REPORT NUMBER 225-GTL-06-001

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

HONDA OF AMERICA MFG., INC. 2006 HONDA CIVIC, PASSENGER CAR NHTSA NO. C65302

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



OCTOBER 29, 2006

FINAL REPORT

PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION SAFETY ENFORCEMENT OFFICE OF VEHICLE SAFETY COMPLIANCE 400 SEVENTH STREET, SW ROOM 6111 (NVS-220) WASHINGTON, D.C. 20590 This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

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16. Abstract				
Compliance tests were conducted on the subject, 2006 Honda Civic 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 identifie				
Child Restraint Fixture will not attach to lower anchor bars due to interference with the seat				
back assembly. S225 Paragraph S9.3.				
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Compliance Testing		Copies of this report are available from		
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PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF COMPLIANCE TEST

A 2006 Honda Civic 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 2006 Honda Civic Passenger Car. Nomenclature applicable to the test vehicle are:
 - A. Vehicle Identification Number: 1HGFA16576L054629
 - B. NHTSA No.: C65302
 - C. Manufacturer: HONDA OF AMERICA MFG., INC.
 - D. Manufacture Date: 01/06
- 1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing during the time period July 14-19, 2006.

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 2006 HONDA CIVIC PASSENGER CAR did not appear to meet the requirements of FMVSS 225 testing.

COMPLIANCE TEST DATA

3.0 <u>TEST DATA</u>

The following data sheets document the results of testing on the 2006 Honda Civic Passenger Car.

DATA SHEET 1 SUMMARY OF RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 HONDA CIVIC PASSENGER CAR VEH. NHTSA NO: C65302; VIN: 1HGFA16576L054629 VEH. BUILD DATE:01/06 ; TEST DATE: JULY 14-19, 2006 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

C.

D.

B. REQUIREMENTS FOR CHILD RESTRAINT SYSTEMS AND TETHER ANCHORAGES

	PASS	FAIL
DSP a	<u> X </u>	
DSP b	X	
DSP c	<u> </u>	
LOCATION OF TETHER ANCHORAGE	ES	
	PASS	FAIL
DSP a	<u>X</u>	
DSP b	<u> X </u>	
DSP c	<u> X </u>	
LOWER ANCHORAGE DIMENSIONS		
	PASS	FAIL
DSP a		<u>X</u>
DSP b	<u>N/A</u>	N/A
DSP c		<u> </u>

DATA SHEET 1 CONTINUED SUMMARY OF RESULTS

E. CONSPICUITY AND MARKING OF LOWER ANCHORAGES

F.

G.

Η.

I.

DSP a	PASS X	FAIL
DSP b	N/A	N/A
DSP c	<u></u>	
STRENGTH OF TETHER ANCHORA	GES	
DSP a	PASS <u>N/A</u>	FAIL <u>N/A</u>
DSP b	<u>N/A</u>	N/A
DSP c	<u>N/A</u>	<u>N/A</u>
STRENGTH OF LOWER ANCHORAG	GES (Forward Force)	
DSP a	PASS N/A	FAIL <u>N/A</u>
DSP b	<u>N/A</u>	N/A
DSP c	<u>N/A</u>	N/A
STRENGTH OF LOWER ANCHORAG	GE (Lateral Force)	
DSP a	PASS <u>N/A</u>	FAIL <u>N/A</u>
DSP b	<u>N/A</u>	<u>N/A</u>
DSP c	<u>N/A</u>	<u>N/A</u>
OWNER'S MANUAL	PASS X	FAIL

REMARKS: DSP a = Left Rear Outboard, DSP b = Center, DSP c = Right Rear Outboard Strength tests were not performed due to failure of lower anchorage dimensions and fit.

RECORDED BY:_	G. Farrand	DATE:	07/19/06	
_				

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

VEH. MOD YR/MAKE/MODEL/BODY: <u>2006 HONDA CIVIC PASSENGER CAR</u> VEH. NHTSA NO: <u>C65302;</u> VIN: <u>1HGFA16576L054629</u> VEH. BUILD DATE: <u>01/06</u> ; TEST DATE: <u>JULY 14-19, 2006</u> TEST LABORATORY: <u>GENERAL TESTING LABORATORIES</u> OBSERVERS: <u>GRANT FARRAND, JIMMY LATANE</u>
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? <u>NO</u> 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? <u>NO</u> 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: <u>2</u>
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)? <u>YES</u>

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

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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/AYES = PASS NO = FAIL (S4.4(a)(1))

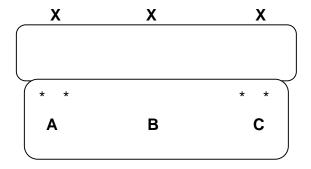
Number of provided tether anchorages (can be additional CRAS) indicate if a built-in child restraint is counted a s tether anchorage (NOTE: a built-in child restraint can only be counted toward either the required number of CRAS or tether anchorages, not both): <u>3</u>

Is the number of provided tether anchorages greater than or equal to the number of required tether anchorages? <u>YES</u>

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? <u>YES</u> 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? <u>YES</u>

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



X = Top Tether
* = Lower Anchors

 RECORDED BY:
 G. Farrand
 DATE:
 07/14/06

 APPROVED BY:
 D. Messick

DATA SHEET 3 LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/B	ODY: 2006 HONDA CIVIC PASSENGER CAR
VEH. NHTSA NO: <u>C65302;</u>	VIN: 1HGFA16576L054629
VEH. BUILD DATE:01/06;	TEST DATE: JULY 14-19, 2006
TEST LABORATORY: GENERAL	TESTING LABORATORIES
OBSERVERS: GRANT FARRAN	ID, JIMMY LATANE

