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

DAIMLER CHRYSLER CORPORATION
2003 PT CRUISER MPV
NHTSA NO. C30309

GENERAL TESTING LABORATORIES, INC.
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SEPTEMBER 22, 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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Prepared By: [Signature]
Approved By: [Signature]
Approval Date: 09/22/03

FINAL REPORT ACCEPTANCE BY OVSC:

Accepted By: [Signature]
Acceptance Date: 9/30/03
This test was conducted on the subject, 2003 PT Cruiser MPV 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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APPENDIX – Normal Load Occupation Distribution
SECTION 1

INTRODUCTION

1.0 PURPOSE OF INDICANT TEST

A 2003 PT Cruiser MPV 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 PT Cruiser. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 3C4FY78G13T616178

B. NHTSA No.: C30309

C. Manufacturer: DAIMLERCHRYSLER CORPORATION

D. Manufacture Date: 03/03

1.2 TEST DATE

The test vehicle was subjected to testing on June 02, 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

Currently FMVSS 110 applies only to passenger cars. The subject PT Cruiser is a multipurpose passenger vehicle (MPV) and therefore it is not required to meet FMVSS 110 requirements. It was subjected to the normal load testing as executed for FMVSS 110 compliance verification for information only.
SECTION 3

TEST DATA
DATA SHEET 1
SUMMARY

VEHICLE MAKE/MODEL/BODY STYLE: 2003 PT CRUISER MPV
VEHICLE NHTSA NO.: C30309; VIN: 3C4FY78G13T616178
LABORATORY: GENERAL TESTING LABORATORIES
TEST DATE: 06/02/03

REQUIREMENT

The vehicle is equipped with tires that meet the requirements of FMVSS 109 or FMVSS 119.  

YES

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.  

YES

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).  

N/A

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).  

YES

REMARKS:  


RECORDED BY:  

DATE: 06/02/03

APPROVED BY:
DATA SHEET 2
TEST VEHICLE INFORMATION/RECEIVING INSPECTION

LABORATORY: GENERAL TESTING LABORATORIES       DATE: 06/02/03

VEHICLE MODEL YEAR/MAKE/MODEL/BODY STYLE: 2003 PT CRUISER

MANUFACTURE DATE: 03/03  NHTSA NO.: C30309  BODY COLOR: BLACK

VIN: 3C4FY78G13T616178       VEHICLE TYPE: MPV

GVWR 2008 kg (4425 lbs)  GAWR(Fr) 1082 kg (2384 lbs)  GAWR(Rr) 942 kg (2075 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:  X Automatic  ___ Manual  4 No. of Speeds

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

INSTALLED TIRE DATA: Size - P205/50R17  Mfr. - GOODYEAR

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

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

REMARKS:

RECORDED BY: [Signature]       DATE: 06/02/03

APPROVED BY: [Signature]
DATA SHEET 3
CURB WEIGHT WITH OPTIONS AND NORMAL LOAD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 PT CRUISER MPV
VEHICLE NHTSA NO.: C30309; VIN: 3C4FY78G13T616178
LABORATORY: GENERAL TESTING LABORATORIES
TEST DATE: 06/02/03

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

Tire Pressure:
LF 260 KPA (38 psi) LR 260 KPA (38 psi)
RF 260 KPA (38 psi) RR 260 KPA (38 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

LF 465 KG (1024 LB) LR 285 KG (629 LB)
RF 445 KG (982 LB) RR 316 KG (697 LB)
Front Axle 910 KG (2006 LB) Rear Axle 601 KG (1326 LB)

Total Vehicle 1511 KG (3332 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 66 KG per occupant)

(4) Measured Normal Load on Each Wheel and Axles (Sum)

LF 509 KG (1122 LB) LR 342 KG (754 LB)
RF 490 KG (1080 LB) RR 372 KG (820 LB)
Frt Axle 999 KG (2202 LB) Rr Axle 714 KG (1574 LB)

Total Vehicle 1713 KG (3778 LB)
DATA SHEET 3 – CONTINUED

(5) Calculated Vehicle Normal Load on the Tire
Front Tires (measured front axle normal load/2) = 499 KG (1101 LB)
Rear Tires (measured front axle normal load/2) = 357 KG (787 LB)

(6) High Speed Test Load from (X) FMVSS 109 (S5.5), or ( ) FMVSS 119 (S7.4)

