

REPORT NUMBER 110-STF-10-003

SAFETY COMPLIANCE TESTING FOR FMVSS NO. 110 TIRE SELECTION AND RIMS

HONDA MOTOR COMPANY
2010 HONDA ODYSSEY
FOUR-DOOR MPV
NHTSA NO. CA5305

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



May 18, 2010

FINAL REPORT

PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
NVS-220
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590

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Prepared By: Doris Beebe

Approved By: Kenneth H. Yates

Accepted By: John J. ...

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7. Author(s) Jack R. Stewart, Junior Systems Analyst Todd P. Groghan, Safety Compliance Engineer Kenneth H. Yates, Safety Compliance Engineer	9. Performing Organization Name and Address U.S. DOT San Angelo Test Facility 131 Comanche Trail, Building 3527 Goodfellow AFB, Texas 76908	
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SECTION 1
INTRODUCTION

1.1 PURPOSE OF COMPLIANCE TEST

A 2010 Honda Odyssey four-door MPV was tested to determine if the vehicle was in compliance with the requirements of FMVSS 110. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure, TP-110T-02, dated August 31, 2007.

This standard establishes requirements to ensure that applicable vehicles are equipped with tires of adequate size and load rating and rims of appropriate size and type designation. This standard also establishes location, content, and format requirements for the Vehicle Placard and optional Tire Inflation Pressure Label.

1.2 TEST VEHICLE

The test vehicle was a 2010 Honda Odyssey four-door MPV. Nomenclatures applicable to the test vehicle are:

- A. Vehicle Identification Number: 5FNRL3H21AB039382
- B. NHTSA Number: CA5305
- C. Manufacturer: Honda Motor Company
- D. Manufacture Date: 12/2009

1.3 TEST DATE

The test vehicle was tested March 2, 2010.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.1 TEST PROCEDURE

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 NHTSA/OVSC Test Procedure. Tire sidewall information was recorded. The owner's manual was reviewed. Pertinent information from the tire and rim was photographed.

Subsequent events included weighing the vehicle to establish delivered Unloaded Vehicle Weight and the distribution of weight on the front and rear axles and each wheel position. The vehicle was ballasted to its Normal Load, Full Occupant Load, and Maximum Vehicle Load weight. At each step of the ballasting procedure, data was recorded. Ballast was photographically documented for Normal, Full, and Maximum Vehicle Load weight. The vehicle maximum load on each wheel was measured. Data from each tire furnished with the vehicle were recorded. Tire size information was taken from vehicle certification label and vehicle placard. The right front wheel was removed from the vehicle and the tire was dismounted from the rim. The rim was measured from flange to flange, and rim markings were photographically documented. The owner's manual was checked for all required information on tire loading, and on general tire and loading parameters.

In the second (center) row, the right passenger-side seat slides from the right side to the center space to create a path to the rear seats (third row) on the right side of the van. Normal, full, and max loading was done with this seat in both positions. Normal load data for ballasting right seat for both positions are supplied.

2.2 SUMMARY OF RESULTS

The Honda Odyssey test vehicle appears to be in compliance with all FMVSS 110 requirements tested except that the vehicle placard designated seating capacity description does not comply with Paragraph S4.3(b) which requires that the designated seating capacity be included on the vehicle placard showing the total number of occupants and the number of occupants for each front and rear seat locations. The Odyssey label breaks the rear seat location into second and third row seat locations. Refer to Notice of Test Failure in Section 6.

SECTION 3

TEST DATA

DATA SUMMARY SHEET (1 of 2)

VEHICLE MAKE/MODEL/BODY STYLE: 2010 Honda Odyssey four-door MPV
VEHICLE NHTSA NUMBER: CA5305 VIN: 5FNRL3H21AB039382
VEHICLE TYPE: MPV DATE OF MANUFACTURE: 12/2009
LABORATORY: US DOT San Angelo Test Facility

LIGHT TRUCK TYPE REQUIREMENTS

PASS/FAIL

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 2)

The sum of the maximum load ratings of the tires fitted to an axle is not less than the gross axle weight rating (GAWR) of the axle system as specified on the certification label. When passenger car tires are installed, each tire's load rating is reduced by dividing it by 1.10 before determining the sum of the maximum load ratings of the tires fitted to an axle. (S110, S4.2.2.1, S4.2.2.2)

PASS

When passenger car tires are installed, the vehicle normal load on the tire is not greater than the value of 94 percent of the de-rated load rating at the vehicle manufacturer's recommended cold inflation pressure for that tire. When LT tires are installed, 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, S4.2.2.3(a), (b))

PASS

Rim (Data Sheet 3)

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

Each rim is properly marked. (S110, S4.4.2)

PASS

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

**See
Remarks**

DATA SUMMARY SHEET (2 of 2)

Certification, Placard, and Tire Inflation Pressure Labels (Data Sheet 4)

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

FAIL

The Part 567 certification label shows the size designation of the tires and and rims appropriate for the vehicle including the tire size(s) listed on the vehicle placard and, if provided, tire inflation pressure label. (S110, S4.3.3)

PASS

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

PASS

Vehicle Weight Distribution (Data Sheet 5)

The Gross Vehicle Weight Rating (GVWR) is not less than the sum of the unloaded vehicle weight, rated cargo load, and 68 kg times the vehicle's designated seating capacity. However, for school buses, the minimum occupant weight allowance is 54 kg. (49 CFR 567, *Certification*)

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))

PASS

REMARKS: The rim retention test required by FMVSS No.110, paragraph S4.4.1(b) was not executed on the subject Honda Odyssey.

