REPORT NUMBER 225-GTL-06-007

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

FORD MOTOR CO.
2006 FORD MUSTANG, PASSENGER CAR
NHTSA NO. C60203

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

OCTOBER 27, 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
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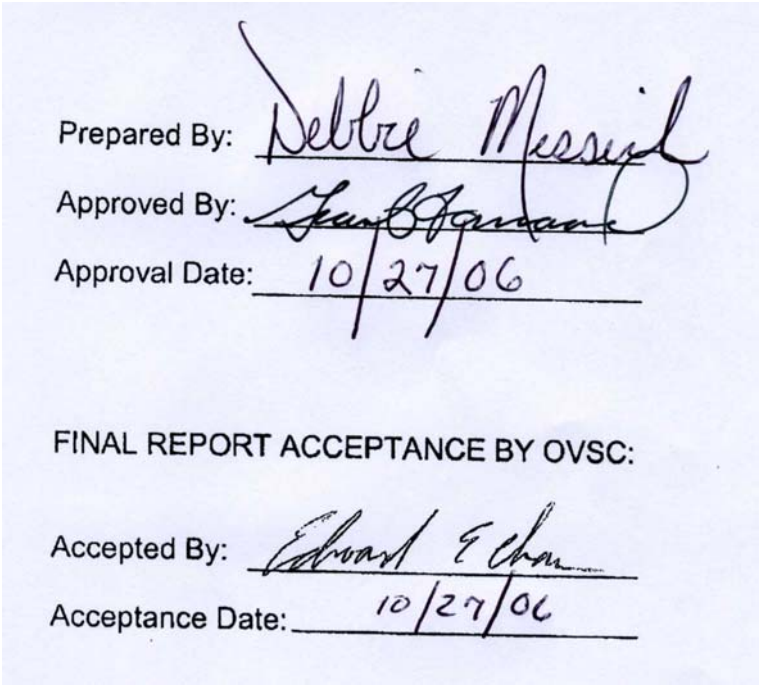

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16. Abstract Compliance tests were conducted on the subject, 2006 Ford Mustang Passenger Car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-225-01 for the determination of FMVSS 225 compliance. Test failures identified were as follows: NONE		
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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF COMPLIANCE TEST

A 2006 Ford Mustang 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 Ford Mustang Passenger Car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 1ZVFT80N265107331

B. NHTSA No.: C60203

C. Manufacturer: FORD MOTOR CO.

D. Manufacture Date: 08/05

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing during the time period July 24 through September 28, 2006.

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 2006 Ford Mustang Passenger Car appeared 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 2006 Ford Mustang Passenger Car.

DATA SHEET 1
SUMMARY OF RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE:08/05 ; TEST DATE: JULY 24 – SEPTEMBER 28, 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

B. REQUIREMENTS FOR CHILD RESTRAINT SYSTEMS AND TETHER ANCHORAGES

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

C. LOCATION OF TETHER ANCHORAGES

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

D. LOWER ANCHORAGE DIMENSIONS

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

DATA SHEET 1 CONTINUED
SUMMARY OF RESULTS

E. CONSPICUITY AND MARKING OF LOWER ANCHORAGES

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

F. STRENGTH OF TETHER ANCHORAGES

	PASS	FAIL
DSP a	X	
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	X	
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: X FAIL:

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

RECORDED BY: G. Farrand DATE: 09/28/06

APPROVED BY: D. Messick

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

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: JULY 24, 2006
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Is the number of provided tether anchorages greater than or equal to the number of required tether anchorages? YES

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

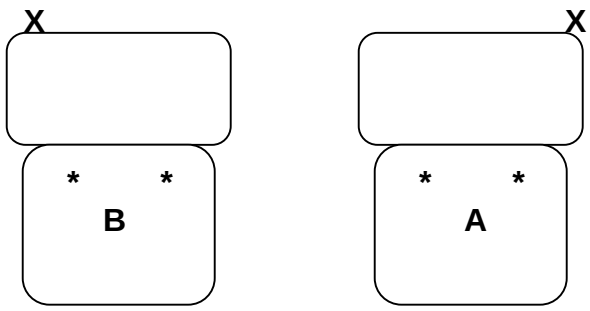
If the vehicle has 3 or more rear dsps and a non-outboard dsp, is a tether anchorage or CRAS provided at a non-outboard dsp? N/A

YES = PASS NO = FAIL (S4.4 (a)(2))

Are all tether and lower anchorages available for use at all times when the seat is configured for passenger use? YES

YES = PASS NO = FAIL (S4.6 (b))

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



X = Top Tether
***** = Lower Anchors

RECORDED BY: G. FARRAND DATE: 07/24/06

APPROVED BY: D. MESSICK

DATA SHEET 3
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: JULY 24, 2006
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 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 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: 07/24/06

APPROVED BY: D. MESSICK

DATA SHEET 3A
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: JULY 10, 2006
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Detailed description of the location of the tether anchorage:
Located on shelf behind eat 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 RIGHT SIDE (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: 07/24/06

APPROVED BY: D. MESSICK

DATA SHEET 4
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: JULY 24, 2006
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Outboard Lower Anchorage bar diameter: 5.99 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 5.99 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): 25 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): 32 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 32 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 16.1º
Angle = 15º±10º = PASS Angle≠15º±10º = FAIL (S9.2.1)

CRF Roll angle: 0.0
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: 36 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 36 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: 155 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 155 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: Lower anchor bars are extremely difficult to access due to the small access hole in the seat cushion.

RECORDED BY: G. FARRAND DATE: 07/24/06

APPROVED BY: D. MESSICK

DATA SHEET 4A
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: JULY 24, 2006
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Outboard Lower Anchorage bar diameter: 5.99 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 5.99 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): 25 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): 32 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 32 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 16.2º
Angle = 15º±10º = PASS Angle≠15º±10º = FAIL (S9.2.1)

CRF Roll angle: 0.0
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: 40 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 40 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

DATA SHEET 4A CONTINUED

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

Distance between SgRP and the front surface of outboard anchor bar: 155 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 155 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: Lower anchor bars are extremely difficult to access due to the small access hole in the seat cushion.

RECORDED BY: G. FARRAND DATE: 07/24/06

APPROVED BY: D. MESSICK

DATA SHEET 5
CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: JULY 24, 2006
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

MARKING (Circles)

Diameter of the circle: 15
Diameter ≥13mm = PASS Diameter <13mm = FAIL (S9.5(a)(1))

Does the circle have words, symbols or pictograms? YES Symbol
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: 50
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 (DSP A), AND ROW 2 RIGHT SIDE (DSP B)

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. N/A

RECORDED BY: G. FARRAND DATE: 07/24/06

APPROVED BY: D. MESSICK

DATA SHEET 6
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: SEPTEMBER 28, 2006
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 5650

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

SFAD: 2

Seat Back Angle: 27º FIXED

Location of seat back angle measurement: 2D Template

Head Restraint Position: FIXED

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: 55 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): 14,950 N

Tested simultaneously with another DSP? NO

COMMENTS: Displacement at maximum load 42 mm.

RECORDED BY: G. FARRAND DATE: 09/28/06

APPROVED BY: D. MESSICK

DATA SHEET 7
STRENGTH OF LOWER ANCHORAGES (Forward Force)

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE:08/05; TEST DATE: SEPTEMBER 26, 2006
TEST LABORATORY:GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 5651

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

Seat Back Angle: 27º FIXED

Location of seat back angle measurement: 2D Template

Head Restraint Position: FIXED

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: 421 N/S

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

Maximum force (10,950 N ± 50 N): 10,973 N

Displacement, H1 (at 500 N): 0.0

Displacement, H2 (at maximum load): 57 mm

Displacement of Point X: 57 mm (H2-H1)
Displacement > 175 mm = FAIL (S9.4.1(a))

Tested simultaneously with another DSP? NO

Distance between adjacent DSP's: 530 mm

COMMENTS:

RECORDED BY: G. FARRAND DATE: 09/28/06

APPROVED BY: D. MESSICK

DATA SHEET 8
OWNER'S MANUAL

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD MUSTANG PASSENGER CAR
VEH. NHTSA NO: C60203; VIN: 1ZVFT80N265107331
VEH. BUILD DATE: 08/05 ; TEST DATE: SEPTEMBER 28, 2006
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: 09/28/06

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	09/06	09/07
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	GTL SFAD 2	BEFORE USE	BEFORE USE

SECTION 5
PHOTOGRAPHS

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.1
LEFT SIDE VIEW OF VEHICLE

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.2
RIGHT SIDE VIEW OF VEHICLE

