SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 110
TIRE SELECTION AND RIMS
FOR MOTOR VEHICLES WITH A
GVWR OF 4536 KILOGRAMS OR LESS

DAIMLERCHRYSLER AG
2008 SMART CAR FORTWO, PASSENGER CAR
NHTSA NO. C80501

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

JUNE 13, 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
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<tbody>
<tr>
<td>110-GTL-08-001</td>
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<tr>
<th>7. Author(s)</th>
<th>8. Performing Organ. Rep#</th>
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<tbody>
<tr>
<td>Grant Farrand, Project Engineer Debbie Messick, Project Manager</td>
<td>GTL-DOT-08-110-001</td>
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<thead>
<tr>
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<td>General Testing Laboratories, Inc.</td>
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</tr>
<tr>
<td>1623 Leedstown Road</td>
<td></td>
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<td>Colonial Beach, Va 22443</td>
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<td>U.S. Department of Transportation</td>
<td>Final Test Report</td>
</tr>
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<td>1200 New Jersey Ave., S.E., Washington, DC 20590</td>
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<th>15. Supplementary Notes</th>
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<td>Compliance tests were conducted on the subject 2008 Smart Car Fortwo 2-door passenger car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-110P-03 for the determination of FMVSS 110 compliance.</td>
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<tr>
<td>Compliance Testing Safety Engineering FMVSS 110</td>
<td>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</td>
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<table>
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Form DOT F 1700.7 (8-72)
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<td>5.19 Rear Tire Showing Manufacturer</td>
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<td>5.20 Rear Tire Showing Model</td>
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<td>5.21 Rear Tire Showing Size, Load Index and Speed Symbol</td>
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<td>5.23 Rear Tire Showing Serial Number</td>
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<td>5.25 Rear Rim Showing Size</td>
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<td></td>
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</tbody>
</table>
SECTION 1
INTRODUCTION

1.0 PURPOSE OF COMPLIANCE TEST

A 2008 Smart Car Fortwo 2-door passenger car was subjected to FMVSS No. 110 testing to determine if the vehicle was in compliance with the requirements of the standard. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure, TP-110P-03 dated 31 August 2007 and General Testing Laboratories, Inc (GTL) Test Procedure, TP-110-03A dated 13 May 2008.

1.1 TEST VEHICLE

The test vehicle was a 2008 Smart Car Fortwo 2-door passenger car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: WMEEJ31X68K100508

B. NHTSA No.: C80501

C. Manufacturer: DAIMLERCHRYSLER AG

D. Manufacture Date: 12/07

E. Color: Deep Black/Tridion Silver Metallic

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 110 testing during the time period May 16 through June 3, 2008.
SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 GENERAL

The 2008 Smart Car 2-door passenger car, NHTSA No. C80501, was subjected to FMVSS No. 110 testing during the time period May 16 through June 3, 2008.

2.1 TEST PROCEDURE

Prior to test, the test vehicle was inspected for completeness, systems operability and appropriate fuel and liquid levels, i.e., oil and coolant. The vehicle was then photographically documented as required by the DOT/NHTSA and GTL test procedures. Subsequent events included weighing the vehicle to establish delivered curb weight and the distribution of weight on the front and rear axles and each wheel position. The vehicle normal load as well as the maximum load on each wheel were measured. Data from each tire furnished with the vehicle were recorded. The vehicle tire placard was surveyed and photographed. Required dimensional data and other identifying data for the left front and right rear rims were obtained. The contour of the aforementioned rims was documented photographically.

2.2 SUMMARY OF RESULTS

The test vehicle appears to be in compliance with the requirements of FMVSS No. 110.
SECTION 3

TEST DATA
VEHICLE MAKE/MODEL/BODY STYLE: 2008 SMART CAR FORTWO

VEHICLE NHTSA NO: C80501 VIN: WMEEJ31X68K100508

VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 12/07

LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 06/03/08

PASSENGER CAR REQUIREMENTS

GENERAL (DATA SHEET 2)

The vehicle must be equipped with tires that meet the requirements of S139. (S110, S4.1)  
Pass

TIRE LOAD LIMITS (DATA SHEET 5)

The vehicle maximum load on the tire is not greater than the maximum load rating as marked on the sidewall of the tire. (S110, S4.2.1.1)  
Pass

