REPORT NUMBER 225-GTL-07-001

FMVSS NO. 225
CHILD RESTRAINT ANCHORAGE SYSTEMS
LOWER AND TETHER ANCHORAGES
INDICANT TESTING

HONDA MOTOR CO., LTD.
2007 HONDA FIT, PASSENGER CAR
NHTSA NO. C75300

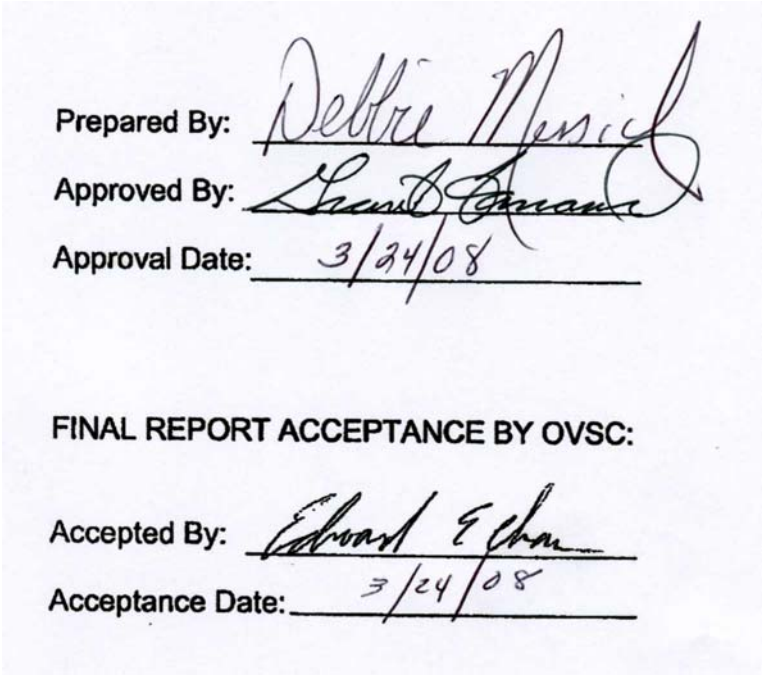
GENERAL TESTING LABORATORIES, INC.
1623 LEEDSTOWN ROAD
COLONIAL BEACH, VIRGINIA 22443

MARCH 24, 2008

FINAL REPORT

PREPARED FOR

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



Technical Report Documentation Page

1. Report No. 225-GTL-07-001	2. Government Accession No. N/A	3. Recipient's Catalog No. N/A
4. Title and Subtitle Final Report of FMVSS 225 Indicant Testing of 2007 HONDA FIT, PASSENGER CAR NHTSA No. C75300		5. Report Date March 24, 2008 6. Performing Organ. Code GTL
7. Author(s) Grant Farrand, Project Engineer Debbie Messick, Project Manager		8. Performing Organ. Rep# GTL-DOT-07-225-001
9. Performing Organization Name and Address General Testing Laboratories, Inc. 1623 Leedstown Road Colonial Beach, Va 22443		10. Work Unit No. (TRAIS) N/A 11. Contract or Grant No. DTNH22-06-C-00032
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Admin. Enforcement Office of Vehicle Safety Compliance (NVS-220) 1200 New Jersey Ave., S.E., Washington, DC 20590		13. Type of Report and Period Covered Final Test Report November 7, 2007 14. Sponsoring Agency Code NVS-221
15. Supplementary Notes		

16. Abstract

Tests were conducted on the subject, 2007 Honda Fit Passenger Car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-225-01.

The Child Restraint Fixture (CRF) would not fit on the lower 225 anchors. The manufacturer was notified and they came to GTL to review the anomaly. They had an alternate procedure for CRF installation that is not specifically prohibited by FMVSS 225 and were able to install their CRF in this vehicle. Due to this CRF fit issue this test is now considered an indicant test.

17. Key Words Safety Engineering FMVSS 225	18. Distribution Statement Copies of this report are available from NHTSA Technical Information Services (TIS) Room W45-212 (NPO-411) 1200 New Jersey Ave., S.E. Washington, DC 20590 Telephone No. (202) 366-4947		
19. Security Classif. (of this report) UNCLASSIFIED	21. No. of Pages 83	22. Price	
20. Security Classif. (of this page) UNCLASSIFIED			

Form DOT F 1700.7 (8-72)

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

SECTION 1

PURPOSE OF INDICANT TEST

1.0 PURPOSE OF INDICANT TEST

A 2007 Honda Fit Passenger Car was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 225 testing. 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 2007 Honda Fit Passenger Car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: JHMGD37647S056969

B. NHTSA No.: C75300

C. Manufacturer: HONDA MOTOR CO., LTD.

D. Manufacture Date: 6/07

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing on November 7, 2007.

SECTION 2

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.

The Child Restraint Fixture (CRF) would not fit on the lower 225 anchors. The manufacturer was notified and they came to GTL to review the anomaly. They had an alternate procedure for CRF installation that is not specifically prohibited by FMVSS 225 and were able to install their CRF in this vehicle. Due to this CRF fit issue this test is now considered an indicant test.

The following data sheets document the results of testing on the 2007 HONDA FIT PASSENGER CAR.

SECTION 3

TEST DATA

3.0 TEST DATA

Data on the 2007 Honda Fit is documented on the following data sheets.

DATA SHEET 1
SUMMARY OF RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
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	N/A	N/A
DSP b	N/A	N/A
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	N/A	N/A

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	FAIL
	X	

REMARKS: DSP a = Left Rear Outboard, DSP b = Center, DSP c = Right Rear Outboard

NOTE: Strength tests were not performed due to SFAD test fixture not fitting anchorages.

RECORDED BY: G. Farrand DATE: 11/09/07

APPROVED BY: D. Messick

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

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
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))

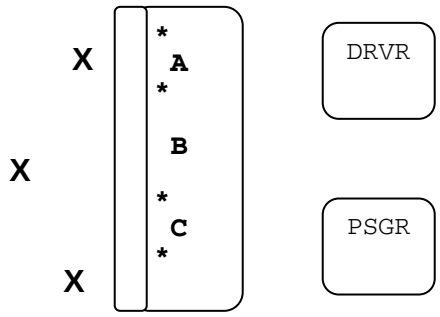
If the vehicle has 3 or more rear dsps and a non-outboard dsp, is a tether anchorage or CRAS provided at a non-outboard dsp? YES

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: 11/07/07

APPROVED BY: D. Messick

DATA SHEET 3
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Detailed description of the location of the tether anchorage:
Located on rear side of 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 SIDE (DSP A)

If the DSP has a flexible tether routing device, after installing SFAD2 record the tether strap tension: N/A (Must be 60 N ± 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: 11/07/07

APPROVED BY: D. Messick

DATA SHEET 3A
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Detailed description of the location of the tether anchorage:
Located in headliner above and 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 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: 11/07/07

APPROVED BY: D. Messick

DATA SHEET 3B
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, 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? 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 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: 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: 11/07/07

APPROVED BY: D. Messick

DATA SHEET 4
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Outboard Lower Anchorage bar diameter: 6.03 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 6.04 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): 30 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 46 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 40 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 59 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

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

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

CRF Yaw angle: FAIL*
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: FAIL*
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: FAIL*
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: 170 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 170 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: *STEEL ROD WELDED TO BOTTOM OF SEAT BACK TO HOLD SEAT COVER FABRIC WILL NOT ALLOW CRF FIXTURE TO HOOK ONTO LOWER OUTBOARD ANCHOR.