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

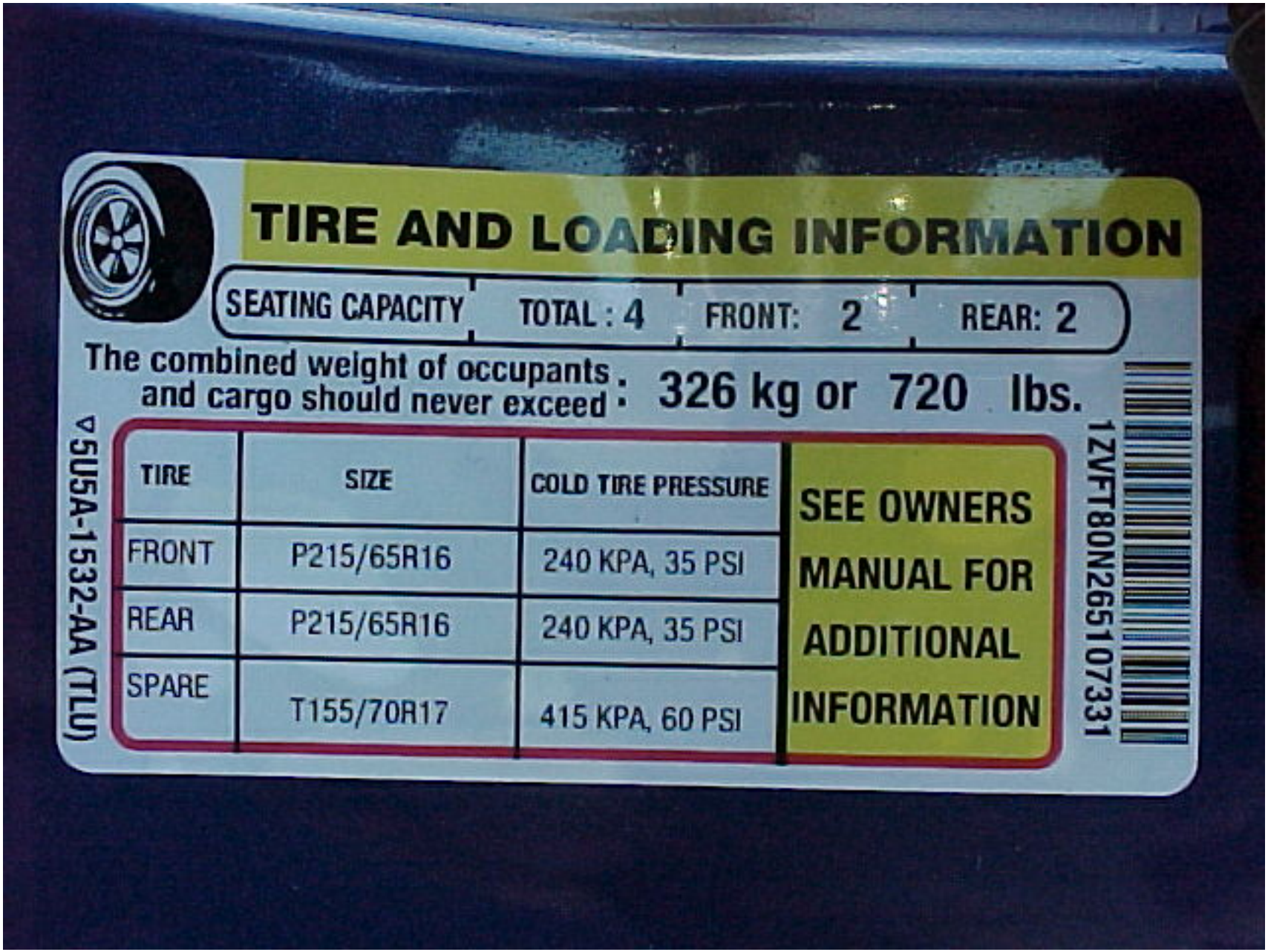
FIGURE 5.3
¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.4
3/4 REAR VIEW FROM RIGHT SIDE OF VEHICLE

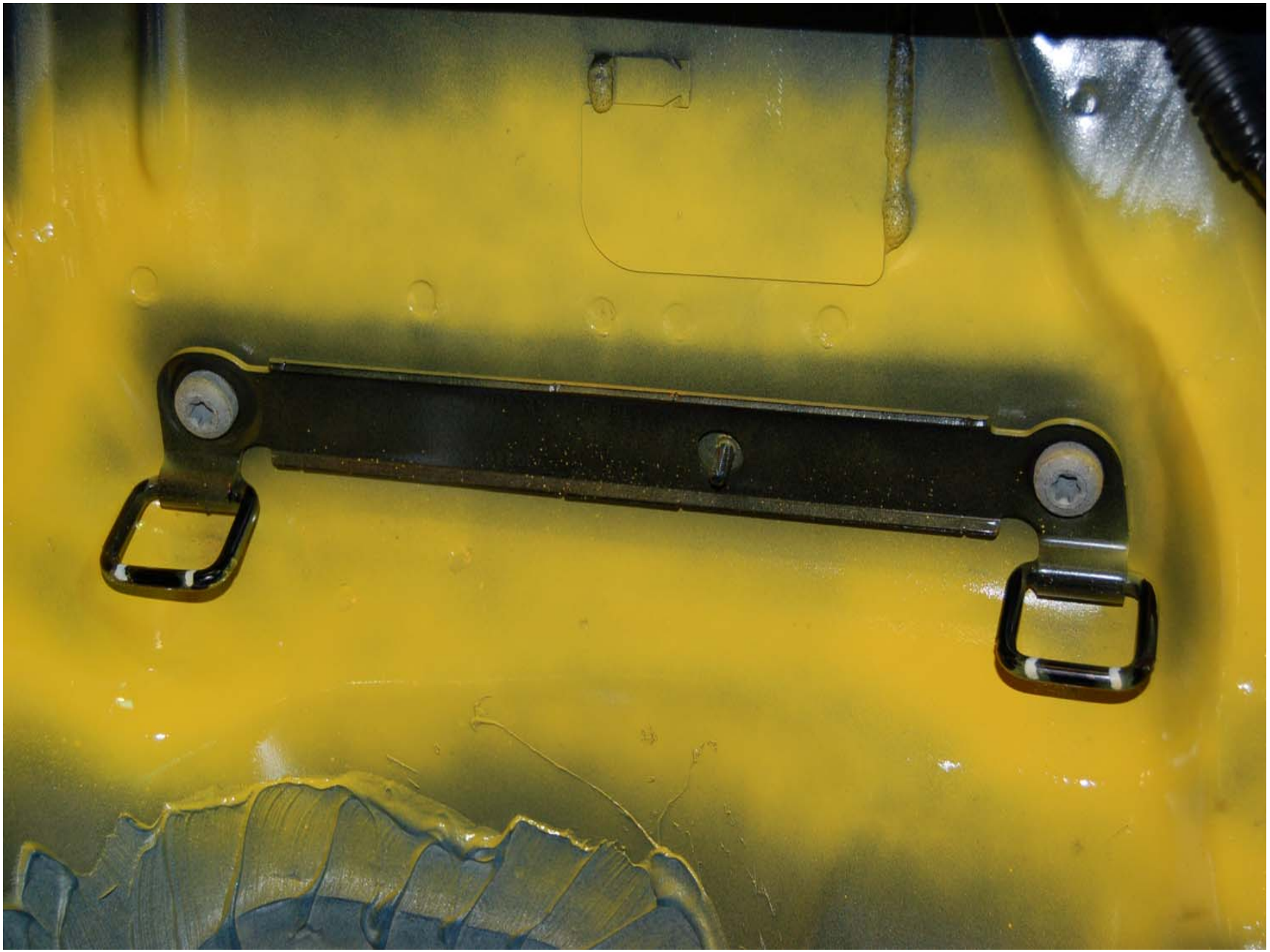
2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.5
VEHICLE CERTIFICATION LABEL



2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.6
VEHICLE TIRE INFORMATION LABEL



2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

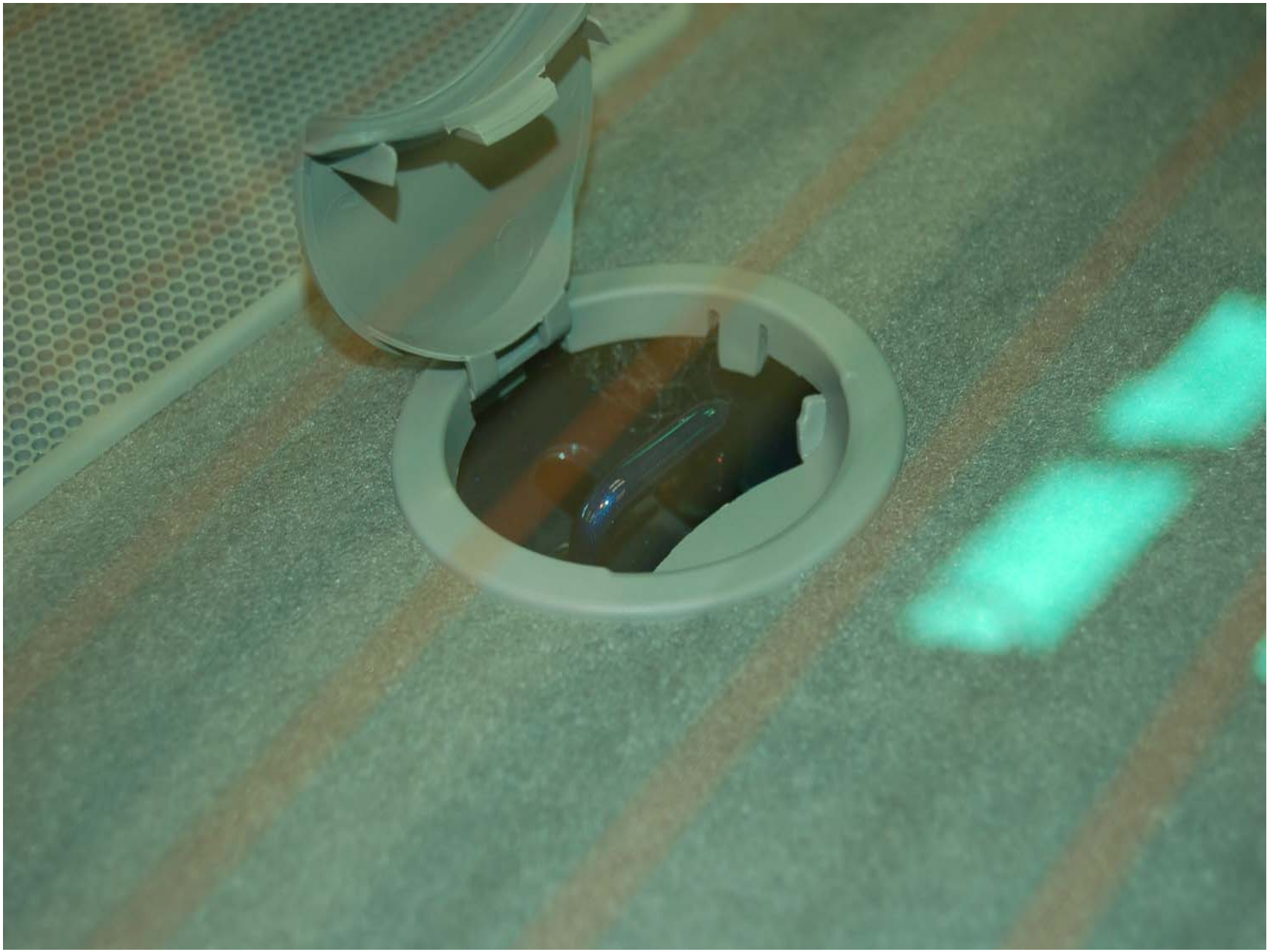
FIGURE 5.7
ROW 2, LEFT SIDE LOWER ANCHORS, PRE-TEST

