

REPORT NUMBER 110(IND)-GTL-03-031

**SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 110(INDICANT)
TIRE SELECTION AND RIMS**

**HONDA OF AMERICA MFG., INC.
2003 HONDA ACCORD EX PASSENGER CAR
NHTSA NO. C35310**

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



SEPTEMBER 25, 2003

FINAL REPORT

PREPARED FOR

**U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SAFETY ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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15. Supplementary Notes		
16. Abstract This test was conducted on the subject, 2003 Honda Accord EX passenger car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-110-02 (partial), to gather data relating to the normal load requirements specified in FMVSS 110. NHTSA's Office of Safety Performance Standards requested this data to support the agency's TREAD tire rulemaking efforts.		
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TABLE OF CONTENTS

SECTION		PAGE
1	Introduction	1
2	Test Procedure and Summary of Results	2
3	Test Data	3
4	Test Equipment List	10
5	Photographs	11
	5.1 ¾ Frontal View of Vehicle	
	5.2 Vehicle's Certification Label	
	5.3 Vehicle's Tire Information Label	
	5.4 Tire Showing Brand, Model, Size, Load Index and Speed Symbol	
	5.5 Tire Showing Max Load Rating and Max Inflation Pressure	
	5.6 Tire Showing Serial Number	
	5.7 Vehicle Ballasted to Simulate Normal Load Condition	

APPENDIX – Normal Load Occupation Distribution

SECTION 1

INTRODUCTION

1.0 PURPOSE OF INDICANT TEST

A 2003 Honda Accord EX passenger car was subjected to a FMVSS No. 110 (Indicant) test intended to gather data relating to the normal load requirements specified in FMVSS 110. NHTSA's Office of Safety Performance Standards requested this data to support the agency's TREAD tire rulemaking efforts.

1.1 TEST VEHICLE

The test vehicle was a 2003 Honda Accord EX. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 1HGCM55693A015589

B. NHTSA No.: C35310

C. Manufacturer: HONDA OF AMERICA MFG., INC.

D. Manufacture Date: 10/02

1.2 TEST DATE

The test vehicle was subjected to testing on June 05, 2003.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 TEST PROCEDURE

The vehicle was inspected, photographed and filled with fuel. It was then weighed to establish total curb weight and the weights of all wheels were measured and recorded. The vehicle was then ballasted to its normal load condition (refer to appendix) and the weights of all wheels were measured and recorded. Tire information labeling data and tire sidewall data were recorded.

This indicant test did not include any other requirements in FMVSS 110.

2.1 SUMMARY OF RESULTS

Test results are provided in Section 3.

SECTION 3

TEST DATA

DATA SHEET 1
SUMMARY

VEHICLE MAKE/MODEL/BODY STYLE: 2003 HONDA ACCORD PASSENGER CAR
 VEHICLE NHTSA NO.: C35310 ; VIN: 1HGCM55693A015589
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 06/05/03

<u>REQUIREMENT</u>	<u>YES/NO</u>
The vehicle is equipped with tires that meet the requirements of FMVSS 109 or FMVSS 119.	<u>YES</u>
The vehicle normal load on the tire is not greater than the high speed performance test load specified in FMVSS 109 paragraph S5.5 or FMVSS 119 paragraph S7.4.	<u>YES</u>
For passenger cars, the tire information placard is permanently affixed to the glove compartment door or equally accessible location; and displays the required information (FMVSS 110, S4.3).	<u>YES</u>
For vehicles other than passenger cars, a combined certification/ tire information label or separate tire information label is permanently affixed to either the hinge pillar, door-latch post or to the inward-facing surface of the door next to the driver's seating position (FMVSS 120, S5.3).	<u>N/A</u>

REMARKS:

RECORDED BY: M. A. Bly

DATE: 06/05/03

APPROVED BY: D. Hunt

DATA SHEET 2 TEST VEHICLE INFORMATION/RECEIVING INSPECTION

LABORATORY: GENERAL TESTING LABORATORIES DATE: 06/05/03

VEHICLE MODEL YEAR/MAKE/MODEL/BODY STYLE: 2003 HONDA ACCORD EX

MANUFACTURE DATE: 10/02 NHTSA NO.: C35310 BODY COLOR: SILVER

VIN: 1HGCM55693A015589 VEHICLE TYPE: PASSENGER CAR

GVWR 1871 kg (4125 lbs) GAWR(Fr) 1009 kg (2225 lbs) GAWR(Rr) 900 kg (1985 lbs)