RECORDED BY: G. Farrand DATE: 11/07/07

APPROVED BY: D. Messick

DATA SHEET 4A
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Outboard Lower Anchorage bar diameter: 6.00 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 6.02 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): 31 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 29 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 41 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 41 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 13.0
Angle = 15º±10º = PASS Angle≠15º±10º = FAIL (S9.2.1)

CRF Roll angle: 0.4
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: 52 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 52 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: 168 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 168 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: 11/07/07

APPROVED BY: D. Messick

DATA SHEET 5
CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

MARKING (Circles)

Diameter of the circle: 15.3 mm
Diameter ≥13mm = PASS Diameter <13mm = FAIL (S9.5(a)(1))

Does the circle have words, symbols or pictograms? PICTOGRAPH
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
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: 11/07/07

APPROVED BY: D. Messick

DATA SHEET 6
OWNER'S MANUAL

VEH. MOD YR/MAKE/MODEL/BODY: 2007 HONDA FIT PASSENGER CAR
VEH. NHTSA NO: C75300; VIN: JHMGD37647S056969
VEH. BUILD DATE: 6/07 ; TEST DATE: NOVEMBER 7, 2007
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: 11/07/07

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	496	03/07	03/08
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

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

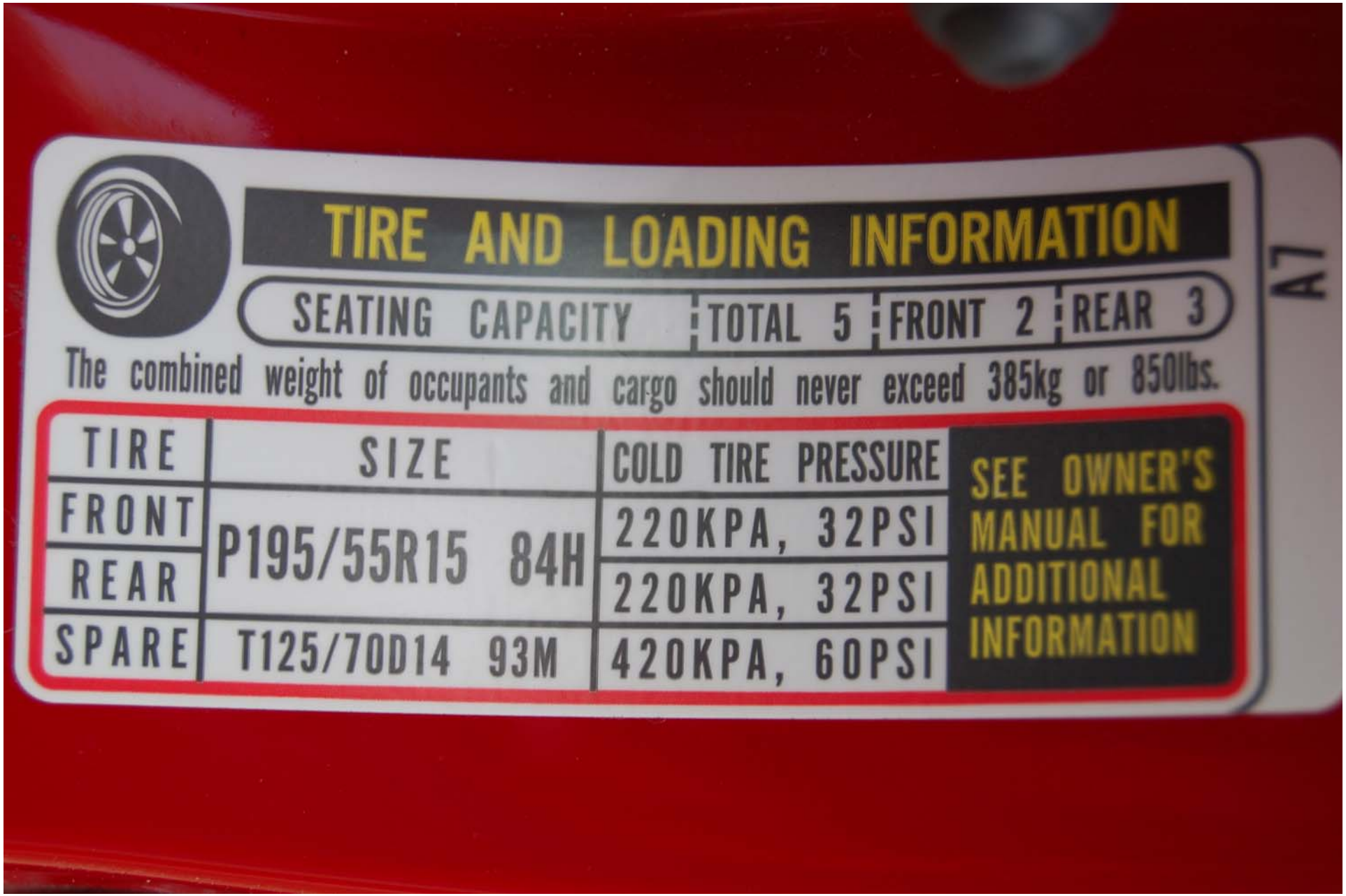
FIGURE 5.1
¾ FRONTAL RIGHT SIDE VIEW OF VEHICLE

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.2
¾ REARWARD LEFT SIDE VIEW OF VEHICLE