RECORDED BY: Todd P. Groghan

DATE: March 2, 2010

APPROVED BY: Kenneth H. Yates

DATA SHEET 1
TEST VEHICLE INFORMATION / RECEIVING INSPECTION

VEHICLE MAKE/MODEL/BODY STYLE: 2010 Honda Odyssey four-door MPV

VEHICLE NHTSA NUMBER: CA5305 TEST DATE: March 2, 2010

VIN: 5FNRL3H21AB039382 MANUFACTURE DATE: 12/2009

GVWR: 2,695 kg (5,941 lbs) GAWR (front): 1,320 kg (2,910 lbs)

GAWR (rear): 1,450 kg (3,197 lbs)

SEATING POSITIONS: FRONT 2 SECOND 2 THIRD 3

ODOMETER READING AT START OF TEST: 99.8 km (62 mi)

ENGINE DATA: 6 Cylinders 3.5 Liters Cubic Inches

TRANSMISSION DATA: X Automatic Manual 5 No. of Speeds

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

CHECK APPROPRIATE BOXES FOR INSTALLED VEHICLE EQUIPMENT:

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

REMARKS: None

RECORDED BY: Todd P. Groghan DATE: March 2, 2010

APPROVED BY: Kenneth H. Yates

DATA SHEET 2 (1 of 2)
VEHICLE TIRE IDENTIFICATION AND LOAD LIMITS

VEHICLE MAKE/MODEL/BODY STYLE: 2010 Honda Odyssey four-door MPV

VEHICLE NHTSA NUMBER: CA5305 VIN: 5FNRL3H21AB039382

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 2, 2010

All tires on the vehicle (excluding the spare) are the same make and model: () YES () NO

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

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

Tire Sidewall	Right Front	Left Rear (If different)	Spare Tire (If different)
Manufacturer and Model	<u>Michelin Energy LX4</u>	<u></u>	<u>Goodyear Convenience Spare</u>
Tire Size Designation	<u>235/65R16</u>	<u></u>	<u>T135/80D17</u>
Load Index/Speed Symbol	<u>103T</u>	<u></u>	<u>103M</u>
Maximum Inflation Pressure	<u>300 kPa (44 psi)</u>	<u></u>	<u>420 kPa (60 psi)</u>
Maximum Load Rating	<u>875 kg (1,929 lbs)</u>	<u></u>	<u>875 kg (1,929 lbs)</u>
Tread/Traction/Temperature	<u>500/A/B</u>	<u></u>	<u>N/A</u>
Tires Have "DOT" Markings	<u>Yes</u>	<u></u>	<u>Yes</u>

Serial Number: Right Front AP46CPXX4509 Left Front AP46CPXX4509

Right Rear AP46CPXX4509 Left Rear AP46CPXX4509

Spare PCPKH90P4509

DATA SHEET 2 (2 of 2)
VEHICLE TIRE IDENTIFICATION AND LOAD LIMITS

MOUNTED TIRE VS. AXLE RATING COMPARISON (at sidewall maximum inflation pressure)		
	FRONT AXLE	REAR AXLE
A. GAWR from certification label	1,320 kg (2,910 lbs)	1,450 kg (3,197 lbs)
B. Tire Maximum Load Rating from above	875 kg (1,929 lbs)	875 kg (1,929 lbs)
C. Reduced tire load rating if applicable*	795.5 kg (1,753.6 lbs)	795.5 kg (1,753.6 lbs)
D. (No. of tires) x (Tire load rating de-rated if appropriate)	1,591.0 kg (3,507.2 lbs)	1,591.0 kg (3,507.2 lbs)
Is "D" equal to or greater than "A"? (Yes/No)	Yes	Yes

* If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: March 2, 2010

APPROVED BY: Kenneth H. Yates

**DATA SHEET 3
VEHICLE RIM IDENTIFICATION**

VEHICLE MAKE/MODEL/BODY STYLE: 2010 Honda Odyssey four-door MPV

VEHICLE NHTSA NUMBER: CA5305 VIN: 5FNRL3H21AB039382

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 2, 2010

Rim Markings	RIGHT FRONT	LEFT REAR (if different)
A. Source of published dimensions (letter designation)	J	
B. Rim Size Designation	16X7J	
C. Does rim contain DOT symbol? (Yes/No)	Yes	
D. Manufacturer's name, symbol or trademark (copy format)	CMC	
E. Date of manufacture or symbol (copy format)	10 09	
F. Letter height (not less than 3 mm)	5 mm	
G. Lettering (impressed or embossed)	Impressed	
H. Are all rim markings legible? (Yes/No)	Yes	
Do items A-C appear on weather side of rim (Yes/No)	Yes	
Do all markings comply with requirements (Yes/No)	Yes	