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

Detailed description of the location of the tether anchorage: Located on rear 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 YES coin? 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? <u>YES</u> YES = PASS NO = FAIL (S6.1(d))

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

DATA SHEET 3 CONTINUED

If the DSP has a flexible tether routing device, after installing SFAD2 record the tether strap

If the DSP has a flexible tether routing device, record the horizontal distance between the torso

If the DSP has a rigid tether routing device, record the horizontal distance between the torso

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

N/A (Must be $60 \text{ N} \pm 5 \text{ N}$)

reference plane and the routing device: N/A

reference plane and the routing device: <u>N/A</u> Greater than or equal to 100mm = PASS

Greater than or equal to 65mm = PASS

COMMENTS:

tension:

RECORDED BY: G. Farrand

DATE: 07/14/06

Less than 65mm = FAIL

Less than 100mm = FAIL

APPROVED BY: D. Messick

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DATA SHEET 3A LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BO	DDY: 2006 HONDA CIVIC PASSENGER CAR
VEH. NHTSA NO: <u>C65302;</u>	VIN: 1HGFA16576L054629
VEH. BUILD DATE:01/06;	TEST DATE: JULY 14-19, 2006
TEST LABORATORY: GENERAL	TESTING LABORATORIES
OBSERVERS: GRANT FARRAN	ID, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 CENTER POSITION (DSP B)

Detailed description of the location of the tether anchorage: Located on rear shelf behind seat back.

Based on visual inspection, is the tether anchorage within the shaded zone? <u>YES</u> 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? <u>YES</u> If NO, skip to next question If YES, is it outside of the tether strap wraparound area? <u>YES</u> YES = PASS NO = FAIL (S6.2.1)

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

Is the tether anchorage accessible without the need for any tools other than a screwdriver or $\frac{\text{YES}}{\text{VES} - \text{PASS}}$

YES = PASS NO = FAIL (S6.1(b))

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

Is the tether anchorage sealed to prevent the entry of exhaust fumes into the passenger compartment? <u>YES</u>

YES = PASS NO = FAIL (S6.1(d))

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

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DATA SHEET 3A CONTINUED

DESIGNATED SEATING POSITION: ROW 2 CENTER POSITION (DSP B)

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:	07/14/06

DATA SHEET 3B LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BO	ODY: 2006 HONDA CIVIC PASSENGER CAR
VEH. NHTSA NO: <u>C65302;</u>	VIN: 1HGFA16576L054629
VEH. BUILD DATE:01/06;	TEST DATE: JULY 14-19, 2006
TEST LABORATORY: GENERAL	TESTING LABORATORIES
OBSERVERS: GRANT FARRAN	ID, JIMMY LATANE

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

Detailed description of the location of the tether anchorage: Located on rear shelf behind seat back.

Based on visual inspection, is the tether anchorage within the shaded zone? <u>YES</u> 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?

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

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

Is the tether anchorage accessible without the need for any tools other than a screwdriver or $\frac{YES}{VES = PASS}$

YES = PASS NO = FAIL (S6.1(b))

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

Is the tether anchorage sealed to prevent the entry of exhaust fumes into the passenger compartment? <u>YES</u>

YES = PASS NO = FAIL (S6.1(d))

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

DATA SHEET 3B CONTINUED

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

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: <u>N/A</u>

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:	07/14/06
	01/1//00

DATA SHEET 4 LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: <u>2006 HONDA CIVIC PASSENGER CAR</u> VEH. NHTSA NO: <u>C65302;</u> VIN: <u>1HGFA16576L054629</u> VEH. BUILD DATE: <u>01/06</u> ; TEST DATE: <u>JULY 14-19, 2006</u> TEST LABORATORY: <u>GENERAL TESTING LABORATORIES</u> OBSERVERS: <u>GRANT FARRAND, JIMMY LATANE</u>				
DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)				
Outboard Lower Anchorage bar diameter: <u>6.04 mm</u> 6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))				
Inboard Lower Anchorage bar diameter: <u>6.04 mm</u> 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): 27 mm Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))				
Length of the straight portion of the bar (inboard lower anchorage): 26 mm Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))				
Length between the anchor bar supports (outboard lower anchorage): <u>30 mm</u> Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))				
Length between the anchor bar supports (inboard lower anchorage):28 mm Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))				
CRF Pitch angle: <u>13</u> Angle = 15⁰±10º = PASS Angle≠15º±10º = FAIL (S9.2.1)				
CRF Roll angle: 0.0 Angle = $0^{\circ}\pm 5^{\circ}$ = PASS Angle $\neq 0^{\circ}\pm 5^{\circ}$ = FAIL (S9.2.1)				
CRF Yaw angle: 0.0 Angle = 0°±10° = PASS Angle≠0°±10° = FAIL (S9.2.1)				
Distance between point Z on the CRF and the front surface of outboard anchor bar: <u>55 mm</u> Distance ≤70mm = PASS Distance > 70mm = FAIL				
Distance between point Z on the CRF and the front surface of inboard anchor bar:* 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: <u>174 mm</u> Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: <u>175 mm</u> 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: *CRF WILL NOT FIT ON INBOARD ANCHOR BAR DUE TO INTERFERENCE WITH SEAT BACK.

