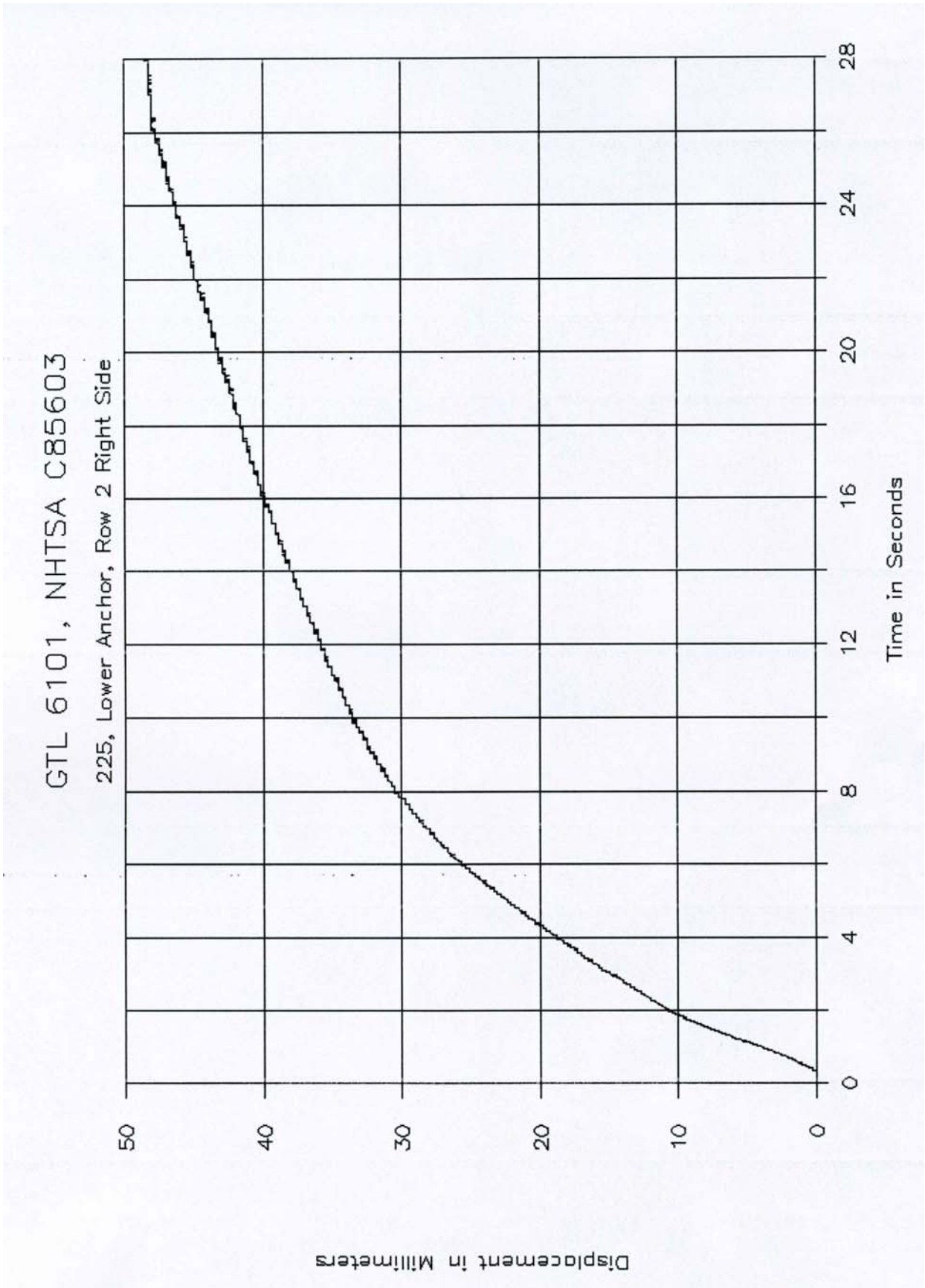
3. How many designated seating positions are equipped with tether anchorages? Specify which positions(s).
   Answer: 3 positions, 2nd row LH, Center & RH side

