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

TOYOTA MOTOR CORPORATION
2009 LEXUS ES 350, PASSENGER CAR
NHTSA NO. C95104

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

September 1, 2009
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
NHTSA No. C95104

Test failures identified were as follows:
None

Compliance tests were conducted on the subject, 2009 Lexus ES 350 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.
<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Purpose of Compliance Test</td>
<td>1</td>
</tr>
<tr>
<td>2 Compliance Test Results</td>
<td>2</td>
</tr>
<tr>
<td>3 Compliance Test Data</td>
<td>3</td>
</tr>
<tr>
<td>4 Test Equipment List</td>
<td>20</td>
</tr>
<tr>
<td>5 Photographs</td>
<td>21</td>
</tr>
<tr>
<td>5.1 Left Side View of Vehicle</td>
<td></td>
</tr>
<tr>
<td>5.2 Right Side View of Vehicle</td>
<td></td>
</tr>
<tr>
<td>5.3 ¾ Frontal View from Left Side of Vehicle</td>
<td></td>
</tr>
<tr>
<td>5.4 ¾ Rear View from Right Side of Vehicle</td>
<td></td>
</tr>
<tr>
<td>5.5 Vehicle Certification Label</td>
<td></td>
</tr>
<tr>
<td>5.6 Vehicle Tire Information Label</td>
<td></td>
</tr>
<tr>
<td>5.7 Pre-Test View of Row 2 Seating Positions</td>
<td></td>
</tr>
<tr>
<td>5.8 Measurement of Lower Anchor Symbol</td>
<td></td>
</tr>
<tr>
<td>5.9 Visibility of Lower Anchor Bars</td>
<td></td>
</tr>
<tr>
<td>5.10 Row 2, Left Side, Top Tether Anchor, Pre-Test</td>
<td></td>
</tr>
<tr>
<td>5.11 Row 2, Center, Top Tether Anchor, Pre-Test</td>
<td></td>
</tr>
<tr>
<td>5.12 Row 2, Right Side, Top Tether Anchor, Pre-Test</td>
<td></td>
</tr>
<tr>
<td>5.13 Row 2, Right Side, Outboard Lower Anchor, Pre-Test</td>
<td></td>
</tr>
<tr>
<td>5.14 Row 2, Right Side, Inboard Lower Anchor, Pre-Test</td>
<td></td>
</tr>
<tr>
<td>5.15 Row 2, Left Side, Outboard Lower Anchor, Pre-Test</td>
<td></td>
</tr>
<tr>
<td>5.16 Row 2, Left Side, Inboard Lower Anchor, Pre-Test</td>
<td></td>
</tr>
<tr>
<td>5.17 Row 2, Right Side with CRF</td>
<td></td>
</tr>
<tr>
<td>5.18 Row 2, Right Side Pitch Measurement</td>
<td></td>
</tr>
<tr>
<td>5.19 Row 2, Right Side, Outboard Z Measurement</td>
<td></td>
</tr>
<tr>
<td>5.20 Row 2, Right Side, Inboard Z Measurement</td>
<td></td>
</tr>
<tr>
<td>5.21 Row 2, Left Side with CRF</td>
<td></td>
</tr>
<tr>
<td>5.22 Row 2, Left Side Pitch Measurement</td>
<td></td>
</tr>
<tr>
<td>5.23 Row 2, Left Side, Outboard Z Measurement</td>
<td></td>
</tr>
<tr>
<td>5.24 Row 2, Left Side, Inboard Z Measurement</td>
<td></td>
</tr>
<tr>
<td>5.25 Row 2, Right Side with 2-D Template</td>
<td></td>
</tr>
<tr>
<td>5.26 Row 2, Left Side with 2-D Template</td>
<td></td>
</tr>
<tr>
<td>5.27 Row 2, Center with 2-D Template</td>
<td></td>
</tr>
<tr>
<td>5.28 Row 2, Left Side, Top Tether Routing</td>
<td></td>
</tr>
<tr>
<td>5.29 Row 2, Left Side, Top Tether Routing</td>
<td></td>
</tr>
<tr>
<td>5.30 Row 2, Right Side, Top Tether Routing</td>
<td></td>
</tr>
<tr>
<td>5.31 Row 2, Center, Top Tether Routing</td>
<td></td>
</tr>
<tr>
<td>5.32 Row 2, Left Side, Outboard SRP Measurement</td>
<td></td>
</tr>
<tr>
<td>5.33 Row 2, Left Side, Inboard SRP Measurement</td>
<td></td>
</tr>
<tr>
<td>5.34 Row 2, Right Side Outboard SRP Measurement</td>
<td></td>
</tr>
<tr>
<td>5.35 Row 2, Right Side Inboard SRP Measurement</td>
<td></td>
</tr>
<tr>
<td>5.36 ¾ Left Front View of Vehicle in Test Rig</td>
<td></td>
</tr>
<tr>
<td>5.37 ¾ Right Front View of Vehicle in Test Rig</td>
<td></td>
</tr>
<tr>
<td>5.38 Pre-Test, Row 2, Left Side with SFAD 2</td>
<td></td>
</tr>
<tr>
<td>5.39 Post Test, Row 2, Left Side with SFAD 2</td>
<td></td>
</tr>
<tr>
<td>5.40 Pre-Test, Row 2, Right Side with SFAD 2</td>
<td></td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS (continued)