BELTED SEATING POSITIONS: FRONT 2 MID N/A REAR 3 OTHER N/A

ENGINE DATA: 4 Cylinders 2.4 Liters Cubic Inches

TRANSMISSION DATA: Automatic X Manual 5 No. of Speeds

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

INSTALLED TIRE DATA: Size - P205/60R16 Mfr. - MICHELIN

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

X	Air Conditioning		Traction Control	X	Clock
X	Tinted Glass		All Wheel Drive		Roof Rack
X	Power Steering	X	Cruise Control	X	Console
X	Power Windows	X	Rear Window Defroster	X	Driver Air Bag
X	Power Door Locks	X	Sun Roof or T-Top	X	Passenger Air Bag
X	Power Driver's Seat	X	Tachometer	X	Front Disc Brakes
X	Power Brakes	X	Tilt Steering Wheel	X	Rear Disc Brakes
X	Antilock Brake System	X	AM/FM/CD		Other -

ARE ALL OPTIONS LISTED ON "WINDOW STICKER" PRESENT ON THE TEST VEHICLE:
(YES/NO) Yes

REMARKS:

RECORDED BY: M. A. Olan

DATE: 06/05/03

APPROVED BY: D. M. [Signature]

DATA SHEET 3
CURB WEIGHT WITH OPTIONS AND NORMAL LOAD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 HONDA ACCORD PASSENGER CAR
 VEHICLE NHTSA NO.: C35310 ; VIN: 1HGCM55693A015589
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 06/05/03

Full Fluid Levels:

Fuel Full ; Coolant Full ; Other Fluids Full

Tire Pressure: LF 220 KPA (32 psi) LR 210 KPA (30 psi)
 RF 220 KPA (32 psi) RR 210 KPA (30 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

LF 426 KG (939 LB) LR 284 KG (626 LB)
 RF 432 KG (953 LB) RR 273 KG (601 LB)
 Front Axle 858 KG (1892 LB) Rear Axle 557 KG (1227 LB)
 Total Vehicle 1415 KG (3119 LB)

B. MEASURED VEHICLE WEIGHT IN NORMAL LOAD CONDITION

- (1) Seating Capacity (from Tire Information Placard) = 5
 Seating Capacity (# of belted seating positions) = 5
- (2) Normal Load # of Occupants from Appendix
 Occupant Distribution: Front Seat- 2 Second Seat- 1
 Third Seat - N/A Fourth Seat- N/A
- (3) Total Normal Occupant Load 204 KG (450 LB)
 (# of occupants x 68 KG per occupant)
- (4) Measured Normal Load on Each Wheel and Axles (Sum)
- LF 473 KG (1043 LB) LR 340 KG (750 LB)
 RF 480 KG (1058 LB) RR 328 KG (723 LB)
 Frt Axle 953 KG (2101 LB) Rr Axle 668 KG (1473 LB)
 Total Vehicle 1621 KG (3574 LB)

DATA SHEET 3 – CONTINUED

- (5) Calculated Vehicle Normal Load on the Tire
 Front Tires (measured front axle normal load/2) = 476 KG (1050 LB)
 Rear Tires (measured front axle normal load/2) = 334 KG (737 LB)
- (6) High Speed Test Load from (X) FMVSS 109 (S5.5), or () FMVSS 119 (S7.4)

	Front	Rear
(a) Installed Tire Size	<u>P205/60R16</u>	<u>P205/60R16</u>
Max. Load Rating on Sidewall	<u>615 KG(1356 LBS)</u>	<u>615 KG(1356 LBS)</u>
Reduced Sidewall Load Rating (if applicable)*	<u>N/A</u>	<u>N/A</u>
High Speed Test Load (88% of sidewall max. load rating)	<u>541 KG(1193 LBS)</u>	<u>541 KG(1193 LBS)</u>
(b) Optional Tire Size(s)	<u>NONE</u>	<u>NONE</u>

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

REMARKS: The Vehicle Normal Load on the Tire is not greater than the High Speed Test Load

RECORDED BY: M. A. Bly

DATE: 06/05/03

APPROVED BY: D. Murt

DATA SHEET 4
TIRE INFORMATION LABEL OR PLACARD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 HONDA ACCORD PASSENGER CAR
 VEHICLE NHTSA NO.: C35310 ; VIN: 1HGCM55693A015589
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 06/05/03

A. Vehicle Type from Certification Label: Passenger Car

B. Identify Vehicle Labeling:

Vehicle has a combined Certification Tire Information Label ☐ Yes ☒ No
 Is Label Permanently Affixed: ☐ Yes ☐ No
 Label Location: _____
 Description of Label: _____

Vehicle has a separate Tire Information Label or Placard ☒ Yes ☐ No
 Is Label Permanently Affixed: ☒ Yes ☐ No
 Label Location: _____ Driver's "B" Pillar
 Description of Label: _____ Vinyl