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

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

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.9
ROW 2, RIGHT SIDE, LOWER ANCHORS,
PRE-TEST



2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

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

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

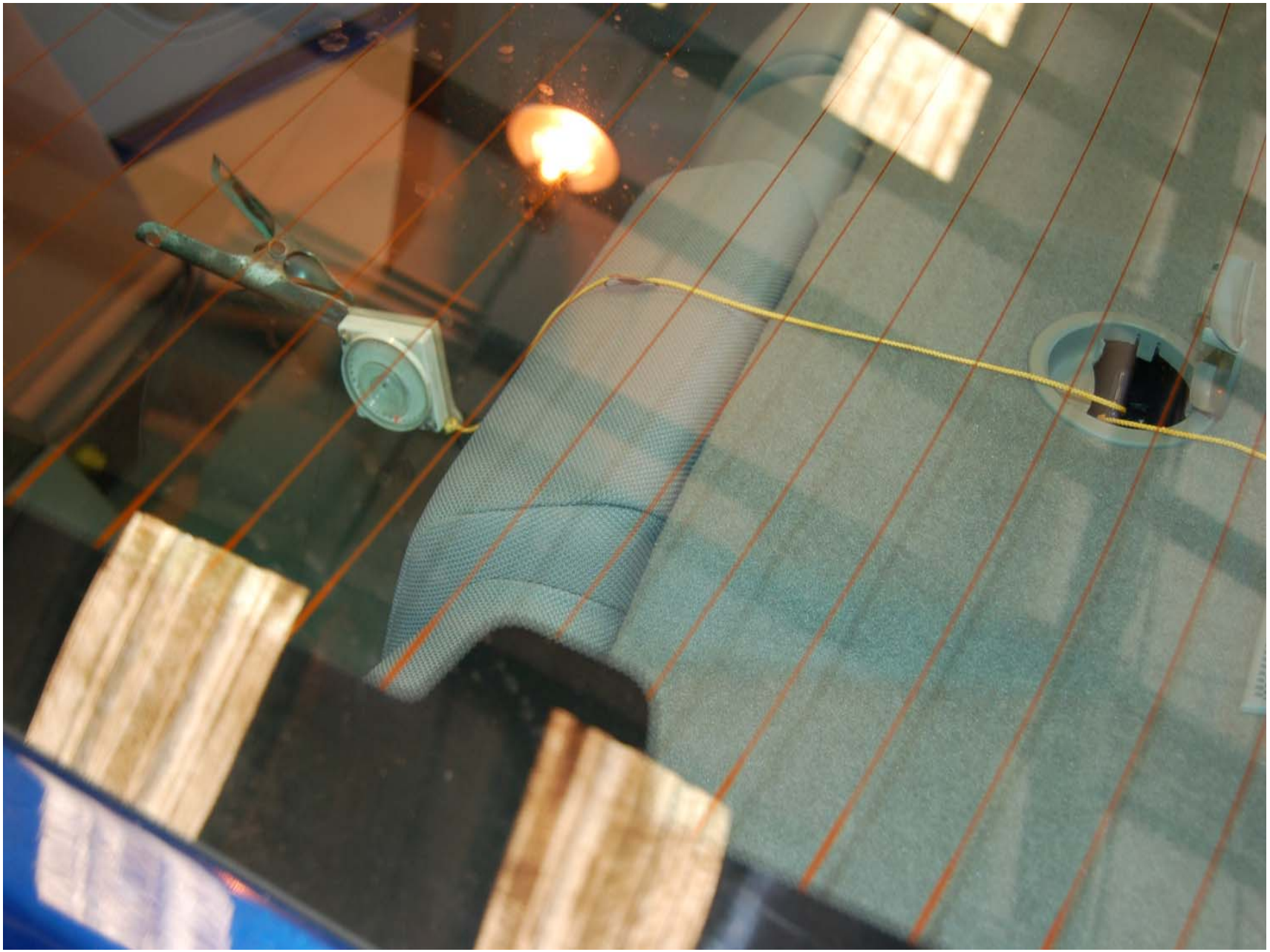
FIGURE 5.11
OVERALL VIEW OF ROW 2 SEATING POSITIONS,
PRE-TEST

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.12
ROW 2, LEFT SIDE WITH CRF

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.13
ROW 2, LEFT SIDE WITH 2-D TEMPLATE



2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.14
ROW 2, LEFT SIDE TOP TETHER ROUTING

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.15
ROW 2, RIGHT SIDE WITH CRF

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.16
ROW 2, RIGHT SIDE WITH 2-D TEMPLATE

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.17
ROW 2, RIGHT SIDE TOP TETHER ROUTING

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.18
ROW 2, RIGHT SIDE INBOARD CRF MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.19
ROW 2, RIGHT SIDE OUTBOARD CRF MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.20
ROW 2, LEFT SIDE, INBOARD CRF MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.21
ROW 2, LEFT SIDE, OUTBOARD CRF MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.22
SYMBOL MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.23
ROW 2, LEFT SIDE CRF PITCH MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

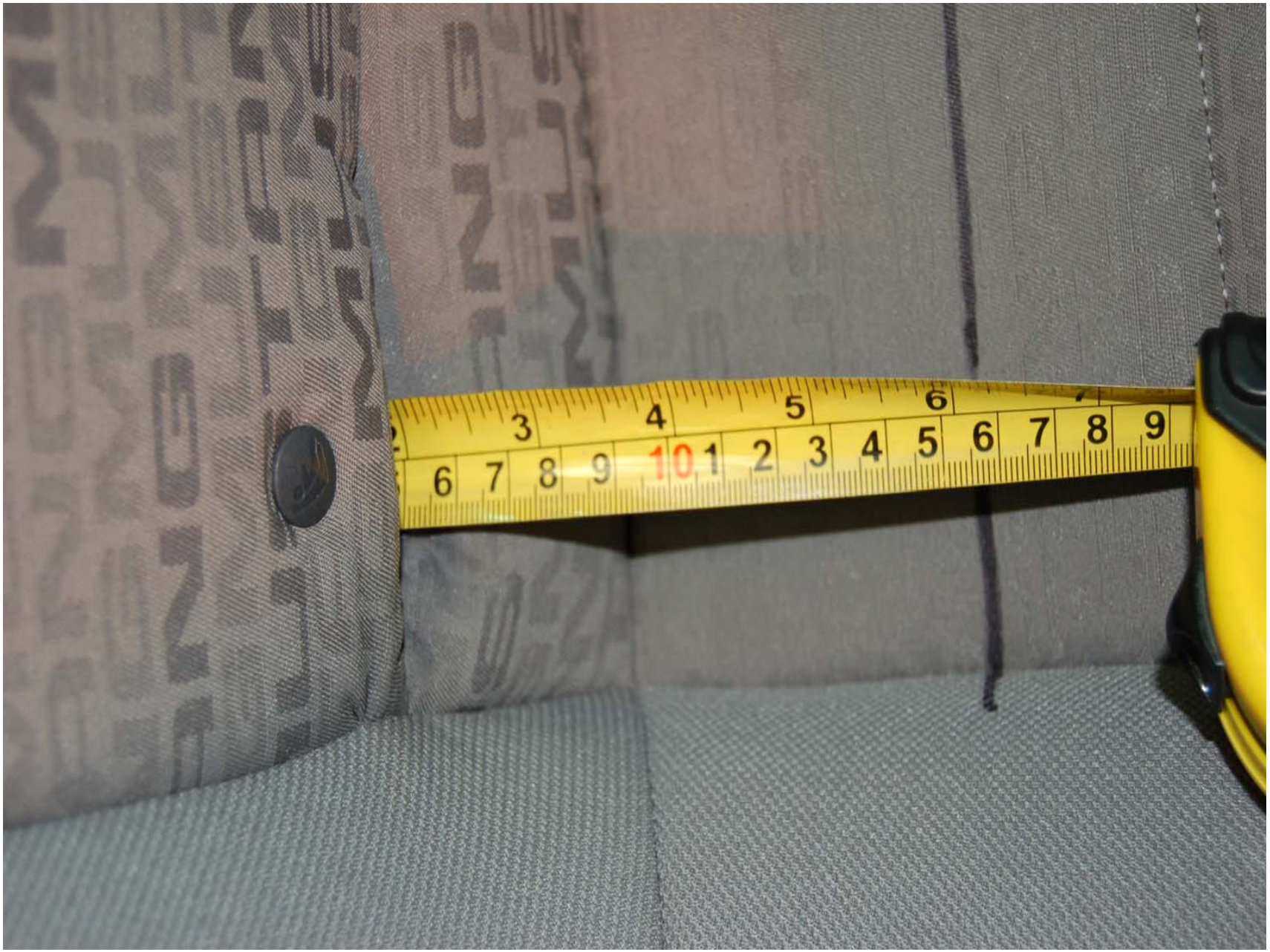
FIGURE 5.24
ROW 2, RIGHT SIDE CRF PITCH MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.25
ROW 2, LEFT SIDE OUTBOARD SRP MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.26
ROW 2, LEFT SIDE INBOARD SRP MEASUREMENT



2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.27
ROW 2, RIGHT SIDE OUTBOARD SRP MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

