SAFETY COMPLIANCE TESTING FOR
FMVSS 110
TIRE SELECTION AND RIMS

HYUNDAI MOTOR COMPANY
2009 HYUNDAI GENESIS
FOUR-DOOR PASSENGER CAR
NHTSA NO. C90501

U.S. DOT SAN ANGELO TEST FACILITY
131 COMANCHE TRAIL, BUILDING 3527
GOODFELLOW AFB, TEXAS  76908

March 26, 2009
FINAL REPORT

PREPARED FOR
U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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Prepared By:    

Approved By:    

Accepted By:    

Acceptance Date: 3/26/09
## Abstract

Compliance tests were conducted on the subject 2009 Hyundai Genesis four-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. Test failures identified were as follows: owner’s manual failure (49 CFR 575.6(a)(5)(i)(6)).
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<td>5.21</td>
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</table>
SECTION 1

INTRODUCTION

1.1 PURPOSE OF COMPLIANCE TEST

A 2009 Hyundai Genesis passenger car was tested to determine if the vehicle was in compliance with the requirements of FMVSS No. 110. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure TP-110P-03, dated August 31, 2007.

1.2 TEST VEHICLE

The test vehicle was a 2009 Hyundai Genesis four-door passenger car. Nomenclatures applicable to the test vehicle are:

A. Vehicle Identification Number: KMHGC46E89U025598

B. NHTSA Number: C90501

C. Manufacturer: Hyundai Motor Company

D. Manufacture Date: 06/2008

1.3 TEST DATE

The test vehicle was tested February 19 and 20, 2009.
SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

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. The right front and left rear wheels were removed from the vehicle. Pertinent information on the tires and rims furnished with the vehicle were recorded and tires and rims were photographed.

The vehicle tire placard was photographed and checked for compliance to location, format, and information requirements. 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. Vehicle was ballasted to Normal Load weight, Full Occupant Load, and Maximum Vehicle Load weight. At each step of the ballasting procedure, data was recorded. Ballast was photographically documented for the Normal and Maximum Vehicle Load weights. The owner’s manual was checked for all required information on placard, tire loading, and general tire and loading parameters.

2.2 SUMMARY OF RESULTS

The Hyundai Genesis test vehicle appears to be in compliance with all FMVSS 110 requirements tested.

The data indicate compliance with all requirements tested, except for the owner’s manual statement required by CFR (575.6(a)(5)(i)(6)), regarding towing a trailer. (Refer to Laboratory Notice of Test Failure, page 40.)
SECTION 3
TEST DATA
DATA SUMMARY SHEET

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Hyundai Genesis four-door passenger car

VEHICLE NHTSA NUMBER: C90501  VIN: KMHGC46E89U025598

VEHICLE TYPE: passenger car  DATE OF MANUFACTURE: 06/2008

LABORATORY: US DOT San Angelo Test Facility

PASSENGER CAR REQUIREMENTS  PASS/FAIL

General (Data Sheet 2)

The vehicle is 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 shall not be 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

Rim (Data Sheet 3)

Each rim is constructed to the dimensions of a rim specified for the application. (S110, S4.4.1(a))  PASS

Owner’s Manual (Data Sheet 6)

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

Owner’s manual includes exact statement relating to “Steps for Determining Correct Load Limits.” (575.6(a)(5))  FAIL
DATA SHEET 1
TEST VEHICLE INFORMATION/RECEIVING INSPECTION

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Hyundai Genesis four-door passenger car

VEHICLE NHTSA NUMBER: C90501  TEST DATE: February 19, 2009

VIN: KMHGC46E89U025598  MANUFACTURE DATE: 06/2008

GVWR: 2,200 kg (4,850 lb)  GAWR(front): 1,200 kg (2,646 lb)

GAWR(rear): 1,250 kg (2,756 lb)

SEATING POSITIONS: FRONT 2  MID N/A  REAR 3

ODOMETER READING AT START OF TEST: 153 km (95 mi)