5.41 Post Test, Row 2, Right Side with SFAD 2
5.42 Pre-Test, Row 2, Center with SFAD 1
5.43 Post Test, Row 2, Center with SFAD 1

Appendix A – Owner’s Manual Child Restraint Information 65
Appendix B – Manufacturer’s Data 73
Appendix C - Plots 85
SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0      PURPOSE OF COMPLIANCE TEST

A 2009 Lexus ES 350 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 2009 Lexus ES 350 Passenger Car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: JTHBJ46GX92295416

B. NHTSA No.: C95104

C. Manufacturer: TOYOTA MOTOR CORPORATION

D. Manufacture Date: 10/08

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing during the time period August 18-19, 2009.
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 2009 Lexus ES 350 Passenger Car appears to meet the requirements of FMVSS 225 testing.
SECTION 3

COMPLIANCE TEST DATA

3.0 TEST DATA

The following data sheets document the results of testing on the 2009 Lexus ES 350 Passenger Car.
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

<table>
<thead>
<tr>
<th>DSP</th>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

C. LOCATION OF TETHER ANCHORAGES

<table>
<thead>
<tr>
<th>DSP</th>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

D. LOWER ANCHORAGE DIMENSIONS

<table>
<thead>
<tr>
<th>DSP</th>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>c</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
### E. CONSPICUITY AND MARKING OF LOWER ANCHORAGES

<table>
<thead>
<tr>
<th>DSP a</th>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DSP b</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>DSP c</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### F. STRENGTH OF TETHER ANCHORAGES

<table>
<thead>
<tr>
<th>DSP a</th>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DSP b</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>DSP c</td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

### G. STRENGTH OF LOWER ANCHORAGES (Forward Force)

<table>
<thead>
<tr>
<th>DSP a</th>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>DSP b</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>DSP c</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### H. STRENGTH OF LOWER ANCHORAGE (Lateral Force)

<table>
<thead>
<tr>
<th>DSP a</th>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>DSP b</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>DSP c</td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

### I. OWNER’S MANUAL

<table>
<thead>
<tr>
<th>PASS</th>
<th>FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS:

NOTE:

RECORDED BY: G. Farrand
DATE: 08/19/09
APPROVED BY: D. Messick
DATA SHEET 2
REQUIREMENTS FOR CHILD RESTRAINT ANCHORAGE SYSTEMS
AND TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 19, 2009
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): 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 = PASS      NO = FAIL (S4.4(a) or (b) or (c))
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 = 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 = 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 = PASS  NO = FAIL (S4.6 (b))

