

97-GP SERIES

CANCELLATION  
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CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Standards  
for

AUTOMOTIVE VEHICLE SAFETY

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Standards 97-GP-101 to 97-GP-301 inclusive, covering safety features for automotive vehicles, have been cancelled. They have been replaced by the Motor Vehicle Safety Regulations of the Ministry of Transport, which are available from Information Canada.

Publication 97-GP, Guide to Traffic Safety, has also been cancelled.



# CANADIAN GOVERNMENT SPECIFICATIONS BOARD

STANDARD

FOR

TIRE SELECTION AND RIMS - PASSENGER CARS

97-GP-110

24 MAY 1968

THIS STANDARD SPECIFIES REQUIREMENTS FOR TIRE SELECTION TO PREVENT TIRE OVERLOADING.

DEPARTMENT OF DEFENCE PRODUCTION, OTTAWA, CANADA

CANADIAN GOVERNMENT SPECIFICATIONS BOARD  
STANDARD  
FOR  
TIRE SELECTION AND RIMS - PASSENGER CARS

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1. PURPOSE AND SCOPE

This standard specifies requirements for tire selection to prevent tire overloading.

2. APPLICABLE PUBLICATIONS

2.1 The following publication is applicable to this standard:

Canadian Government Specifications Board (CGSB)  
97-GP-109, New Pneumatic Tires - Passenger Cars.

2.1.1 Reference to the above publication is to the latest issue, unless otherwise specified.

3. APPLICABILITY

3.1 This standard applies to:  
Passenger Cars.

4. DEFINITIONS

4.1 "Accessory weight" means the combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio, and heater, to the extent these items are available as factory-installed equipment (whether installed or not).

4.2 "Curb weight" means the weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil and coolant, and, if so equipped, air conditioning and additional weight optional engine.

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\* See Par 6.1

4.3 "Designated seating capacity" means the number of designated seating positions provided.

4.4 "Maximum loaded vehicle weight" means the sum of:

- (a) curb weight
- (b) accessory weight
- (c) vehicle capacity weight, and
- (d) production options weight.

4.5 "Normal occupant weight" means 150 pounds times the number of occupants specified in the second column of Table I.

TABLE I

OCCUPANT LOADING AND DISTRIBUTION FOR VEHICLE NORMAL LOAD FOR VARIOUS DESIGNATED SEATING CAPACITIES

| Designated seating capacity, number 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                       |

4.6 "Occupant distribution" means distribution of occupants in a vehicle as specified in the third column of Table I.

4.7 "Production options weight" means the combined weight of those installed regular production options weighing over 5 pounds, in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery and special trim.

4.8 "Vehicle capacity weight" means the rated cargo and luggage load plus 150 pounds times the vehicle's designated seating capacity.

4.9 "Vehicle maximum load on the tire" means that load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.

4.10 "Vehicle normal load on the tire" means that load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table I), and dividing by two.

## 5. REQUIREMENTS

5.1 General - Passenger cars shall be equipped with tires that meet the requirements of CGSB 97-GP-109.

### 5.2 Tire Load Limits

5.2.1 The vehicle maximum load on the tire shall not be greater than the applicable maximum load rating specified in Table I of CGSB 97-GP-109 for the tire's size designation and type.

5.2.2 The vehicle normal load on the tire shall not be greater than the test load used in the high-speed performance test specified in par 6.5 of CGSB 97-GP-109 for that tire.

5.3 Placard - A placard, permanently affixed to the glove compartment door or an equally accessible location, shall display the:

- (a) Vehicle capacity weight.
- (b) Designated seating capacity (expressed in terms of total number of occupants and in terms of occupants for each seat location).
- (c) Vehicle manufacturer's recommended cold tire inflation pressure for maximum loaded vehicle weight and, subject to the limitations of par 5.3.1, for any other manufacturer-specified vehicle loading condition.
- (d) Vehicle manufacturer's recommended tire size designation.

5.3.1 No inflation pressure other than the maximum permissible inflation pressure may be specified unless:

- (a) It is less than the maximum permissible inflation pressure.
- (b) The vehicle loading condition for that pressure is specified.
- (c) The tire load rating from Table I of CGSB 97-GP-109 for the tire at that pressure is not less than the vehicle load on the tire for that vehicle loading condition.

### 5.4 Rims

5.4.1 Each rim shall:

- (a) Be constructed to the dimensions of a rim specified for the applicable tire's size designation in a reference cited in the definition of test rim in par 4.21 of CGSB 97-GP-109. Approved alternative rims, not cited in

par 4.21 of CGSB 97-GP-109 are listed in Table II. Requests for additions to this table must be supported by data indicating compliance with the test requirements of CGSB 97-GP-109 and CGSB 97-GP-110 except par 5.2.2.2 of CGSB 97-GP-109.

- (b) In the event of rapid loss of inflation pressure with the vehicle travelling in a straight line at a speed of 60 miles per hour, retain the deflated tire until the vehicle can be stopped with a controlled braking application.

## 6. NOTES

6.1 The requirements in this standard are identical with those in United States Federal Motor Vehicle Safety Standard No. 110, Tire Selection and Rims - Passenger Cars, and changes in that standard will be duly incorporated in CGSB Standard 97-GP-110.