C. Enter Information from Combined or Separate Tire Information Label/Placard

Vehicle Capacity Weight - 385 KG (850 LBS)

Designated Seating Capacity (DSC) - 5
 Expressed In—

(1) Total No. of Occupants ☒ Yes ☐ No

(2) Terms of Occupants for Each Seat Location ☒ Yes ☐ No

Manufacturer's Recommended Tire Size and Cold Tire Inflation Pressure For Maximum Load Vehicle Weight:

P205/60R16 FRONT - 220 kPa (32 psi)
 REAR - 210 kPa (30 psi)

Manufacturer's Recommended Tire Size and Cold Tire Inflation Pressure For Other Load Conditions: NONE

REMARKS:

RECORDED BY: [Signature]
 APPROVED BY: [Signature]

DATE: 06/05/03

DATA SHEET 5
VEHICLE TIRE DATA

VEHICLE MAKE/MODEL/BODY STYLE: 2003 HONDA ACCORD PASSENGER CAR
 VEHICLE NHTSA NO.: C35310; VIN: 1HGCM55693A015589
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 06/05/03

All tires on the vehicle are the same size: (Yes/No) Yes

INFORMATION FROM TIRE SIDEWALL:

Left Front Tire

Tire Size Designation	<u>P205/60R16</u>
Tire Load Index/Speed Symbol	<u>91V</u>
Maximum Inflation Pressure	<u>300 kPa (44 psi)</u>
Maximum Load Rating	<u>615 KG (1356 LBS.)</u>
Mfr. Name or Brand & Code	<u>MICHELIN ENERGY</u>
Tube or Tubeless	<u>TUBELESS</u>
Treadwear/Traction/Temp. Grades	<u>440/A/A</u>
Sidewall (Plies & Composition)	<u>1 PLY POLYESTER</u>
Tread (Plies & Composition)	<u>1 PLY POLYESTER</u> <u>2 PLY STEEL</u> <u>1 PLY POLYAMIDE</u>
Serial Number: Right Front -	<u>DOT B97R FW6X 3802</u>

Tire has "DOT" markings: (X) YES () NO () UNDETERMINED

REMARKS:

RECORDED BY: M. D. Oja

DATE: 06/05/03

APPROVED BY: A. Hunt

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO.	CAL. DATE	NEXT CAL. DATE
PAD SCALES	#1 199744LF	199744LF	06/02	06/20/03
	#2 199744RF	199744RF	06/02	06/20/03
	#3 199744LR	199744LR	06/02	06/20/03
	#4 199744RR	19974RR	06/02	06/20/03
PRESSURE GAGE	WESKLER	0-100	05/03	05/04
SURFACE LEVEL	GTL	N/A	BEFORE USE	BEFORE USE

SECTION 5 PHOTOGRAPHS



FIGURE 5.1
¾ FRONTAL VIEW OF VEHICLE

2003 HONDA ACCORD EX
NHTSA NO. C35310
FMVSS NO. 110 (INDICANT)

MADE BY HONDA OF AMERICA MFG. INC. 10-02
OVER AIRBAGS SAFETY 2275285 11 1995-05
THIS VEHICLE COMPLIES TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY, BUMPER,
AND THEFT PREVENTION STANDARDS IN EFFECT
ON THE DATE OF MANUFACTURE SHOWN ABOVE.