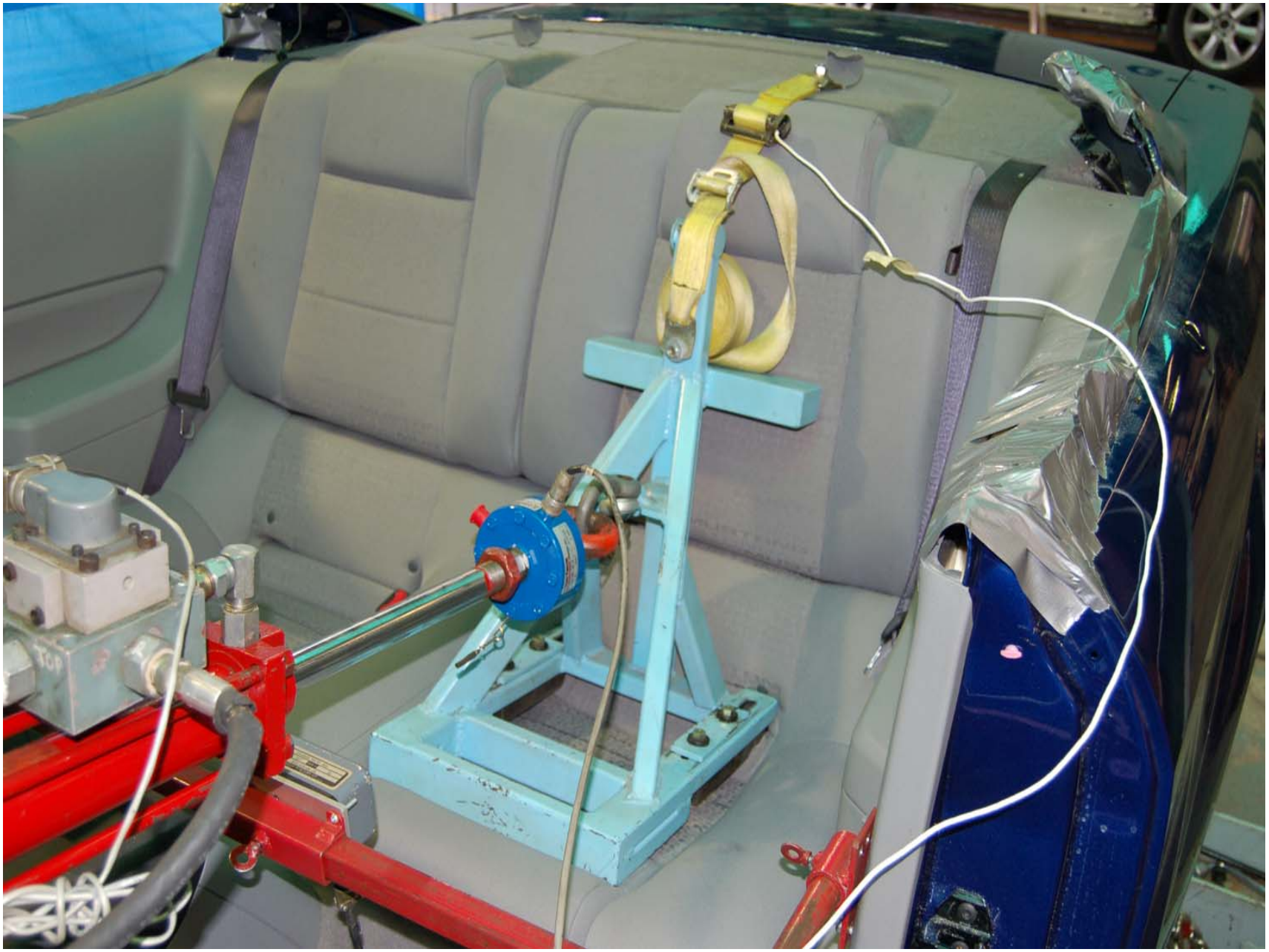
FIGURE 5.28
ROW 2, RIGHT SIDE INBOARD SRP MEASUREMENT

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.29
¾ LEFT REAR VIEW OF VEHICLE IN TEST RIG

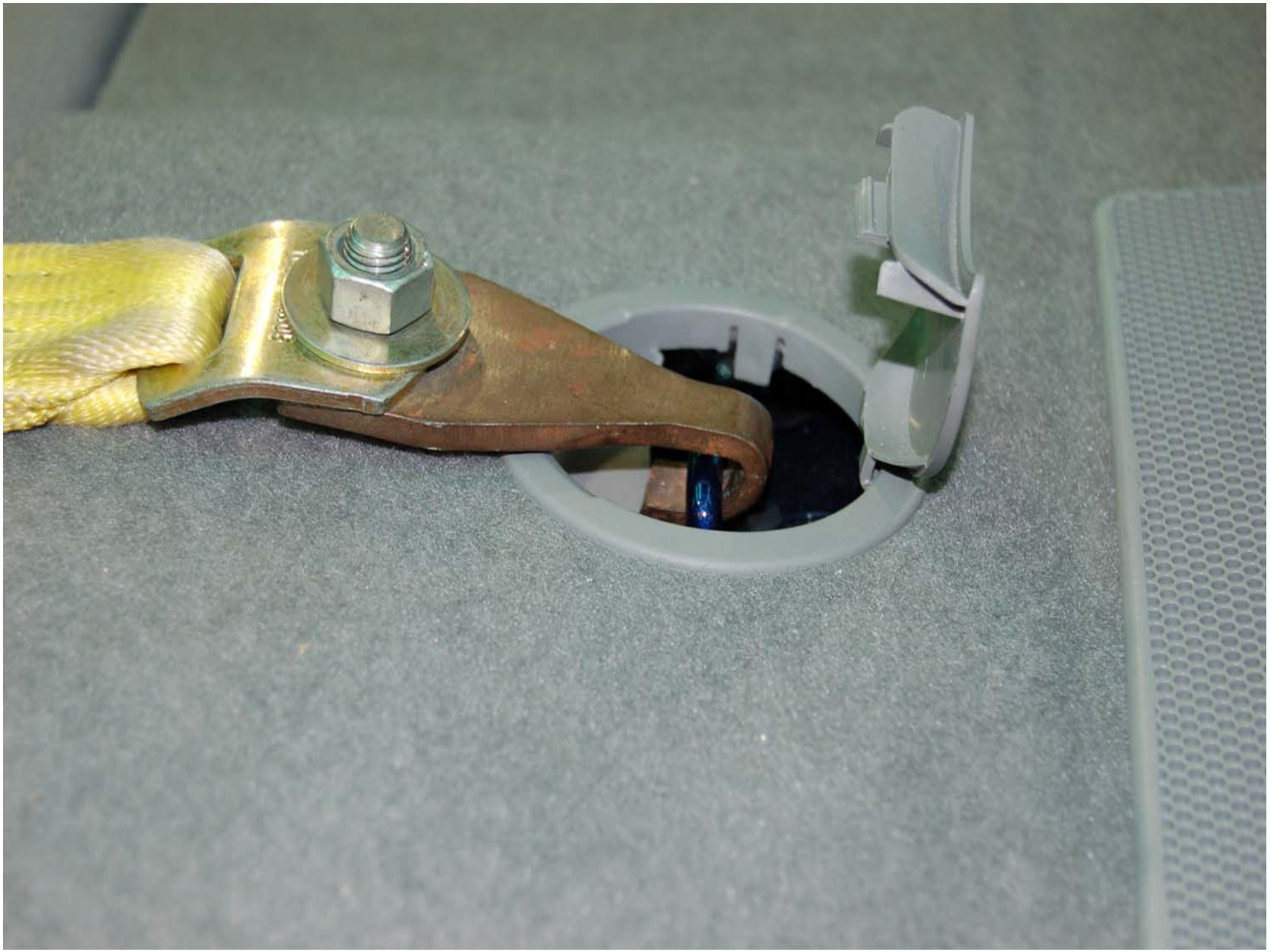
2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.30
¾ RIGHT FRONT VIEW OF VEHICLE IN TEST RIG



2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.31
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2

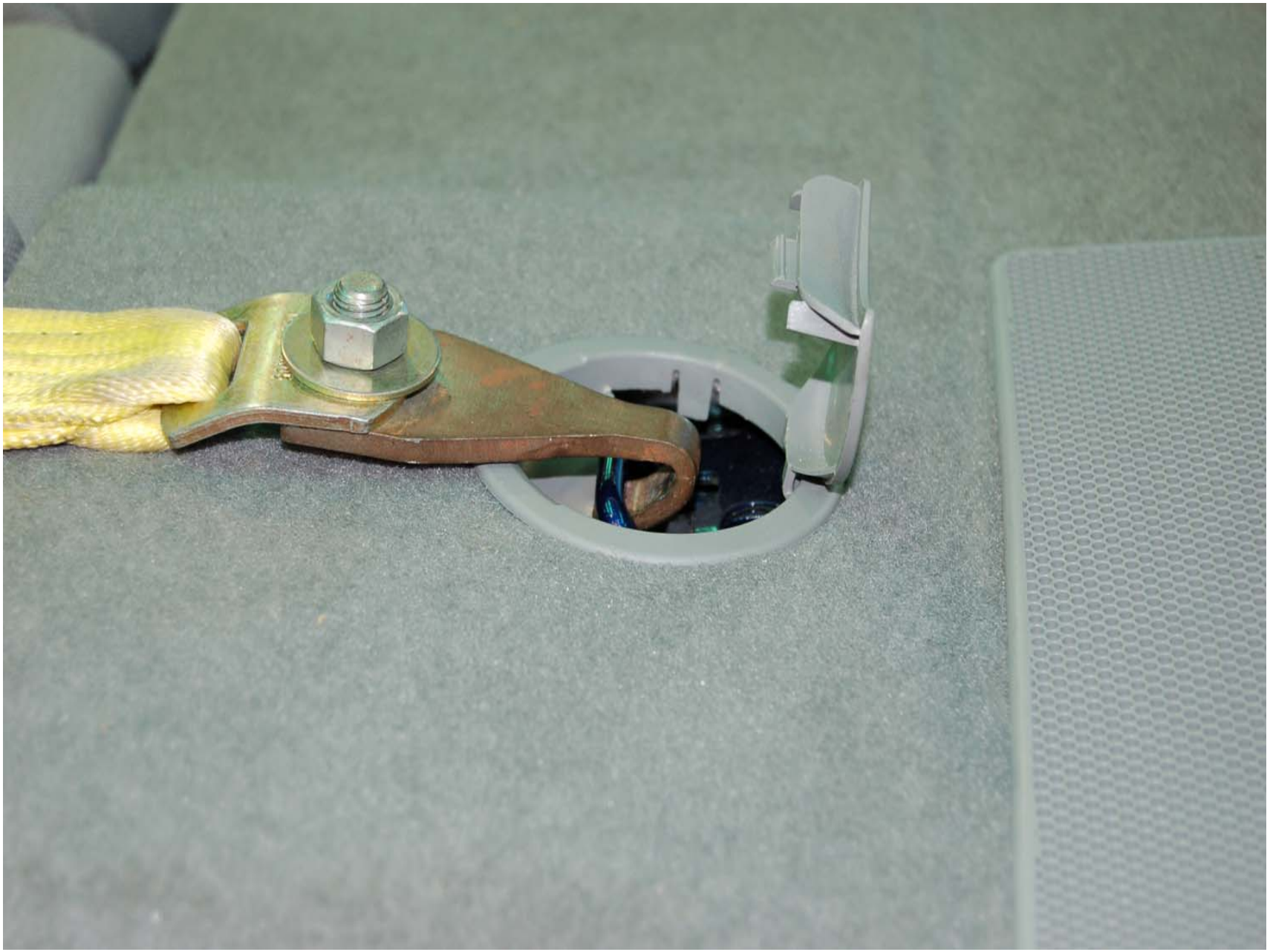


2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.32
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2