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.3
CLOSE-UP VIEW OF VEHICLE CERTIFICATION LABEL



2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.4
CLOSE-UP VIEW OF VEHICLE TIRE INFORMATION LABEL

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

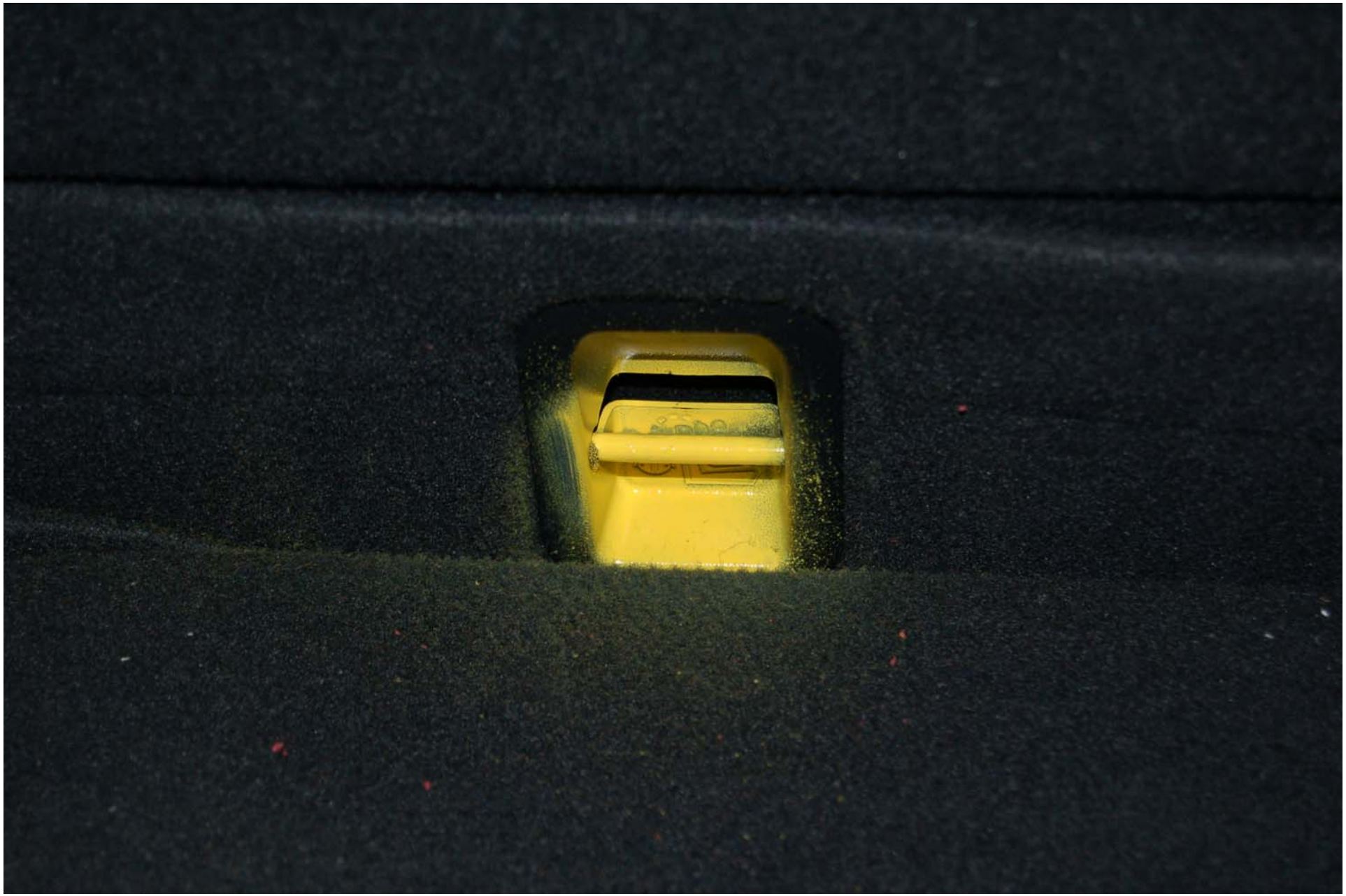
FIGURE 5.5
VISIBILITY OF LOWER ANCHORS

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.6
ROW 2, LEFT SIDE, OUTBOARD LOWER ANCHOR,
PRE-TEST

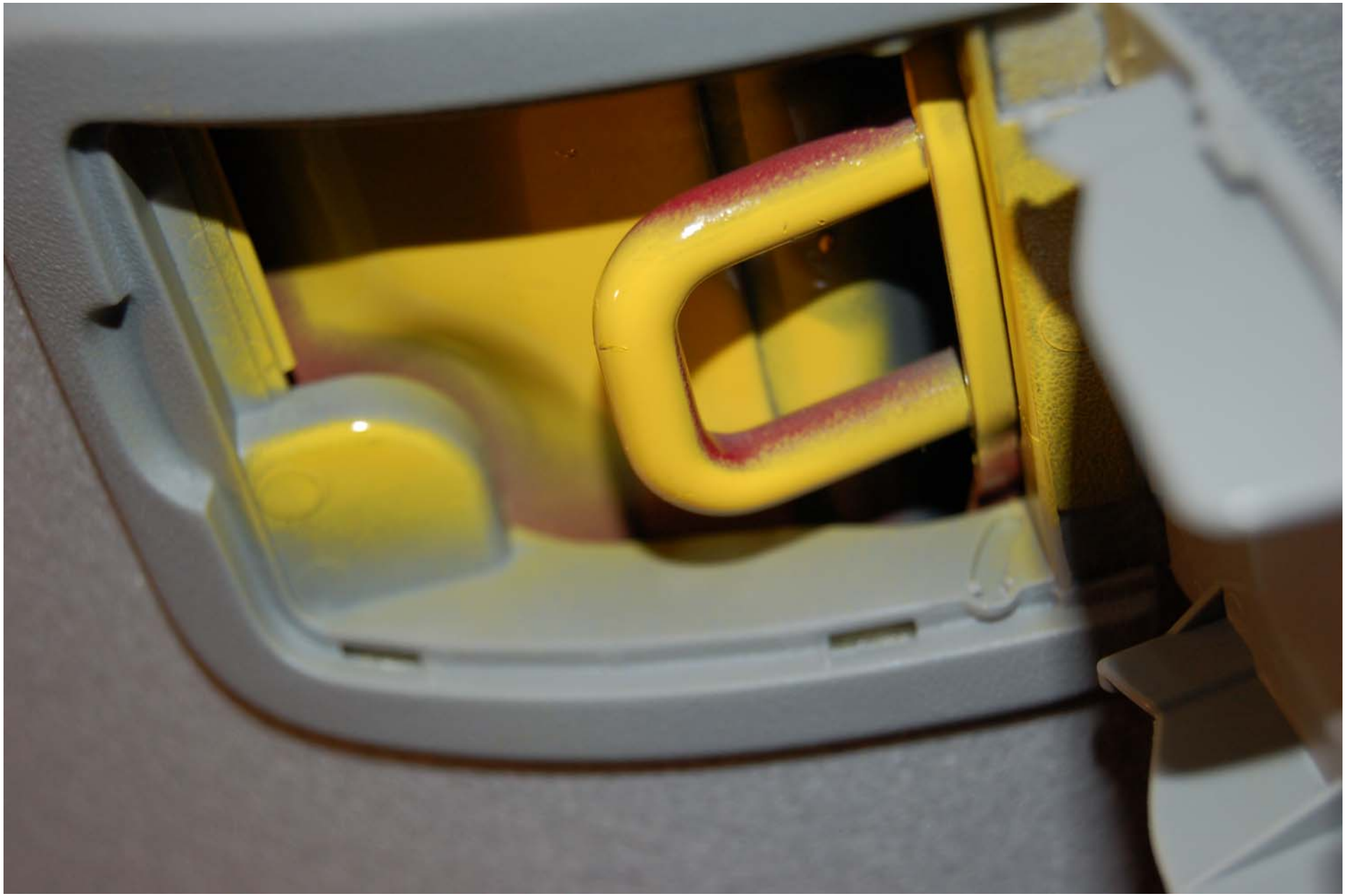
2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.7
ROW 2, LEFT SIDE, INBOARD LOWER ANCHOR,
PRE-TEST



2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.8
ROW 2, LEFT SIDE, TOP TETHER ANCHOR, PRE-TEST



2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.9
ROW 2, CENTER, TOP TETHER ANCHOR, PRE-TEST

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.10
ROW 2, RIGHT SIDE, INBOARD LOWER ANCHOR,
PRE-TEST

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.11
ROW 2, RIGHT SIDE, OUTBOARD LOWER ANCHOR,
PRE-TEST

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.12
ROW 2, RIGHT SIDE, TOP TETHER ANCHOR, PRE-TEST