ENGINE DATA: 6 Cylinders  3.8 Liters  ______ Cubic Inches

TRANSMISSION DATA: X Automatic  _____ Manual  6 No. of Speeds

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

INSTALLED VEHICLE EQUIPMENT:

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

REMARKS: None

RECORDED BY: Jack R. Stewart  DATE: February 19, 2009

APPROVED BY: Kenneth H. Yates
DATA SHEET 2
VEHICLE TIRE IDENTIFICATION

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Hyundai Genesis four-door passenger car

VEHICLE NHTSA NUMBER: C90501
VIN: KMHGC46E89U025598

LABORATORY: US DOT San Angelo Test Facility
TEST DATE: February 19, 2009

All tires on the vehicle (excluding the spare) are the same size: (X) YES ( ) NO

Spare tire is the same size as all other tires: ( ) YES (X) NO

<table>
<thead>
<tr>
<th>Tire Sidewall</th>
<th>Right Front</th>
<th>Left Rear (If different)</th>
<th>Spare Tire (If different)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer and Model</td>
<td>Dunlop SP Sport 5000 M</td>
<td></td>
<td>Hankook S400</td>
</tr>
<tr>
<td>Tire Size Designation</td>
<td>P225/55R17</td>
<td></td>
<td>T135/90D17</td>
</tr>
<tr>
<td>Load Index/Speed Symbol</td>
<td>95H</td>
<td></td>
<td>103M</td>
</tr>
<tr>
<td>Maximum Inflation Pressure</td>
<td>350 kPa (51 psi)</td>
<td></td>
<td>420 kPa (60 psi)</td>
</tr>
<tr>
<td>Maximum Load Rating</td>
<td>690 kg (1,521 lb)</td>
<td></td>
<td>875 kg (1,929 lb)</td>
</tr>
<tr>
<td>Tread/Traction/Temperature</td>
<td>340/A/A</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Tires Have “DOT” Markings</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Serial Number: Right Front V4UP3MDR1108 Left Front V4UP3MDR1108 Right Rear V4UP3MDR1108 Left Rear V4UP3MDR1108 Spare H6MLBBH2308

DATA INDICATES COMPLIANCE: PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Jack R. Stewart DATE: February 19, 2009
APPROVED BY: Kenneth H. Yates
**DATA SHEET 3**
**VEHICLE RIM IDENTIFICATION**

**VEHICLE MAKE/MODEL/BODY STYLE:** 2009 Hyundai Genesis four-door passenger car

**VEHICLE NHTSA NUMBER:** C90501  **VIN:** KMHGC46E89U025598

**LABORATORY:** US DOT San Angelo Test Facility  **TEST DATE:** February 19, 2009

**Rim Markings (if available):**

<table>
<thead>
<tr>
<th>Manufacturer's Name, Symbol or Trademark</th>
<th>Right Front</th>
<th>Left Rear (if different)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rim Size</th>
<th>Right Front</th>
<th>Left Rear (if different)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.5JX17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of Manufacture</th>
<th>Right Front</th>
<th>Left Rear (if different)</th>
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<tbody>
<tr>
<td>080613</td>
<td></td>
<td></td>
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</tbody>
</table>

Does Rim contain "DOT" symbol? (YES/NO)  Yes

Other Rim Markings  See Figure 5.16

Rim Inspection Comments: None

Tire Inspection Comments: None

<table>
<thead>
<tr>
<th>Rim Size:</th>
<th>Tire Size</th>
<th>Measured Rim Width</th>
<th>Measured Rim Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Front Wheel</td>
<td>P225/55R17</td>
<td>6.5 in (16.5 cm)</td>
<td>17.0 in (43.2 cm)</td>
</tr>
<tr>
<td>Left Rear Wheel</td>
<td>P225/55R17</td>
<td>6.5 in (16.5 cm)</td>
<td>17.0 in (43.2 cm)</td>
</tr>
</tbody>
</table>

Does stamped rim size (if available) agree with the measured rim size?
Right front rim: (X) YES  ( ) NO  Left rear rim: (X) YES  ( ) NO

Installed rims are suitable for installed tires? (X) YES  ( ) NO

DATA INDICATES COMPLIANCE: PASS/FAIL: PASS

REMARKS: The 6.5" rims used are T&RA approved rim size for this size tire, with the 7.0" rim being the T&RA recommended rim.

