# The Public Service Vehicles (Construction) Regulations.

# MADE BY THE MINISTRY OF HOME AFFAIRS FOR NORTHERN IRELAND UNDER THE MOTOR VEHICLES (TRAFFIC AND REGULATION) ACT (NORTHERN IRELAND), 1926.

## 1927. No. 87.

Regulations as to the manner in which public service vehicles are to be furnished and fitted and for ensuring their fitness for public hire and the safety of their passengers :—

1. No person shall cause or permit a public service vehicle to be used unless it conforms to the requirements set forth in the Schedule to these Regulations in addition to the general requirements relating to the construction of motor cars prescribed by any statute or order.

2. If the owner of a public service vehicle which does not conform to the said requirements satisfies the Ministry of Home Affairs for Northern Ireland that it is in all respects fit and satisfactory for public service, the said Ministry may, if it thinks proper, consent to a departure in the case of that vehicle from any of the said requirements.

3. These regulations may be cited as the Public Service Vehicles (Construction) Regulations, 1927, and shall come into operation on the 1st day of July, 1927.

Given under the Seal of the Ministry of Home Affairs for Northern Ireland, this 27th day of June, 1927.

(L.S.)

D. L. Clarke,

Assistant Secretary.

#### SCHEDULE.

#### PART I.

#### REQUIREMENTS FOR PUBLIC SERVICE VEHICLES SEATING MORE THAN SIX PASSENGERS.

Every public service vehicle must be presented for inspection in a thoroughly good condition and no vehicle will be certified as fit for public service unless it is properly painted and varnished. If so desired, application may be made for a preliminary inspection of the chassis.

1. WEIGHT.—The total weight laden and complete for service must not exceed 9 tons, and the weight on any one axle must not exceed  $5\frac{1}{2}$  tons. 140 lbs. to be allowed for each passenger, as well as the driver and conductor in calculating the total laden weight.

2. LENGTH.—The maximum length, measured from the dumb irons, must not exceed 26 feet, except that the hood (if any), when down, and any ladder permanently attached to the vehicle for the purpose of affording access to the roof and which does not project for a greater distance than 9 inches from the back of the vehicle, shall not be included in calculating the maximum length. 3. WIDTH.—The overall width must not exceed 7 ft. 6 ins. The hood crutches, wing nuts, runners, etc., on vehicles not fitted with permanent tops are to be included in measuring the width of the vehicle.

4. OVERHANG BEHIND REAR WHEELS.—The overhang behind rear wheels measured from the centre of the rear axle shall not exceed 7/24ths of the overall length of the vehicle.

5. WHEEL TRACK.—The distance between the centre lines of the track of the front wheels and of the rear wheels must be as nearly as possible the same, and must not be less than 69 per cent. of the overall width of the vehicle. In no case may the distance between the centre lines of the tracks of the front wheels be less than the distance between the centre lines of the tracks of the rear wheels, nor shall the excess be more than five inches. In all cases wheel track measurements shall be taken horizontally in line with the axles.

6. ROAD WHEELS.—When the axle weight on any axle exceeds 4 tons, the diameter of the tyres on the wheels of such axle, unless they are pneumatic, shall not be less than 1,010 m.m. Where pneumatic tyres are used, they shall not be less than 950 m.m.

7. BRAKES.—(a) Brakes must be of sufficient strength and be capable of stopping and holding the vehicle under all conditions.

 $(\tilde{b})$  There must be at least two independent brakes, the application of either of which shall be capable of causing the two rear wheels to be so held as effectuallg to prevent the wheels from revolving, or shall have the same effect in stoppiny the vehicle as if such wheels were so held.

(c) Brakes will not be deemed independent which are operated by pedals or levers acting through the same connections or upon the same brake blocks or the same brake drums. One brake must be applied by a pedal and at least one brake must act directly upon the road wheels without any connection with the propelling gear.

(d) The operation of either brake must not in any case declutch the engine from the transmission gear.

(e) The brake gear must be properly adjusted and nothing shall be placed on the vehicle which will prevent easy access to the brakes for adjustment.

(7) All brake connections secured with bolts or pins must have such bolts threaded and fitted with nuts, which latter must be locked or pinned.

8. SPRINGS.—(a) Rear.—The rear springs must be attached to, or bear upon, the back axle or axle casing as near to the road wheels as possible, and the distance from outside to outside must not be less than 50 per cent. of the overall width of the vehicle.