The vehicle normal load on the tire is not greater than the value of 94 percent of the load rating at the vehicle manufacturer’s recommended cold inflation pressure for that tire. (S110, S4.2.1.2)  
Pass

PLACARD AND TIRE INFLATION PRESSURE LABEL (DATA SHEETS 4 AND 5)

The placard and tire inflation pressure label (if provided) are affixed and located correctly, and display the information and format required. (S110, S4.3)  
Pass*

No inflation pressure other than the maximum permissible inflation pressure may be shown on the placard and, if any, tire inflation pressure label unless as required. (S110, S4.3.4)  
Pass

RIMS (DATA SHEETS 3 AND 6)

Each rim is constructed to the dimensions of a rim referred to in FMVSS 139 that is listed by the manufacturer of the tires as suitable for use with those tires. (S110, S4.4.1(a)).  
Pass
PASSENGER CAR REQUIREMENTS

Vehicle rims retain deflated tires during a controlled braking application (S110, S4.4.1(b)).

PASS/FAIL

Pass

OWNER’S MANUAL (DATA SHEET 7)

Owner’s manual or other documentation has discussion of Vehicle Placard, Loading and Tires (575.6 (a)(4)).

Pass

Owner’s manual includes exact statement to “Steps for Determining Correct Load Limits.” (575.6(a)(5))

Pass

REMARKS: *The tire figure on the vehicle placard is somewhat small at 11.5 mm x 12.5 mm instead of the required dimensions of 13 mm x 14 mm. Table format depicting tire location and size does not follow exact format provided in FMVSS No. 110 vehicle placard figure.

RECORDED BY: G. Farrand

DATE: 06/03/08

APPROVED BY: D. Messick
DATA SHEET 1  
TEST VEHICLE INFORMATION/RECEIVING INSPECTION

VEHICLE MODEL YEAR/MAKE/BODY STYLE: 2008 SMART CAR FORTWO PASSENGER CAR
NHTSA NO.: C80501  TEST DATE: 06/03/08
VIN.: WMEEJ31X68K100508  MANUFACTURE DATE: 12/07

GVWR 1050 KG (2315 LBS)  GAWR(Fr) 440 KG (970 LBS)  GAWR(Rr) 660 KG (1455 LBS)

SEATING POSITIONS: FRONT 2  MID ____  REAR ____  OTHER ___

BODY COLOR: __DEEP BLACK/TRIDION SILVER METALLIC

ODOMETER READINGS: ARRIVAL - 920.54 KILOMETERS (572 MILES)

ENGINE DATA: 3 Cylinders  1 Liters  61 Cubic Inches

TRANSMISSION DATA: X Automatic  ____ Manual  ____ No. of Speeds

FINAL DRIVE DATA: X Rear Drive  ____ Front Drive  ____ 4 Wheel Drive

CHECK APPROPRIATE BOXES FOR VEHICLE EQUIPMENT/MAKE SURE ALL OPTIONS ON WINDOW STICKER ARE LISTED:

<table>
<thead>
<tr>
<th></th>
<th>Air Conditioning</th>
<th>Traction Control</th>
<th>Clock</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Tinted Glass</td>
<td>Telephone</td>
<td>Roof Rack</td>
</tr>
<tr>
<td></td>
<td>Power Steering</td>
<td>Cruise Control</td>
<td>X Console</td>
</tr>
<tr>
<td>X</td>
<td>Power Windows</td>
<td>X Rear Window Defroster</td>
<td>X Driver Air Bag</td>
</tr>
<tr>
<td></td>
<td>Power Door Locks</td>
<td>X Sun Roof or T-Top</td>
<td>X Passenger Air Bag</td>
</tr>
<tr>
<td></td>
<td>Power Seat(s)</td>
<td>Tachometer</td>
<td>X Side Curtain Air Bag(s)</td>
</tr>
<tr>
<td></td>
<td>Power Brakes</td>
<td>Tilt Steering Wheel</td>
<td>X Front Disc Brakes</td>
</tr>
<tr>
<td>X</td>
<td>Antilock Brake System</td>
<td>Stereo</td>
<td>Rear Disc Brakes</td>
</tr>
</tbody>
</table>

REMARKS: Front tires and rims are different size than rear tires and rims. No spare tire supplied with vehicle.