RECORDED BY: Jack R. Stewart  DATE: February 19, 2009

APPROVED BY: Kenneth H. Yates
VEHICLE MAKE/MODEL/BODY STYLE: 2009 Hyundai Genesis four-door passenger car

VEHICLE NHTSA NUMBER: C90501
VIN: KMHGC46E89U025598

LABORATORY: US DOT San Angelo Test Facility
TEST DATE: February 20, 2009

Identification of Vehicle Labeling

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes/No</th>
<th>Location</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Certification Label</td>
<td>Yes</td>
<td>Driver’s side B pillar</td>
<td>PASS</td>
</tr>
<tr>
<td>2. Vehicle Placard</td>
<td>Yes</td>
<td>Driver’s side B pillar</td>
<td>PASS</td>
</tr>
<tr>
<td>3. Tire Inflation Pressure Label</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vehicle Placard

Vehicle Placard has the exact color and format as specified in Figure 1 and text is in English language. (X) YES ( ) NO

Vehicle Placard is permanently affixed. (X) YES ( ) NO

Vehicle Placard Information:

Combined weight of occupants and cargo 390 kg (860 lb)
Seating Capacity: Total 5 Front 2 Rear 3

Is the number of belted seating positions the same as the labeled seating capacity? (X) YES ( ) NO

Is the tire size and pressure provided? (X) YES ( ) NO
Vehicle Placard Tire Information:

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Rear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tire size:</td>
<td>P225/55R17</td>
<td>P225/55R17</td>
</tr>
<tr>
<td>Tire Inflation Pressure:</td>
<td>230 kPa (33 psi)</td>
<td>230 kPa (33 psi)</td>
</tr>
</tbody>
</table>

Are the sizes of the installed tires the same as the sizes of the labeled tires? (X) YES ( ) NO

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 INDICATES COMPLIANCE: PASS

REMARKS: None

RECORDED BY: Jack R. Stewart DATE: February 20, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 5 (1 of 4)
CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Hyundai Genesis four-door passenger car

VEHICLE NHTSA NUMBER: C90501 VIN: KMHGC46E89U025598

LABORATORY: US DOT San Angelo Test Facility TEST DATE: February 20, 2009

Full Fluid Levels: Fuel Full Coolant Full Other Fluids* Full
* Transmission, windshield washer, & engine oil

Tire Pressures: LF 230 kPa (33 psi) LR 230 kPa (33 psi)
RF 230 kPa (33 psi) RR 230 kPa (33 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

<table>
<thead>
<tr>
<th></th>
<th>Front Axle</th>
<th>Rear Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td>457 kg (1,008 lb)</td>
<td>406 kg (894 lb)</td>
</tr>
<tr>
<td>RF</td>
<td>441 kg (972 lb)</td>
<td>409 kg (902 lb)</td>
</tr>
<tr>
<td>Total</td>
<td>898 kg (1,980 lb)</td>
<td>815 kg (1,796 lb)</td>
</tr>
</tbody>
</table>

B. MEASURED VEHICLE NORMAL LOAD WEIGHT

(1) Seating Capacity from Vehicle Placard = 5
(2) Normal Load Number of Occupants (Table in Section 10) = 3
   Occupant Distribution: Front Seat 2 Second Seat 1
(3) Total Normal Occupant Load: 204 kg (450 lb)
   [# of occupants x 68 KG per occupant]
(4) Measured Normal Load on Axles:
<table>
<thead>
<tr>
<th></th>
<th>Front Axle</th>
<th>Rear Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td>501 kg (1,104 lb)</td>
<td>465 kg (1,024 lb)</td>
</tr>
<tr>
<td>RF</td>
<td>481 kg (1,061 lb)</td>
<td>470 kg (1,037 lb)</td>
</tr>
<tr>
<td>Total</td>
<td>982 kg (2,165 lb)</td>
<td>935 kg (2,061 lb)</td>
</tr>
</tbody>
</table>