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

X  

*  

A  

*  

B  

*  

C  

X = Top Tether  

* = Lower Anchors

RECORDED BY:  G. Farrand  

DATE: 08/19/09

APPROVED BY:  D. Messick
DATA SHEET 3
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 19, 2009
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

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

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

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

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

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

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

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

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

If the DSP has a tether routing device, is it flexible or rigid? N/A
DATA SHEET 3 CONTINUED

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

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

______ N/A ______ (Must be 60 N ± 5 N)

If the DSP has a flexible tether routing device, record the horizontal distance between the torso reference plane and the routing device:  N/A

Greater than or equal to 65mm = PASS

Less than 65mm = FAIL

If the DSP has a rigid tether routing device, record the horizontal distance between the torso reference plane and the routing device:  N/A

Greater than or equal to 100mm = PASS

Less than 100mm = FAIL

COMMENTS:

RECORDED BY:  G. Farrand

DATE:  08/19/09

APPROVED BY:  D. Messick
VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104;  VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08;  TEST DATE: AUGUST 18, 2009
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

**Outboard Lower Anchorage bar diameter:** 5.97 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

**Inboard Lower Anchorage bar diameter:** 5.97 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):** 33 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

**Length of the straight portion of the bar (inboard lower anchorage):** 33 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

**Length between the anchor bar supports (outboard lower anchorage):** 43 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

**Length between the anchor bar supports (inboard lower anchorage):** 43 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

**CRF Pitch angle:** 16.3°
Angle = 15º±10º = PASS Angle≠15º±10º = FAIL (S9.2.1)

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

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

Distance between point Z on the CRF and the front surface of outboard anchor bar: 48 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 48 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: 158 mm
Distance ≥ 120mm = PASS  Distance < 120mm = FAIL

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

Based on visual observation, would a 100 N load cause the anchor bar to deform more than 5 mm?

NO

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

COMMENTS:

RECORDED BY: G. Farrand DATE: 08/18/09

APPROVED BY: D. Messick
DATA SHEET 4A
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 18, 2009
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ___ROW 2 RIGHT SIDE (DSP C)____

Outboard Lower Anchorage bar diameter: ______ 5.97 mm____
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: ______ 5.97 mm____
6mm ± 0.1 mm = 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): ______ 33 mm____
Length ≥ 25mm = PASS Length < 25mm = FAIL (S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): ______ 33 mm____
Length ≥ 25mm = PASS Length < 25mm = FAIL (S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): ______ 43 mm____
Length ≤ 60mm = PASS Length > 60mm = FAIL (S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): ______ 43 mm____
Length ≤ 60mm = PASS Length > 60mm = FAIL (S9.1.1(c) (ii))

CRF Pitch angle: ____15.4°____
Angle = 15°±10° = PASS Angle ≠ 15°±10° = FAIL (S9.2.1)

CRF Roll angle: ____0.1°____
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: ______ 47 mm____
Distance ≤ 70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: ______ 48 mm____
Distance ≤ 70mm = PASS Distance > 70mm = FAIL
DATA SHEET 4A CONTINUED

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

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

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

Based on visual observation, would a 100 N load cause the anchor bar to deform more than 5 mm?

NO

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

COMMENTS:

RECORDED BY: G. Farrand DATE: 08/18/09
APPROVED BY: D. Messick
DATA SHEET 5
CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 19, 2009
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

MARKING (Circles)

Diameter of the circle: 15.0 mm

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

Does the circle have words, symbols or pictograms? PICTOGRAM

NO skip to next question

YES, are the meaning of the words, symbols or pictograms explained in the owner’s manual?

