

REPORT NUMBER 110(IND)-GTL-03-028

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

**DAIMLER CHRYSLER CORPORATION
2003 PT CRUISER MPV
NHTSA NO. C30309**

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SEPTEMBER 22, 2003

FINAL REPORT

PREPARED FOR

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NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SAFETY ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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16. Abstract 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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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 Inducant 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
SUMMARYVEHICLE MAKE/MODEL/BODY STYLE: 2003 PT CRUISER MPVVEHICLE NHTSA NO.: C30309 ; VIN: 3C4FY78G13T616178LABORATORY: GENERAL TESTING LABORATORIESTEST DATE: 06/02/03

<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>N/A</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>YES</u>

REMARKS:

RECORDED BY: M. A. B. G.DATE: 06/02/03APPROVED BY: D. Messel

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:

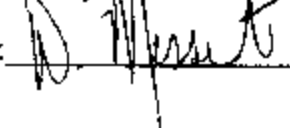
☒	Air Conditioning	☒	Traction Control	☒	Clock
☒	Tinted Glass	☐	All Wheel Drive	☐	Roof Rack
☒	Power Steering	☒	Cruise Control	☒	Console
☒	Power Windows	☒	Rear Window Defroster	☒	Driver Air Bag
☒	Power Door Locks	☒	Sun Roof or T-Top	☒	Passenger Air Bag
☐	Power Seat(s)	☐	Tachometer	☒	Front Disc Brakes
☒	Power Brakes	☒	Tilt Steering Wheel	☒	Rear Disc Brakes
☒	Antilock Brake System	☒	AM/FM/CD	☐	Other -

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

REMARKS:

RECORDED BY: 

DATE: 06/02/03

APPROVED BY: 

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 <u>465</u> KG (1024 LB)	LR <u>285</u> KG (629 LB)
RF <u>445</u> KG (982 LB)	RR <u>316</u> KG (697 LB)
Front Axle <u>910</u> KG (2006 LB)	Rear Axle <u>601</u> KG (1326 LB)
Total Vehicle <u>1511</u> 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 68 KG per occupant)

 - (4) Measured Normal Load on Each Wheel and Axles (Sum)
- | | |
|--|---------------------------------|
| LF <u>509</u> KG (1122 LB) | LR <u>342</u> KG (754 LB) |
| RF <u>490</u> KG (1080 LB) | RR <u>372</u> KG (820 LB) |
| Frt Axle <u>999</u> KG (2202 LB) | Rr Axle <u>714</u> KG (1574 LB) |
| Total Vehicle <u>1713</u> KG (3776 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)

	Front	Rear
(a) Installed Tire Size	<u>P205/50R17</u>	<u>P205/50R17</u>
Max. Load Rating on Sidewall	<u>650 KG(1433 LBS)</u>	<u>650 KG(1433 LBS)</u>
Reduced Sidewall Load Rating (if applicable)*	<u>591 KG (1303 LBS)</u>	<u>591 KG (1303 LBS)</u>
High Speed Test Load (88% of sidewall max. load rating)	<u>520 KG(1147 LBS)</u>	<u>520 KG(1147 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. [Signature]

DATE: 06/02/03

APPROVED BY: D. Messick

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 ☒ Yes ☐ No

Is Label Permanently Affixed: ☒ Yes ☐ No

Label Location: Driver's Door

Description of Label: Paper, Vinyl Coated

Vehicle has a separate Tire Information Label or Placard ☐ Yes ☒ 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: [Signature]

DATE: 06/02/03

APPROVED BY: [Signature]

DATA SHEET 5
VEHICLE TIRE DATAVEHICLE MAKE/MODEL/BODY STYLE: 2003 PT CRUISER MPVVEHICLE NHTSA NO.: C30309; VIN: 3C4FY78G13T616178LABORATORY: GENERAL TESTING LABORATORIESTEST DATE: 06/02/03All tires on the vehicle are the same size: (Yes/No) Yes

INFORMATION FROM TIRE SIDEWALL:

Left Front Tire

Tire Size Designation P205/50R17Tire Load Index/Speed Symbol 93HMaximum Inflation Pressure 340 kPa (50 psi)Maximum Load Rating 650 KG (1433 LBS.)Mfr. Name or Brand & Code GOODYEAR EAGLETube or Tubeless TUBELESSTreadwear/Traction/Temp.
Grades 260/A/ASidewall (Plies & Composition) 2 PLY POLYESTERTread (Plies & Composition) 2 PLY POLYESTER
2 PLY STEEL
1 PLY NYLONSerial Number: Right Front - DOT MK7P AYWR 4402

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

REMARKS:

RECORDED BY: M. D. [Signature]DATE: 06/02/03APPROVED BY: D. Messic [Signature]