Total Vehicle 1,917 kg (4,226 lb)
DATA SHEET 5 (2 of 4)
CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

(5) Calculated Vehicle Normal Load on the Tire:

Front Tires [measured front axle normal load/2] = 491 kg (1,083 lb)
Rear Tires [measured rear axle normal load/2] = 468 kg (1,031 lb)

(6) Calculated 94% of tire load rating at recommended cold inflation pressure:

Load rating at recommend cold inflation pressure= 680 kg (1,499 lb)
94% of load rating = 639 kg (1,409 lb)

Vehicle Normal Load on the Tire must not be greater than 94% of Load Rating Value.

PASS/FAIL

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

C. MEASURED VEHICLE WEIGHT WITH FULL OCCUPANT LOAD

(1) Seating Capacity from Placard:

Total 5 Front 2 Rear 3

(2) Full Occupant Load: 340 kg (750 lb)
[# of total occupants from C.(1) x 68 KG per occupant]

(3) Measured Vehicle Weight with Full Occupant Load:

LF 511 kg (1,127 lb) LR 522 kg (1,151 lb)
RF 494 kg (1,089 lb) RR 526 kg (1,159 lb)
Front Axle 1,005 kg (2,216 lb) Rear Axle 1,048 kg (2,310 lb)
Total Vehicle 2,053 kg (4,526 lb)
D. MEASURED MAXIMUM VEHICLE LOAD WEIGHT

1) Vehicle Capacity Weight (from placard): 390 kg (860 lb)

2) Full Occupant Load (from C.2): 340 kg (750 lb)

3) Luggage/Cargo Load (subtract 2 from 1): 50 kg (110 lb)

4) Measured Vehicle Maximum Load on Axles:
   LF 508 kg (1,120 lb)  LR 551 kg (1,215 lb)
   RF 490 kg (1,080 lb)  RR 554 kg (1,221 lb)

   Front Axle 998 kg (2,200 lb)  Rear Axle 1,105 kg (2,436 lb)

   Total Vehicle 2,103 kg (4,636 lb)

5) Calculated Vehicle Maximum Load on the Tire:
   Front Tires [measured front axle maximum load/2] = 499 kg (1,100 lb)
   Rear Tires [measured rear axle maximum load/2] = 552 kg (1,218 lb)

6) Tire Sidewall Maximum Load Ratings:

   Front  Rear
   Installed Tire Size P225/55R17  P225/55R17
   Max. Load Rating on Sidewall 690 kg (1,521 lb)  690 kg (1,521 lb)

   Vehicle Maximum Load on the tire must not be greater than the Maximum Load Rating Marked on the Tire Sidewall.

   PASS/FAIL
   [D.(5)<D.(6)]  Front Tires  PASS
   Rear Tires    PASS
DATA SHEET 5 (4 of 4)
CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

(7) Tire Load Ratings at Vehicle Placard or Tire Inflation Pressure Label
Recommended Cold Tire Inflation Pressure.

<table>
<thead>
<tr>
<th></th>
<th>Front Axle</th>
<th>Rear Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeled Tire Size</td>
<td>P225/55R17</td>
<td>P225/55R17</td>
</tr>
<tr>
<td>Labeled Cold Inflation Pressure</td>
<td>230 kPa (33 psi)</td>
<td>230 kPa (33 psi)</td>
</tr>
<tr>
<td>Load Rating at This Pressure*</td>
<td>680 kg (1,499 lb)</td>
<td>680 kg (1,499 lb)</td>
</tr>
</tbody>
</table>

*Reference used to obtain Load Rating: 2008 Tire & Rim Association Yearbook

Vehicle Normal Load on the Tire must not be greater than the Tire Load Rating at the Labeled Cold Tire Inflation Pressure.