Rim Measurements	RIGHT FRONT	LEFT REAR (if different)
Rim width	17.8 cm (7 in)	
Rim diameter	40.6 cm (16 in)	
Rim measurements same as rim markings?	Yes	

Rims are suitable for tires on vehicle? (X)YES () NO

Reference source used for tire/rim match verification:

2010 Japan Automobile Tyre Manufacturers Association Yearbook

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: March 2, 2010

APPROVED BY: Kenneth H. Yates

DATA SHEET 4 (1 of 3)
VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

VEHICLE MAKE/MODEL/BODY STYLE: 2010 Honda Odyssey four-door MPV

VEHICLE NHTSA NUMBER: CA5305 VIN: 5FNRL3H21AB039382

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 2, 2010

Identification of Vehicle Labeling

	(Yes/No)	Location	PASS/FAIL
1. Certification Label*	<u>Yes</u>	<u>Driver's side B pillar</u>	<u>PASS</u>
2. Vehicle Placard*	<u>Yes</u>	<u>Driver's side B pillar</u>	<u>PASS</u>
3. Tire Inflation Pressure Label*	<u>N/A</u>		

* Labels must be located as specified in section 12.4 of test procedure.

Vehicle Placard

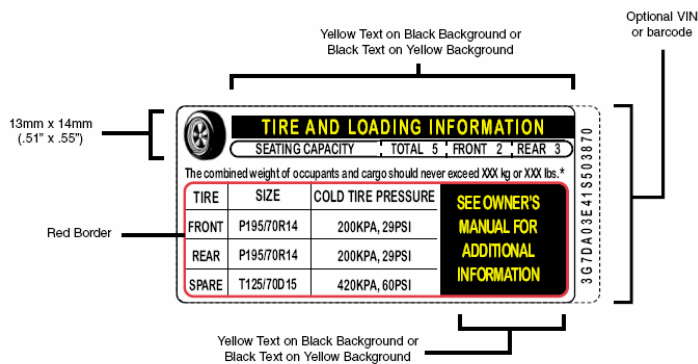


FIGURE 1
(70 FR 14425)

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

Vehicle Placard and, if provided, **Tire Inflation Pressure Label** are permanently affixed. (X) YES () NO

DATA SHEET 4 (2 of 3)
VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

Vehicle Placard Information:

Combined weight of occupants and cargo 612 kg (1,349 lbs)

Seating Capacity: Total 7; Front 2; Second 2; Third 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

Tire Information:

Tire Size: Front 235/65R16; Rear 235/65R16

Tire Inflation Pressure: Front 230 kPa (33 psi); Rear 240 kPa (35 psi)

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

Vehicle Certification Label information:

	Tire Size	Rim Size Designation	Rim Suitable for Tire?*
Front Axle	<u>235/65R16</u>	<u>16x7J</u>	<u>Yes</u>
Rear Axle	<u>235/65R16</u>	<u>16x7J</u>	<u>Yes</u>

*Referenced source used for tire/rim match verification:

2010 Japan Automobile Tyre Manufacturers Association Yearbook

DATA SHEET 4 (3 of 3)
VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

Is (Are) tire size(s) listed on the vehicle placard and/or tire inflation pressure label also listed on the certification label with suitable rim size? (X) YES () NO

LABELED TIRE CAPACITY AT SPECIFIED PRESSURE		
GVWR <u>2,695 kg (5,941 lbs)</u>	FRONT AXLE	REAR AXLE
A. GAWR from certification label	1,320 kg (2,910 lbs)	1,450 kg (3,197 lbs)
B. Tire load rating of labeled tire size at labeled inflation pressure*	855 kg (1,885 lbs)	875 kg (1,929 lbs)
C. Reduced tire load rating if applicable**	777.3 kg (1,713.7 lbs)	795.5 kg (1,753.8 lbs)
D. (No. of tires) x (Tire load rating de-rated if appropriate)	1,554.5 kg (3,427.4 lbs)	1,591.0 kg (3,507.6 lbs)
Is "D" equal to or greater than "A"?	Yes	Yes

*Reference source used for determining load rating:

2010 Japan Automobile Tyre Manufacturers Association Yearbook

** If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: FMVSS 571.110, Paragraph S4.3(b), requires that the designated seating capacity be included on the vehicle placard showing the total number of occupants and the number of occupants for each front and rear seat locations. The Odyssey vehicle placard breaks the rear seat location into second and third row seat locations.