YES

YES = PASS NO = FAIL (S9.5(a)(2))

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

For circles on seat backs, vertical distance from the center of the circle to the center of the anchor bar: 70 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: 3 mm

Distance≤25mm = PASS Distance >25mm = FAIL (S9.5(a)(3))

CONSPICUITY (No Circles)

Is the anchor bar or guide visible when viewed from a point 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))
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: 08/19/09

APPROVED BY: D. Messick
DATA SHEET 6
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 19, 2009
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 6289

DESIGNATED SEATING POSITION: ____ROW 2 LEFT SIDE (DSP A)
SFAD: ____ 2____

Seat Back Angle: ____25º____

Location of seat back angle measurement: ____2D Template____

Head Restraint Position: ____DOWN____

D-ring Position: ____N/A______

Force at Point X (lower front crossmember for SFAD2) while securing belts and tether: ____135 N____

Lap belt tension: ____N/A____ (SFAD 1 only)

Tether strap tension: ____60 N____

Angle (measured above the horizontal at 500 N): ____10º____

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

Force application rate: ____577 N/S____

Time to reach maximum force (24-30 s): ____26 sec.____

Maximum force (14,950 N ± 50 N): ____14,919 N____

Tested simultaneously with another DSP? ____NO____

COMMENTS:

RECORDED BY: ____G. FARRAND______ DATE: ____08/19/09______

APPROVED BY: ____D. MESSICK______
DATA SHEET 6A
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 19, 2009
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 6290

DESIGNATED SEATING POSITION: ROW 2 CENTER (DSP B)
SFAD: 1
Seat Back Angle: 23º
Location of seat back angle measurement: 2D Template
Head Restraint Position: DOWN
D-ring Position: N/A

Force at Point X (lower front crossmember for SFAD2) while securing belts and tether: 135N
Lap belt tension: 60 N (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: 577 N/S
Time to reach maximum force (24-30 s): 26 sec.
Maximum force (14,950 N ± 50 N): 14,905 N
Tested simultaneously with another DSP? NO

COMMENTS:

RECORDED BY: G. FARRAND DATE: 08/19/09
APPROVED BY: D. MESSICK
DATA SHEET 7
STRENGTH OF LOWER ANCHORAGES (Forward Force)

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 19, 2009
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: __6288__

DESIGNATED SEATING POSITION: __ROW 2 RIGHT SIDE (DSP C)__

Seat Back Angle: __25°__

Location of seat back angle measurement: __2D Template__

Head Restraint Position: __DOWN__

Force at lower front crossmember for SFAD2 while tightening rearward extensions: ___135 N

Angle (measured above the horizontal at 500 N): ___10°__

Force application rate: ___423 N/S__

Time to reach maximum force (24-30 s): ___26 sec.____

Maximum force (10,950 N ± 50 N): ___10,933 N__

Displacement, H1 (at 500N): ___0___

Displacement, H2 (at maximum load): ___45.2 mm__

Displacement of Point X: ___45.2 mm__ (H2-H1)

Displacement > 175 mm = FAIL (S9.4.1(a))

Tested simultaneously with another DSP? ___NO____

Distance between adjacent DSP’s: ___365 mm____

COMMENTS:

RECORDED BY: ___G. FARRAND__________ DATE: ___08/19/09__________

APPROVED BY: ___D. MESSICK__________
DATA SHEET 8
OWNER’S MANUAL

VEH. MOD YR/MAKE/MODEL/BODY: 2009 LEXUS ES 350 PASSENGER CAR
VEH. NHTSA NO: C95104; VIN: JTHBJ46GX92295416
VEH. BUILD DATE: 10/08; TEST DATE: AUGUST 19, 2009
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: 08/19/09
APPROVED BY: D. Messick
TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
<th>DESCRIPTION</th>
<th>MODEL/ SERIAL NO.</th>
<th>CAL. DATE</th>
<th>NEXT CAL. DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPUTER</td>
<td>AT&amp;T</td>
<td>486DX266</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>LOAD CELL</td>
<td>INTERFACE</td>
<td>215636</td>
<td>05/09</td>
<td>05/10</td>
</tr>
<tr>
<td>LINEAR TRANSUDER</td>
<td>SERVO SYSTEMS</td>
<td>69</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>SEAT BELT LOAD CELL</td>
<td>TRANSUDER</td>
<td>135</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>SEAT BELT LOAD CELL</td>
<td>TRANSUDER</td>
<td>137</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>LEVEL</td>
<td>STANLEY</td>
<td>42-449</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>FORCE GAUGE</td>
<td>CHATILLON</td>
<td>8761</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>CALIPER</td>
<td>N/A</td>
<td>Q9322365</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>CRF</td>
<td>MEASUREMENT FIXTURE</td>
<td>GTL CRF</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>SFAD 1</td>
<td>FORCE APPLICATION DEVICE</td>
<td>GTL SFAD 1</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>SFAD 2</td>
<td>FORCE APPLICATION DEVICE</td>
<td>GLT SFAD 2</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
</tbody>
</table>
SECTION 5
PHOTOGRAPHS
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.1
LEFT SIDE VIEW OF VEHICLE
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.3
3/4 FRONTAL VIEW FROM LEFT SIDE OF VEHICLE
MFD. BY: TOYOTA MOTOR CORPORATION 10/08
GVWR 4680LB GAWR FR 2668LB RR 2359LB
THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY, BUMPER, AND
THEFT PREVENTION STANDARDS IN EFFECT ON
THE DATE OF MANUFACTURE SHOWN ABOVE.
JTHBJ46GX92295416 PASS. CAR

C/TR: 1GO/LA25 GSV40L-BETGKA
A/TM: -01A/U660E MADE IN JAPAN 122 A

FIGURE 5.5
CLOSE-UP VIEW OF VEHICLE CERTIFICATION LABEL
<table>
<thead>
<tr>
<th>TIRE</th>
<th>SIZE</th>
<th>COLD TIRE PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT</td>
<td>P215/55R17</td>
<td>210kPa, 30PSI</td>
</tr>
<tr>
<td>REAR</td>
<td>P215/55R17</td>
<td>210kPa, 30PSI</td>
</tr>
<tr>
<td>SPARE</td>
<td>P215/55R17</td>
<td>210kPa, 30PSI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PNEUS</th>
<th>DIMENSION</th>
<th>PRESSION DE GONFLAGE À FROID</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVANT</td>
<td>P215/55R17</td>
<td>210kPa, 30PSI</td>
</tr>
<tr>
<td>ARRIÈRE</td>
<td>P215/55R17</td>
<td>210kPa, 30PSI</td>
</tr>
<tr>
<td>SECOURS</td>
<td>P215/55R17</td>
<td>210kPa, 30PSI</td>
</tr>
</tbody>
</table>

See owner’s manual for additional information.
FIGURE 5.7
PRE-TEST VIEW OF ROW 2 SEATING POSITIONS

2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.8
MEASUREMENT OF LOWER ANCHOR SYMBOL
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.9
VISIBILITY OF LOWER ANCHOR BARS
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.10
ROW 2, LEFT SIDE, TOP TETHER ANCHOR, PRE-TEST
FIGURE 5.12
ROW 2, RIGHT SIDE, TOP TETHER ANCHOR, PRE-TEST

2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225
FIGURE 5.13
ROW 2, RIGHT SIDE, OUTBOARD LOWER ANCHOR, PRE-TEST
FIGURE 5.14
ROW 2, RIGHT SIDE, INBOARD LOWER ANCHOR PRE-TEST
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

