CHAPTER 2
DETAILS OF SAFETY REGULATIONS THAT APPLY TO MOTOR VEHICLES

Section 1
Details of Safety Regulations That Apply to Designated Motor Vehicles, etc. to Be Newly Used for Operation

Article 5

The provisions of this Section shall apply to the following cases.

(1) Cases where the initial inspection is conducted pursuant to the provision of Article 59 of the Act, or cases where the preliminary inspection is carried out pursuant to the provision of Article 71 of the Act in connection with designated motor vehicles, etc. (except cases where the initial inspection or preliminary inspection is performed for motor vehicles subjected to deletion registration pursuant to the provision of Article 16 of the Act or motor vehicles for which motor vehicle inspection certificates have been returned pursuant to the provision of Paragraph 4 of Article 69 of the Act);

(2) Cases where the evaluation is made for the recommendation provided for in Paragraph 1 of Article 63–2 of the Act, Paragraph 2 of the same Article or Paragraph 3 of the same Article;

(3) Cases where the evaluation is made for the notification pursuant to the provision of Paragraph 1 of Article 63–3 of the Act and Paragraph 2 of the same Article, or the instruction of revision pursuant to the provision of Paragraph 3 of the same Article;

(4) Cases where the evaluation is made pursuant to the provision of Paragraph 3 of Article 75 of the Act, cases where the inspection is conducted pursuant to the provision of Paragraph 4 of the same Article, or cases where the evaluation is made for the deletion pursuant to the provision of Paragraph 5 of the same Article;

(5) Cases where the evaluation is made pursuant to the provision of Paragraph 3 of Article 75–2 of the Act, or cases where the evaluation is made for the deletion pursuant to the provision of Paragraph 5 of the same Article;

(6) Cases where motor vehicles provided for in Article 99 of the Act (limited only to designated motor vehicles, etc.) are to be newly used for operation;

(7) With regard to mini-sized motor vehicles exempted from inspection and small-sized special motor vehicles provided for in Paragraph 1 of Article 58 of the Act, cases where approval is granted pursuant to the provision of Paragraph 1 of Article 62–3 of the Enforcement Regulations, cases where the inspection is carried out pursuant to the provision of Paragraph 5 of the same Article, or cases where the evaluation is made for the deletion pursuant to the provision of Paragraph 6 of the same;

(8) Cases where the inspection is conducted pursuant to the provision of Article 62–4 of the Enforcement Regulations in connection with motor vehicles equipped with a noise control device whose type has been designated pursuant to the provision of Paragraph 1 of Article 75–2 of the Act (except motor vehicles whose type has been designated pursuant to the provision of Paragraph 1 of Article 75 of the Act. Hereinafter referred to as the "motor vehicles with designated noise control device");

(9) Cases where the inspection is conducted pursuant to the provision of Article 63 of the Enforcement Regulations in connection with motor vehicles equipped with an exhaust emission control device whose type has been designated pursuant to the provision of Paragraph 1 of Article 75–2 of the Act (except motor vehicles whose type has been designated pursuant to the provision of Paragraph 1 of Article 75 of the Act. Hereinafter referred to as the "motor vehicles with designated exhaust emission control device").

Article 6 (Length, Width and Height)

1. The method prescribed in the Announcement of Paragraph 1 of Article 2 of the Safety Regulations in connection with the measurement of a motor vehicle shall mean that the motor vehicle under the conditions enumerated in each of the following Items be measured according to Paragraph 2.

(1) Unloaded state;

(2) Any ladder of a ladder truck, a turret of an overhead wire repair motor vehicle or those which can be housed while the motor vehicle is being driven shall be housed;

(3) Any folding awnings, cranes of a work motor vehicle or those which may be used in various states while the motor vehicle is being driven shall be in respective states where these are used during running. However, any outward-opening windows and ventilators shall be closed.

(4) Any outside rear-view mirrors, devices and flexible antennas in Paragraph 5 of Article 44 of the Safety Regulations shall be removed. In this case, the outside rear-view mirrors and devices in Paragraph 5 of Article 44 of the Safety Regulations shall include lamps and reflectors attached thereto.

2. The length, width and height of a motor vehicle shall be the measured values of the dimensions given in each of the following Items, using a measuring tape or the like, with the motor vehicle in its straight-ahead position under the conditions of the preceding Paragraph placed on a horizontal, flat surface (hereinafter referred to as the "reference surface").