RECORDED BY: Todd P. Groghan

DATE: March 2, 2010

APPROVED BY: Kenneth H. Yates

DATA SHEET 5 (1 of 6)
CURB WEIGHT, NORMAL AND FULL LOADS WEIGHT & MAXIMUM VEHICLE WEIGHT

VEHICLE MAKE/MODEL/BODY STYLE: 2010 Honda Odyssey four-door MPV

VEHICLE NHTSA NUMBER: CA5305 VIN: 5FNRL3H21AB039382

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 2, 2010

Full Fluid Levels: Fuel Full Coolant Full Other Fluids* Full

* Engine oil, transmission, windshield washer, brake, and power steering

Tire Pressures: LF 230 kPa (33 psi) LR 240 kPa (35 psi)

(cold, prior to loading
vehicle)

RF 230 kPa (33 psi) RR 240 kPa (35 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

Measured Unloaded Vehicle Weight

LF 563 kg (1,241 lb) LR 445 kg (982 lb)

RF 548 kg (1,208 lb) RR 425 kg (938 lb)

Front Axle 1,111 kg (2,449 lb) Rear Axle 870 kg (1,920 lb)

Total Vehicle Weight 1,981 kg (4,369 lb)

DATA SHEET 5 (2 of 6)
CURB WEIGHT, NORMAL AND FULL LOADS WEIGHT & MAXIMUM VEHICLE WEIGHT

B. MEASURED VEHICLE NORMAL LOAD WEIGHT

- (1) Seating Capacity from Vehicle Placard = 7
- (2) Normal Load Number of Occupants 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

Weight in second row in slider seat positioned in the center:*

LF	<u>613 kg (1,351 lb)</u>	LR	<u>494 kg (1,088 lb)</u>
RF	<u>602 kg (1,328 lb)</u>	RR	<u>477 kg (1,052 lb)</u>
Front Axle	<u>1,215 kg (2,679 lb)</u>	Rear Axle	<u>971 kg (2,140 lb)</u>
Total Vehicle Weight <u>2,186 kg (4,819 lb)</u>			

Weight in second row in slider seat positioned on the right side:*

LF	<u>603 kg (1,330 lb)</u>	LR	<u>488 kg (1,076 lb)</u>
RF	<u>612 kg (1,349 lb)</u>	RR	<u>483 kg (1,064 lb)</u>
Front Axle	<u>1,215 kg (2,679 lb)</u>	Rear Axle	<u>971 kg (2,140 lb)</u>
Total Vehicle Weight <u>2,186 kg (4,819 lb)</u>			

*See Remarks

DATA SHEET 5 (3 of 6)
CURB WEIGHT, NORMAL AND FULL LOADS WEIGHT & MAXIMUM VEHICLE WEIGHT

(5) Calculated Vehicle Normal Load on the Tire

Front Tires [measured front axle normal load/2] = 607.5 kg (1,339.5 lbs)

Rear Tires [measured rear axle normal load/2] = 485.5 kg (1,070.0 lbs)

(6) Measured Normal Load on Tire vs. Value of 94% of Load Rating for that Tire at Specified Pressure

MEASURED NORMAL LOAD ON TIRE VS. VALUE OF 94% OF LOAD RATING FOR THAT TIRE AT SPECIFIED PRESSURE		
	FRONT AXLE	REAR AXLE
A. Calculated Vehicle Normal Load on the Tire from (5)	607.5 kg (1,339.5 lbs)	485.5 kg (1,070.0 lbs)
B. Tire load rating of installed tire size at recommended inflation pressure*	855 kg (1,885 lbs)	875 kg (1,929 lbs)
C. Reduced tire load rating if applicable**	777.3 kg (1,713.7 lbs)	795.5 kg (1,753.8 lbs)
D. 94% of tire load rating, (de-rated if appropriate)	730.7 kg (1,610.9 lbs)	747.8 kg (1,648.6 lbs)
Is "D" equal to or greater than "A"?	Yes	Yes

*Reference source used for tire/rim match verification:

2010 Japan Automobile Tyre Manufacturers Association Yearbook

** If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

Vehicle Normal Load on the tire is not greater than 94% of the Recommended Cold Inflation Load Rating.

PASS/FAIL

Front Tires

PASS

Rear Tires

PASS

DATA SHEET 5 (4 of 6)
CURB WEIGHT, NORMAL AND FULL LOADS WEIGHT & MAXIMUM VEHICLE WEIGHT

C. MEASURED VEHICLE WEIGHT WITH FULL OCCUPANT LOAD

Seating Capacity: Total 7 ; Front 2 ; Second 2 ; Third 3

Full Occupant Load 476 kg (1,050 lbs)

[# of occupants x 68 KG per adult occupant and 54 KG per student occupant]

Slider seat to the right:*

LF	<u>626 kg (1,381 lb)</u>	LR	<u>626 kg (1,379 lb)</u>
RF	<u>604 kg (1,331 lb)</u>	RR	<u>602 kg (1,328 lb)</u>
Front Axle	<u>1,230 kg (2,712 lb)</u>	Rear Axle	<u>1,228 kg (2,707 lb)</u>
Total Vehicle Weight		<u>2,458 kg (5,419 lb)</u>	