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

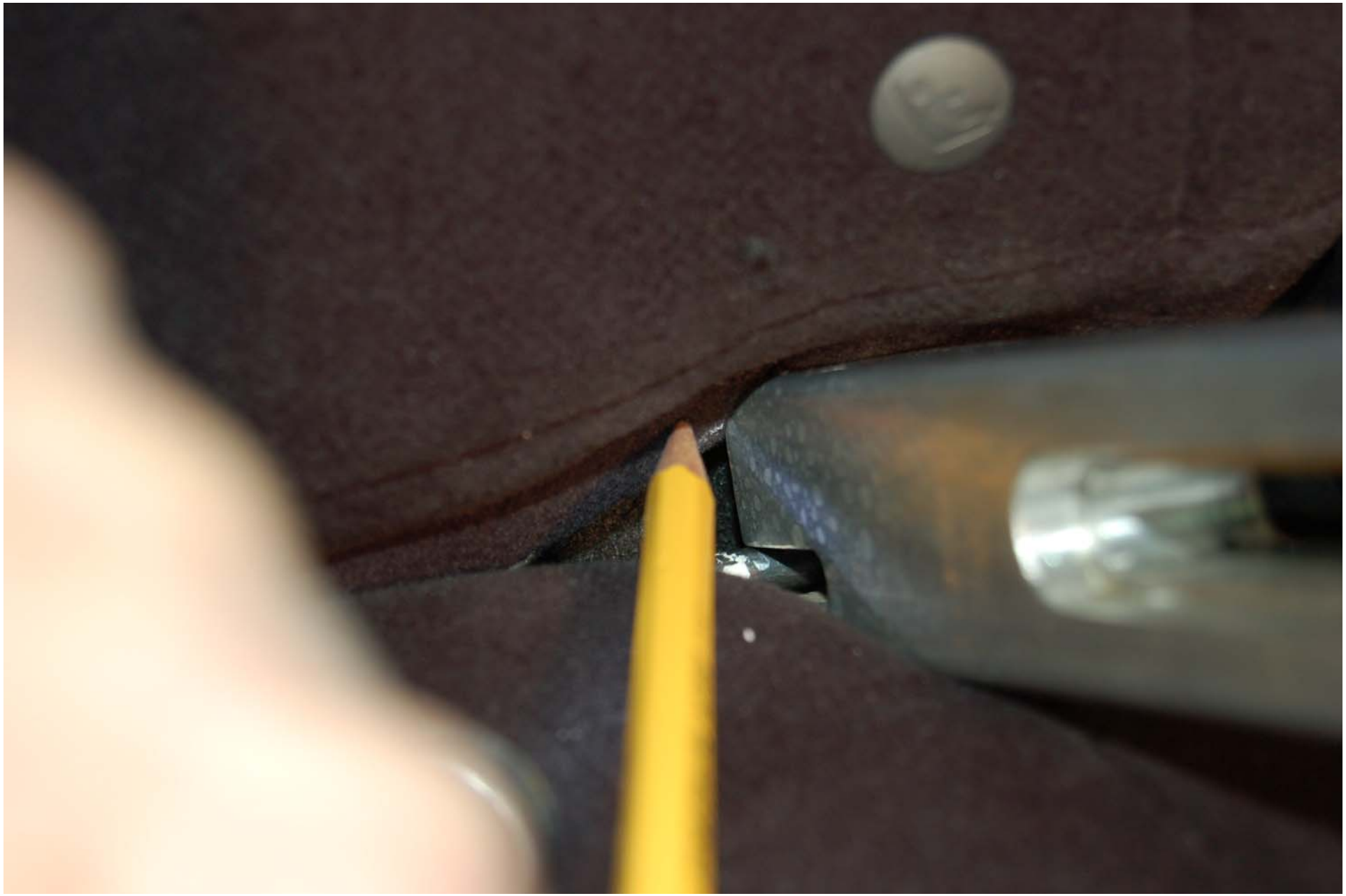
FIGURE 5.13
ROW 2 SEATING POSITIONS

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.14
INTERFERENCE OF ROW 2 LEFT OUTBOARD LOWER ANCHOR

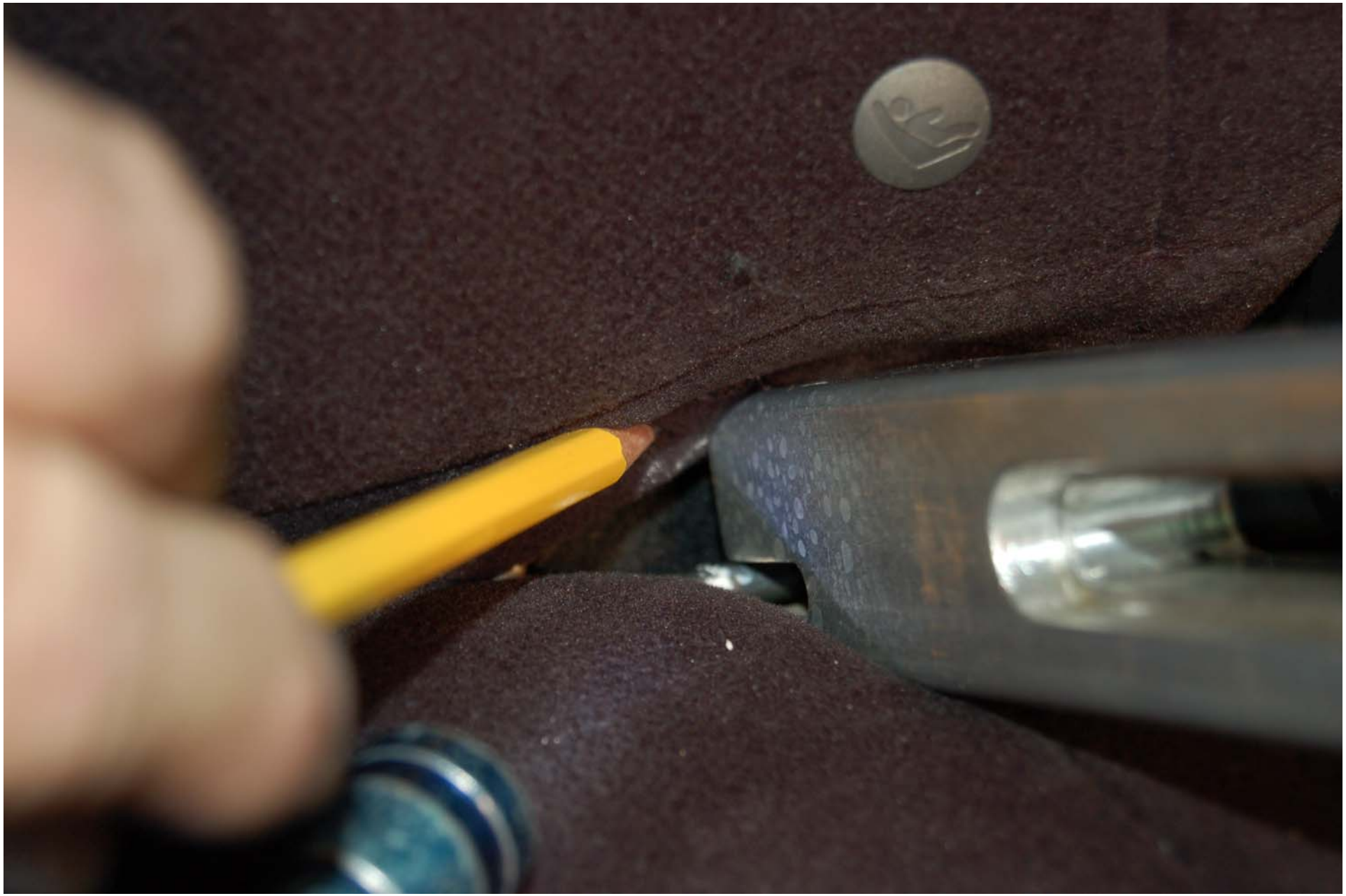
2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.15
INTERFERENCE OF ROW 2 LEFT OUTBOARD LOWER ANCHOR



2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.16
INTERFERENCE OF ROW 2 LEFT OUTBOARD LOWER ANCHOR



2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.17
INTERFERENCE WITH STEEL ROD IN SEAT BACK