RECORDED BY: G. Farrand  DATE: 06/03/08
APPROVED BY: D. Messick
DATA SHEET 2
VEHICLE TIRE IDENTIFICATION

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SMART CAR FORTWO
VEHICLE NHTSA NO: C80501 VIN: WMEEJ31X68K100508
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 12/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 06/03/08

All tires on the vehicle (excluding the spare) are the same size: ( ) Yes (X) No
Spare tire is the same size as all other tires: ( ) Yes ( ) No (X) N/A

<table>
<thead>
<tr>
<th>TIRE SIDEWALL</th>
<th>Right Front</th>
<th>Left Rear</th>
<th>Spare Tire</th>
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<tr>
<td>Manufacture and Model</td>
<td>Continental</td>
<td>Continental</td>
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<td></td>
<td>ContiProContact</td>
<td>ContiProContact</td>
<td></td>
</tr>
<tr>
<td>Tire Size Designation</td>
<td>155/60R15</td>
<td>175/55R15</td>
<td>N/A</td>
</tr>
<tr>
<td>Load Index/Speed Symbol</td>
<td>74T</td>
<td>77T</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum Inflation Pressure</td>
<td>300 KPA (44 psi)</td>
<td>300 KPA (44 psi)</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum Load Rating</td>
<td>375 KG (827 lbs)</td>
<td>412 KG (908 lbs)</td>
<td>N/A</td>
</tr>
<tr>
<td>Tread/Traction/ Temperature</td>
<td>400/AA/A</td>
<td>400/AA/A</td>
<td>N/A</td>
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<tr>
<td>Tires have “DOT” Symbol</td>
<td>YES</td>
<td>YES</td>
<td>N/A</td>
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Serial Number: Right Front CN93 PVH6 4507 Left Front CN93 PVH6 4507
Right Rear CNHW PVH6 4907 Left Rear CNHW PVH6 4907
Spare N/A

DATA INDICATES COMPLIANCE: PASS/FAIL PASS

REMARKS: No spare tire supplied with vehicle.

RECORDED BY: G. Farrand DATE: 06/03/08
APPROVED BY: D. Messick
DATA SHEET 3
VEHICLE RIM IDENTIFICATION

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SMART CAR FORTWO
VEHICLE NHTSA NO: C80501 VIN: WMEEJ31X68K100508
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 12/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 06/03/08

RIM MARKINGS (if available)

Right Front Left Rear

Manufacturer’s Name, Symbol or Trademark SM SM

Rim Size 4.5Jx15 5.5Jx15

Load Rating and Max Inflation Pressure N/A N/A

Date of Manufacture 12/07 12/07

Does Rim contain “DOT” Symbol (Yes/No) No No

Other Rim Markings See Photographs See Photographs

Rim Inspection Comments: __________________________________________________________________________

Tire Inspection Comments: __________________________________________________________________________

RIM SIZE: Tire Size Measured Rim Width Measured Rim Diameter

RIGHT FRONT 155/60R15 4.5” 15”

LEFT REAR 175/55R15 5.5” 15”

Does stamped rim size (if available) agree with the measured rim size?

Right Front Rim (X) Yes ( ) No Left Rear Rim (X) Yes ( ) No ( ) Not Applicable

Installed rims are suitable for installed tires? (X) Yes ( ) No

REFERENCE USED: 2008 ETRTO MANUAL

DATA INDICATED COMPLIANCE: PASS/FAIL PASS

RECORDED BY: G. Farrand ; DATE: 06/03/08
APPROVED BY: D. Messick
VEHICLE MAKE/MODEL/BODY STYLE: 2008 SMART CAR FORTWO
VEHICLE NHTSA NO: C80501 VIN: WMEEJ31X68K100508
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 12/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 06/03/08

IDENTIFICATION OF VEHICLE LABELING

<table>
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<tr>
<th>(Yes/No)</th>
<th>Location</th>
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<tbody>
<tr>
<td>YES</td>
<td>Driver “B” Pillar</td>
<td>Pass</td>
</tr>
<tr>
<td>YES</td>
<td>Driver “B” Pillar</td>
<td>Pass</td>
</tr>
<tr>
<td>NO</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Labels are to be affixed to the driver’s side B-pillar otherwise refer to FMVSS 110 requirements.