D. MEASURED MAXIMUM VEHICLE LOAD WEIGHT

- | | |
|--|---------------------------|
| (1) Vehicle Capacity Weight (from placard) | <u>612 kg (1,349 lbs)</u> |
| (2) Full Occupant Load (from above) | <u>476 kg (1,050 lbs)</u> |
| (3) Luggage/Cargo Load (subtract (2) from (1)) | <u>136 kg (299 lbs)</u> |
| (4) Measured Vehicle Maximum Load on Axles | |

Slider seat to the right position:*

LF	<u>607 kg (1,339 lb)</u>	LR	<u>712 kg (1,569 lb)</u>
RF	<u>591 kg (1,303 lb)</u>	RR	<u>684 kg (1,507 lb)</u>
Front Axle	<u>1,198 kg (2,642 lb)</u>	Rear Axle	<u>1,396 kg (3,076 lb)</u>
Total Vehicle Weight		<u>2,594 kg (5,718 lb)</u>	

*See Remarks

DATA SHEET 5 (5 of 6)
VEHICLE WEIGHT DISTRIBUTION

ITEM	Tire or Vehicle Rating*	Unloaded Vehicle Weight		Vehicle Weight with Normal Occupant Load (weight in second row in slider seat positioned in the center)**		Vehicle Weight with Normal Occupant Load (weight in second row in slider seat positioned on the right side)**	
		Measured	Over-load	Measured	Over-load	Measured	Over-load
Left Front Tire	777.3 kg (1,713.7 lbs)	563 kg (1,241 lbs)	no	613 kg (1,351 lbs)	no	603 kg (1,330 lbs)	no
Right Front Tire	777.3 kg (1,713.7 lbs)	548 kg (1,208 lbs)	no	602 kg (1,328 lbs)	no	612 kg (1,349 lbs)	no
Front Axle (GAWR)	1,320 kg (2,910 lbs)	1,111 kg (2,449 lbs)	no	1,215 kg (2,679 lbs)	no	1,215 kg (2,679 lbs)	no
Left Rear Tire	795.5 kg (1,753.8 lbs)	445 kg (982 lbs)	no	494 kg (1,088 lbs)	no	488 kg (1,076 lbs)	no
Right Rear Tire	795.5 kg (1,753.8 lbs)	425 kg (938 lbs)	no	477 kg (1,052 lbs)	no	483 kg (1,064 lbs)	no
Rear Axle (GAWR)	1,450 kg (3,197 lbs)	871 kg (1,920 lbs)	no	971 kg (2,140 lbs)	no	971 kg (2,140 lbs)	no
Total Vehicle (GVWR)	2,695 kg (5,941 lbs)	1,982 kg (4,369 lbs)	no	2,186 kg (4,819 lbs)	no	2,186 kg (4,819 lbs)	no

*Vehicle and axle weight ratings (GVWR & GAWR) are located on the vehicle certification label. Vehicle tire load ratings are based upon the inflation pressure specified on the Vehicle Placard or Tire Inflation Pressure Label for each respective axle, as determined from the appropriate Tire and Rim reference manual. If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck, or bus, the tire's load rating is reduced by dividing by 1.10

**See Remarks

DATA SHEET 5 (6 of 6)
VEHICLE WEIGHT DISTRIBUTION

ITEM	Tire or Vehicle Rating*	Unloaded Vehicle Weight		Vehicle Weight with Full Occupant Load (slider seat positioned on the right side)**		Vehicle Maximum Weight with Occupants and Cargo (slider seat positioned on the right side)**	
		Measured	Over-load	Measured	Over-load	Measured	Over-load
Left Front Tire	777.3 kg (1,713.7 lbs)	563 kg (1,241 lbs)	no	626 kg (1,381 lbs)	no	607 kg (1,339 lbs)	no
Right Front Tire	777.3 kg (1,713.7 lbs)	548 kg (1,208 lbs)	no	604 kg (1,331 lbs)	no	591 kg (1,303 lbs)	no
Front Axle (GAWR)	1,320 kg (2,910 lbs)	1,111 kg (2,449 lbs)	no	1,230 kg (2,712 lbs)	no	1,198 kg (2,642 lbs)	no
Left Rear Tire	795.5 kg (1,753.8 lbs)	445 kg (982 lbs)	no	626 kg (1,379 lbs)	no	712 kg (1,569 lbs)	no
Right Rear Tire	795.5 kg (1,753.8 lbs)	425 kg (938 lbs)	no	602 kg (1,328 lbs)	no	684 kg (1,507 lbs)	no
Rear Axle (GAWR)	1,450 kg (3,197 lbs)	871 kg (1,920 lbs)	no	1,228 kg (2,707 lbs)	no	1,396 kg (3,076 lbs)	no
Total Vehicle (GVWR)	2,695 kg (5,941 lbs)	1,982 kg (4,369 lbs)	no	2,458 kg (5,419 lbs)	no	2,594 kg (5,718 lbs)	no

*Vehicle and axle weight ratings (GVWR & GAWR) are located on the vehicle certification label. Vehicle tire load ratings are based upon the inflation pressure specified on the Vehicle Placard or Tire Inflation Pressure Label for each respective axle, as determined from the appropriate Tire and Rim reference manual. If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck, or bus, the tire's load rating is reduced by dividing by 1.10

**See Remarks

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: In the second (center) row, the right seat slides side-to-side to create a path to the rear seats (third row) on the right side of the van. Normal, full, and max loading was done with this seat in both positions. No non-compliances were found. See photos for different seating positions evaluated for compliance.