Figure 5.15
ROW 2, LEFT SIDE, OUTBOARD LOWER ANCHOR, PRE-TEST
FIGURE 5.17
ROW 2, RIGHT SIDE WITH CRF INSTALLED
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.18
ROW 2, RIGHT SIDE PITCH MEASUREMENT
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.21
ROW 2, LEFT SIDE WITH CRF INSTALLED
FIGURE 5.22
ROW 2, LEFT SIDE PITCH MEASUREMENT
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.23
ROW 2, LEFT SIDE OUTBOARD Z MEASUREMENT
FIGURE 5.26
ROW 2, LEFT SIDE WITH 2-D TEMPLATE
FIGURE 5.27
ROW 2, CENTER WITH 2-D TEMPLATE
FIGURE 5.28
ROW 2, LEFT SIDE, TOP TETHER ROUTING
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.29
ROW 2, LEFT SIDE, TOP TETHER ROUTING
FIGURE 5.30
ROW 2, RIGHT SIDE, TOP TETHER ROUTING
FIGURE 5.31
ROW 2, CENTER, TOP TETHER ROUTING
FIGURE 5.34
ROW 2, RIGHT SIDE, OUTBOARD SRP MEASUREMENT
FIGURE 5.35
ROW 2, RIGHT SIDE, INBOARD SRP MEASUREMENT
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.38
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2
FIGURE 5.39
POST TEST ROW 2, LEFT SIDE WITH SFAD 2

2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225
2009 LEXUS ES 350
NHTSA NO. C95104
FMVSS NO. 225

FIGURE 5.43
POST TEST ROW 2, CENTER WITH SFAD 1
APPENDIX A
OWNER’S MANUAL RESTRAINT INFORMATION
Follow the child restraint system manufacturer's instructions. Firmly secure child restraints to the outside rear seats using the LATCH anchors or a seat belt. Attach the top tether strap when installing a child restraint.

The lap/shoulder belt can be used if your child restraint system is not compatible with the LATCH (Lower Anchors and Tethers for Children) system.

Child restraint LATCH anchors

LATCH anchors are provided for the outside rear seats. (Buttons displaying the location of the anchors are attached to the seats.)

Seat belts equipped with a child restraint locking mechanism (ALR/ELR belts except driver's seat belt) (→P. 50)

Anchor bracket (for top tether strap)

Anchor brackets are provided for all rear seats.
Installation with LATCH system

Type A

**Step 1:** Widen the gap between the seat cushion and seatback slightly.

**Step 2:** Latch the hooks of lower straps onto the LATCH anchorages.

**Step 3:** If the child restraint has a top tether strap, the top tether strap should be latched onto the top tether strap anchor.

For owners in Canada:
A symbol on a child restraint system indicates the presence of a lower connector system.

Type B

**Step 1:** Widen the gap between the seat cushion and seatback slightly.

**Step 2:** Latch the buckles onto the LATCH anchors.

**Step 3:** If the child restraint has a top tether strap, the top tether strap should be latched onto the top tether strap anchor.

For owners in Canada:
A symbol on a child restraint system indicates the presence of a lower connector system.
Installing child restraints using a seat belt (child restraint lock function belt)

Rear facing — Infant seat/convertible seat

STEP 1
Place the child seat on the rear seat facing the rear of the vehicle.

STEP 2
Run the seat belt through the child seat and insert the plate into the buckle. Make sure that the belt is not twisted.

STEP 3
Fully extend the shoulder belt and then allow it to retract slightly in order to activate the ALR lock mode.

Lock mode allows the seat belt to retract only.
While pushing the child seat down into the rear seat, allow the shoulder belt to retract until the child seat is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.

**Forward facing — Convertible seat**

Place the child seat on the seat facing the front of the vehicle.

Run the seat belt through the child seat and insert the plate into the buckle. Make sure that the belt is not twisted.

**STEP 3**

Fully extend the shoulder belt and then allow it to retract slightly into the ALR lock mode.

Lock mode allows the seat belt to retract only.
While pushing the child seat into the rear seat, allow the shoulder belt to retract until the child seat is securely in place.

After the shoulder belt has retracted to a point where there is no slack in the belt, pull the belt to check that it cannot be extended.

STEP 2: If the child restraint has a top tether strap, the top tether strap should be latched onto the top tether strap anchor.

**Booster seat**

STEP 1: Place the booster seat on the seat facing the front of the vehicle.

STEP 2: Sit the child in the booster seat. Fit the seat belt to the booster seat according to the manufacturer's instructions and insert the plate into the buckle. Make sure that the belt is not twisted.