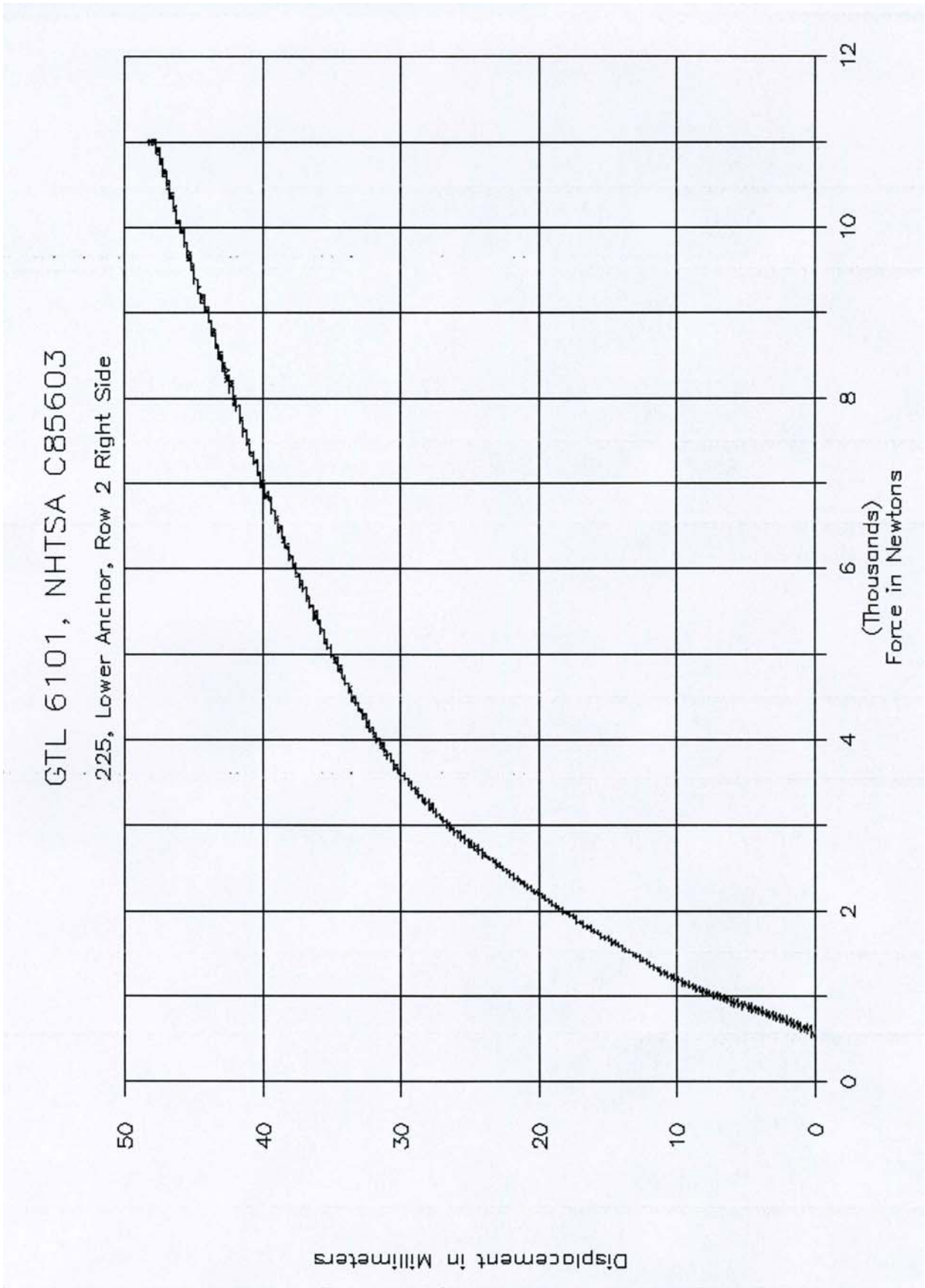
4. Lower Anchorages Marking and Conspicuity: Whether the anchorages are certified to S9.5(a) or S9.5(b) of FMVSS No. 225.
   Answer: S9.5(a)