RECORDED BY: Todd P. Groghan

DATE: March 2, 2010

APPROVED BY: Kenneth H. Yates

DATA SHEET 6 (1 of 2)
OWNER'S MANUAL REQUIREMENTS

VEHICLE MAKE/MODEL/BODY STYLE: 2010 Honda Odyssey four-door MPV

VEHICLE NHTSA NO. CA5305 VIN: 5FNRL3H21AB039382

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 2, 2010

Owner's Manual Discusses:

Part 575.6(a) Paragraph	Required Discussion Topic	Discussed in Manual? (YES/NO)	Page Numbers
(4)(i)	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).	YES	494-497
(4)(ii)	(A) Description and explanation of recommended cold tire inflation pressure.	YES	451, 452
	(B) Description and explanation of FMVSS 110 Vehicle Placard and Tire Inflation Pressure Label and their location(s).	YES	379, 380
	(C) Description and explanation of adverse safety consequences of under-inflation including tire failure.	YES	450
	(D) Description and explanation for measuring and adjusting air pressure to achieve proper inflation.	YES	451
(4)(iii)	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 & 139.	YES	497
(4)(iv)	Tire care, including maintenance and safety practices.	YES	450-453
(4)(v)	(A) Description and explanation of locating and understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity.	YES	379
	(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.	YES	379, 380
	(C) Description and explanation for determining compatibility of tire and vehicle load capabilities.	YES	379
	(D) Description and explanation of adverse safety consequences of overloading on handling and stopping and on tires.	YES	378

DATA SHEET 6 (2 of 2)
OWNER'S MANUAL REQUIREMENTS

The following statement, in the English language, is provided verbatim in the Owner's Manual. Reference Part 575.6(a)(5) YES (X) NO ()

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: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: March 2, 2010

APPROVED BY: Kenneth H. Yates

SECTION 4

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO	CAL. DATE	NEXT CAL. DATE
PLATFORM SCALE (BALLAST)	HOWE RICHARDSON	MODEL #6401 SERIAL #0181- 5509-26	7/28/2009	7/28/2010
AIR PRESSURE GAUGE	ASHCROFT GENERAL PURPOSE DIGITAL GAUGE	MODEL #D1005PS 02L 100 PSI SERIAL #20017398- 01	12/9/2009	12/9/2010
FLOOR SCALES (VEHICLE)	INTERCOMP SW DELUXE SCALES	PART #100156 SERIAL #27032382	7/28/2009	7/28/2010

SECTION 5
PHOTOGRAPHS



2010 HONDA ODYSSEY
NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.1
¾ FRONT VIEW FROM LEFT SIDE OF VEHICLE



2010 HONDA ODYSSEY
NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.2
¾ REAR VIEW FROM RIGHT SIDE OF VEHICLE

MFD. BY HONDA MFG. OF ALABAMA, LLC 12/' 09
GVWR 2695KG(5941LBS) TIRE SIZE RIM SIZE
GAWR F 1320KG(2910LBS) 235/65R16 103T 16X7J
GAWR R 1450KG(3197LBS) 235/65R16 103T 16X7J

THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY
AND THEFT PREVENTION STANDARDS IN EFFECT
ON THE DATE OF MANUFACTURE SHOWN ABOVE.

V.I.N.: 5FNRL3H21AB039382 TYPE: MPV



SHJ A AB5 -NH700M -B -B



2010 HONDA ODYSSEY
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 FMVSS NO.110

FIGURE 5.4
 VEHICLE PLACARD



2010 HONDA ODYSSEY
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FIGURE 5.5
TIRE SHOWING BRAND



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FIGURE 5.6
TIRE SHOWING MODEL