Check that the shoulder belt is correctly positioned over the child's shoulder, and that the lap belt is as low as possible. (→P. 50)
Removing a child restraint installed with a seat belt

Push the buckle release button and fully retract the seat belt.

Child restraint systems with a top tether strap

Secure the child restraint using a seat belt or a lower anchors, and lock the head restraint in place at the lowest position.

STEP 1

Open the anchor bracket cover, latch the hook onto the anchor bracket and tighten the top tether strap.

Make sure the top tether strap is securely latched.
Laws and regulations pertaining to anchorages

The LATCH system conforms to FMVSS225 or CMVSS210.2.
Child restraint systems conforming to FMVSS213 or CMVSS213 specifications can be used.
This vehicle is designed to conform to the SAE J1819.

CAUTION

When installing a booster seat

Do not fully extend the shoulder belt to prevent the belt from going to ALR lock mode. (→P 52)
ALR mode causes the belt to tighten only which could cause injury or discomfort to the child.
APPENDIX B

MANUFACTURER’S DATA
SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA
FMVSS No. 225
(All dimensions in mm')


SEAT STYLE: FRONT ROW: SEPARATE / SECOND ROW: BENCH / THIRD ROW: N/A
Table 1. Seating Positions¹ and Torso Angles

<table>
<thead>
<tr>
<th>Torso Angle (degree)</th>
<th>Front Row</th>
<th>Center (if any)</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>(Driver) 229</td>
<td>N/A</td>
<td>(Front Passenger) 229</td>
</tr>
<tr>
<td>A2' (*)</td>
<td>231</td>
<td>279</td>
<td>231</td>
</tr>
<tr>
<td>A3</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B</td>
<td>345</td>
<td>N/A</td>
<td>345</td>
</tr>
<tr>
<td>C</td>
<td>1224</td>
<td>1180</td>
<td>1224</td>
</tr>
<tr>
<td>D</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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

(*) : A2' are the dimensions from driver's seat front outboard seat adjuster anchorage.
SEATING REFERENCE POINT
FMVSS No. 225
(All dimensions in mm)


SEAT STYLE: FRONT ROW: SEPARATE / SECOND ROW: BENCH / THIRD ROW: N/A

Driver's seat front outboard seat adjuster anchorage
Table 2. Seating Reference Point and Tether Anchorage Locations

<table>
<thead>
<tr>
<th>Seating Reference Point (SRP)</th>
<th>Distance from Driver's front outboard seat adjuster anchorage'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Row</td>
<td></td>
</tr>
<tr>
<td>B1</td>
<td>345</td>
</tr>
<tr>
<td>E1</td>
<td>217</td>
</tr>
<tr>
<td>B2</td>
<td>N/A</td>
</tr>
<tr>
<td>E2</td>
<td>N/A</td>
</tr>
<tr>
<td>B3</td>
<td>345</td>
</tr>
<tr>
<td>E3</td>
<td>967</td>
</tr>
<tr>
<td>Second Row</td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>1224</td>
</tr>
<tr>
<td>F1</td>
<td>227</td>
</tr>
<tr>
<td>C2</td>
<td>1180</td>
</tr>
<tr>
<td>F2</td>
<td>592</td>
</tr>
<tr>
<td>C3</td>
<td>1224</td>
</tr>
<tr>
<td>F3</td>
<td>957</td>
</tr>
<tr>
<td>Third Row</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>N/A</td>
</tr>
<tr>
<td>G1</td>
<td>N/A</td>
</tr>
<tr>
<td>D2</td>
<td>N/A</td>
</tr>
<tr>
<td>G2</td>
<td>N/A</td>
</tr>
<tr>
<td>D3</td>
<td>N/A</td>
</tr>
<tr>
<td>G3</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: Use the center of anchorage.
TETHER ANCHORAGE LOCATIONS
FMVSS No. 225
(All dimensions in mm)