(b) Front.—The front springs must be as wide apart as possible, and not less than 37 per cent. of the overall width of the vehicle from outside to outside, provided that if the width of the rear springs from outside to outside is 53 per cent. of the overall width of the vehicle or more, the minimum width between the front springs as provided above may be reduced by one inch.

(c) Cross.—Prohibited.

9. STEERING ARMS AND CONNECTIONS.—(a) The ball and socket joints of steering connections, when such are used, should not be pendant, but the longitudinal or transverse rods must be carried upon the ball.

(b) All steering connections secured with bolts or pins must have such bolts threaded and fitted with nuts, which latter must be locked or pinned.

(c) The steering gear, including the arms and other connection thereof, must be of ample strength, must be maintained in effective condition, and as far as possible must be protected from damage by collision.

10. DRIVER'S SEAT.—The steering pillar must be on the right-hand side of the chassis, and the driver's seat must be so placed as to permit him to give the usual traffic signals on the off-side of the vehicle by hand.

11. CLEARANCE.—All the underparts of the vehicle inside the pivots of the front axle and steering arms as far back at least as 14 ft. 6 ins. from the front of the vehicle (or up to but not including the back axle if the back axle is nearer than 14 ft. 6 ins.) must clear the ground by at least 10 inches, sufficient allowance in addition being made to provide for the wear of the tyres, set of the springs or other causes of lessened height, so that the minimum clearance of 10 inches is at all times maintained.

12. LOCK NUTS.—All moving parts and all parts subject to severe vibration connected by bolts or studs and nuts must be fastened by lock nuts, or by nuts and efficient spring or lock nut washers, or by castellated nuts and split pins so as to prevent their working or coming loose.

13. GUARD FOR SPROCKET.—Driving chains and sprockets must be protected by a suitable guard.

14. FUEL TANKS.—(a) Fuel tanks must be so placed that any overflow shall not fall upon any woodwork or accumulate where it can be readily ignited.

(b) The petrol supply pipe must be so led that a cock can be provided which shall be visible and readily accessible at all times from outside the vehicle to shut off the main supply.

(c) The filling point must be outside the body of the vehicle, and special care must be taken that the filler caps of all petrol tanks are tightly fixed in position. The vent hole (if any) must be protected from danger of fire penetration, and must be designed to prevent petrol being splashed over.

15. EXHAUST PIFE.—The exhaust pipe must not be fixed in such a position that oil, or any vaporisable or inflammable material, is likely to be dropped upon it.

Effective means shall be adopted to prevent the heat of the motor, generator, or the exhaust pipe and its connections from injuriously affecting any parts of the vehicle or the comfort of the passengers.

16. CARBURETTORS.—Carburettors or other petrol receptacles must be suitably encased or screened, or so placed that no leakage from them shall fall upon any magneto, or on any connections or wires carrying electric current.

17. TURNING CIRCLE.—Each vehicle must be able to turn in either direction in a circle not exceeding 60 feet in diameter as determined by the extreme wheel track.

18. HUB-CAPS .--- Hub-caps must not project more than 31 inches beyond the rim of the wheel.

19. DRIVER.—(a) No passenger to be permitted on the right-hand side of the driver.

(b) Where the vehicle is not fitted with a permanent top if passengers are carried on the left-hand side of the driver, a space of at least 18 inches from the centre of the steering column to the left thereof shall be reserved for the driver, to be divided off from such passengers by means of a solid partition at least 9 inches high and extending for the whole width of the seat.

(c) Nothing shall be placed or permitted on the vehicle which will interfere with free signalling by the driver either by hand signals or by a mechanical contrivance.

20. WIND SCREENS .- Front glass wind screens (if any) must be securely fastened to the body of the vehicle and be of such a size and construction that the view of the driver shall at all times and under all conditions be clear and unobstructed. Adjustable sections (if any) must be provided with adequate locking or fixing devices.

21. LIFEGUARDS .--- Vehicles not fitted with " running boards " or the equivalent, and so constructed as to leave the space between the front and rear wheels unguarded, must be fitted with guard rails so as to guard that space effectively.

22. MACHINERY, BODY AND FITTINGS.--(a) The body must be securely affixed to the chassis.

(b) The machinery, body and fittings shall be in a good state of repair, so that no undue noise or vibration arises from them.