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FIGURE 5.7
TIRE SHOWING SIZE, LOAD INDEX, AND SPEED SYMBOL



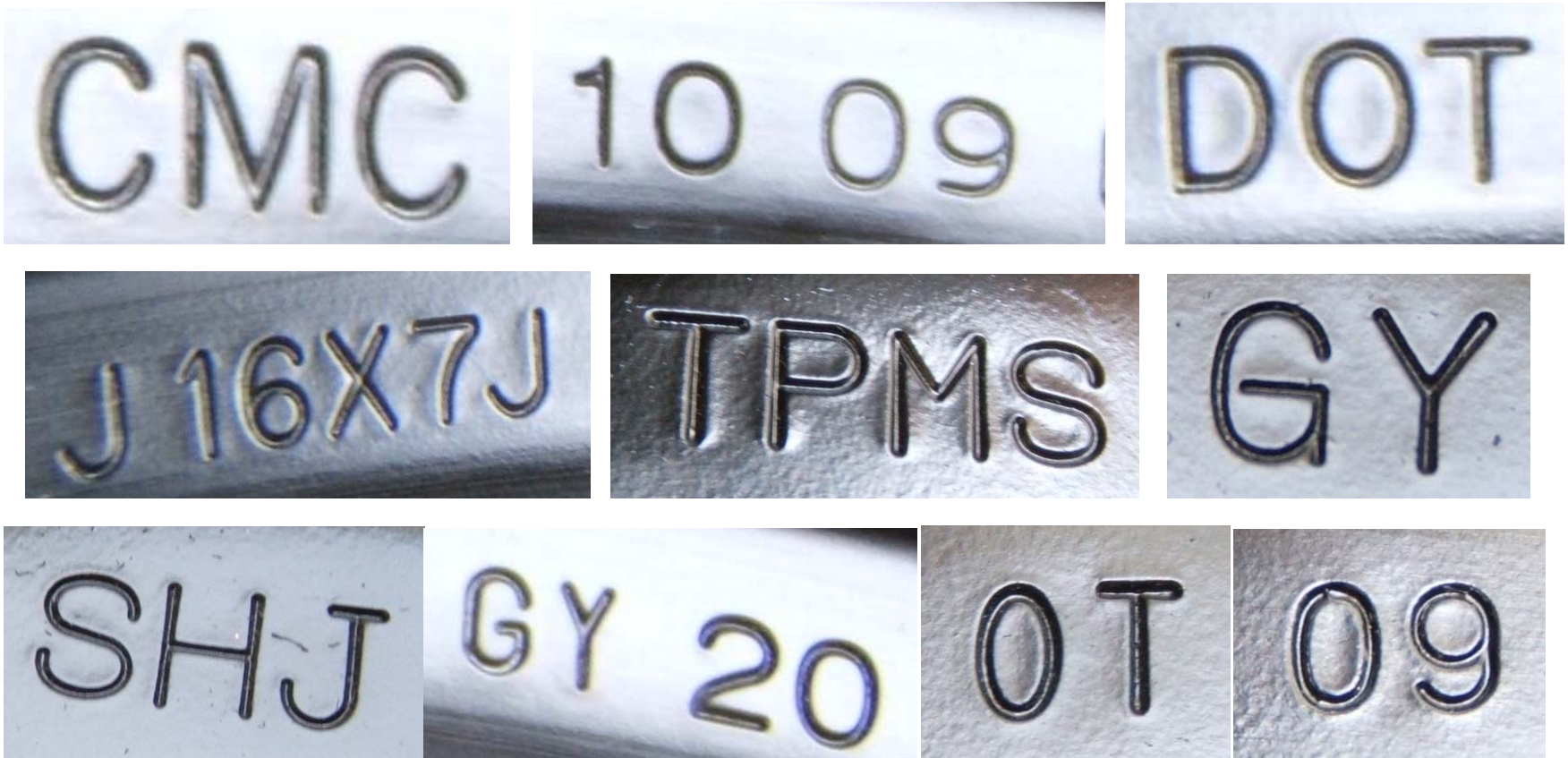
2010 HONDA ODYSSEY
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FMVSS NO. 110

FIGURE 5.8
TIRE SHOWING MAX LOAD RATING AND MAX INFLATION PRESSURE



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FIGURE 5.9
TIRE SHOWING SERIAL NUMBER



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 FMVSS NO. 110

FIGURE 5.10
 RIM MARKINGS INCLUDING MANUFACTURER'S SYMBOL, MANUFACTURE DATE, DOT
 SYMBOL, LETTER DESIGNATION FOR SOURCE OF PUBLISHED DIMENSIONS, AND SIZE



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FMVSS NO. 110

FIGURE 5.11
RIM CONTOUR FOR FULL WIDTH OF CROSS SECTION



2010 HONDA ODYSSEY
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FMVSS NO. 110

FIGURE 5.12
VEHICLE FRONT SEAT BALLASTED
FOR NORMAL, FULL, AND MAXIMUM LOADS



2010 HONDA ODYSSEY
NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.13
VEHICLE SECOND ROW SEATS WITH SLIDER SEAT
IN CENTER POSITION AND BALLASTED FOR NORMAL LOAD



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NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.14
VEHICLE SECOND ROW SEATS WITH SLIDER SEAT TO THE
RIGHT POSITION AND BALLASTED FOR NORMAL LOAD