6.2 Certification to US Standard No. 110 applicable at date of manufacture will certify conformance to CGSB Standard 97-GP-110.

6.3 The publication listed in Section 2 is available from the Canadian Government Specifications Board.

6.4 Further related information may be found in the CGSB Guide to Traffic Safety, also available from the Canadian Government Specifications Board.

TABLE II

## Alternative Rims

| Tire Size | Rim *                                                                                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------------|
| 6.40-15   | <u>4 1/2-JK</u> , <u>4 1/2-J</u> , <u>4 1/2-K</u> , <u>4.50E</u> , 4-J, 5.00E, 5-J, 5-K, 5-JK, 5 1/2-J                    |
| 7.00-15   | <u>5.00F</u> , <u>5-K</u>                                                                                                 |
| 8.25-15   | <u>6-JK</u> , <u>6-K</u> , <u>6-L</u>                                                                                     |
| 8.55-15   | <u>6-JK</u> , <u>6-K</u> , <u>6-L</u>                                                                                     |
| 8.90-15   | <u>6 1/2-L</u> , 6-JK, 6-JJ, 7-L                                                                                          |
| D70-13    | <u>5 1/2-JK</u> , <u>5 1/2-JJ</u> , <u>5 1/2-J</u> , <u>5 1/2-K</u>                                                       |
| 5.0-15    | <u>4J</u> , 3.50B, 3.50D, 3 1/2J, 4.00C                                                                                   |
| 5.5-15    | <u>4J</u> , 3 1/2J, 3.50D, 4 1/2J                                                                                         |
| B78-14    | <u>4 1/2-JJ</u> , <u>4 1/2-J</u> , <u>4 1/2K</u> , 5-JJ, 5-J, 5-K                                                         |
| C78-14    | <u>5-JJ</u> , <u>5-J</u> , <u>5-K</u> , <u>4 1/2-JJ</u> , <u>4 1/2-J</u> , <u>5 1/2-J</u> , 6-JJ, 6-JK                    |
| D78-14    | <u>5-JJ</u> , <u>5-J</u> , <u>5-K</u>                                                                                     |
| E78-14    | <u>5 1/2-JK</u> , <u>5 1/2-JJ</u> , <u>5 1/2-J</u> , <u>5 1/2-K</u> , 4 1/2-JJ, 4 1/2-J, 5-JJ, 5-J, 5-K, 6 1/2-JK         |
| F78-14    | <u>5 1/2-JJ</u> , <u>5 1/2-JK</u> , <u>5 1/2-J</u> , <u>5 1/2-K</u> , 5-JJ, 5-J, 5-K, 6-JK, 6-JJ, 6-K, 6 1/2-JK, 6 1/2-JJ |
| G78-14    | <u>6-JJ</u> , <u>6-JK</u> , <u>6-K</u> , 5-JJ, 5-J, 5 1/2-JK, 5 1/2-JJ, 5 1/2-J, 5 1/2-K                                  |
| H78-14    | <u>6-JK</u> , <u>6-JJ</u> , <u>6-K</u> , 5 1/2-JK, 6 1/2-JK, 6 1/2-JJ, 6 1/2-K                                            |
| J78-14    | <u>6-JK</u> , <u>6-JJ</u> , <u>6-K</u> , 6 1/2-JK, 6 1/2-JJ                                                               |
| C78-15    | <u>5-JJ</u> , <u>5-J</u> , <u>5-K</u> , 4 1/2-JJ, 4 1/2-J, 4 1/2-K                                                        |
| D78-15    | <u>5-JJ</u> , <u>5-J</u> , <u>5-K</u>                                                                                     |
| E78-15    | <u>5-JJ</u> , <u>5-J</u> , <u>5-K</u> , 4 1/2-K, 5 1/2-JK, 5 1/2-JJ, 5 1/2-J, 5 1/2-K, 6-JK, 6-JJ                         |
| F78-15    | <u>5 1/2-JK</u> , <u>5 1/2-JJ</u> , <u>5 1/2-J</u> , <u>5 1/2-K</u> , 4 1/2-K, 5-JJ, 5-J, 5-K, 6-JK, 6-JJ                 |
| G78-15    | <u>5 1/2-JK</u> , <u>5 1/2-JJ</u> , <u>5 1/2-J</u> , <u>5 1/2-K</u> , 5-JJ, 5-J, 5-K, 6-JK, 6-JJ, 6-K, 6L                 |
| H78-15    | <u>6-JK</u> , <u>6-JJ</u> , <u>6-K</u> , <u>6-L</u> , 5 1/2-JK, 5 1/2-JJ, 5 1/2-J, 5 1/2-K, 6 1/2-K                       |
| J78-15    | <u>6-JK</u> , <u>6-JJ</u> , <u>6-K</u> , <u>6-L</u> , 6 1/2-JK, 6 1/2-JJ                                                  |
| L78-15    | <u>6-JK</u> , <u>6-JJ</u> , <u>6-K</u> , <u>6-L</u> , 6 1/2-JK, 6 1/2-JJ                                                  |

\* Underlined designations denote Test Rims.