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

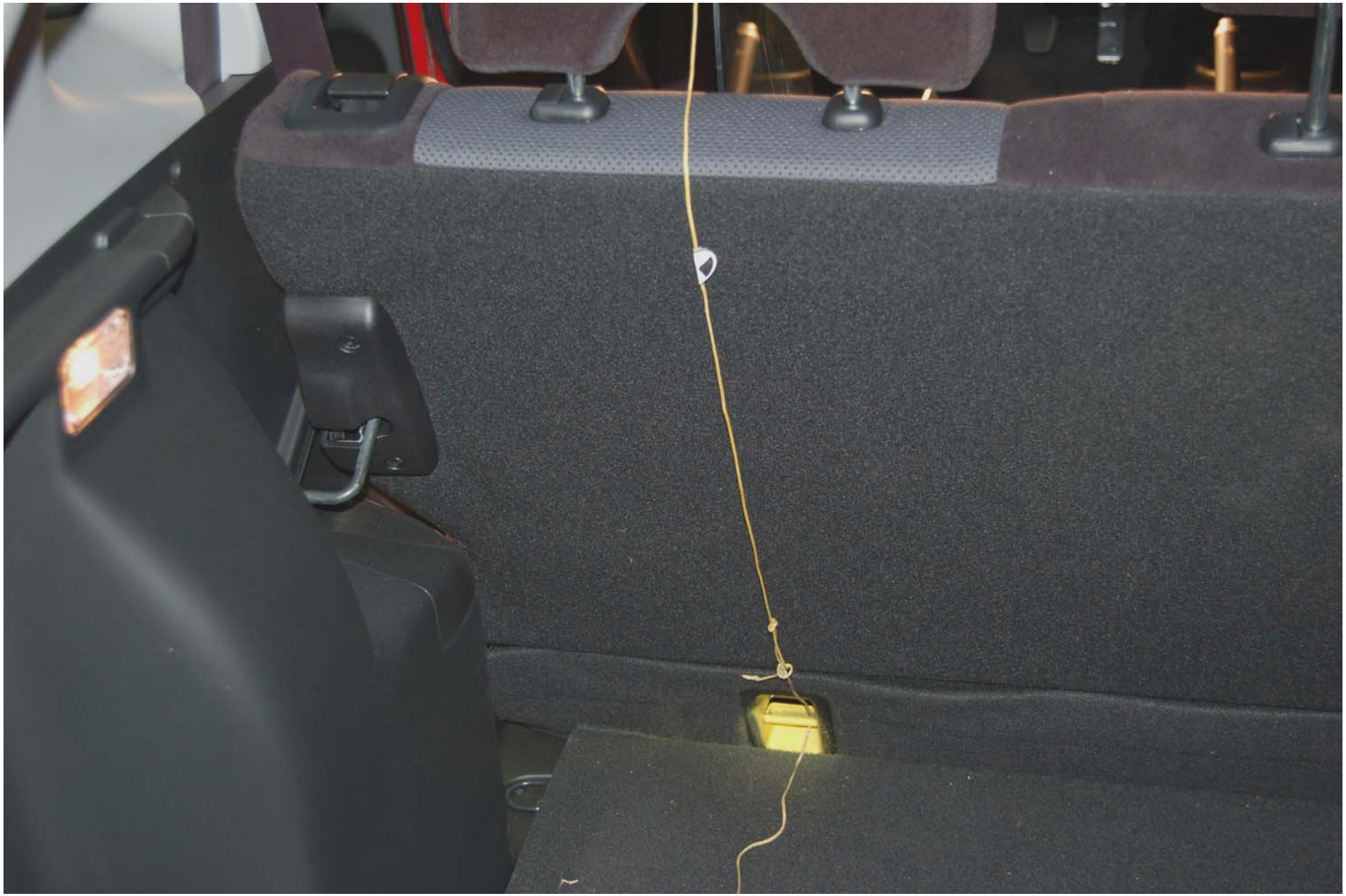
FIGURE 5.18
INTERFERENCE WITH STEEL ROD IN SEAT BACK

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.19
ROW 2, LEFT SIDE WITH 2-D TEMPLATE

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.20
ROW 2, LEFT SIDE TOP TETHER ROUTING



2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.21
ROW 2, LEFT SIDE TOP TETHER ROUTING

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.22
ROW 2, RIGHT SIDE WITH CRF

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.23
ROW 2, RIGHT SIDE WITH 2-D TEMPLATE

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.24
ROW 2, RIGHT SIDE TOP TETHER ROUTING

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.25
ROW 2, RIGHT SIDE TOP TETHER ROUTING

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.26
ROW 2, CENTER WITH 2-D TEMPLATE

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.27
ROW 2, CENTER TOP TETHER ROUTING

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.28
ROW 2, CENTER TOP TETHER ROUTING

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.29
ROW 2, RIGHT SIDE INBOARD CRF MEASUREMENT

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.30
ROW 2, RIGHT SIDE OUTBOARD CRF MEASUREMENT

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.31
SYMBOL MEASUREMENT

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.32
ROW 2, RIGHT SIDE CRF PITCH MEASUREMENT

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.33
ROW 2, LEFT SIDE OUTBOARD SRP MEASUREMENT

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.34
ROW 2, LEFT SIDE INBOARD SRP MEASUREMENT

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.35
ROW 2, RIGHT SIDE OUTBOARD SRP MEASUREMENT

2007 HONDA FIT
NHTSA NO. C75300
FMVSS NO. 225

FIGURE 5.36
ROW 2, RIGHT SIDE INBOARD SRP MEASUREMENT

APPENDIX A
OWNER'S MANUAL RESTRAINT INFORMATION

3. The child seat should fit the vehicle seating position (or positions) where it will be used.

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

Installing a Child Seat

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

1. Properly secure the child seat to the vehicle. All child seats must be secured to the vehicle with the lap part of a lap/shoulder belt or with the LATCH (lower anchors and tethers for children) system. A child whose seat is not properly secured to the vehicle can be endangered in a crash.

2. Make sure the child seat is firmly secured. After installing a child seat, push and pull the seat forward and from side-to-side to verify that it is secure.

A child seat secured with a seat belt should be installed as firmly as possible. However, it does not need to be "rock solid." Some side-to-side movement can be expected and should not reduce the child seat's effectiveness.

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

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

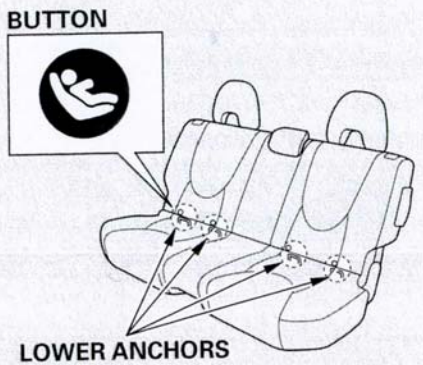
The following pages provide guidelines on how to properly install a child seat. A forward-facing child seat is used in all examples, but the instructions are the same for rear-facing child seats.

Installing a Child Seat with LATCH

Your vehicle is equipped with LATCH (lower anchors and tethers for children) at the outer rear seats.

The lower anchors are located between the seat-back and seat bottom, and are to be used only with a child seat designed for use with LATCH.

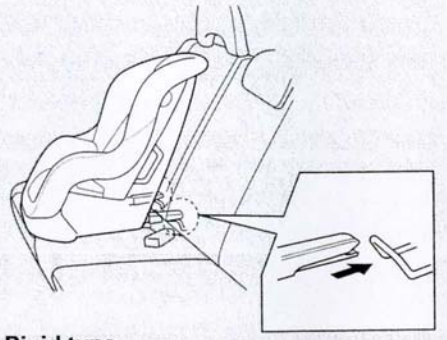
The location of each lower anchor is indicated by a small button above the anchor point.