<table>
<thead>
<tr>
<th>Front</th>
<th>Rear</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(a) Installed Tire Size</strong></td>
<td><strong>(a) Installed Tire Size</strong></td>
</tr>
<tr>
<td>P205/50R17</td>
<td>P205/50R17</td>
</tr>
<tr>
<td><strong>Max. Load Rating on Sidewall</strong></td>
<td><strong>Max. Load Rating on Sidewall</strong></td>
</tr>
<tr>
<td>650 KG (1433 LBS)</td>
<td>650 KG (1433 LBS)</td>
</tr>
<tr>
<td><strong>Reduced Sidewall Load Rating</strong></td>
<td><strong>Reduced Sidewall Load Rating</strong></td>
</tr>
<tr>
<td>(if applicable)*</td>
<td>(if applicable)*</td>
</tr>
<tr>
<td>591 KG (1303 LBS)</td>
<td>591 KG (1303 LBS)</td>
</tr>
<tr>
<td><strong>High Speed Test Load</strong></td>
<td><strong>High Speed Test Load</strong></td>
</tr>
<tr>
<td>(88% of sidewall max. load rating)</td>
<td>(88% of sidewall max. load rating)</td>
</tr>
<tr>
<td>520 KG (1147 LBS)</td>
<td>520 KG (1147 LBS)</td>
</tr>
<tr>
<td><strong>(b) Optional Tire Size(s)</strong></td>
<td><strong>(b) Optional Tire Size(s)</strong></td>
</tr>
<tr>
<td>NONE</td>
<td>NONE</td>
</tr>
</tbody>
</table>

* 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: [Signature]  DATE: 06/02/03

APPROVED BY: [Signature]
DATA SHEET 4
TIRE INFORMATION LABEL OR PLACARD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 PT CRUISER MPV
VEHICLE NHTSA NO.: C30309 ; VIN: 3C4FY78G13T616178
LABORATORY: GENERAL TESTING LABORATORIES
TEST DATE: 06/02/03

A. Vehicle Type from Certification Label: MPV

B. Identify Vehicle Labeling:

Vehicle has a combined Certification Tire Information Label (X) Yes ( ) No
Is Label Permanently Affixed: (X) Yes ( ) No
Label Location: Driver’s Door
Description of Label: Paper, Vinyl Coated

Vehicle has a separate Tire Information Label or Placard ( ) Yes (X) No
Is Label Permanently Affixed: ( ) Yes ( ) No
Label Location:
Description of Label:

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

Vehicle Capacity Weight - N/A (see remarks)

Designated Seating Capacity (DSC) - N/A (see remarks)
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:

P205/50R17
FRONT - 262 kPa (38 psi)
REAR - 262 kPa (38 psi)

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

REMARKS: The vehicle labeling requirements of FMVSS 120 for an MPV do not include Vehicle Capacity Weight (VCW) or Designated Seating Capacity (DSP) as required by FMVSS 110 passenger car labeling.

RECORDED BY: DATE: 06/02/03
APPROVED BY: [Signature]

[Signature]
VEHICLE MAKE/MODEL/BODY STYLE: 2003 PT CRUISER MPV
VEHICLE NHTSA NO.: C30309 ; VIN: 3C4FY78G13T616178
LABORATORY: GENERAL TESTING LABORATORIES
TEST DATE: 06/02/03

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

INFORMATION FROM TIRE SIDEWALL:

Left Front Tire

Tire Size Designation: P205/50R17

Tire Load Index/Speed Symbol: 93H

Maximum Inflation Pressure: 340 kPa (50 psi)

Maximum Load Rating: 650 KG (1433 LBS.)

Mfr. Name or Brand & Code: GOODYEAR EAGLE

Tube or Tubeless: TUBELESS

Treadwear/Traction/Temp. Grades: 260/A/A

Sidewall (Plies & Composition): 2 PLY POLYESTER

Tread (Plies & Composition):

- 2 PLY POLYESTER
- 2 PLY STEEL
- 1 PLY NYLON

Serial Number: Right Front - DOT MK7P AYWR 4402

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

REMARKS:

RECORDED BY: [Signature] DATE: 06/02/03

APPROVED BY: [Signature]
# SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

## TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
<th>DESCRIPTION</th>
<th>MODEL/ SERIAL NO.</th>
<th>CAL. DATE</th>
<th>NEXT CAL. DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAD SCALES</td>
<td>#1 199744LF</td>
<td>199744LF</td>
<td>06/02</td>
<td>06/20/03</td>
</tr>
<tr>
<td></td>
<td>#2 199744RF</td>
<td>199744RF</td>
<td>06/02</td>
<td>06/20/03</td>
</tr>
<tr>
<td></td>
<td>#3 199744LR</td>
<td>199744LR</td>
<td>06/02</td>
<td>06/20/03</td>
</tr>
<tr>
<td></td>
<td>#4 199744RR</td>
<td>199744RR</td>
<td>06/02</td>
<td>06/20/03</td>
</tr>
<tr>
<td>PRESSURE GAGE</td>
<td>WESKLER</td>
<td>0-100</td>
<td>05/03</td>
<td>05/04</td>
</tr>
<tr>
<td>SURFACE LEVEL</td>
<td>GTL</td>
<td>N/A</td>
<td>BEFORE USE</td>
<td>BEFORE USE</td>
</tr>
</tbody>
</table>
SECTION 5
PHOTOGRAPHS
VEHICLE BALLASTED TO SIMULATE NORMAL LOAD CONDITION (PART 5)
APPENDIX

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

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

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.