

23 November 1981



UNITED NATIONS

## AGREEMENT

CONCERNING THE ADOPTION OF UNIFORM CONDITIONS OF APPROVAL  
AND RECIPROCAL RECOGNITION OF APPROVAL  
FOR MOTOR VEHICLE EQUIPMENT AND PARTS

done at Geneva on 20 March 1958

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*Addendum 47: Regulation No. 48*

Date of entry into force as an annex to the Agreement:  
1 January 1982

UNIFORM PROVISIONS CONCERNING THE APPROVAL  
OF VEHICLES WITH REGARD TO THE INSTALLATION OF LIGHTING AND  
LIGHT-SIGNALLING DEVICES

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Within this field, almost the whole light-emitting surface of the lamp shall be visible. The presence of partitions or other items of equipment near the headlamp shall not give rise to secondary effects causing discomfort to other road users.

6.2.5. Orientation

Forwards.

6.2.5.1. The vertical orientation of the passing beam measured in the static condition and in all the states of loading defined in annex 5 to this Regulation shall remain between -0.5 per cent and -2.5 per cent without manual adjustment. In the "unladen" state, with one person in the driver's seat, this vertical orientation shall be initially set between -1 per cent and -1.5 per cent. For each type of vehicle the manufacturer shall specify this initial orientation, which shall be shown on a plate on each vehicle.

6.2.5.2. If the foregoing condition is met by means of a device acting on the position of the headlight in relation to the vehicle, the beam shall not in the event of failure of the device assume a position in which the dip is less than it was at the time when the failure of the device occurred.

6.2.5.2.1. The conditions laid down in paragraph 6.2.5.2. above shall be met by automatic means.

6.2.5.2.2. Devices which are adjusted manually, either in continuous or in stepped fashion, may nevertheless be allowed provided they have a reference position whereby the headlamps can be put back to the initial vertical orientation specified in paragraph 6.2.5.1. by means of the usual adjusting screws. These manually adjustable devices must be operable from the driving seat.

6.2.5.2.2.1. Continuously adjustable devices must have reference marks indicating the main loading conditions.

6.2.5.2.2.2. The number of positions on stepped adjustable devices must be such that, starting from a vertical orientation value of between -1 per cent and -1.5 per cent, observance of the -0.5 per cent to -2.5 per cent range is ensured for all the states of loading defined in annex 5 to this Regulation. The states of loading corresponding to each position must be clearly indicated near the control.

6.2.6. May be "grouped" with the driving lamp and the other front lamps.

6.2.7. May not be "combined" with any other lamp.

Annex 5

STATES OF LOADING TO BE TAKEN INTO CONSIDERATION IN DETERMINING  
VARIATIONS IN THE VERTICAL ORIENTATION OF THE PASSING BEAM

(See paragraph 6.2.5. of the Regulation)

1. For the purpose of establishing the states of loading specified below, the weight of an occupant shall be assumed to be 75 kg.
2. States of loading for the different types of vehicles:
  - 2.1. Vehicles of category M<sub>1</sub><sup>1/</sup>
    - 2.1.1. one person in the driver's seat;
    - 2.1.2. one person in the driver's seat and one in the front seat farthest from the driver;
    - 2.1.3. one person in the driver's seat, one in the front seat farthest from the driver, and all the seats farthest to the rear occupied;
    - 2.1.4. all seats occupied;
    - 2.1.5. all seats occupied, plus a balanced load in the luggage boot, so as to attain the permissible load on the rear axle, or on the front axle if the luggage boot is at the front. If the vehicle has a boot at the front and a boot at the rear, the additional load shall be uniformly distributed so as to attain the permissible loads on the axles. If the authorized total weight is exceeded, however, the load in the boot or boots shall be so limited as to attain the authorized weight without exceeding it;
    - 2.1.6. one person in the driver's seat, plus a balanced load in the luggage boot or boots, so as to attain each time the permissible load on the corresponding axle. However, if the maximum permissible laden weight is obtained before the permissible load on the axle, the loading of the boot(s) shall be limited to the figure which enables that weight to be reached.
    - 2.1.7. In determining the above loads, account shall be taken of any restrictions on the loading conditions which the manufacturer may have specified in the information sheet.
  - 2.2. Vehicles of categories N<sub>1</sub>, N<sub>2</sub> and N<sub>3</sub>
    - 2.2.1. Vehicles having a loading surface
      - 2.2.1.1. vehicle unladen;

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<sup>1/</sup> For definitions of the categories, see Regulation No. 13 annexed to the 1958 Agreement.

- 2.2.1.2. one person in the driver's seat, the load being so distributed as to attain the maximum technically permissible load on the rear axle or axles and a load on the front axle corresponding as closely as possible to that of the unladen vehicle. If the loading surface is at the front of the vehicle the procedure shall be, mutatis mutandis, the same.
- 2.2.2. Vehicles not having a loading surface
- 2.2.2.1. Drawing vehicles for semi-trailers
- 2.2.2.1.1. unladen vehicle without a load on the coupling attachment;
- 2.2.2.1.2. one person in the driver's seat and the technically permissible load on the fifth wheel, the latter being in the position corresponding to the maximum load on the rear axle.
- 2.2.2.2. Drawing vehicles for trailers
- 2.2.2.2.1. vehicle unladen;
- 2.2.2.2.2. one person in the driver's seat, all the other seats provided in the cab being occupied.
- 2.3. Vehicles of categories M<sub>2</sub> and M<sub>3</sub>
- 2.3.1. vehicle unladen;
- 2.3.2. the vehicle loaded in such a way that each of the axles bears its technically permissible load.
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