23. FLOOR BOARDS.--(a) Floor boards must be strong and well fitted; also where they are intended to be lifted, properly hinged sunk lifting rings must be provided for the purpose. (b) Holes may be bored in floor boards for drainage purposes, but are pro-

hibited for any other purpose.

24. PILLARS.—All body pillars must be of sufficient strength, the joints properly made, and all parts liable to severe stress properly ironed and stayed.

25. WINDOW RAILS.—When the side lights are made to be lowered, provision must be made (by means of guard rails or otherwise) to protect the arms of seated passengers from being thrust through and injured by passing vehicles, or the extent to which the side lights can be lowered must be limited so that such protection may not be needed

26. ENTRANCES AND EXITS.—(a) Where the vehicle is fitted with a permanent top and the entrance is not at the rear end, an emergency door opening outwards shall be provided behind and clear of the rear wheels. This door must be easily accessible to the passengers and so fastened as to be readily opened in case of need both from the inside and from the outside.

(b) Direct access to the driver's seat from the offside must be provided when there are seats for passengers on his left side.

(c) Door handles or levers to door catches must be affixed in such a manner that they cannot become dislodged or rendered inoperative by accidental manipulation. Except in regard to the door referred to in (a) above, if the handles or levers are on top of or inside the doors, double locks, safety catches or straps or some other form of additional fastening shall be provided.

(d) A grab handle must be fitted to each doorway to assist passengers in mounting or alighting from the vehicle.

(e) No doorway shall be less than 18 inches in width, and if the door does not open to the full extent of the doorway it must open to the extent of at least 18 inches.

(f) If the vehicle has entrances for passengers on both sides, or has more than two doors on one side, a step or bar must be provided to facilitate boarding and alighting where a doorway is placed above the back wheel.

27. HEIGHT.—(a) Where permanent tops are fitted, the height inside, measured at the centre line of the vehicle from the top of the floor battens of the lower deck to the lower edge of the hoop sticks or other such projections must not be less than 5 feet 6 inches if the seating capacity of the vehicle does not exceed 20, and not less than 5 feet 10 inches if the seating capacity of the vehicle exceeds 20.

(b) For vehicles without permanent tops the height of the body sides from the floor must not be less than 2 feet 4 inches.

28. BREADTH (INSIDE OF BODY).—When the seats are placed lengthwise, the surface of any portion of the seat against which the back of the passenger is to rest shall be at least 54 inches from the surface of the corresponding portion of the seat facing it.

29. SEATS.—At least 16 inches, measured in a straight line along the length of the front of each seat must be allowed for each passenger on every seat, which seat must be fit and convenient for sitting on. Gross or "garden" seats must be so fitted that :—

- (i) when facing in the same direction a clear space of a minimum width of 25 inches must be provided in front of the back of each seat at all points measured along the top of the seat back; and
- (ii) when facing each other there must be a clear space between all parts of the front of each seat of a minimum width of 19 inches.

30. SEATS AT WHEEL ARCH.—Where seats are placed over the wheel arch they must be placed in such a position as not to cause discomfort to passengers using them.

31. SEAT BACKS.—The backs of all seats must be so closed or otherwise constructed as to prevent, as far as possible, the pockets of passengers being picked.

32. GANGWAYS, AND ACCESS TO SEATS.—(a) No form of seating accommodation across or in the gangways will be permitted, except in the case of those vehicles not fitted with permanent tops.

(b) The width of the gangway must not be less than 12 inches up to seat level. Above seat level, the width of the gangway must not be less than 14 inches.

(c) Nothing shall be placed or permitted on a vehicle which will obstruct the gangways or which will impede the free ingress or egress of passengers.

33. STEPs.—(a) The lowest step, for entrance upon the vehicle when empty, must not be more than 15 inches, or less than 10 inches, above the ground.

(b) Non-slip treads must be fitted to each step of each doorway and the treads should be level.

(c) If the vehicle has entrances for passengers on both sides or has more than two doors on one side, fixed steps must not be less than 9 inches wide, but in no case shall the steps project beyond the front wings.

34. WING GUARDS.—Suitable wings must be provided above each wheel to prevent mud-splashing as far as practicable.

35. GAS CONTAINERS.—Where acetylene or other gas is used for lighting purposes, the cylinders or vessels which contain the gas, or in which it is generated, must be fixed outside the body and in such a position as to be as far removed as possible from the danger of accidental ignition or damage by impact. 36. INSULATION.—All electric leads must be adequately insulated and protected against injury, and so placed as not to be a cause of danger.