RECORDED BY: G. Farrand

DATE:	07/19/06
DAIE.	07/19/00

DATA SHEET 4A LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: <u>2006 HONDA CIVIC PASSENGER CAR</u> VEH. NHTSA NO: <u>C65302;</u> VIN: <u>1HGFA16576L054629</u> VEH. BUILD DATE: <u>01/06</u> ; TEST DATE: <u>JULY 14-19, 2006</u> TEST LABORATORY: <u>GENERAL TESTING LABORATORIES</u> OBSERVERS: <u>GRANT FARRAND, JIMMY LATANE</u>			
DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)			
Outboard Lower Anchorage bar diameter: <u>6.04 mm</u> 6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))			
Inboard Lower Anchorage bar diameter: <u>6.04 mm</u> 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): 27 mm Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))			
Length of the straight portion of the bar (inboard lower anchorage): 25 mm Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))			
Length between the anchor bar supports (outboard lower anchorage): <u>30 mm</u> Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))			
Length between the anchor bar supports (inboard lower anchorage): 28 mm Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))			
CRF Pitch angle: <u>12.5</u> Angle = 15º±10º = PASS_Angle≠15º±10º = FAIL (S9.2.1)			
CRF Roll angle:0.0 Angle = 0°±5° = PASS Angle≠0°±5° = FAIL (S9.2.1)			
CRF Yaw angle: 0.0 Angle = 0°±10° = PASS Angle≠0°±10° = FAIL (S9.2.1)			
Distance between point Z on the CRF and the front surface of outboard anchor bar: <u>50 mm</u> Distance ≤70mm = PASS Distance > 70mm = FAIL			
Distance between point Z on the CRF and the front surface of inboard anchor bar:*			

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: <u>190 mm</u> Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: <u>190 mm</u> 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: *CRF WILL NOT FIT ON INBOARD ANCHOR BAR DUE TO INTERFERENCE WITH SEAT BACK.

RECORDED BY: G. Farrand

DATA SHEET 5 CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/B	ODY: 2006 HONDA CIVIC PASSENGER CAR
VEH. NHTSA NO: <u>C65302;</u>	VIN: 1HGFA16576L054629
VEH. BUILD DATE: <u>01/06</u> ;	TEST DATE: JULY 14-19, 2006
TEST LABORATORY: GENERAL	TESTING LABORATORIES
OBSERVERS: GRANT FARRAN	ID, JIMMY LATANE

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

MARKING (Circles)

Diameter of the circle: <u>15 mm</u> Diameter ≥13mm = PASS

Diameter <13mm = FAIL (S9.5(a)(1))

Does the circle have words, symbols or pictograms? <u>SYMBOL</u> NO skip to next question YES, are the meaning of the words, symbols or pictograms explained in the owner's manual? <u>YES</u> 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: <u>55 mm</u>

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: <u>N/A</u>

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 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 30° 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)) 18

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:	07/19/06
	01/10/00

DATA SHEET 6 OWNER'S MANUAL

VEH. MOD YR/MAKE/MODEL/BO	ODY: 2006 HONDA CIVIC PASSENGER CAR	
VEH. NHTSA NO: <u>C65302;</u>	VIN: 1HGFA16576L054629	
VEH. BUILD DATE: <u>01/06</u> ;	TEST DATE: JULY 14-19, 2006	
TEST LABORATORY: GENERAL TESTING LABORATORIES		
OBSERVERS: GRANT FARRAN	ID, JIMMY LATANE	

Description of which DSP's are equipped with tether anchorages and child restraint anchorage systems: <u>YES</u>

PASS<u>X</u> FAIL_____

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

PASS<u>X</u> FAIL_____

Description of how to properly use the tether anchorage and lower anchor bars: <u>YES</u>

PASS<u>X</u> 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: <u>YES</u>

PASS<u>X</u> FAIL_____

COMMENTS:

RECORDED BY: G. Farrand

DATE: 07/19/06

SECTION 4 INSTRUMENTATION AND EQUIPMENT LIST

EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO.	CAL. DATE	NEXT CAL. DATE
COMPUTER	AT&T	486DX266	BEFORE USE	BEFORE
LOAD CELL	INTERFACE	496	01/05	01/06
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	02/06	02/07
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

TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

PHOTOGRAPHS



FIGURE 5.1 LEFT SIDE VIEW OF VEHICLE



FIGURE 5.2 RIGHT SIDE VIEW OF VEHICLE



FIGURE 5.3 ¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE



FIGURE 5.4 ¾ REAR VIEW FROM RIGHT SIDE OF VEHICLE

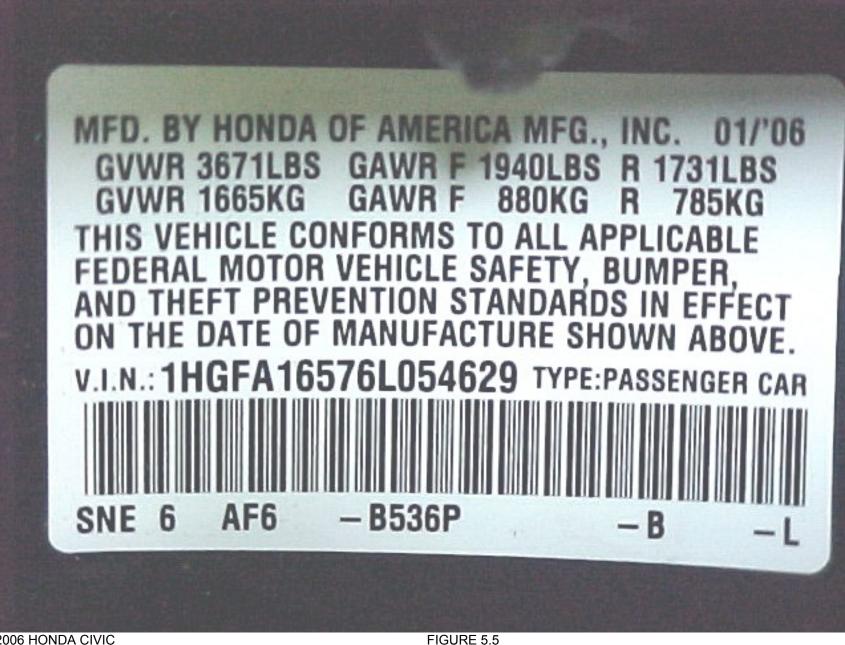


FIGURE 5.5 VEHICLE CERTIFICATION LABEL

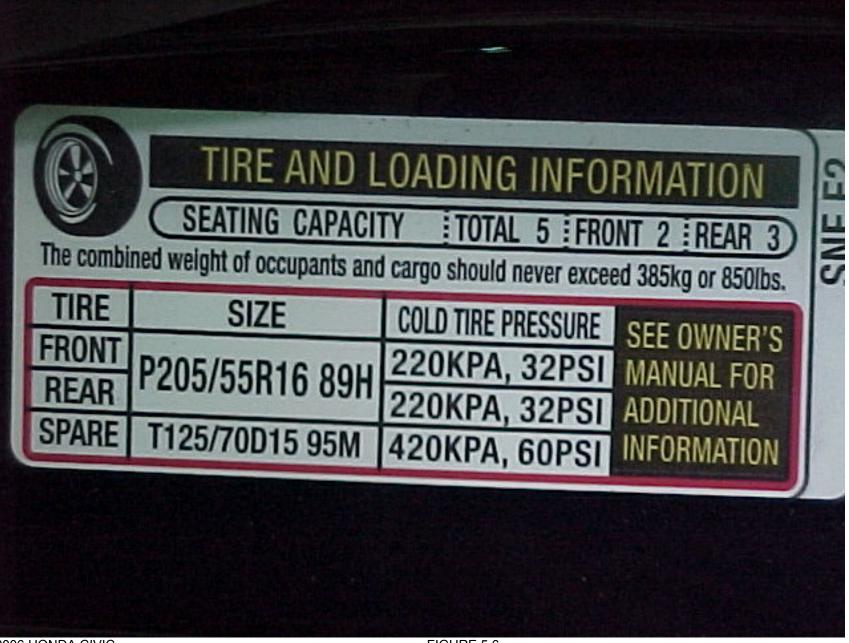


FIGURE 5.6 VEHICLE TIRE INFORMATION LABEL



FIGURE 5.7 LOCATIONS OF CHILD RESTRAINTS



FIGURE 5.8 VISIBILITY OF LOWER RESTRAINTS



FIGURE 5.9 PRE-TEST 2ND ROW RIGHT LOWER ANCHORS



NHTSA NO. C65302 FMVSS NO. 225

FIGURE 5.10 PRE-TEST 2ND ROW RIGHT TOP TETHER ANCHORS



FIGURE 5.11 PRE-TEST 2ND ROW LEFT LOWER ANCHORS



FIGURE 5.12 PRE-TEST 2ND ROW LEFT TOP TETHER ANCHOR



FIGURE 5.13 PRE-TEST 2ND ROW CENTER TOP TETHER ANCHOR



FIGURE 5.14 CAP OVER TOP TETHER ANCHOR

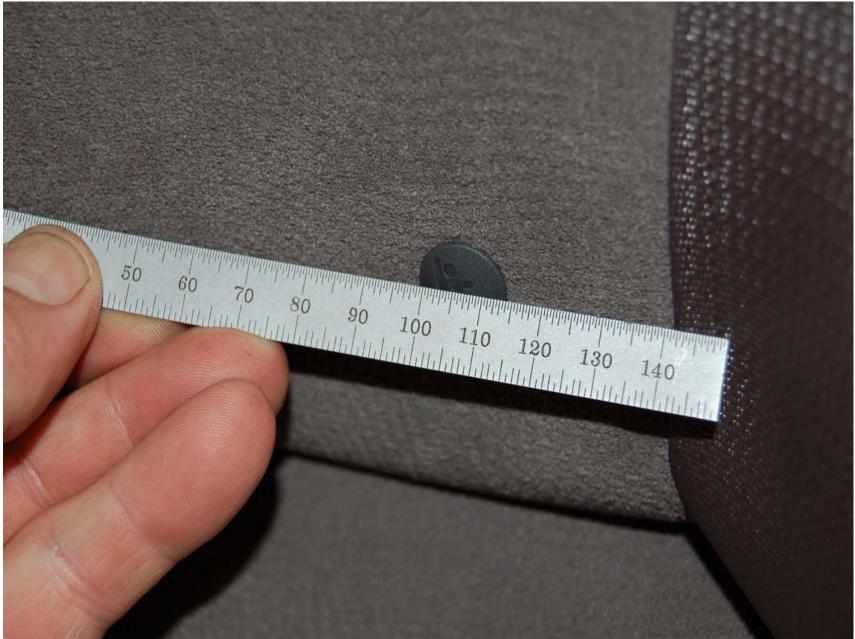


FIGURE 5.15 LOWER ANCHOR BAR IDENTIFICATION



FIGURE 5.16 MEASUREMENT OF LOWER ANCHOR BAR ID.