To install a LATCH-compatible child seat:

1. Move the seat belt buckle or tongue away from the lower anchors.

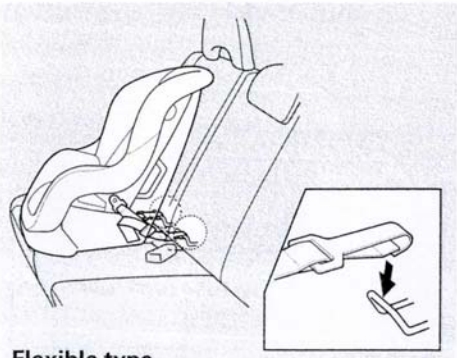
2. Make sure there are no objects near the anchors that could prevent a secure connection between the child seat and the anchors.


Rigid type

3. Place the child seat on the vehicle seat, then attach the seat to the lower anchors according to the child seat maker's instructions.

   Some LATCH-compatible seats have a rigid-type connector as shown above.

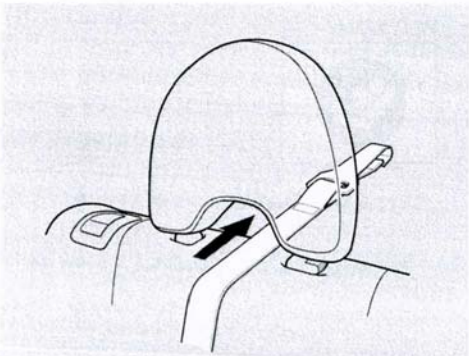
CONTINUED



Flexible type

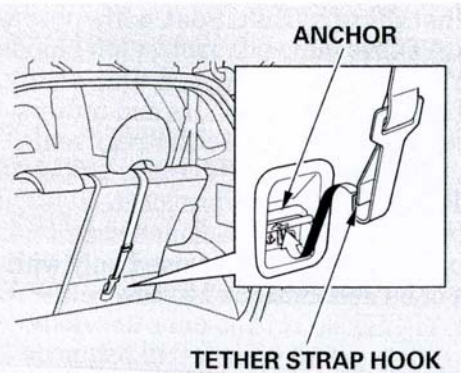
Other LATCH-compatible seats have a flexible-type connector as shown above.

4. Whatever type you have, follow the child seat maker's instructions for adjusting or tightening the fit.



5. Route the tether strap over the seat-back and through the head restraint legs.

6. Attach the tether strap hook to the anchor, making sure the strap is not twisted.



7. Tighten the strap according to the seat maker's instructions.

8. Push and pull the child seat forward and from side-to-side to verify that it is secure.

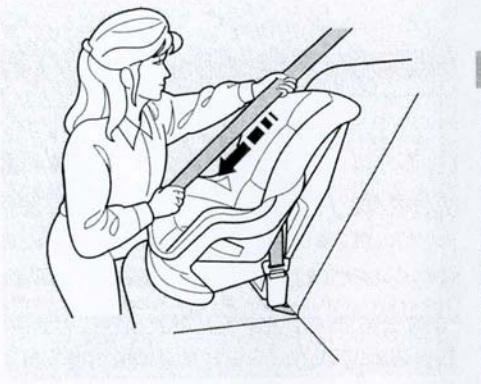
Installing a Child Seat with a Lap/Shoulder Belt

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.

If you intend to install a child seat in the center seating position of the rear seat, remove its head restraint, and make sure the detachable seat belt is securely latched (see page 92).

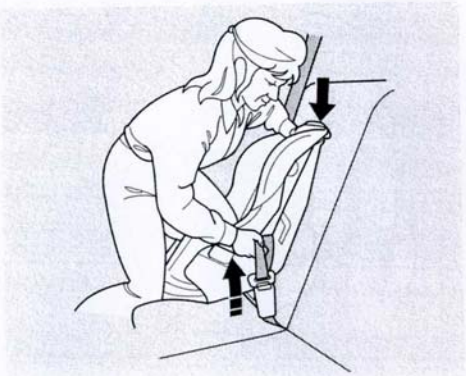
1. With the child seat in the desired seating position, route the belt through the child seat according to the seat maker's instructions, then insert the latch plate into the buckle.



2. To activate the lockable retractor, 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.

CONTINUED



4. 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. Remember, if the lap part of the belt is not tight, the child seat will not be secure.

   To remove slack, it may help to put weight on the child seat, or push on the back of the seat while pulling up on the belt.

5. Push and pull the child seat forward and from side-to-side to verify that it is secure enough to stay upright during normal driving maneuvers. If the child seat is not secure, unlatch the belt, allow it to retract fully, then repeat these steps.

To deactivate the locking mechanism and remove a child seat, unlatch the buckle, unroute the seat belt, and let the belt fully retract.

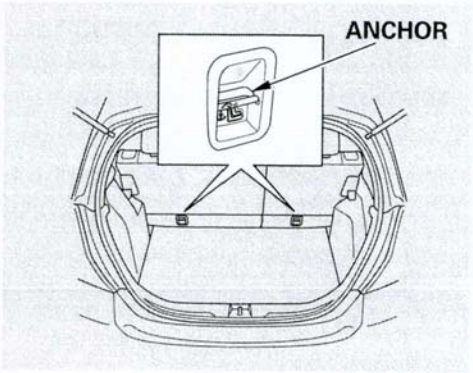
Installing a Child Seat with a Tether

A child seat with a tether can be installed in any seating position in the back seat.

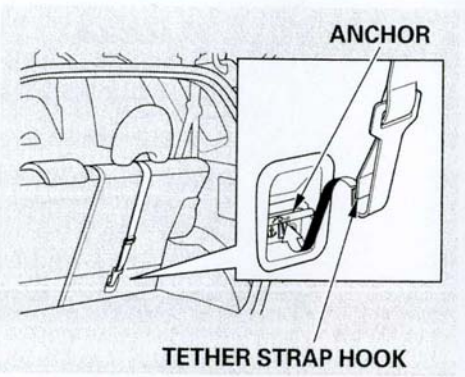
Each rear outside seating position has an anchorage point on the seat-back, and the center seating position has an anchorage point in the ceiling near the tailgate.

Since a tether can provide additional security to the lap/shoulder belt installation, we recommend using a tether whenever one is required or available.

Using an Outer Anchor



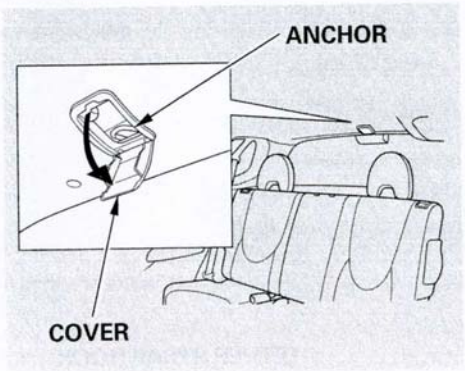
1. After properly securing the child seat (see page 45), route the tether strap over the seat-back and through the head restraint legs.



2. Attach the tether strap hook to the anchor, making sure the tether strap is not twisted.

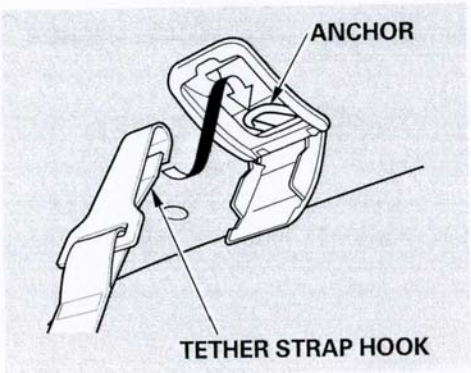
3. Tighten the strap according to the seat maker's instructions.