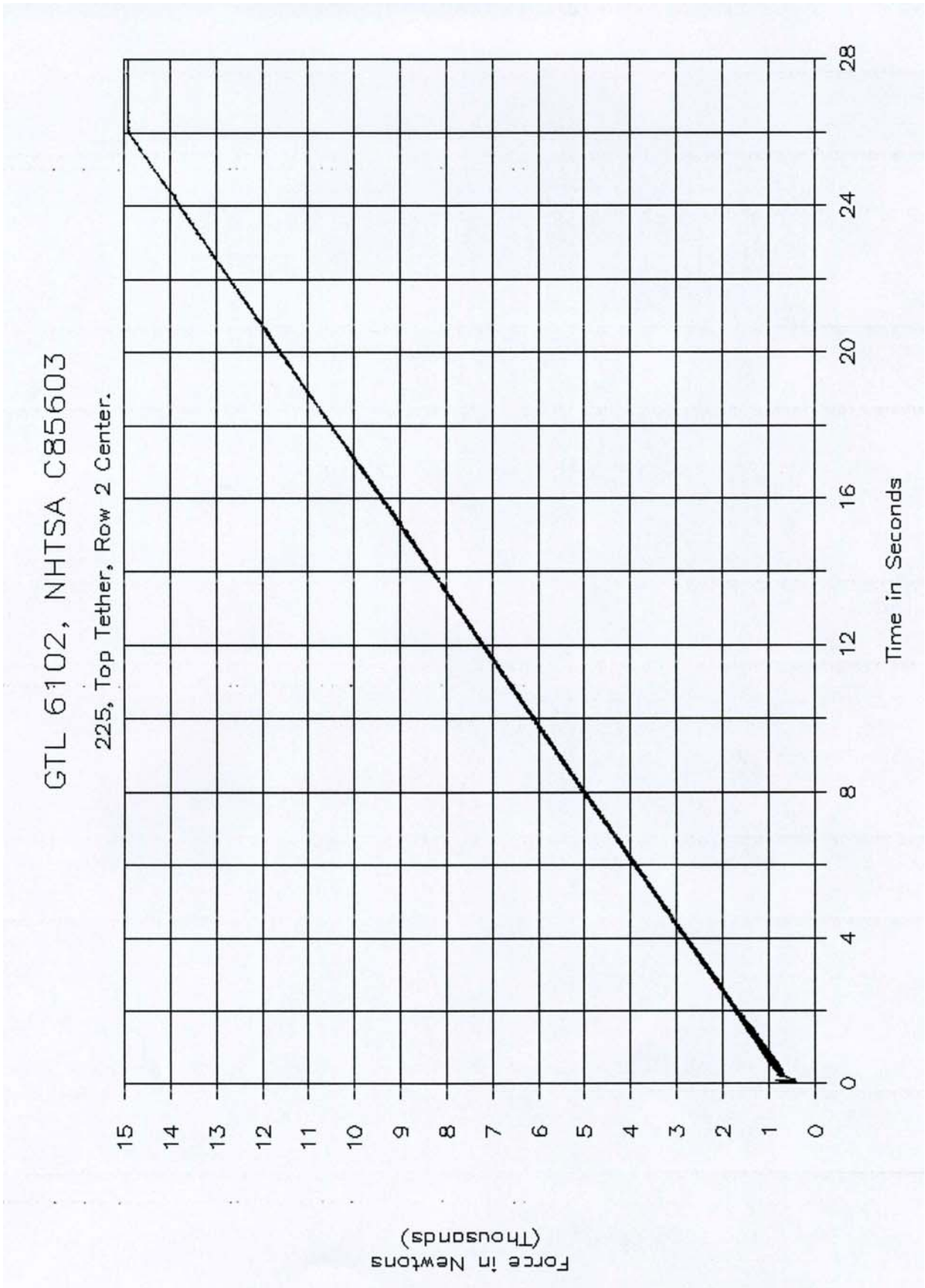
APPENDIX C
PLOTS


GTL 6100, NHTSA C85603
225,Top Tether, Row 2 Left Side.
Force in Newtons
(Thousands)
Time in Seconds
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
0
4
8
12
16
20
24
28


GTL 6101, NHTSA C85603
225, Lower Anchor, Row 2 Right Side
Force in Newtons
(Thousands)
0
1
2
3
4
5
6
7
8
9
10
11
12
0
4
8
12
16
20
24
28
Time in Seconds


GTL 6101, NHTSA C85603
225, Lower Anchor, Row 2 Right Side
Displacement in Millimeters
0
10
20
30
40
50
0
4
8
12
16
20
24
28
Time in Seconds


GTL 6101, NHTSA C85603
225, Lower Anchor, Row 2 Right Side
Displacement in Millimeters
0
10
20
30
40
50
0
2
4
6
8
10
12
(Thousands)
Force in Newtons


GTL 6102, NHTSA C85603
225, Top Tether, Row 2 Center.
Force in Newtons
(Thousands)
Time in Seconds
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
0
4
8
12
16
20
24
28