2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.33
POST TEST ROW 2, LEFT SIDE WITH SFAD 2



2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

FIGURE 5.34
POST TEST ROW 2, LEFT SIDE WITH SFAD 2

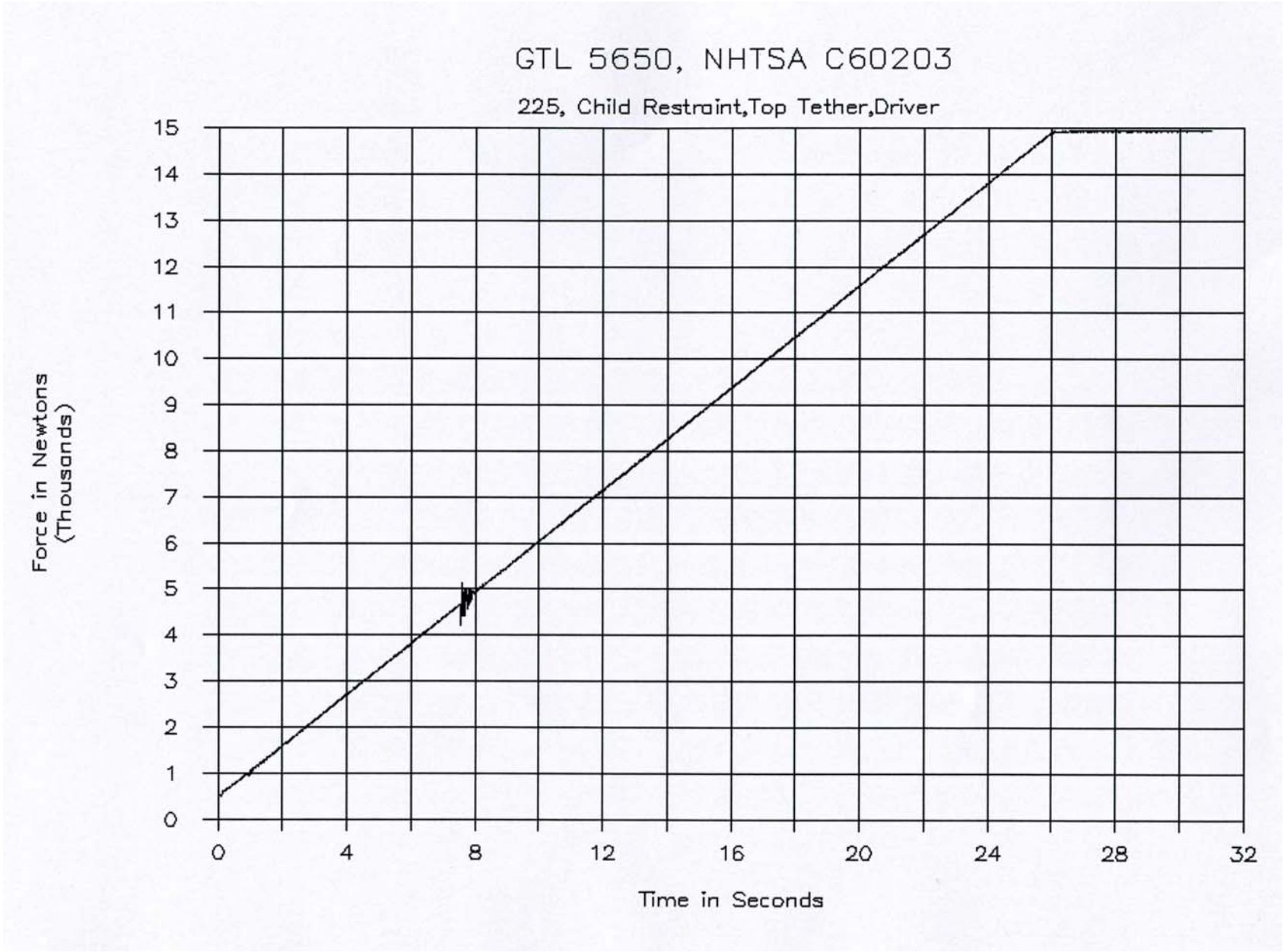
2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

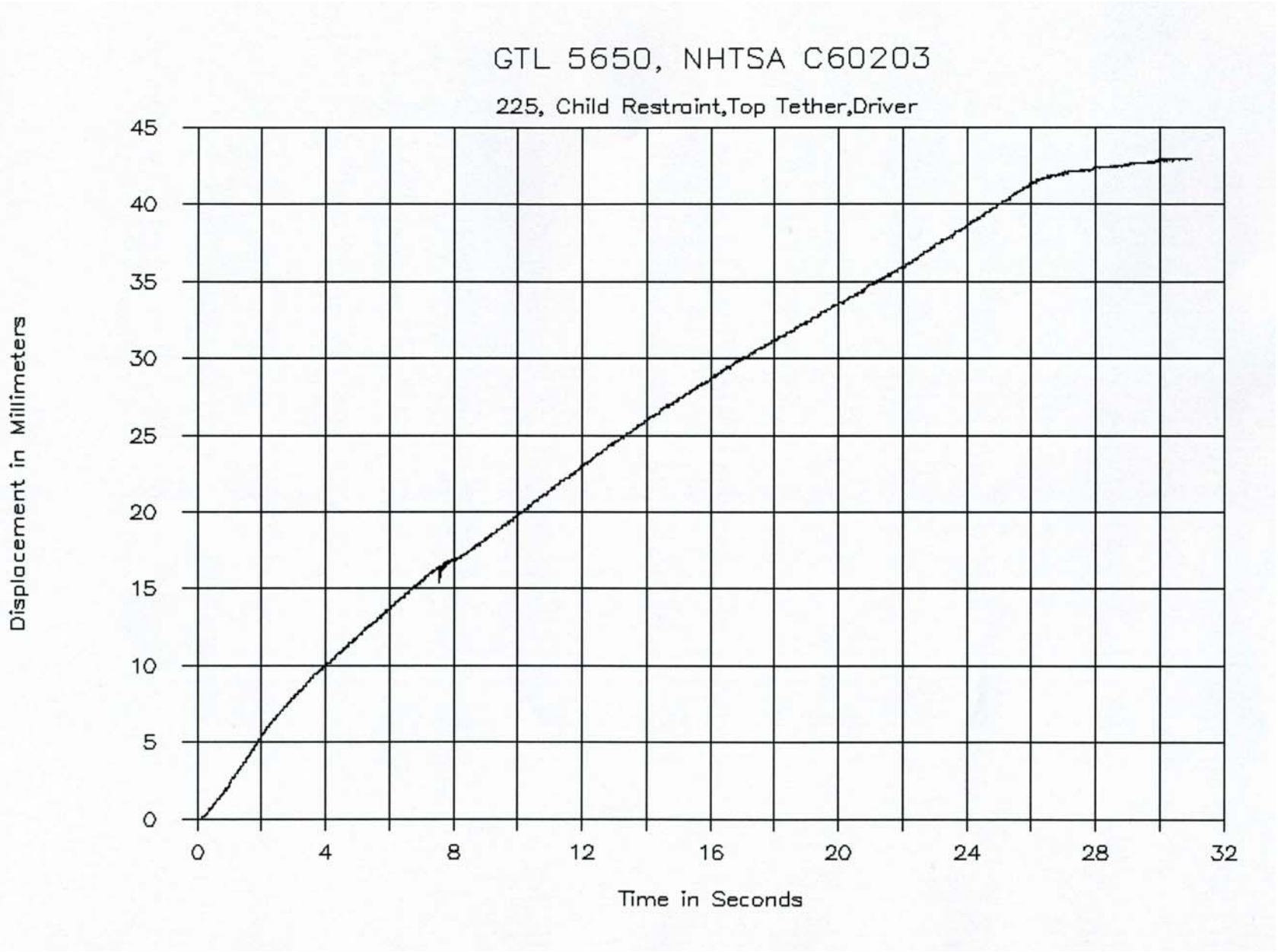
FIGURE 5.35
PRE-TEST ROW 2, RIGHT SIDE WITH SFAD 2