PASS/FAIL

[B.(5)<D.(7)] Front Tires  PASS
Rear Tires  PASS

Vehicle Maximum Load on the tire must not be greater than the Tire Load Rating at the Labeled Cold Tire Inflation Pressure.

PASS/FAIL

[D.(5)<D.(7)] Front Tires  PASS
Rear Tires  PASS

DATA INDICATES COMPLIANCE: PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Jack R. Stewart DATE: February 20, 2009
APPROVED BY: Kenneth H. Yates
DATA SHEET 6 (1 of 2)
OWNER’S MANUAL REQUIREMENTS

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Hyundai Genesis four-door passenger car

VEHICLE NHTSA NUMBER: C90501  VIN: KMHGC46E89U025598

LABORATORY: US DOT San Angelo Test Facility  TEST DATE: February 19, 2009

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>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)(i)</td>
<td>Tire labeling, including a description and explanation of each marking on the tires provided with the vehicle, and information about the location of the Tire Identification Number (TIN).</td>
<td>Yes</td>
<td>7-37 through 7-42</td>
</tr>
<tr>
<td>(4)(ii)</td>
<td>(A) Description and explanation of recommended cold tire inflation pressure.</td>
<td>Yes</td>
<td>7-31, 7-41</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>
<td>7-31</td>
</tr>
<tr>
<td></td>
<td>(C) Description and explanation of adverse safety consequences of under-inflation including tire failure.</td>
<td>Yes</td>
<td>7-31</td>
</tr>
<tr>
<td></td>
<td>(D) Description and explanation for measuring and adjusting air pressure to achieve proper inflation.</td>
<td>Yes</td>
<td>7-32</td>
</tr>
<tr>
<td>(4)(iii)</td>
<td>Glossary of tire terminology, including “cold tire pressure,” maximum inflation pressure,” and “recommended inflation pressure,” and all non-technical terms defined in S3 of FMVSS 110 &amp; 139.</td>
<td>Yes</td>
<td>7-40 through 7-42</td>
</tr>
<tr>
<td>(4)(iv)</td>
<td>Tire care, including maintenance and safety practices.</td>
<td>Yes</td>
<td>7-31</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>
<td>5-42 through 5-44</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>
<td>5-44</td>
</tr>
<tr>
<td></td>
<td>(C) Description and explanation for determining compatibility of tire and vehicle load capabilities.</td>
<td>Yes</td>
<td>5-42</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>
<td>5-45, 5-46</td>
</tr>
</tbody>
</table>
The following statement, in the English language, is provided verbatim in the Owner’s Manual. Reference Part 575.6(a)(5)  
YES ( )  NO ( X )

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 passengers that will be riding in your vehicle.
(3) Subtract the combined weight of the driver and passengers 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 passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5x150) = 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 your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

DATA INDICATES COMPLIANCE:  PASS/FAIL: ___FAIL___


RECORDED BY:  Jack R. Stewart  DATE:  February 19, 2009

APPROVED BY:  Kenneth H. Yates
# SECTION 4

## TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

<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>PLATFORM SCALE (BALLAST)</td>
<td>HOWE RICHARDSON</td>
<td>MODEL #6401 SERIAL #0181-5509-26</td>
<td>8/5/2008</td>
<td>8/5/2009</td>
</tr>
<tr>
<td>AIR PRESSURE GAUGE</td>
<td>ASHCROFT GENERAL PURPOSE DIGITAL GAUGE</td>
<td>MODEL #D1005PS 02L 100 PSI SERIAL #20017398-01</td>
<td>11/20/2008</td>
<td>11/20/2009</td>
</tr>
<tr>
<td>FLOOR SCALES (VEHICLE)</td>
<td>INTERCOMP SW DELUXE SCALES</td>
<td>PART #100156 SERIAL #27032382</td>
<td>8/5/2008</td>
<td>8/5/2009</td>
</tr>
</tbody>
</table>
SECTION 5
PHOTOGRAPHS
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.1
¾ FRONT VIEW FROM LEFT SIDE OF VEHICLE
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.3
VEHICLE CERTIFICATION LABEL
The combined weight of occupants and cargo should never exceed 390kg or 860lbs.
Le poids total des occupants et des marchandises ne doit jamais dépasser 390kg ou 860lb.