FIGURE 5.17 VIEW OF 2D TEMPLATE IN 2ND ROW RIGHT SEAT



FIGURE 5.18 VIEW OF 2D TEMPLATE IN 2ND ROW RIGHT SEAT



FIGURE 5.19 VIEW OF 2D TEMPLATE IN 2ND ROW LEFT SIDE



FIGURE 5.20 VIEW OF 2D TEMPLATE IN 2ND ROW LEFT SEAT



FIGURE 5.21 VIEW OF 2D TEMPLATE IN 2ND ROW CENTER SEAT



FIGURE 5.22 VIEW OF 2D TEMPLATE IN 2ND ROW CENTER SEAT

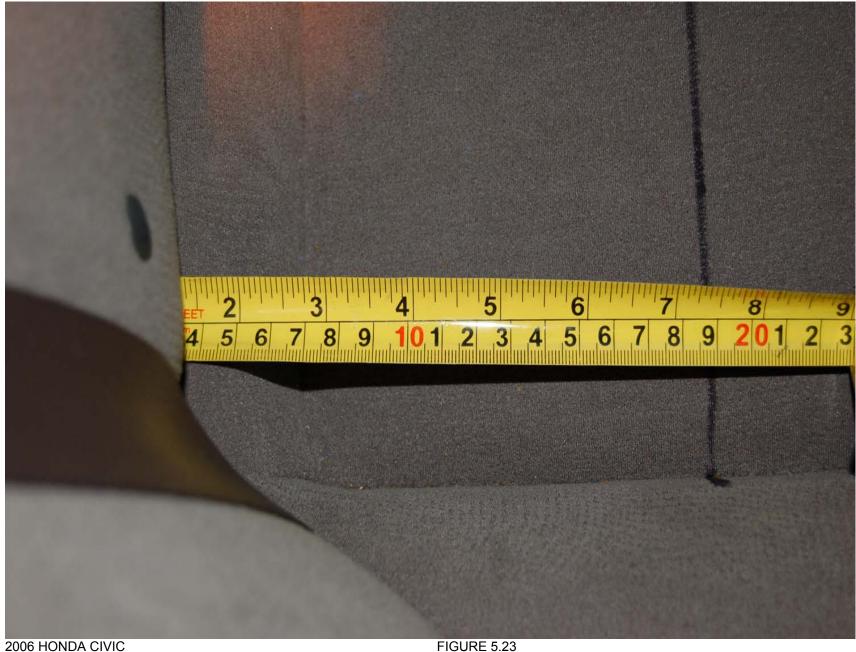


FIGURE 5.23 VIEW OF OUTBOARD "H" POINT MEASUREMENT RIGHT SEAT



FIGURE 5.24 VIEW OF INBOARD "H" POINT MEASUREMENT RIGHT SEAT



FIGURE 5.25 VIEW OF OUTBOARD "H" POINT MEASUREMENT IN 2ND ROW LEFT SEAT



FIGURE 5.26 VIEW OF INBOARD "H" POINT MEASUREMENT LEFT SEAT



FIGURE 5.27 VIEW OF CRF IN 2ND ROW RIGHT SEAT



FIGURE 5.28 VIEW OF ANGLE MEASUREMENT 2ND ROW RIGHT SEAT



FIGURE 5.29 VIEW OF OUTBOARD "Z" MEASUREMENT 2ND ROW RIGHT SEAT



FIGURE 5.30 VIEW OF INBOARD ANCHOR FIT 2ND ROW RIGHT SEAT



FIGURE 5.31 VIEW OF INBOARD ANCHOR FIT 2ND ROW RIGHT SIDE



FIGURE 5.32 VIEW OF CRF FIXTURE IN 2ND ROW LEFT SEAT



FIGURE 5.33 VIEW OF ANGLE MEASUREMENT IN 2ND ROW LEFT SEAT



FIGURE 5.34 VIEW OF OUTBOARD "Z" MEASUREMENT IN 2^{ND} ROW LEFT SEAT



FIGURE 5.35 VIEW OF INBOARD ANCHOR FIT 2ND ROW LEFT SEAT



FIGURE 5.36 INTERFERENCE OF SEAT BACK FRAME



FIGURE 5.37 INTERFERENCE OF SEAT BACK FRAME



FIGURE 5.38 INTERFERENCE OF SEAT BACK FRAME



FIGURE 5.39 INTERFERENCE OF SEAT BACK FRAME

APPENDIX A

OWNER'S MANUAL CHILD RESTRAINT INFORMATION

Seat
a Child Se
Installing
l Seat,
Child
Selecting a (

1.1

- proper type and size to fit the child. Rear-facing for infants, forward-2. The child seat should be of the facing for small children.
- positions) where it will be used. 3. The child seat should fit the vehicle seating position (or

vehicle seating position, or positions, purchased one, we recommend that Before purchasing a conventional child seat, or using a previously you test the seat in the specific where the seat will be used.

and a good place to install the seat After selecting a proper child seat there are three main steps in installing the seat:

Installing a Child Seat

- the vehicle. All child seats must be secured to the vehicle with the lap part of a lap/shoulder belt or with 1. Properly secure the child seat to the LATCH (lower anchors and child whose seat is not properly tethers for children) system. A secured to the vehicle can be endangered in a crash.
- 2. Make sure the child seat is firmly forward and from side-to-side to secured. After installing a child seat, push and pull the seat verify that it is secure.