Labeling Notes:
1. Tire size and pressure can be omitted from Vehicle Placard if same data is displayed on a Tire Inflation Pressure Label.
2. The Alphanumeric Identifier or Barcode, is optional. It can be located vertically, along the right edge or the left edge of the placard or label, or horizontally, along the bottom edge of the placard or label.
3. Tire size can include the tire load range identification symbol (“XL” or “reinforced”, “B”, “C”, “D”, “E”, or “F”), the load index number, and speed rating symbol, located immediately to the right of the tire size designation.
4. The tire “SIZE” heading can be replaced with “ORIGINAL TIRE SIZE” or “ORIGINAL SIZE”
5. The “SPARE” tire heading can be replaced with “SPARE TIRE.”
6. For full size spare tires, the recommended cold tire inflation pressure can be replaced with “SEE ABOVE.”
7. If no spare tire is provided, the word “NONE” is to replace the manufacturer’s cold tire inflation pressure.
Vehicle Placard has the exact color and format as specified in the above Figure 1B and text is in English. ( ) Yes (X) No
If no, explain: Table format depicting tire location and size does not follow exact format provided in FMVSS No. 110 vehicle placard figure. The tire figure is 11.5 mm x 12.5 mm and should be 13 mm x 14 mm.

Tire Inflation Pressure Label, if provided, has the exact color and format as specified in the above Figure 2B and text is in English. ( ) Yes ( ) No (X) N/A
If no, explain:

Vehicle Placard and, if provided, Tire Inflation Pressure Label are permanently affixed. (X) Yes ( ) No

Vehicle Placard information:

Combined weight of occupants and cargo 230 kg (507 lbs)
Seating capacity: Total 2 Front 2 Rear
Is the number of belted seating positions the same as the labeled seating capacity? (X) Yes ( ) No
If no, explain:

Is the tire size and pressure provided? (X) Yes ( ) No
If no, is the tire size and pressure provided on a Tire Inflation Pressure Label? ( ) Yes ( ) No

Vehicle Placard or Tire Inflation Pressure Label tire information:

Tire size Front 155/60R15 Rear 175/55R15
Tire Inflation Pressure Front 200KPA (29psi) Rear 250KPA (36psi)
Are the sizes of the installed tires the same as the sizes of the labeled tires? (X) Yes ( ) No
If no, explain:

Is the labeled cold tire inflation pressure equal to or less than the sidewall labeled maximum cold tire inflation pressure?
Front axle: (X) Yes ( ) No Rear axle: (X) Yes ( ) No

DATA INDICATED COMPLIANCE: PASS/FAIL PASS

RECORDED BY: G. Farrand ; DATE: 06/03/08
APPROVED BY: D. Messick
DATA SHEET 5 (1 of 4)
CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SMART CAR FORTWO
VEHICLE NHTSA NO: C80501 VIN: WMEEOJ1X68K100008
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 12/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 05/16/08

Full Fluid Levels: Fuel Full Coolant Full Other Fluids Brake Fluid Windshield Washer Fluid

Tire Pressures:
<p>| | | |</p>
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<tbody>
<tr>
<td>LF</td>
<td>200</td>
<td>KPA (29 psi)</td>
</tr>
<tr>
<td>RF</td>
<td>200</td>
<td>KPA (29 psi)</td>
</tr>
</tbody>
</table>

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

<p>| | | |</p>
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<tbody>
<tr>
<td>LF</td>
<td>177</td>
<td>KG (390.21 lbs)</td>
</tr>
<tr>
<td>RF</td>
<td>175</td>
<td>KG (385.80 lbs)</td>
</tr>
</tbody>
</table>

Front Axle 352 KG (776.02 lbs) Rear Axle 471 KG (1038.37 lbs)
Total Vehicle 823 KG (1814.40 lbs)

B. MEASURED VEHICLE NORMAL LOAD WEIGHT

1. Seating Capacity from Vehicle Placard 2

2. Normal Load Number of Occupants (from table in Section 10) 2
   Occupant Distribution: Front Seat 2 Second Seat
   Third Seat Fourth Seat

3. Total Normal Occupant Load 136 KG (299.82 lbs)
   (# of occupants x 68 KG per occupant)

4. Measured Normal Load on Axles
   |   |   |
   | LF | 208.5 KG (459.66 lbs) | LR | 269.5 KG (594.14 lbs) |
   | RF | 207 KG (456.35 lbs) | RR | 274 KG (604.06 lbs) |