<table>
<thead>
<tr>
<th>TIRE / PNEU</th>
<th>SIZE / DIMENSIONS</th>
<th>COLD TIRE PRESSURE / PRESSION DES PNEUS À FROID</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT / AVANT</td>
<td>P225/55R17</td>
<td>230kPa, 33psi</td>
</tr>
<tr>
<td>REAR / ARRIÈRE</td>
<td>P225/55R17</td>
<td>230kPa, 33psi</td>
</tr>
<tr>
<td>SPARE / DE RÉCHANGE</td>
<td>T135/90D17</td>
<td>420kPa, 60psi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEATING CAPACITY</th>
<th>TOTAL 5</th>
<th>FRONT 2</th>
<th>REAR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMBRE DE SIÈGES</td>
<td>TOTAL 5</td>
<td>AVANT 2</td>
<td>ARRIÈRE 3</td>
</tr>
</tbody>
</table>

SEE OWNER’S MANUAL FOR ADDITIONAL INFORMATION
VOIR LE MANUEL DE L’USAGER POUR PLUS DE RENSEIGNEMENTS
FIGURE 5.5
TIRE SHOWING BRAND
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.6
TIRE SHOWING MODEL
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.7
TIRE SHOWING SIZE, LOAD INDEX, AND SPEED SYMBOL
FIGURE 5.8
TIRE SHOWING MAX LOAD RATING
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.9
TIRE SHOWING MAX INFLATION PRESSURE
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.10
TIRE SHOWING SERIAL NUMBER
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.11
RIM CONTOUR FOR FULL WIDTH OF CROSS SECTION
FIGURE 5.13
RIM SHOWING LETTER DESIGNATION FOR SOURCE
OF PUBLISHED DIMENSIONS AND DOT SYMBOL
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.14
RIM SHOWING MANUFACTURER’S SYMBOL
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.15
RIM SHOWING DATE OF MANUFACTURER
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.16
RIM SHOWING OTHER RIM MARKINGS
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.17
VEHICLE FRONT SEAT BALLASTED FOR NORMAL AND MAXIMUM LOADS
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.18
VEHICLE REAR SEAT BALLASTED
FOR NORMAL LOAD
VEHICLE REAR SEAT BALLASTED FOR MAXIMUM LOAD
2009 HYUNDAI GENESIS
NHTSA NO. C90501
FMVSS 110

FIGURE 5.21
VEHICLE ON WEIGHT SCALES
SECTION 6
FAILURE REPORT
LABORATORY NOTICE OF TEST FAILURE TO OVSC

FMVSS NUMBER: Part 575.6  TEST DATE: February 19 and 20, 2009

LABORATORY: US DOT San Angelo Test Facility

LABORATORY PROJECT ENGINEER’S NAME: Kenneth H. Yates

TEST SPECIMEN DESCRIPTION: 2009 Hyundai Genesis

NHTSA VEHICLE NUMBER: C90501  VIN: KMHGC46E89U025598

MANUFACTURER: Hyundai Motor Company

TEST FAILURE DESCRIPTION: The verbatim statement required by 99 CFR Part 575.6(a)(5)(i)(6), is not present, as verified by inspection during FMVSS No.110 compliance testing.

FMVSS REQUIREMENT, PARAGRAPH: S575.6(a)(5)

‘…the manufacturer shall provide to the purchaser, in writing in the English language and not less than 10 point type, the following verbatim statement, as applicable, in the owner’s manual…’

“(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle”.

NOTIFICATION TO NHTSA (COTR): John Finneran

DATE: February 21, 2009  BY: Kenneth H. Yates

REMARKS: None