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

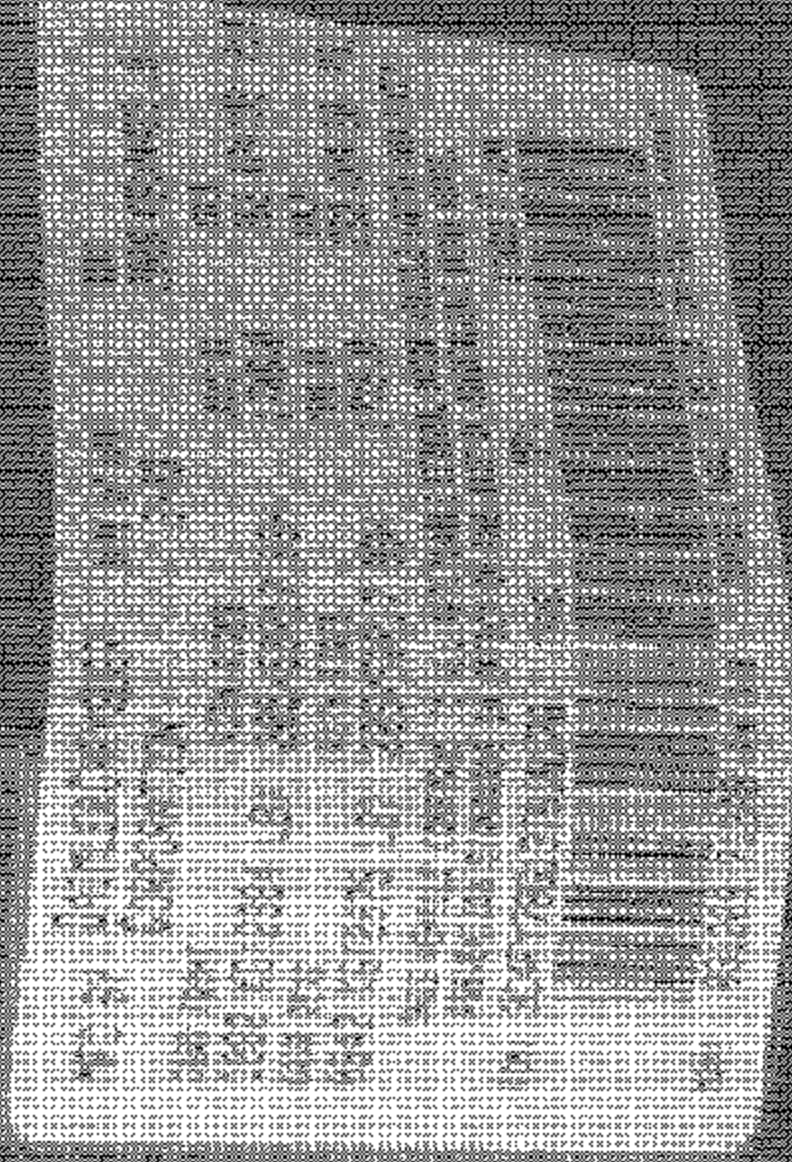
EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO.	CAL. DATE	NEXT CAL. DATE
PAD SCALES	#1 199744LF	199744LF	06/02	06/20/03
	#2 199744RF	199744RF	06/02	06/20/03
	#3 199744LR	199744LR	06/02	06/20/03
	#4 199744RR	19974RR	06/02	06/20/03
PRESSURE GAGE	WESKLER	0-100	05/03	05/04
SURFACE LEVEL	GTL	N/A	BEFORE USE	BEFORE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