37. Frite EXTINGUISHERS.—Suitable and approved appliances for extingrishing fire must be carried in such a position as to be readily available for use.

38. VENTILATION.—There must be adequate ventilation without the necessity for opening the main windows.

39. SIGNAL APPARATUS.—Efficient means must be provided to enable passengers, both inside and outside, to signal to the driver or conductor when required.

40. MIRRORS.—Where a conductor is not carried, a mirror must be provided to enable the driver to observe overtaking traffic.

41. GREASE DROPPING.—The chassis must be so constructed as to prevent oil or grease from the bearings or other parts dropping on to the roadway.

42. UNDERSHIELD.—When a guard tray or undershield is fixed beneath the engine and adjacent to the machinery it shall be so constructed that any overflow of petrol will not be retained in the tray.

43. INFLAMMABLE FITTINGS.—Celluloid, Xylonite or other inflammable fittings shall not be used inside or outside the vehicle, but this shall not apply to accumulator cells.

44. CUSHIONS.—Where cushions are provided they shall be kept clean and be maintained in a good state of repair.

45. LIGHTING.—A public service vehicle which is enclosed shall be suitably lighted so far as the interior is concerned and at every other necessary point in a manner sufficient to provide for the safety of the passengers. Such lighting shall be masked so as not to interfere with the vision of the driver.

46. EXTERNAL LIGHTS, HORN, GONG, &C.—The side lights and head lights, if any, required by any Act of Parliament or other legal provision relating to lights on vehicles, and the horn, gong, or other means for giving due warning of the approach of the vehicle, shall be adequate for the character of the routes upon which the vehicle is to be employed.

47. HOODS (OTHER THAN PERMANENT).—(a) When extended or raised the height of the hood from the floor must not be less than 4 feet 6 inches at the centre line of the vehicle, except over the driver's seat.

(b) Hoods must be provided with an adequate back light made of a transparent mica or similar transparent substance not liable to breakage.

(c) Hoods must be efficiently stayed and easily adjustable.

(d) When side (storm) curtains are provided they must have mica or similar lights.

#### PART II.

## REQUIREMENTS FOR PUBLIC SERVICE VEHICLES SEATING NOT MORE THAN SIX PASSENGERS.

Every public service vehicle must be presented for inspection in a thoroughly good condition, and no vehicle will be certified as fit for public service unless it is properly painted and varnished. If so desired, application may be made for a preliminary inspection of the chassis.

1. SPRINGS.—Must be properly hung and of sufficient strength and flexibility to meet all purposes which may be required of them.

The Rear Springs must be attached to or bear upon back axle or axle casing as near to the road wheels as possible, and the distance between the outsides must be not less than 40 inches. Where a Cross Spring is used it must be so applied that it shall not cause or increase side sway.

The Front Springs must be as far apart as possible and not less than 26 inches from outside to outside.

2. WHEEL-BASE.—Must in all cases be so proportioned that skidding or improper movements shall be as far as possible avoided. Vehicles apt to skid or move improperly are liable to be prohibited until the defects have been remedied. 3. WHEEL TRACK.-(a) Should coincide for front and rear wheels

(b) Measurement from centre to centre taken in line with axle must not be less than 4 feet 4 inches.

(c) The front track must be the same as that of the rear wheels or within  $2\frac{1}{2}$  per cent. thereof, but in no case should it be less in front than the rear.

4. ROAD WHEELS.--Must be of sufficient and suitable strength and diameter and not of undue weight.

5. TYRES.—The material of which tyres are made must be soft and elastic, e.g., pneumatic rubber tyres.

6. LENGTH.—The total length of the vehicle must not exceed 15 feet 6 inches.

7. BREADTH.---The breadth must not be greater than 5 feet 9 inches in any part.

8. BRAKES.—Each complete set of brakes must be of sufficient strength and capable of stopping and holding the vehicle under all conditions. The brakes should be so affixed as to be capable of easy adjustment.

9. STEERING ARMS.—The steering arms and other connections thereof must be of ample strength and, as far as possible, protected from damage by collision.

10. STEERING CONNECTIONS.—The ball and socket joints when such are used should not be pendent, but the longitudinal or tranverse rods must be carried upon and above the ball.

11. BRAKE AND STEERING CONNECTIONS.—All brake and steering connections secured with holts or pins must have such bolts threaded and fitted with nuts, which latter must be locked or pinned. The whole of the brake and steering parts must be maintained in perfect order and will be subject to inspection at any time.