Using the Center Anchor



1. Remove the rear center head restraint, and store it in a safe place.

2. After properly securing the child seat (see page 45), open the anchor cover.



3. Route the tether strap over the seat-back, then attach the tether strap hook to the anchor, making sure the tether strap is not twisted.

4. Tighten the strap according to the seat maker's instructions.

APPENDIX B

MANUFACTURER'S DATA

06/18/07

INFORMATION

2007 MODEL YEAR

HONDA Fit

Page• •FMVSS225 - - - 1-10

CHILD RESTRAINT ANCHRAGE SYSTEM

FORM – 225
Rev. 03/20/07

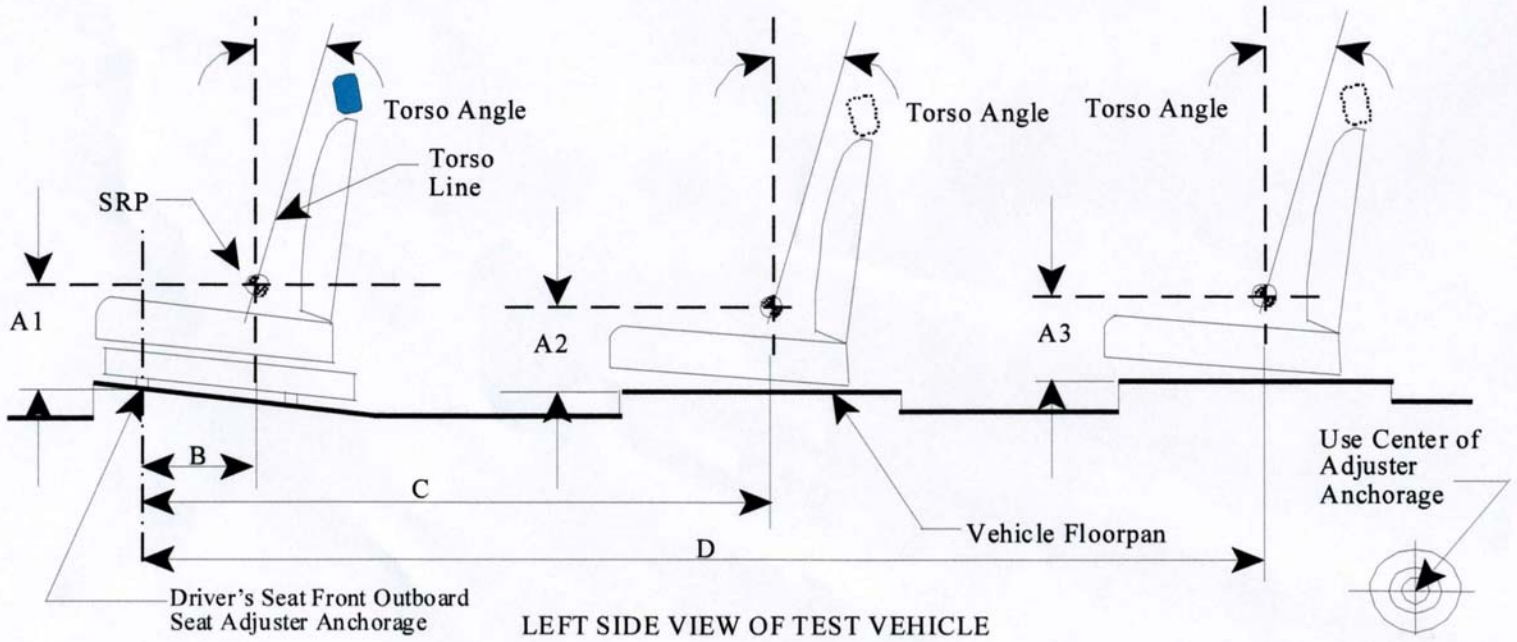
SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA

FMVSS No. 225

(All dimensions in mm[1])

MODEL YEAR: 2007 / MAKE: HONDA / MODEL: Fit / BODY STYLE: 5DOOR HATCHBACK

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Contoured/ THIRD ROW: N.A.



LEFT SIDE VIEW OF TEST VEHICLE

FORM - 225

Table 1. Seating Positions[1] and Torso Angles

		Left (Driver Side)	Center (if any)	Right
A1		241	N.A.	250
A2		277	307	277
A3		N.A.	N.A.	N.A.
B		378	N.A.	349
C		1148	1138	1148
D		N.A.	N.A.	N.A.
Torso Angle (degree)	Front Row	23	N.A.	23
	Second Row	23	23	23
	Third Row	N.A.	N.A.	N.A.

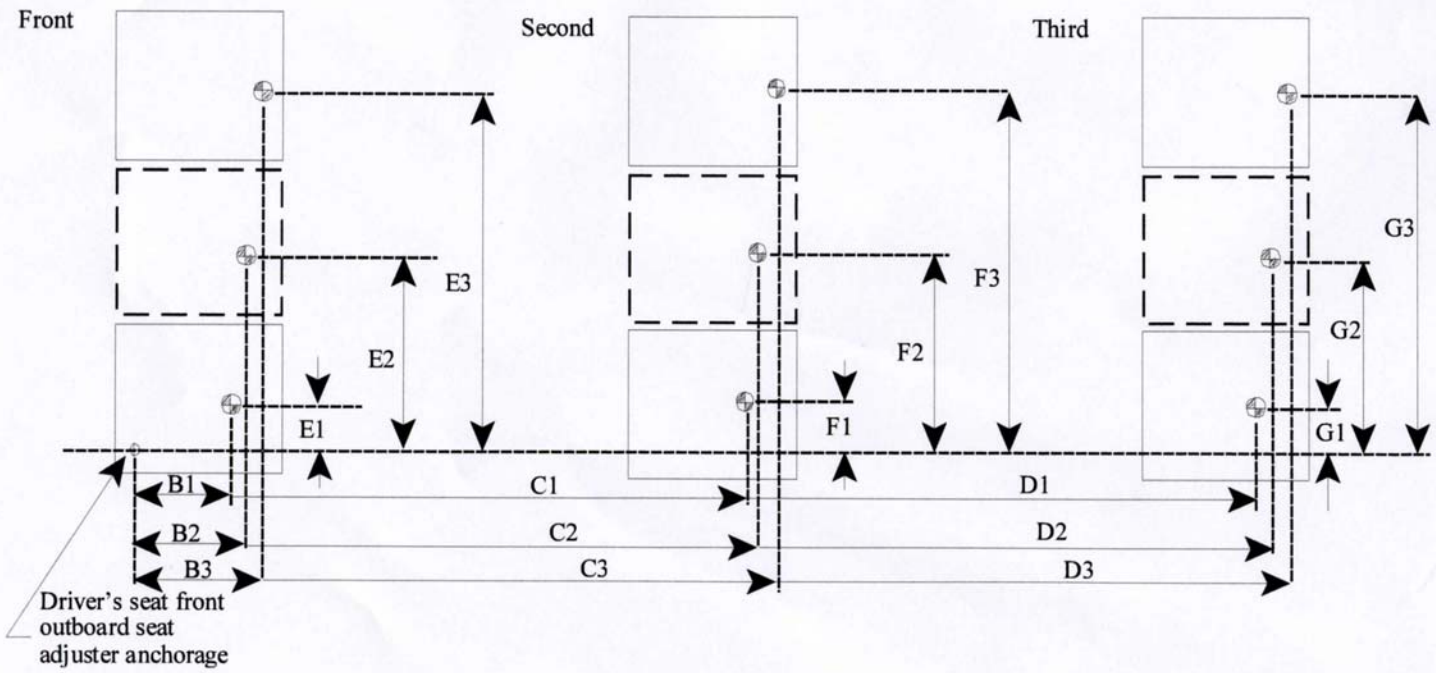
Note: All dimensions are in mm. If not, provide the unit used.