1HGCN55693A015589



PASSENGER CAR

2003 HONDA ACCORD EX
NHTSA NO. C35310
FMVSS NO. 110 (INDICANT)

FIGURE 5.2
VEHICLE'S CERTIFICATION LABEL

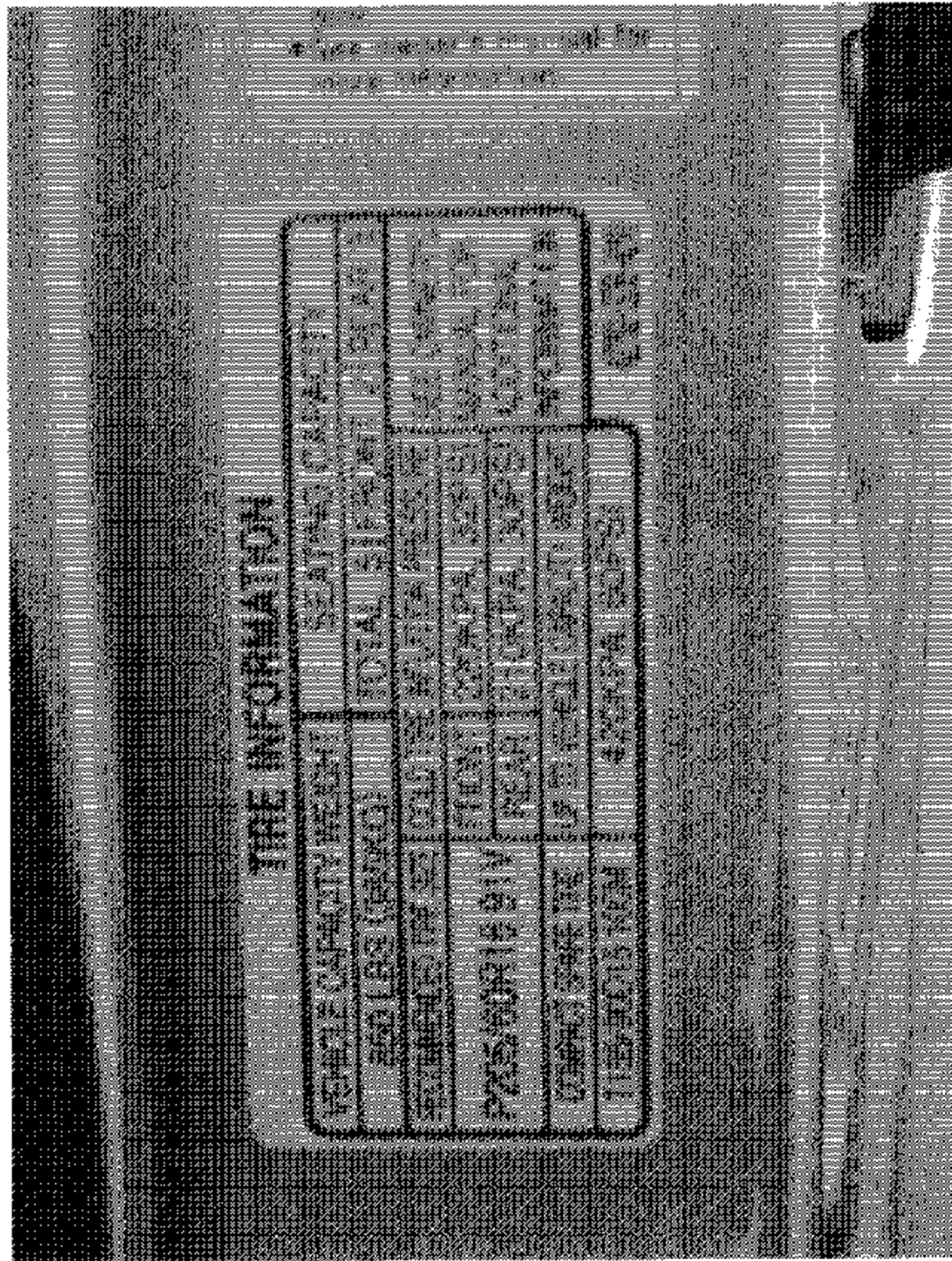


FIGURE 5.3
VEHICLE'S TIRE INFORMATION LABEL

2003 HONDA ACCORD EX
NHTSA NO. C35310
FMVSS NO. 110 (INDICANT)



2003 HONDA ACCORD EX
NHTSA NO. C35310
FMVSS NO. 110 (INDICANT)

FIGURE 5.4
TIRE SHOWING BRAND, MODEL, SIZE, LOAD
INDEX AND SPEED SYMBOL

2003 HONDA ACCORD EX
NHTSA NO. C35310
FMVSS NO. 110 (INDICANT)

FIGURE 5.5
TIRE SHOWING MAX LOAD RATING AND MAX
INFLATION PRESSURE



2003 HONDA ACCORD EX
NHTSA NO. C35310
FMVSS NO. 110 (INDICANT)

FIGURE 5.6
TIRE SHOWING SERIAL NUMBER



FIGURE 5.7
VEHICLE BALLASTED TO SIMULATE NORMAL
LOAD CONDITION

2003 HONDA ACCORD EX
NHTSA NO. C35310
FMVSS NO. 110 (INDICANT)

APPENDIX

Table 1 – Occupant Loading and Distribution for Vehicle Normal Load for Various Designated Seating Capacities

Designated Seating Capacities, numbers of Occupants	Vehicle normal load, number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat
11 through 15	5	2 in front, 1 in second seat, 1 in third seat, 1 in fourth seat
16 through 22	7	2 in front, 2 in second seat, 2 in third seat, 1 in fourth seat

NOTE: For the indicant test each seat was adjusted to its full down and mid forward to aft position with the seat back adjusted to a 25° reclined angle. Each designated seat position was ballasted with 54 KG (120 LBS) in the seat and 14 KG (30 LBS) on the floor directly in front of the respective seat position.