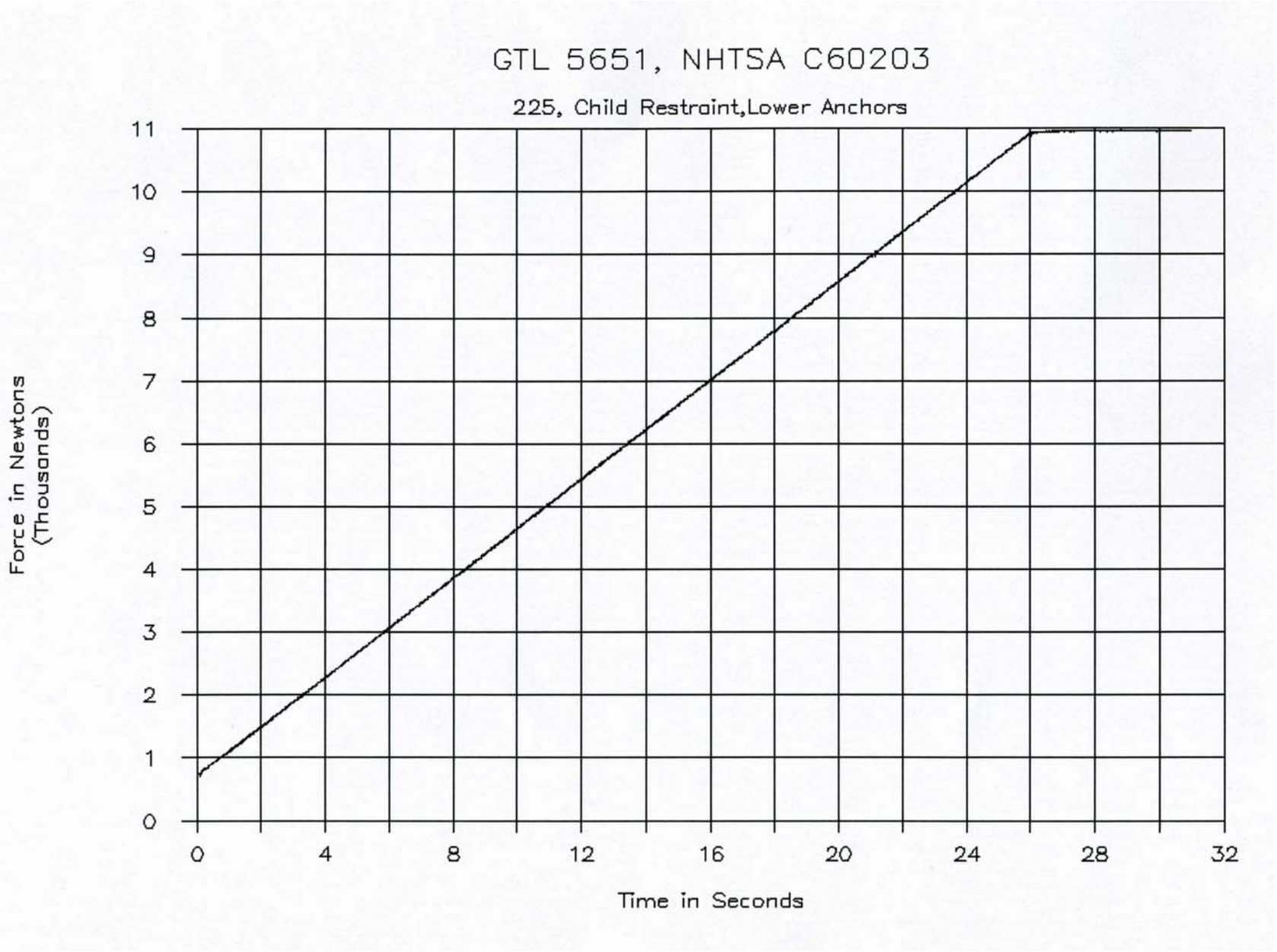
2006 FORD MUSTANG
NHTSA NO. C60203
FMVSS NO. 225

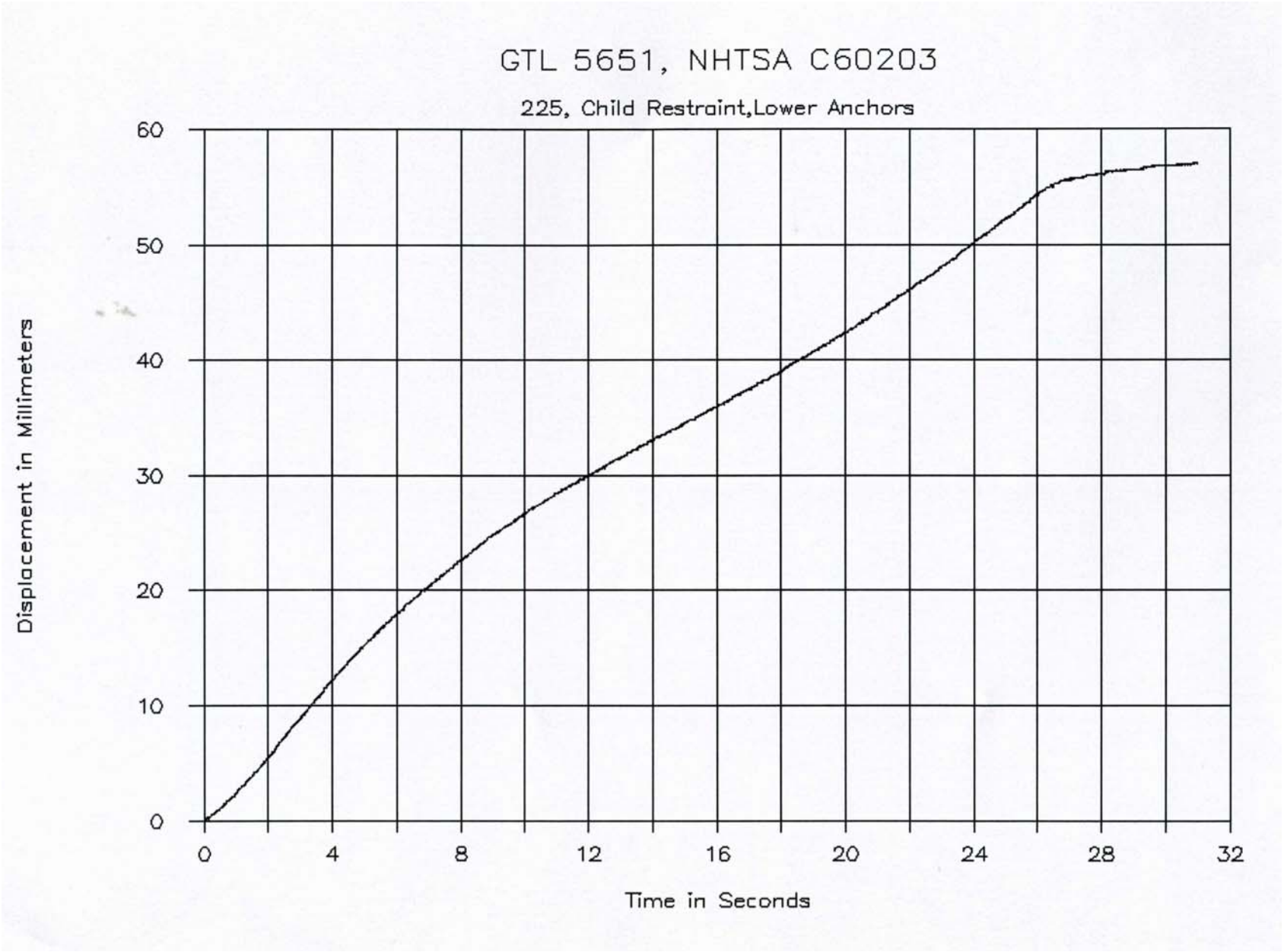
FIGURE 5.36
POST TEST ROW 2, RIGHT SIDE WITH SFAD 2

SECTION 6
PLOTS


GTL 5650, NHTSA C60203
225, Child Restraint,Top Tether,Driver
Force in Newtons
(Thousands)
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
0
4
8
12
16
20
24
28
32
Time in Seconds


GTL 5650, NHTSA C60203
225, Child Restraint,Top Tether,Driver
Displacement in Millimeters
45
40
35
30
25
20
15
10
5
0
0
4
8
12
16
20
24
28
32
Time in Seconds


GTL 5651, NHTSA C60203
225, Child Restraint,Lower Anchors
Force in Newtons
(Thousands)
11
10
9
8
7
6
5
4
3
2
1
0
0
4
8
12
16
20
24
28
32
Time in Seconds


GTL 5651, NHTSA C60203
225, Child Restraint,Lower Anchors
Displacement in Millimeters
60
50
40
30
20
10
0
0
4
8
12
16
20
24
28
32
Time in Seconds

APPENDIX A
OWNER'S MANUAL CHILD RESTRAINT INFORMATION

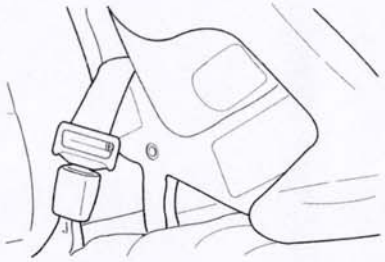
Never use pillows, books, or towels to boost a child. They can slide around and increase the likelihood of injury or death in a collision.

SAFETY SEATS FOR CHILDREN

Child and infant or child safety seats

Use a safety seat that is recommended for the size and weight of the child. Carefully follow all of the manufacturer's instructions with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

When installing a child safety seat:



- Review and follow the information presented in the *Airbag supplemental restraint system* (SRS) section in this chapter.
- Use the correct safety belt buckle for that seating position (the buckle closest to the direction the tongue is coming from).
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode* (passenger side front and outboard rear seating positions) (if equipped) section in this chapter.
- LATCH lower anchors are recommended for use by children up to 48 lb. (22 kg) in a child restraint. Top tether anchors can be used for children up to 60 lb. (27 kg) in a child restraint, and to provide upper torso restraint for children up to 80 lb. (36 kg) using an upper torso harness and a belt-positioning booster.

Ford recommends the use of a child safety seat having a top tether strap. Install the child safety seat in a seating position with LATCH and

tether anchors. For more information on top tether straps and anchors, refer to *Attaching safety seats with tether straps* in this chapter. For more information of LATCH anchors refer to *Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments* in this chapter.

Carefully follow all of the manufacturer's instructions included with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

Rear-facing child seats or infant carriers should never be placed in front of an active airbag.

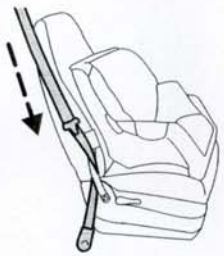
Installing child safety seats with combination lap and shoulder belts

Air bags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active air bag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

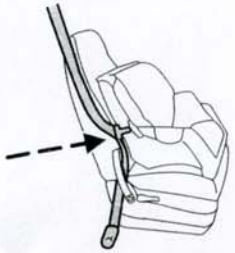
1. Position the child safety seat in a seat with a combination lap and shoulder belt.

Children 12 and under should be properly restrained in the rear seat whenever possible.

2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.

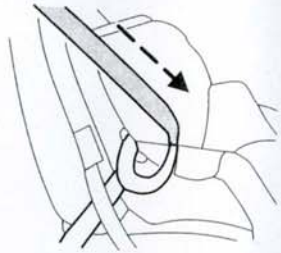


3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.

5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is extracted and a click is heard.

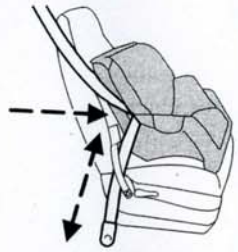


6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

7. Pull the lap belt portion across the child seat toward the buckle and pull up on the shoulder belt while pushing down with your knee on the child seat.