SEATING REFERENCE POINT

FMVSS No. 225
(All dimensions in mm)

MODEL YEAR: 2007 / MAKE: HONDA / MODEL: Fit / BODY STYLE: 5DOOR HATCHBACK

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Contoured / THIRD ROW: N.A.



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	378
	E1	220
	B2	N.A.
	E2	N.A.
	B3	349
	E3	880
Second Row	C1	1148
	F1	235
	C2	1138
	F2	550
	C3	1148
	F3	865
Third Row	D1	N.A.
	G1	N.A.
	D2	N.A.
	G2	N.A.
	D3	N.A.
	G3	N.A.

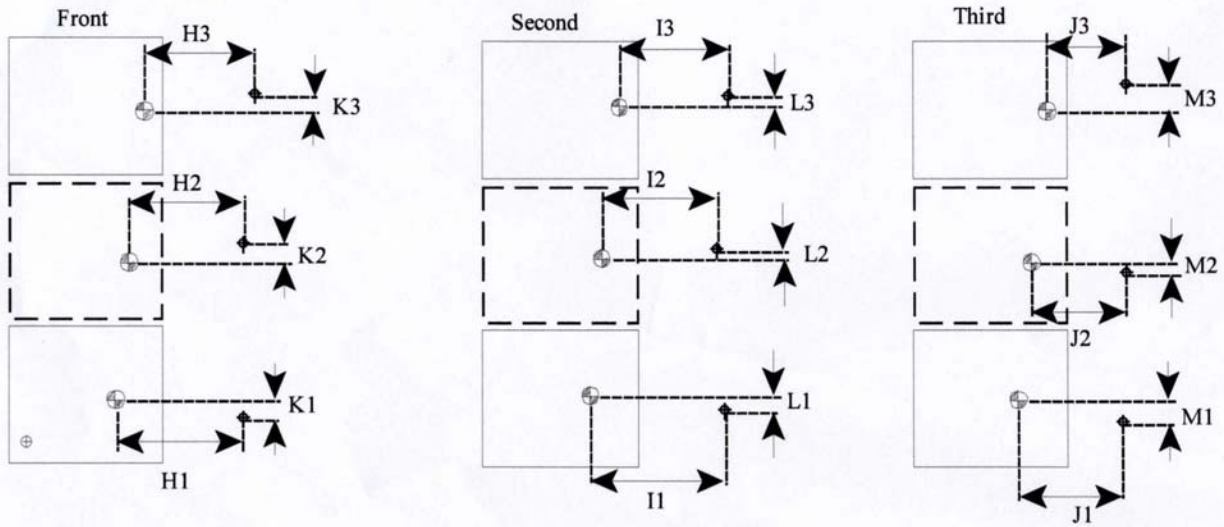
Note: Use the center of anchorage.

TETHER ANCHORAGE LOCATIONS

FMVSS No. 225
(All dimensions in mm)

MODEL YEAR: 2007 / MAKE: HONDA / MODEL: Fit / BODY STYLE: 5DOOR HATCHBACK

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Contoured / THIRD ROW: N.A.



⊕: SRP
✦: Tether anchorage

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

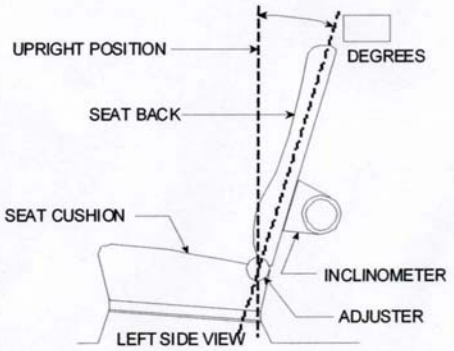
Table 3. Seating Reference Point and Tether Anchorage Locations

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	154
	L1	30
	I2	628
	L2	0
	I3	154
	L3	30
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 = ____ degrees.

Measurement Instructions:

5 detents rearward from the first locking detent.

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

Measurement Instructions:

5 detents rearward from the first locking detent.

Seat back angle for 2nd row seat = ____ degrees.

Measurement Instructions:

First locking detent.

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

Measurement Instructions:

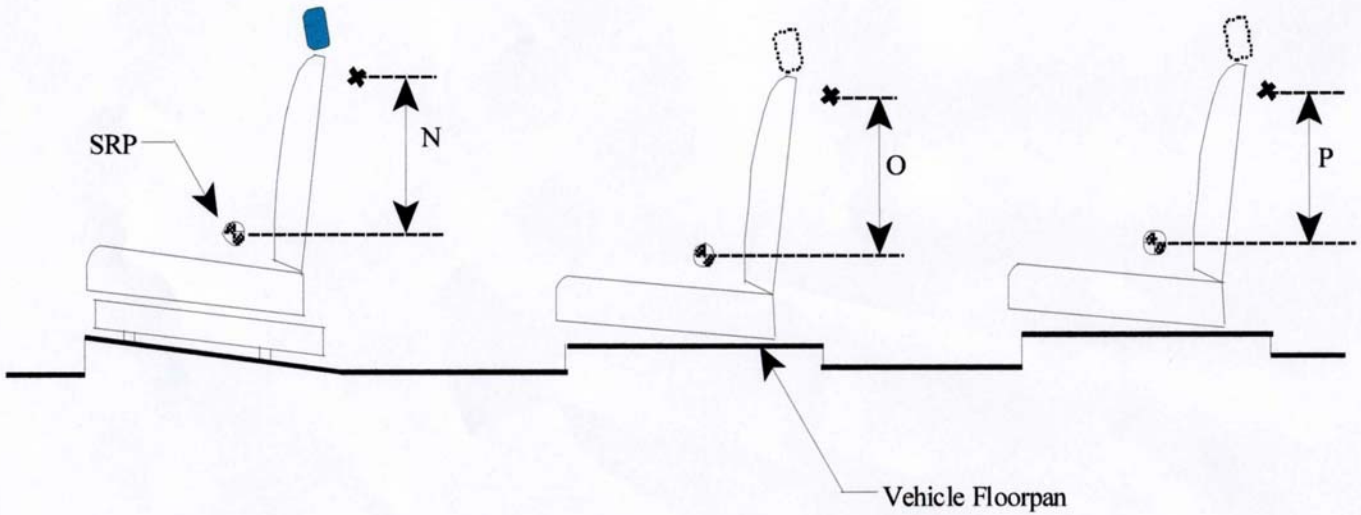
N.A.

TETHER ANCHORAGE LOCATIONS - VERTICAL

FMVSS No. 225
(All dimensions in mm)

MODEL YEAR: 2007 / MAKE: HONDA / MODEL: Fit / BODY STYLE: 5DOOR HATCHBACK

SEAT STYLE: FRONT ROW: Bucket / SECOND ROW: Contoured / THIRD ROW: N.A.



LEFT SIDE VIEW OF TEST VEHICLE

FORM – 225

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)	99
	O2 (Center)	738
	O3 (Right)	99
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?
   Front Row : 2 , Second Row : 3

2. How many designated seating positions are equipped with lower anchorages and tether anchorages? Specify which position(s).
   Second Row Right side : 1 , Left side : 1

3. How many designated seating positions are equipped with tether anchorages? Specify which positions(s).
   Second Row Right side : 1 , Left side : 1 , Center : 1

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