SEAT STYLE: FRONT ROW: SEPARATE / SECOND ROW: BENCH / THIRD ROW: N/A

Note: The location shall be measured at the center of anchorage.
<table>
<thead>
<tr>
<th>Seating Reference Point (SRP)</th>
<th>Distance from SRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Row</td>
<td></td>
</tr>
<tr>
<td>H1</td>
<td>N/A</td>
</tr>
<tr>
<td>K1</td>
<td>N/A</td>
</tr>
<tr>
<td>H2</td>
<td>N/A</td>
</tr>
<tr>
<td>K2</td>
<td>N/A</td>
</tr>
<tr>
<td>H3</td>
<td>N/A</td>
</tr>
<tr>
<td>K3</td>
<td>N/A</td>
</tr>
<tr>
<td>Second Row</td>
<td></td>
</tr>
<tr>
<td>I1</td>
<td>616</td>
</tr>
<tr>
<td>L1</td>
<td>0</td>
</tr>
<tr>
<td>I2</td>
<td>646</td>
</tr>
<tr>
<td>L2</td>
<td>0</td>
</tr>
<tr>
<td>I3</td>
<td>616</td>
</tr>
<tr>
<td>L3</td>
<td>0</td>
</tr>
<tr>
<td>Third Row</td>
<td></td>
</tr>
<tr>
<td>J1</td>
<td>N/A</td>
</tr>
<tr>
<td>M1</td>
<td>N/A</td>
</tr>
<tr>
<td>J2</td>
<td>N/A</td>
</tr>
<tr>
<td>M2</td>
<td>N/A</td>
</tr>
<tr>
<td>J3</td>
<td>N/A</td>
</tr>
<tr>
<td>M3</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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 = 8 degrees.

Measurement Instructions:

Recline to 8 degrees rearward from the most upright position, when seat vertical position is recline adjuster center to 160mm, upper from seat front outboard seat adjuster anchorage and recline adjuster center to 501mm rearward from seat front outboard seat adjuster anchorage.

FORM - 225
Seat back angle for passenger's seat = 8 degrees.

Measurement Instructions:

Recline to 8 degrees rearward from the most upright position, when seat vertical position is recline adjuster center to 160mm upper from seat front outboard seat adjuster anchorage and recline adjuster center to 501mm rearward from seat front outboard seat adjuster anchorage.

Seat back angle for 2nd row seat: Non-Adjustable

Seat back angle for 3rd row seat: N/A
TETHER ANCHORAGE LOCATIONS - VERTICAL

FMVSS No. 225
(All dimensions in mm)


SEAT STYLE: FRONT ROW: SEPARATE / SECOND ROW: BENCH / THIRD ROW: N/A

---

LEFT SIDE VIEW OF TEST VEHICLE

FORM - 225
<table>
<thead>
<tr>
<th>Seating Row</th>
<th>Vertical Distance from Seating Reference Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Row</td>
<td>N1 (Driver) N2 (Center) N3 (Right) 01 (Left) 02 (Center) 03 (Right) P1 (Left) P2 (Center) P3 (Right)</td>
</tr>
<tr>
<td>Second Row</td>
<td>N/A N/A 551 499 551 N/A N/A N/A</td>
</tr>
<tr>
<td>Third Row</td>
<td>N/A N/A</td>
</tr>
</tbody>
</table>

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?
   
   **Response 1:**
   
   The 2009 Lexus ES350 Sedan has 5DSP's.

2. How many designated seating positions are equipped with lower anchorages and tether anchorages? Specify which position(s).
   
   **Response 2:**
   
   The two outboard DSPs in the second row are equipped with lower anchorages and tether anchorages.

3. How many designated seating positions are equipped with tether anchorages? Specify which positions(s).
   
   **Response 3:**
   
   The three DSPs in the second row are equipped with tether anchorages.

4. Lower Anchorages Marking and Conspicuity: Whether the anchorages are certified to S9.5(a) or S9.5(b) of FMVSS No. 225.
   
   **Response 4:**
   
   All anchorages installed in the 2009 Lexus ES350 Sedan are certified to S9.5(a) of FMVSS225.