Front Axle 415.5 KG (916.01 lbs) Rear Axle 543.5 KG (1198.21 lbs)
Total Vehicle 959 KG (2114.23 lbs)

5. Calculated Vehicle Normal Load on the Tire
   Front Tires (Measured front axle normal load/2) 207.75 KG (458.00 lbs)
   Rear Tires (Measured rear axle normal load/2) 271.75 KG (599.10 lbs)
6. Value of 94 percent of the load rating at the vehicle manufacturer’s recommended cold inflation pressure for that tire

<table>
<thead>
<tr>
<th>Installed Tire Size</th>
<th>Front Axle</th>
<th>Rear Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed Tire Size</td>
<td>155/60R15</td>
<td>175/55R15</td>
</tr>
<tr>
<td>Load Rating at recommended cold inflation pressure</td>
<td>315 KG (694.44 lbs)</td>
<td>412 KG (908.29 lbs)</td>
</tr>
<tr>
<td>94% of load rating</td>
<td>296 KG (652.56 lbs)</td>
<td>387 KG (853.17 lbs)</td>
</tr>
</tbody>
</table>

Vehicle Normal Load on the Tire should not be greater than the Value of 94% of the load rating at the vehicle manufacturer’s recommended cold inflation pressure.

\[
((5) < (6)) \quad \text{Front Tires} \quad \text{PASS} \\
\text{Rear Tires} \quad \text{PASS}
\]

C. MEASURED VEHICLE WEIGHT WITH FULL OCCUPANT LOAD

1. Seating Capacity from Placard:
   Total 2 Front 2 Rear

2. Full Occupant Load 136 KG (299.82 lbs)
   (# of occupants x 68 KG per occupant)

3. Measured Vehicle Weight with Full Occupant Load
   LF 208.5 KG (459.66 lbs) LR 269.5 KG (594.14 lbs)
   RF 207.0 KG (456.35 lbs) RR 274.5 KG (604.06 lbs)
   Front Axle 415.5 KG (916.01 lbs) Rear Axle 543.5 KG (1198.21 lbs)
   Total Vehicle 959 KG (2114.23 lbs)

D. MEASURED VEHICLE WEIGHT WITH MAXIMUM LOAD (PLACARD)

1. Vehicle Capacity Weight (from placard) 230 KG (507.06 lbs)

2. Full Occupant Load (from C.2 above) 136 KG (299.82 lbs)

3. Luggage/Cargo Load (subtract 2 from 1) 94 KG (207.23 lbs)
4. Measured Vehicle Maximum Load on Axles

LF 208.5 KG (459.66 lbs)  LR 316.5 KG (697.76 lbs)
RF 206.0 KG (454.15 lbs)  RR 322.0 KG (709.88 lbs)

Front Axle 414.5 KG (913.81 lbs)  Rear Axle 638.5 KG (1407.65 lbs)

Total Vehicle 1053 KG (2321.46 lbs)

5. Calculated Vehicle Maximum Load on the Tire

Front Tires (Measured front axle maximum load/2) 207.25 KG (456.90 lbs)
Rear Tires (Measured rear axle maximum load/2) 319.25 KG (703.82 lbs)

6. Tire Sidewall Maximum Load Ratings

<table>
<thead>
<tr>
<th>Installed Tire Size</th>
<th>Max. Load Rating on Sidewall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front 155/60R15</td>
<td>375 KG (826.73 lbs)</td>
</tr>
<tr>
<td>Rear 175/55R15</td>
<td>412 KG (908.30 lbs)</td>
</tr>
</tbody>
</table>

Vehicle Maximum Load on the Tire should not be greater than the Maximum load rating marked on the Tire Sidewall.

PASS/FAIL

[(5) < (6)]                      Front Tires  PASS
                              Rear Tires   PASS

7. Tire Load Ratings at Vehicle Placard and Tire Inflation Pressure Label

Recommended Cold Tire Inflation Pressure.

<table>
<thead>
<tr>
<th>Labeled Tire Size</th>
<th>Front Axle</th>
<th>Rear Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>155/60R15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>175/55R15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Labeled Cold Inflation Pressure

Front Axle 200 KPA (29psi)  Rear Axle 250 KPA (36 psi)
Load Rating at this Pressure*

Front Axle 315 KG (694.44 lbs)  Rear Axle 412 KG (908.29 lbs)

*Reference used to obtain Load Rating: 2008 ETRTO MANUAL
Vehicle Maximum Load on the Tire should not be greater than the Tire Load Rating at the Labeled Cold Tire Inflation Pressure.