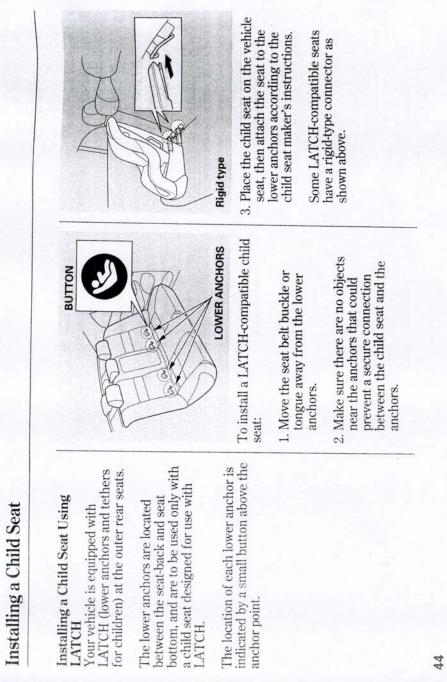
A child seat secured with a seat belt to be "rock solid." Some side-to-side possible. However, it does not need should be installed as firmly as

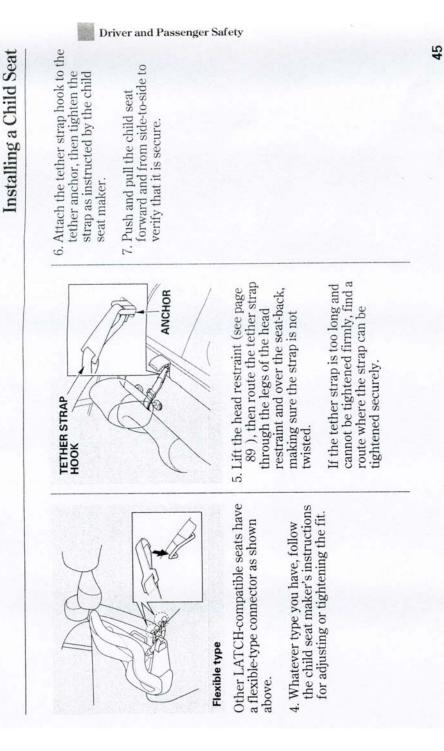
should not reduce the child seat's movement can be expected and effectiveness.

child seat that can be firmly secured. position, or use a different style of If the child seat is not secure, try installing it in a different seating

Driver and Passenger Safety according to the child seat maker's can be seriously injured in a crash. Secure the child in the child seat. Make sure the child is properly instructions. A child who is not properly secured in a child seat strapped in the child seat 3

guidelines on how to properly install seat is used in all examples, but the a child seat. A forward-facing child instructions are the same for rear-The following pages provide facing child seats. 43





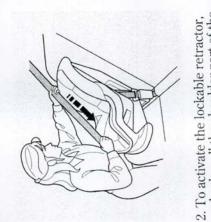


Installing a Child Seat with a Lap/

Shoulder Belt When not using the LATCH system, all child seats must be secured to the vehicle with the lap part of a lap/ shoulder belt. In addition, the lap/shoulder belts in all seating positions except the driver's have a locking mechanism that must be activated to secure a child seat.

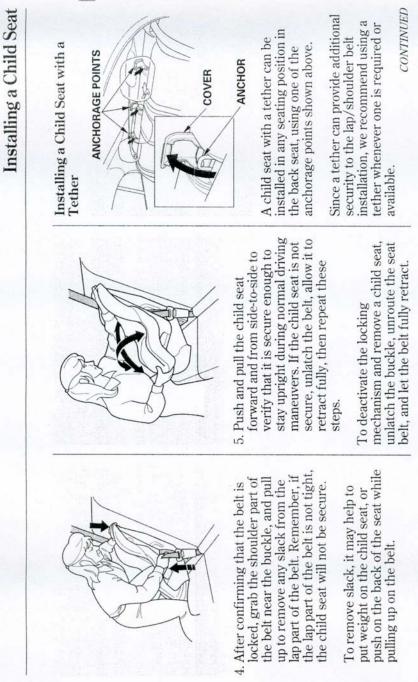


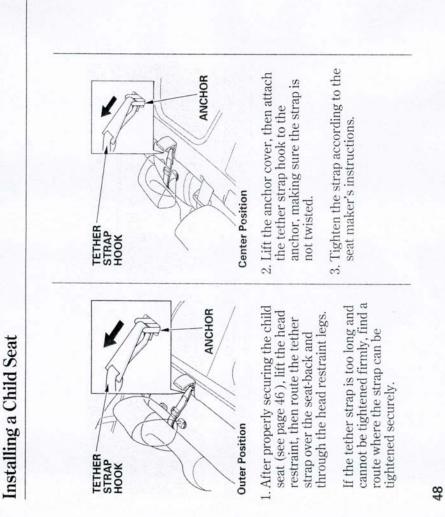
to the seat maker's instructions, then insert the latch plate into the 1. With the child seat in the desired seating position, route the belt through the child seat according buckle.



- slowly pull the shoulder part of the belt all the way out until it stops, then let the belt feed back into the retractor.
- 3. After the belt has retracted, tug on it. If the belt is locked, you will not be able to pull it out. If you can pull the belt out, it is not locked, and you will need to repeat these steps.