8. Allow the safety belt to retract to remove any slack in the belt.

9. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward. There should be no more than one inch of movement for proper installation.



10. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 2 through 9.

Check to make sure the child seat is properly secured before each use.

Attaching child safety seats with tether straps

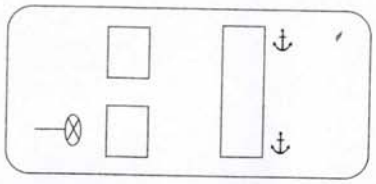
Most new forward-facing child safety seats include a tether strap which goes over the back of the seat and hooks to an anchoring point. Tether straps are available as an accessory for many older safety seats. Contact the manufacturer of your child seat for information about ordering a tether strap.

The rear seats of your vehicle are equipped with built-in tether strap anchors located behind the seats and below the rear window behind the speakers (coupe) or rearward of the seatback in the convertible top sling (convertible).

The tether anchors in your vehicle are either located under a cover marked with the child tether anchor symbol (shown with title) or are under a tag marked with the child tether anchor symbol in the convertible top sling.

The tether strap anchors in your vehicle are in the following positions (shown from top view):

Attach the tether strap only to the appropriate tether anchor as shown. The tether strap may not work properly if attached somewhere other than the correct tether anchor.



1. Position the child safety seat on the seat cushion.
2. Route the child safety seat tether strap over the back of the seat.

For vehicles with adjustable head restraints, route the tether strap under the head restraint and between the head restraint posts, otherwise route the tether strap over the top of the seatback.

3. Locate the correct anchor for the selected seating position as shown previously.

For Coupe only:

4. Open the tether anchor covers.

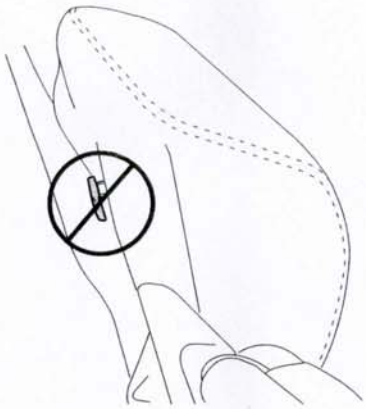
5. Clip the tether strap to the anchor as shown.

For Convertible only:

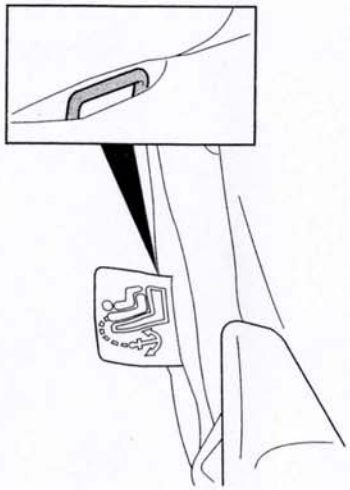
The tether anchors on the convertible are located rearward of the seatback in the convertible top sling.

Note: For easier access, attach the tether with the convertible top up.

Note: The attachments for the convertible boot located on the back of the head restraints are not tether anchors.



4. Access tether anchors located behind the seatback under the vinyl tag marked with the child tether anchor symbol.



5. Clip the tether strap to the anchor as shown.

If the tether strap is clipped incorrectly, the child safety seat may not be retained properly in the event of a collision.

6. Install the child safety seat tightly using the LATCH anchors or safety belts. Follow the instructions in this chapter.

7. Tighten the child safety seat tether strap according to the manufacturer's instructions.

If the safety seat is not anchored properly, the risk of a child being injured in a collision greatly increases.

Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments

Some child safety seats have two rigid or web mounted attachments that connect to two anchors at certain seating positions in your vehicle. This type of child seat eliminates the need to use safety belts to attach the child seat. For forward-facing child seats, the upper tether strap must also be attached to the proper tether anchor. See *Attaching safety seats with tether straps* in this chapter.

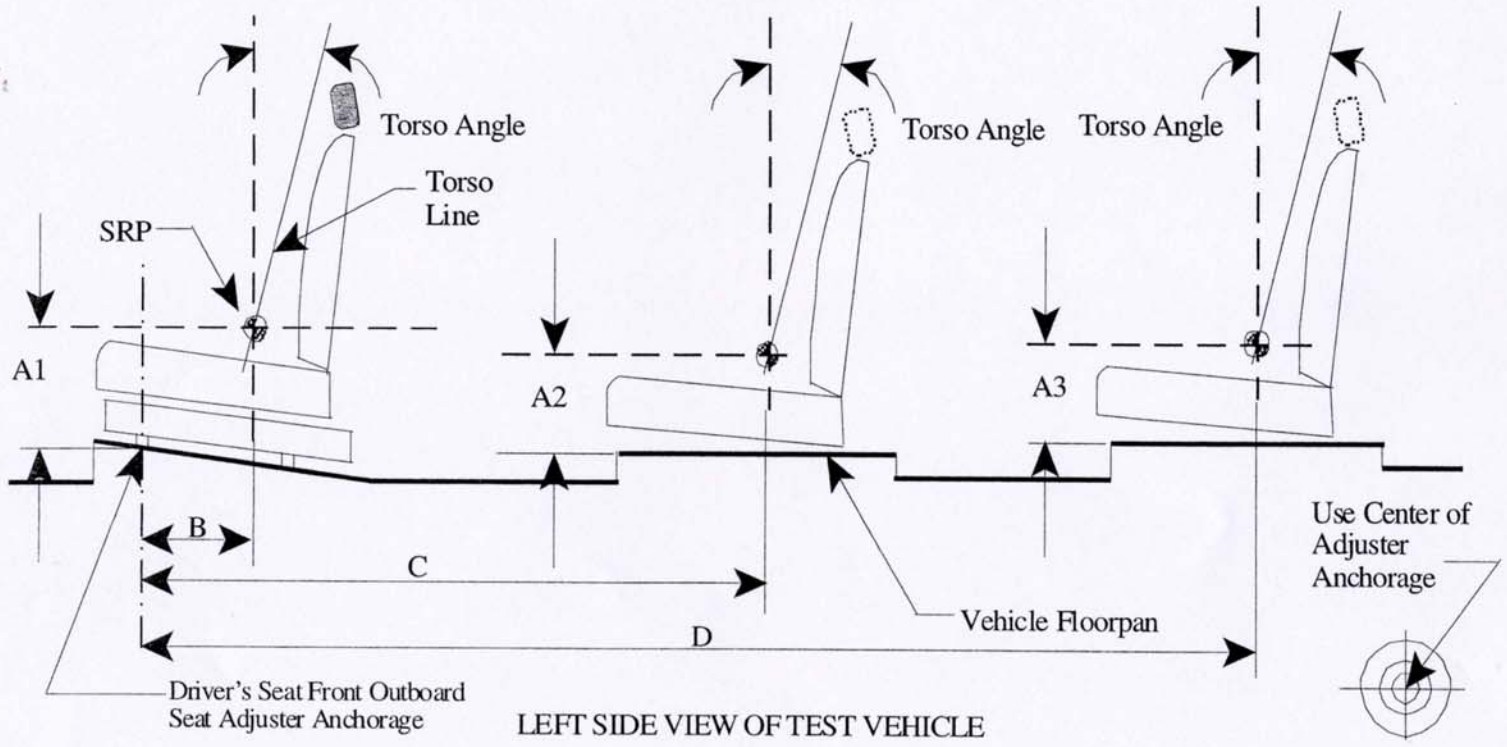
APPENDIX B
MANUFACTURER'S DATA

NHTSA Form 14

SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA FOR FMVSS 225

(All dimensions in mm[1])

Model Year: ____2006__; Make: ____Ford_____; Model: ____Mustang_____; Body Style: ___Coupe
Seat Style: Front row: Adjustable buckets; Second row: _Fixed bench_____; Third row: ____N/A_____



LEFT SIDE VIEW OF TEST VEHICLE

Table 1. Seating Positions[1] and Torso Angles

		Left (Driver Side)	Center (if any)	Right
A1		220.01	N/A	192.21
A2		226.61	N/A	226.61
A3		N/A	N/A	N/A
B		339.85	N/A	339.85
C		1045.84	N/A	1045.84
D		N/A	N/A	N/A
Torso Angle (degree)	Front Row	24	N/A	24
	Second Row	27	N/A	27
	Third Row	N/A	N/A	N/A

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

NHTSA Form 14

SEATING REFERENCE POINT
FOR FMVSS 225
(All dimensions in mm)

Model Year: ___2006_____; Make: __Ford_____; Model: __Mustang_____; Body Style: _Coupe
Seat Style: Front row: _Adjustable bucket____; Second row: ___Fixed Bench____; Third row: ___N/A_____