<table>
<thead>
<tr>
<th></th>
<th>Front Tires</th>
<th>Rear Tires</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ (5) &lt; (7)]</td>
<td>PASS</td>
<td>PASS</td>
</tr>
</tbody>
</table>

DATA INDICATES COMPLIANCE: PASS/FAIL ______ PASS_____

REMARKS:

RECORDED BY: G. Farrand ___________ ; DATE: _______06/03/08_____
APPROVED BY: D. Messick ___________
DATA SHEET 6 (1 of 2)
OWNER’S MANUAL REQUIREMENTS

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SMART CAR FORTWO
VEHICLE NHTSA NO: C80501 VIN: WMEEJ31X68K100508
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 12/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 06/03/08

Owner’s Manual Discusses:

<table>
<thead>
<tr>
<th>Part 575.6(a) Paragraph</th>
<th>Required Discussion Topic</th>
<th>Discussed in Manual? (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) (i)</td>
<td>Tire labeling, including a description and explanation of each marking on the tire provided with the vehicle, and information about the location of the Tire Identification Number (TIN)</td>
<td>YES</td>
</tr>
<tr>
<td>(4) (ii)</td>
<td>A. Description and explanation of recommended cold tire inflation pressure.</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>B. Description and explanation of FMVSS 110 Vehicle Placard and Tire Inflation Pressure Label and their location(s)</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>C. Description and explanation of adverse safety consequences of under-inflation including tire failure</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>D. Description and explanation for measuring and adjusting air pressure to achieve proper inflation</td>
<td>YES</td>
</tr>
<tr>
<td>(4) (iii)</td>
<td>Glossary of tire terminology, including “cold tire pressure”, “maximum inflation pressure”, and all non-technical terms defined in S3 of FMVSS 110 and 139</td>
<td>YES</td>
</tr>
<tr>
<td>(4) (iv)</td>
<td>Tire care, including maintenance and safety practices</td>
<td>YES</td>
</tr>
<tr>
<td>(4) (v)</td>
<td>A. Description and explanation of locating and understanding load limit information, total load capacity, seating capacity, towing capacity and cargo capacity.</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>B. Description and explanation for calculating total and cargo load capacities with varying seating configurations including quantitative examples showing/illustrating how the vehicle’s cargo and luggage capacity decreases as the combined number and size of occupants increases.</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>C. Description and explanation for determining compatibility of tire and vehicle load capabilities</td>
<td>YES</td>
</tr>
<tr>
<td></td>
<td>D. Description and explanation of adverse safety consequences of overloading on handling and stopping and on tires</td>
<td>YES</td>
</tr>
</tbody>
</table>
Steps for Determining Correct Load Limit:

1. Locate the statement “The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.” on your vehicle’s placard.
2. Determine the combined weight of the driver and passenger that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passenger from XXX kg or XXX lbs.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the XXX amount equals 1400 lbs and there will be five 150 lb passenger in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 – 750 (5 x 150) = 650 lbs.)
5. Determine the combined weight of the luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
6. If you vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult the manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

DATA INDICATES COMPLIANCE   PASS/FAIL    PASS

REMARKS:

RECORDED BY:  G. Farrand ;  DATE:  06/03/08
APPROVED BY:  D. Messick
### TABLE 1 – TEST AND 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>PAD SCALES</td>
<td>#1 199744LF</td>
<td>199744LF</td>
<td>01/08</td>
<td>01/09</td>
</tr>
<tr>
<td></td>
<td>#2 199744RF</td>
<td>199744RF</td>
<td>01/08</td>
<td>01/09</td>
</tr>
<tr>
<td></td>
<td>#3 199744LR</td>
<td>199744LR</td>
<td>01/08</td>
<td>01/09</td>
</tr>
<tr>
<td></td>
<td>#4 199744RR</td>
<td>199744RR</td>
<td>01/08</td>
<td>01/09</td>
</tr>
<tr>
<td>PRESSURE TRANSDUCER</td>
<td>BLH</td>
<td>D-HF #65409</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>DATA ACQUISITION COMPUTER</td>
<td>GEO1</td>
<td>N/A</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>ANEMOMETER</td>
<td>OMEGA</td>
<td>HHF616</td>
<td>06/08</td>
<td>06/09</td>
</tr>
<tr>
<td>SLIP RING ASSEMBLY</td>
<td>GTL</td>
<td>N/A</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>DECELEROMETER</td>
<td>GTL</td>
<td>N/A</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>INCLINOMETER</td>
<td>MITUTOYO</td>
<td>PRO 360</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
<tr>
<td>VBOX</td>
<td>RACELOGIC</td>
<td>VB2 #004337</td>
<td>05/08</td>
<td>05/09</td>
</tr>
</tbody>
</table>
SECTION 5
PHOTOGRAPHS
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.1
LEFT SIDE VIEW OF VEHICLE
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.3
¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE
MFD BY DAIMLERCHRYSLER AG