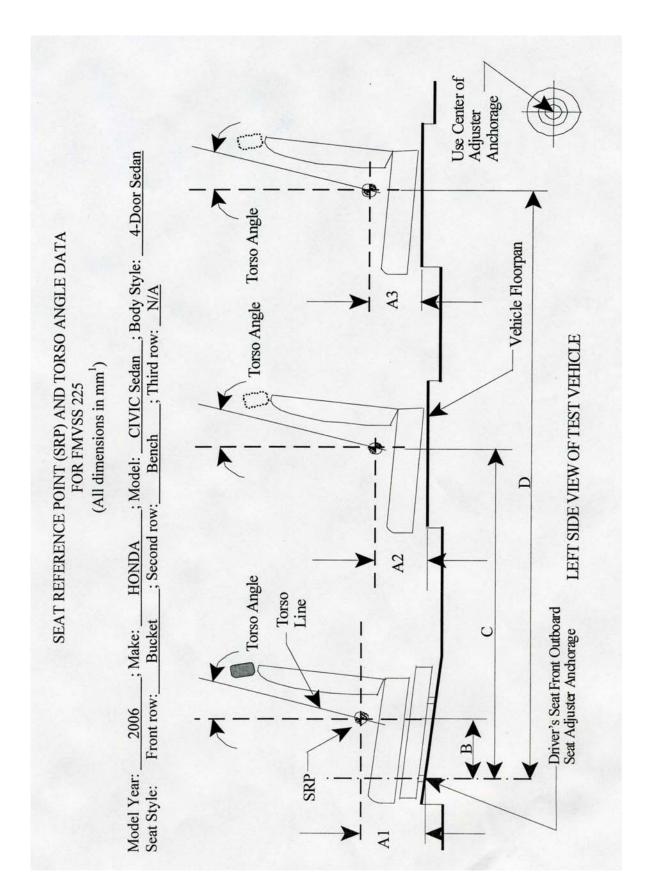
46





APPENDIX B

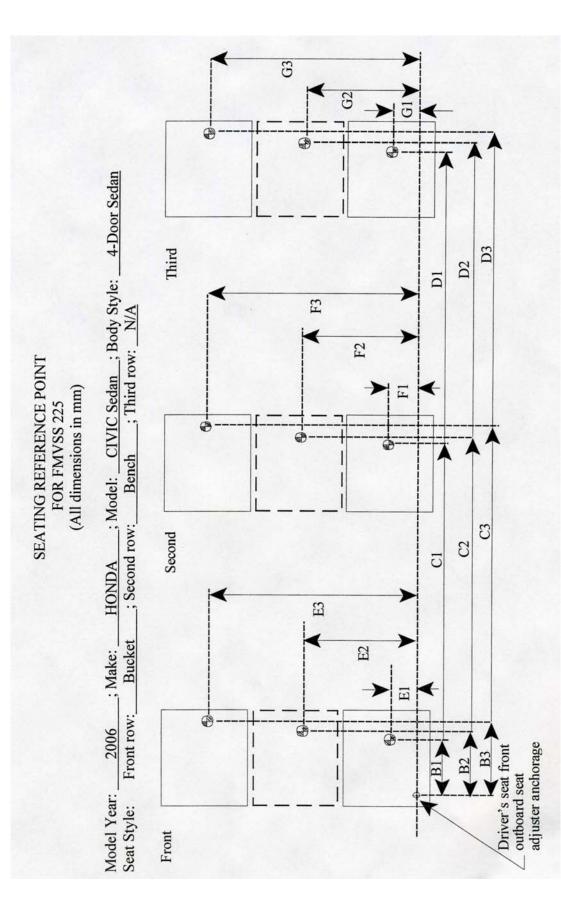
MANUFACTURER'S DATA



		Left (Driver Side)	Center (if any)	_
	Al	(Driver) 220	N/A	-
	A2	252	265	
	A3	N/A	N/A	-
	В	284	N/A	
	С	1094	1054 (with Armrest) 1064 (without Armrest)	
	D	N/A	N/A	-
Torso Angle (deoree)	Front Row	23°	N/A	
1000	Second Row	26°	24°	
	Third Row	N/A	N/A	+

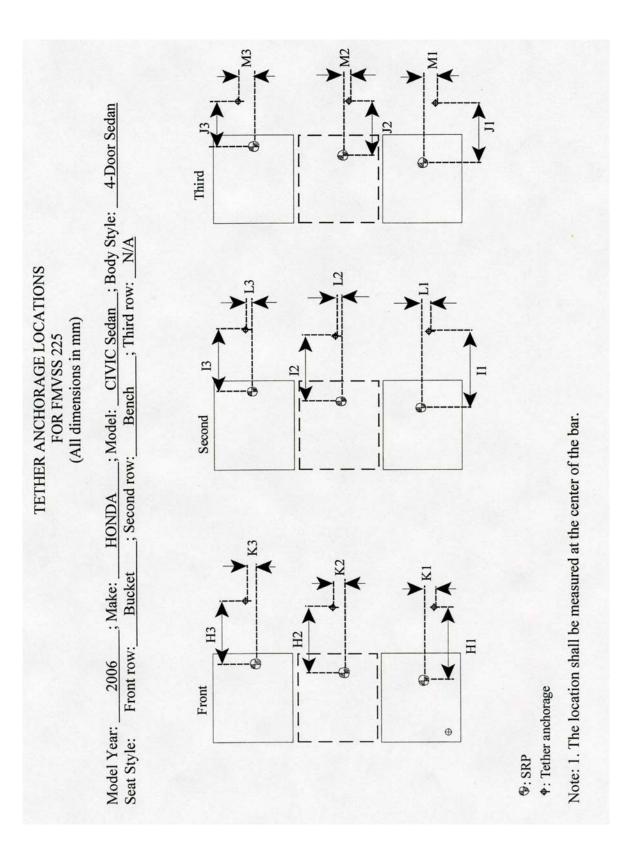
Table 1. Seating Positions¹ and Torso Angles

Note: 1. All dimensions are in mm. If not, provide the unit used.