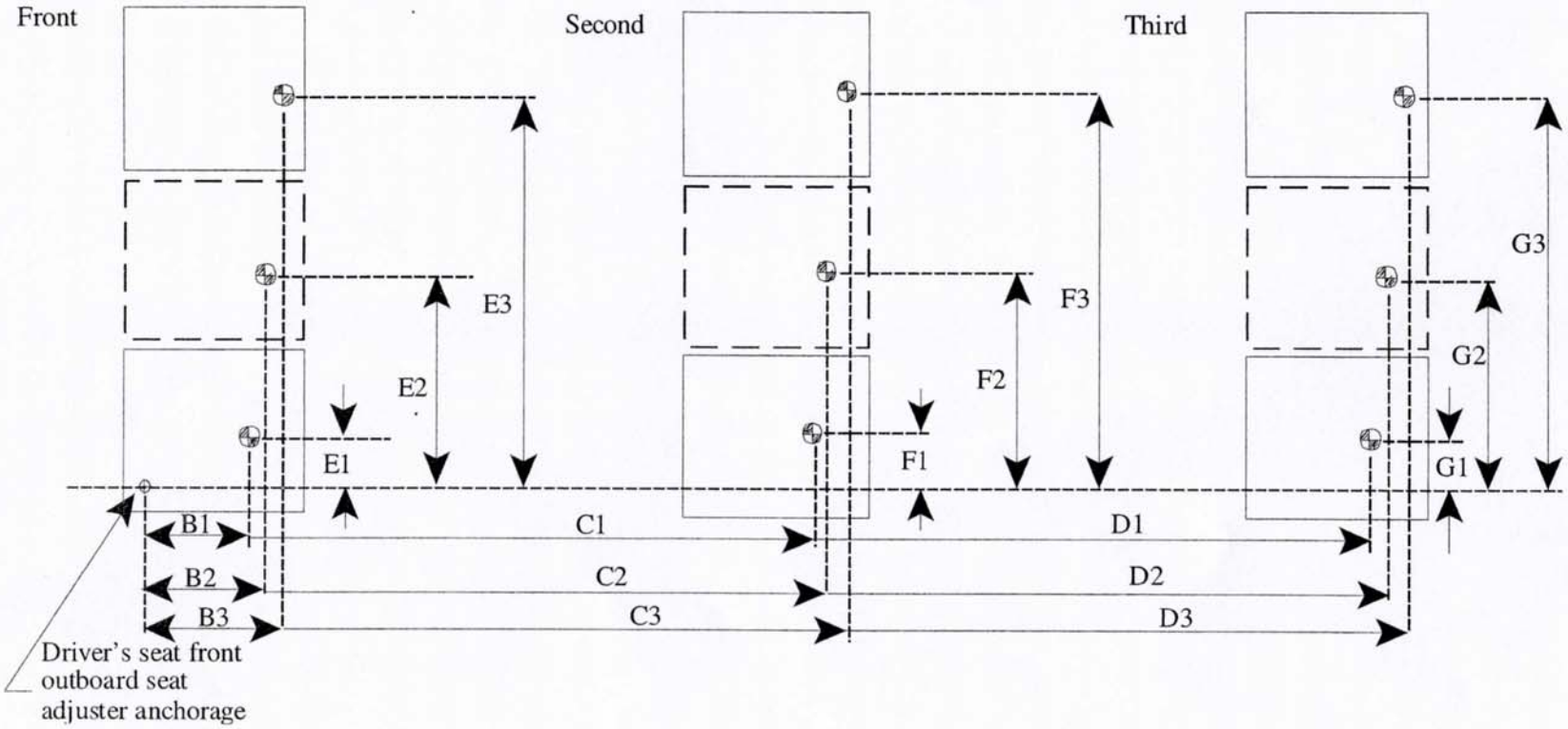


Table 2. Seating Reference Point and Tether Anchorage Locations

Seating Reference Point (SRP)		Distance from Driver's front outboard seat adjuster anchorage[1]
Front Row	B1	339.85
	E1	215.6
	B2	337.7
	E2	955.6
	B3	N/A
	E3	N/A
Second Row	C1	1045.84
	F1	297.6
	C2	1045.84
	F2	873.6
	C3	N/A
	F3	N/A
Third Row	D1	N/A
	G1	N/A
	D2	N/A
	G2	N/A
	D3	N/A
	G3	N/A

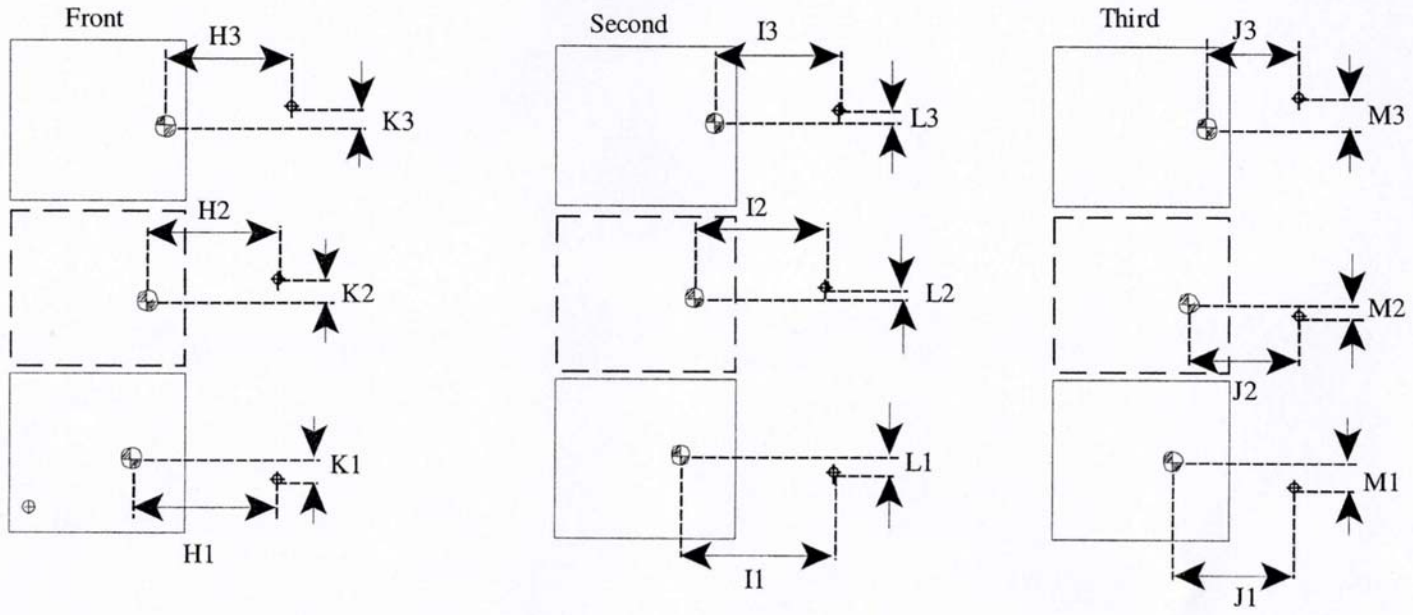
Note: 1. Use the center of anchorage.

NHTSA Form 14

TETHER ANCHORAGE LOCATIONS FOR FMVSS 225

(All dimensions in mm)

Model Year: __2006_____; Make: ____Ford_____; Model: __Mustang_____; Body Style: Coupe
Seat Style: Front row: _Adjustable buckets; Second row: _Fixed bench_____; Third row: _N/A_____



⊕: SRP

⊕: Tether anchorage

Note: 1. The location shall be measured at the center of the bar.

Table 3. Seating Reference Point and Tether Anchorage Locations

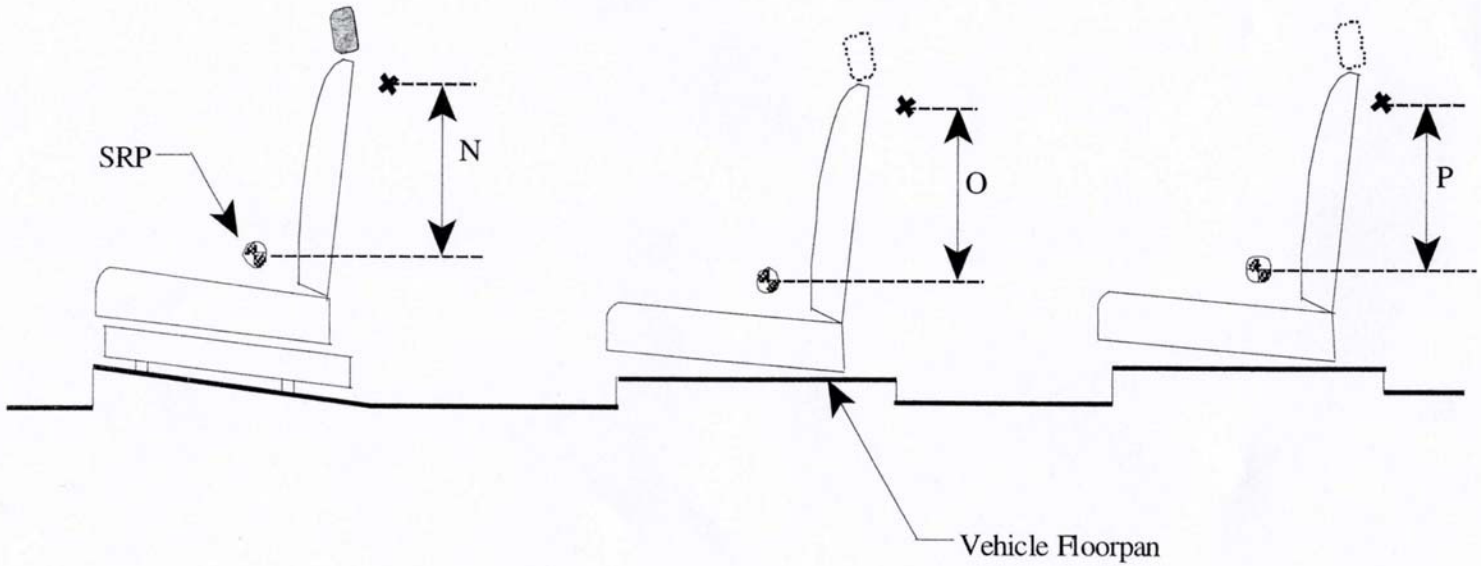
Seating Reference Point (SRP)	Distance from SRP	
Front Row	H1	N/A
	K1	N/A
	H2	N/A
	K2	N/A
	H3	N/A
	K3	N/A
Second Row	I1	602
	L1	22
	I2	N/A
	L2	N/A
	I3	602
	L3	22
Third Row	J1	N/A
	M1	N/A
	J2	N/A
	M2	N/A
	J3	N/A
	M3	N/A

Note: 1. Use the center of anchorage.

NHTSA Form 14

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

Model Year: 2006; Make: Ford; Model: Mustang; Body Style: Coupe
Seat Style: Front row: Adjustable bucket; Second row: _Fixed Bench;
Third row: _N/A_____



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)	553
	O2 (Center)	N/A
	O3 (Right)	553
Third Row	P1 (Left)	N/A
	P2 (Center)	N/A
	P3 (Right)	N/A

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

For each vehicle, provide the following information:

1. **How many designated seating positions exist in the vehicle?**
   Four

2. **How many designated seating positions are equipped with lower anchorages and tether anchorages? Specify which position(s).**
   Two – rear O/B

3. **How many designated seating positions are equipped with tether anchorages? Specify which position(s).**
   Two – rear O/B

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

   The lower anchorages are certified to S9.5(a)