<table>
<thead>
<tr>
<th>MADE IN FRANCE</th>
<th>KG</th>
<th>LBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 SMART CAR FORTWO</td>
<td>1050</td>
<td>2315</td>
</tr>
<tr>
<td>GVWR</td>
<td>440</td>
<td>970</td>
</tr>
<tr>
<td>GAWR FRONT</td>
<td>660</td>
<td>1455</td>
</tr>
<tr>
<td>GAWR REAR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Passenger Car**

**12/07**

**This vehicle conforms to all applicable U.S. federal motor vehicle safety bumper and theft prevention standards in effect on the date of manufacture shown above.**

**VEHICLE CERTIFICATION LABEL**

**FIGURE 5.5**

**NHTSA NO. C80501**

**FMVSS NO. 110**
### Tire and Loading Information

**Seating Capacity**
- Total: 2
- Front: 2

The combined weight of occupants and cargo should never exceed 230 kg or 507 lbs.

<table>
<thead>
<tr>
<th>Original Tire Size</th>
<th>Cold Tire Inflation Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>155/60 R15</td>
<td>Front 200 KPA, 29 PSI</td>
</tr>
<tr>
<td>175/55 R15</td>
<td>Rear 250 KPA, 36 PSI</td>
</tr>
<tr>
<td>Compact Spare Tire</td>
<td>None</td>
</tr>
</tbody>
</table>

**Figure 5.6**

VEHICLE TIRE INFORMATION LABEL

---

2008 SMART CAR FORTWO  
NHTSA NO. C80501  
FMVSS NO. 110
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.7
FRONT TIRE SHOWING MANUFACTURER
FIGURE 5.8
FRONT TIRE SHOWING MODEL
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.9
FRONT TIRE SHOWING SIZE/LOAD INDEX/SPEED SYMBOL
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.10
FRONT TIRE SHOWING MAX INFLATION PRESSURE
AND MAX LOAD RATING

MAX INFLATION 300 KPA (44 PSI)
MAX LOAD 375 KG (827 LBS)
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.11
FRONT TIRE SHOWING SERIAL NUMBER
FIGURE 5.12
FRONT RIM SHOWING CONTOUR FOR FULL WIDTH OF RIM SECTION

2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.14
FRONT RIM SHOWING “FRONT”
FIGURE 5.16
FRONT RIM SHOWING MANUFACTURER
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.17
FRONT RIM SHOWING OTHER MARKINGS
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.18
FRONT RIM SHOWING OTHER MARKINGS
REAR TIRE SHOWING MANUFACTURER

2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.19
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.20
REAR TIRE SHOWING MODEL
FIGURE 5.22
REAR TIRE SHOWING MAX INFLATION PRESSURE AND MAX LOAD RATING
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.24
REAR RIM SHOWING CONTOUR FOR FULL WIDTH
OF RIM CROSS SECTION
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.25
REAR RIM SHOWING SIZE
FIGURE 5.26
REAR RIM SHOWING “REAR”
FIGURE 5.27
REAR RIM SHOWING DATE
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.29
REAR RIM SHOWING OTHER MARKINGS
FIGURE 5.31
VEHICLE BALLASTED WITH OCCUPANTS
IN EACH DESIGNATED SEATING POSITION
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.32
VEHICLE BALLASTED WITH LUGGAGE/CARGO
2008 SMART CAR FORTWO
NHTSA NO. C80501
FMVSS NO. 110

FIGURE 5.33
VIEW OF VEHICLE ON SCALES