Seating Refere (SRP)		Distance from Driver's front outboard seat adjuster anchorage ¹
Front Row	B1	293
	E1	212
	B2	N/A
	E2	N/A
	B3	293
	E3	912
Second Row	C1	1094
	F1	232
	C2	1054 (with Armrest) 1064 (without Armrest)
	F2	562
	C3	1094
	F3	892
Third Row	D1	N/A
	G1	N/A
	D2	N/A
	G2	N/A
	D3	N/A
	G3	N/A

Note: 1. Use the center of anchorage.



FORM 225 Page 6 of 9 Last Updated: 12/12/2005

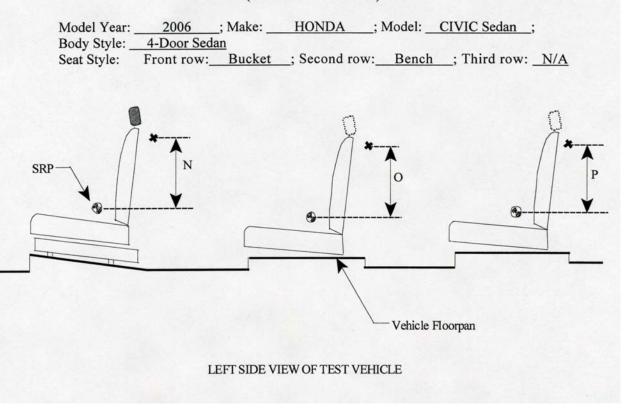
Seating Reference Point (SRP)		Distance from SRP
Front Row	H1	N/A
	K1	N/A
	H2	N/A
	K2	N/A
	H3	N/A
	K3	N/A
Second Row	I1	491.5
	L1	5.5
	I2	532 (with Armrest) 522(without Armrest)
	L2	0.0
	I3	491.5
	L3	5.5
Third Row	J1	N/A
	M1	N/A
	J2	N/A
	M2	N/A
	J3	N/A
	M3	N/A

Table 3. Seating Reference Point and Tether Anchorage Locations

Note: 1. Use the center of anchorage.

FORM 225 Page 7 of 9 Last Updated: 12/12/2005

TETHER ANCHORAGE LOCATIONS - VERTICAL FOR FMVSS 225 (All dimensions in mm)



FORM 225 Page 8 of 9 Last Updated: 12/12/2005

Seating Row	Vertical Distance from Seating Reference	
Front Row	N1 (Driver)	N/A
	N2 (Center)	N/A
	N3 (Right)	N/A
Second Row	O1 (Left)	520
	O2 (Center)	507
	O3 (Right)	520
Third Row	P1 (Left)	N/A
	P2 (Center)	N/A
	P3 (Right)	N/A

Table 4. Vertical Dimension For The Tether Anchorage

Note: 1. All dimensions are in mm. If not, provide the unit used.

FORM 225 Page 9 of 9 Last Updated: 12/12/2005 For each vehicle, provide the following information:

- 1. How many designated seating positions exist in the vehicle? Five positions
- 2. How many designated seating positions are equipped with lower anchorages and tether anchorages? Specify which position(s).

There are four lower anchorages and three tether anchorages. Lower anchorages are equipped at the outer rear seat. Tether anchorages are equipped at the any seating position in the rear seat.

3. How many designated seating positions are equipped with tether anchorages? Specify which position(s). There are three tether anchorages. Tether anchorages are equipped at the any seating position in the rear seat.

4. Lower Anchorage Marking and Conspicuity: Whether the anchorages are certified to S9.5(a) or S9.5(b) of FMVSS 225.

It is certified with S9.5 (a) of FMVSS 225.

APPENDIX C LABORATORY NOTICE OF TEST FAILURE

FMVSS NO.:	225	TEST DATE:	07/19/06		
LABORATORY: General Testing Laboratories, Inc.					
CONTRACT NO.: DT	<u>NH22-02-D-01043</u> ; DEL	.V. ORDER NO.:			
LABORATORY PROJ	ECT ENGINEER'S NAM	/IE: <u>Grant Farra</u>	nd		
TEST VEHICLE MAKE	E/MODEL/BODY STYLE	E: 2006 HONE			
VEHICLE NHTSA NO	.: <u> </u>	VIN: 1HGFA1657	76L054629		
VEHICLE MODEL YE	AR: <u>2006</u> :	BUILD DATE:	01/06		
	CRIPTION: <u>Child restrai</u> to interference with the				
Shall be designed suc	, PARAGRAPH <u>S9.3</u> : <u>h that the CRF can be p</u> anchorages of each chile	laced inside the veh	icle and		

NOTIFICATION TO NHTSA (COTR): John Finneran, Ed Chan, Bob Krauss

DATE: 07/21/06 BY: Grant Farrand

REMARKS: Inboard left side lower anchor and inboard right side lower anchor cannot be attached due to the child seat anchor butting into the seat back cushion frame assembly.