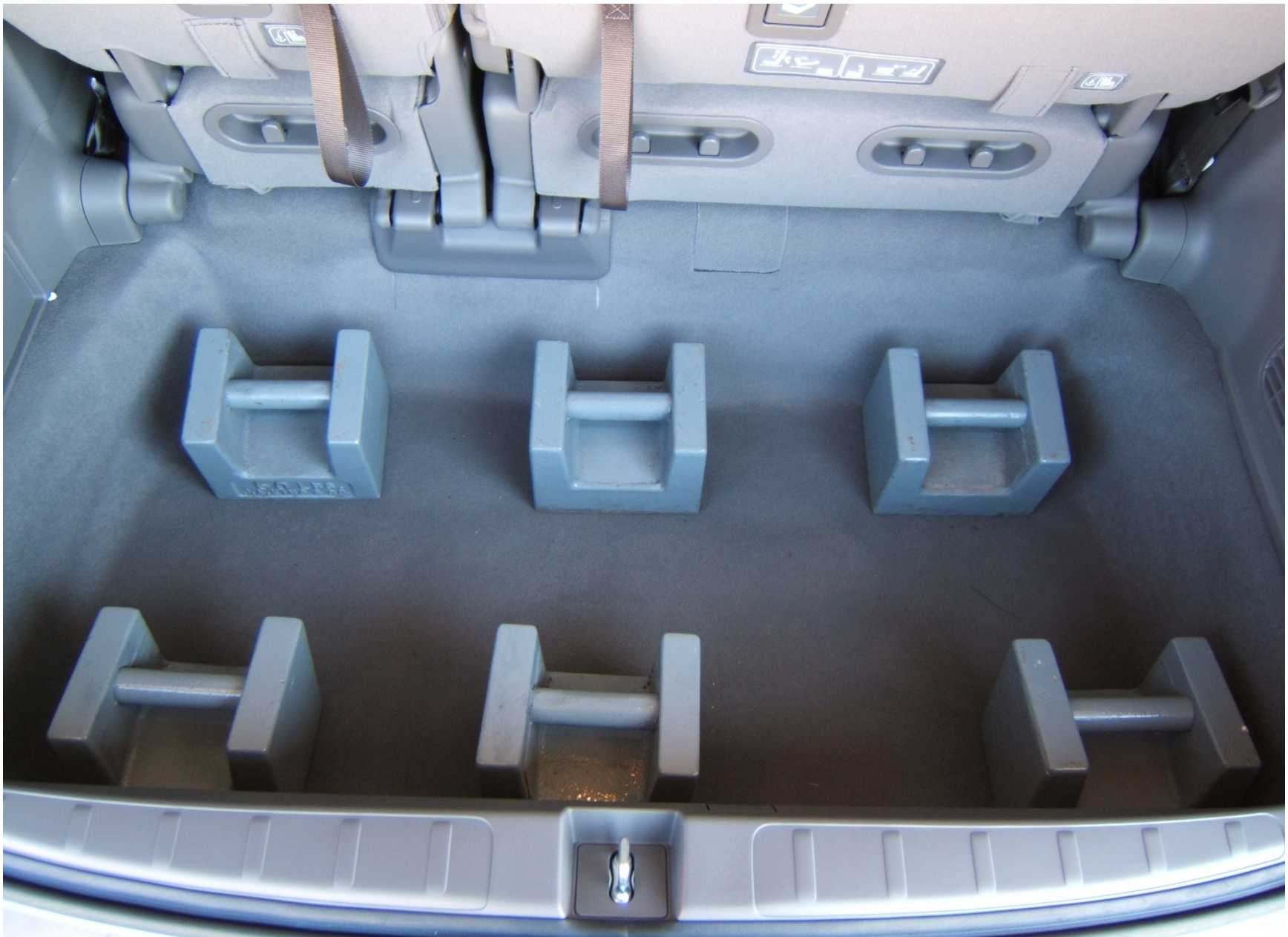
2010 HONDA ODYSSEY
NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.15
VEHICLE SECOND ROW SEATS WITH SLIDER SEAT TO THE
RIGHT POSITION AND BALLASTED FOR FULL AND MAXIMUM LOADS



2010 HONDA ODYSSEY
NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.16
VEHICLE THIRD ROW SEATS BALLASTED
FOR FULL AND MAXIMUM LOADS



2010 HONDA ODYSSEY
NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.17
VEHICLE CARGO AREA BALLASTED FOR MAXIMUM LOAD



2010 HONDA ODYSSEY
NHTSA NO. CA5305
FMVSS NO. 110

FIGURE 5.18
VEHICLE ON WEIGHT SCALES

SECTION 6
FAILURE REPORT

LABORATORY NOTICE OF TEST FAILURE TO OVSC

FMVSS NUMBER: Part 571.110 TEST DATE: March 2, 2010

LABORATORY: US DOT San Angelo Test Facility

LABORATORY PROJECT ENGINEER'S NAME: Kenneth H. Yates

TEST SPECIMEN DESCRIPTION: 2010 Honda Odyssey

NHTSA VEHICLE NUMBER: CA5305 VIN: 5FNRL3H21AB039382

MANUFACTURER: Honda Motor Company

TEST FAILURE DESCRIPTION: Paragraph S4.3(b) requires that the designated seating capacity be included on the vehicle placard, showing the total number of occupants and the number of occupants for each front and rear seat locations. The Odyssey vehicle placard breaks the rear seat location into second and third row seat locations.

FMVSS REQUIREMENT, PARAGRAPH : S4.3(b)

Each vehicle shall show "Designated seated capacity (expressed in terms of total number of occupants and number of occupants for each front and rear seat location)".

NOTIFICATION TO NHTSA (COTR): John Finneran

DATE: March 2, 2010 BY: Kenneth H. Yates

REMARKS: None