SECTION 5
PHOTOGRAPHS



FIGURE 31
3/4 FRONTAL VIEW OF VEHICLE

2003 CHRYSLER PT CRUISER
NHTSA NO. C89506
FMVSS NO. 110 (INDICANT)



2000 CHRYSLER PT CRUISER
NHTSA NO. CH-00-001
THYSD NO. 10-00-001

2000 CHRYSLER PT CRUISER
VEHICLE'S CERTIFICATION AND THE
INFORMATION LABEL



DO NOT OVERLOAD OR EXCEED
ANY SA NO. 25000
PRESS NO. 110 INDICATED

AGRIUM 300
THE SHOWING BRAND



2013 CHRYSLER PT CRUISER
NHTSA NO. C20339
EPA NO. 10 (INDICANT)

FIGURE 3.4
TIRE SHOWING MODEL



2003 CHRYSLER PT CRUISER
NHTSA NO. C30094
FMVSS NO. 110 (Rollover)

FIGURE 3-5
TYPE SHOWING SIZE, LOAD INDEX, SPEED
SYMBOL AND SERIAL NUMBER



2002 CHRYSLER PT CRUISER
NHTSA NO. 230229
FMVSS NO. 110 (INDICANT)

FIGURE 5-6
TIRE SHOWING MAX LOAD RATING



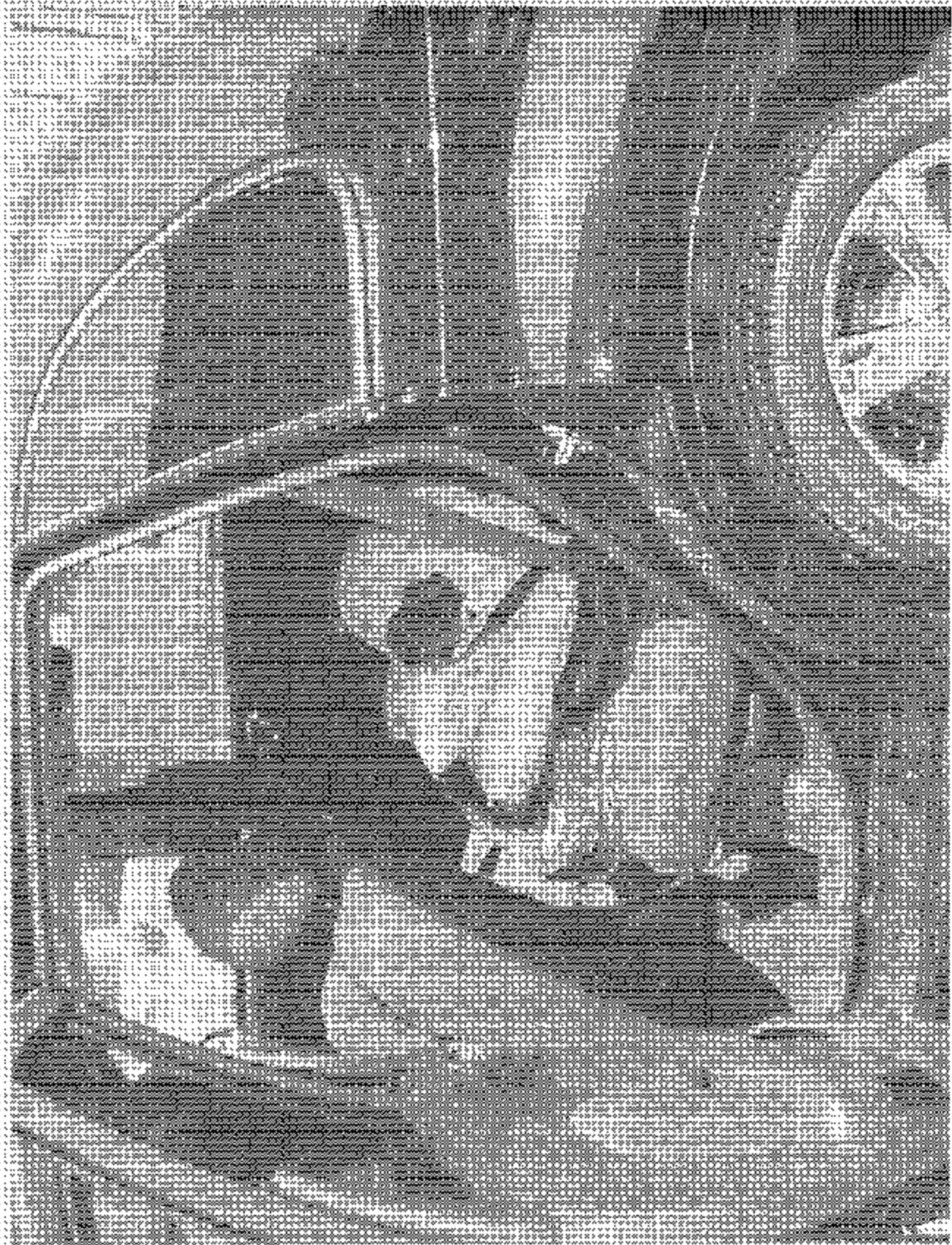
2003 CHRYSLER PT CRUISER
NHTSA NO. C20003
FRWSS NO. 110 (INDICANT)

FIGURE 57
TIRE SHOWING MAX INFLATION PRESSURE



2003 CHRYSLER PT CRUISER
NHTSA NC 04065
PRESS NO. 170 (INDICANT)

FIGURE 5.8
VEHICLE BALLASTED TO SIMULATE NORMAL
LOAD CONDITION (PART 1)



2003 CHRYSLER PT CRUISER
NHTSA NO. 050-005
FMVSS NO. 110 (OCCUPANT)

FIGURE 3-0
VEHICLE BALLASTED TO SIMULATE NHTSA
LOAD CONDITION (PART 3)

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 Inducant 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.