12. PARTS SUBJECT TO SEVERE VIBRATION.—All parts connected by bolts, or studs and nuts subject to severe vibration, must be fastened by lock nuts or by nuts and approved spring or lock nut washers to prevent their working loose, and lamp brackets or other loose fittings likely to cause unnecessary noise will be regarded as unfit for public service.

13. VIBRATION OR NOISE.—The machinery must be so constructed that no undue noise or vibration arises from its use.

14. PETROL RECEPTACLES.—Carburettors or other petrol receptacles, unless they are suitably encased or screened must not be placed in close proximity to magnetos, connections of wires carrying electric current, or to the engine exhaust pipe.

15. UNDERSHIELD.—Where a guard, tray or undershield is fixed beneath the engine and adjacent machinery it must be so constructed that any overflow of petrol shall not be retained in the tray.

16. PETROL TANKS.—Tanks for petrol or other liquid fuel must be made of suitable material, properly constructed and of sufficient strength. They must be so placed that any overflow shall not fall upon any woodwork or accumulate where it can be readily ignited.

17. INSULATION.—All wires carrying electric current must be properly insulated and protected from injury, and so placed that they cannot be the cause of danger.

18. HEAT FROM MOTOR.—Effective means must be adopted for preventing the heat of the motor, generator or exhaust pipe connections from injuriously affecting any parts of the vehicle or the comfort of the passengers.

19. EXHAUST PIPE.—The exhaust pipe must not be led inside the tray or undershield or be fixed so that oil or other vaporizable or inflammable material is likely to be dropped upon it.

20. SILENCER.—The outlet from the silencer must not be so placed as to project the exhaust directly to the rear or on to the roadway.

21. OIL OR GREASE DROFFINGS.—The machinery must be so constructed or placed that oil from the bearings cannot drop on the roadway.

22. CAB SEATS (OUTSIDE).—Not more than one passenger may be carried outside the vehicle.

23. STEPS.—Suitable steps and hand rails must be provided where necessary.

24. FLOOR BOARDS.—The floor boards of the inside must be so arranged that they cannot be a cause of danger to a passenger.

25. CUSHIONS.—The cushions of seats must be covered with leather or other , suitable material, and properly upholstered.

26. GENERAL CONDITION.—Doors, windows, seats, roof, springs, wheels, custions, linings, panels, etc., and all furniture appointments, etc., must be in proper order and repair; the paint and varnish in good condition and the inside of the vehicle perfectly clean.

27. LUGGAGE.—Provision must be made for conveyance of a reasonable guantity of luggage and efficient means provided of securing it. If roof is to be used to carry luggage an approved fixed roof guard rail must be provided.

28. ACCUMULATORS.—Accumulators or other electrical appliances used: for illumination must be so placed as not to be a source of danger and must be of approved type and capacity.

29: CELLULOID OR XYLONITE FITTINGS.—No celluloid, xylonite or inflammable fittings shall be placed inside or outside the vehicle but this shall not apply to accumulator cells.

30. ADVERTISEMENTS.----No printed, written or other matter shall appear on the inside or outside of the vehicle, or be carried, by way of advertisement.

# Licensing of Drivers being Members of Naval, Military, or Air Force.

MADE BY THE MINISTRY OF HOME AFFAIRS FOR NORTHERN IRELAND UNDER THE MOTOR CAR (LICENSING OF DRIVERS).

### 1927. No. 113.

## To the Councils of the several Administrative Counties in Northern Ireland ;

To the Councils of the County Boroughs in Northern Ireland;

And to all others whom it may concern :

Whereas in pursuance of the provisions of the Motor Vehicles (Traffic and Regulation) Act (Northern Ireland); 1926, the Ministry of Home Affairs for Northern Ireland made regulations entitled the Motor Car (Licensing of Drivers). Regulations, 1927, relative to the licensing of drivers of motor cars under Part I of the said Act and matters incidental thereto:

And whereas it is expedient that the said Regulations should be amended in manner hereinafter appearing :

Now, therefore, the Ministry of Home Affairs for Northern Ireland in exercise of the powers vested in it by the Motor Vehicles (Traffic and Regulation) Act (Northern Ireland), 1926, hereby makes the following regulations:—

1. Article 2 of the Motor Car (Licensing of Drivers) Regulations, 1927, shall have effect as if the following proviso were added thereto :---