(1) With regard to the length, the most forward end and most rearward end of the motor vehicle are projected on the reference surface. The length shall be the distance between the projected points in a direction parallel to the longitudinal centre line of the motor vehicle.

(2) As regards the width, the outermost sections of the motor vehicle (except the rotating tyres, disc wheels and their related rotating sections that are mounted on motor vehicles other than large-sized special motor vehicles and small-sized special motor vehicles) are projected on the reference surface. The width shall be the distance between the projected points in a direction parallel to a straight line perpendicular to the motor vehicle longitudinal centre line.

(3) The height shall be the distance between the highest section of the motor vehicle and the reference surface.

3. The method prescribed in the Announcement of Paragraph 2 of Article 2 of the Safety Regulations in connection with the measurement of a motor vehicle shall mean that the motor vehicle under the conditions enumerated in each of the following Items be measured.

(1) With regard to the outward-opening windows and ventilators, the state where they are opened;

(2) As regards the rear-view mirrors and devices of Paragraph 5 of Article

44 of the Safety Regulations, the state where they are fitted.

Article 7 (Minimum Ground Clearance)

The requirements prescribed in the Announcement of Article 3 of the Safety Regulations shall be that any part other than the ground-contact section of a motor vehicle have enough clearance above the ground to ensure safe operation.

Article 8 (Stability)

The requirements prescribed in the Announcement of Article 5 of the Safety Regulations in connection with the stability of a motor vehicle shall be the requirements prescribed in each of the following Items.

(1) The total load imposed upon the ground-contact sections of the steering tyres in the unloaded state and in the loaded state shall be 20% or more (18% in the case of three-wheeled motor vehicles) of the vehicle weight and of the gross vehicle weight, respectively.

(2) In the case of a tractor, the requirement of the preceding Item shall be met even in the state when a trailer is coupled thereto.

(3) In the case of a motor cycle with sidecar, the load imposed upon the ground-contact section of the wheel (except driving wheels) of the sidecar in the unloaded state and in the loaded state shall be 35% or less of the vehicle weight and of the gross vehicle weight, respectively.

(4) Any motor vehicle (except motor cycles and trailers) in the unloaded state shall not overturn when it is tilted to the right and left sides at an angle of 35° (25° in the case of motor cycles with sidecar and 30° in the case of motor vehicles with a maximum speed of less than 20 km/h and motor vehicles with a gross vehicle weight of 1.2 times or less of the vehicle weight). In this case, the phrase “tilted to the right and left sides” shall not mean to tilt a motor vehicle to the right or left side perpendicular to the motor vehicle longitudinal centre line, but it shall mean to tilt a motor vehicle to the side where overturning may actually take place, using as an axis a line connecting the ground-contact sections of the front and rear outer wheels at the side concerned.

(5) In the case of trailers (except pole trailers), the requirements of the preceding Item shall be met when a tractor in the unloaded state is

coupled thereto;

(6) In the case of pole trailers, the distance between the centres of the ground-contact sections of the right and left outermost wheels shall be 1.3 times or more the height of the loading platform above the ground in the unloaded state.

Article 9 (Ground-Contact Section and Contact Pressure)

The requirements prescribed in the Announcement of Article 7 of the Safety Regulations in connection with the ground-contact sections and contact pressure of the running system of a motor vehicle shall be the requirements prescribed in each of the following Items.

(1) No ground-contact section shall be constructed in such a way that it damages road surfaces;

(2) Motor vehicles with a rubber traction belt caterpillar or flat traction belt caterpillar shall comply with the requirement of the preceding Item;

(3) For pneumatic rubber tyres or solid rubber tyres whose ground-contact section is 25 mm or thicker, the ground-contact pressure shall not exceed 200 kg/cm^2 per cm of the width of the ground-contact section of the tyre. In this case, the "width of the ground-contact section of the tyre" shall mean the maximum width of the section that is actually in contact with the ground;

(4) For caterpillar tracks, the ground-contact pressure shall not exceed 3 kg per cm^2 of the ground-contact area of the caterpillar tracks. In this case, the ground-contact area of the caterpillar tracks shall be a virtual ground-contact area and the value calculated from the following formula (The unit shall be cm^2 and the value shall be an integer.):

(Calculation formula)

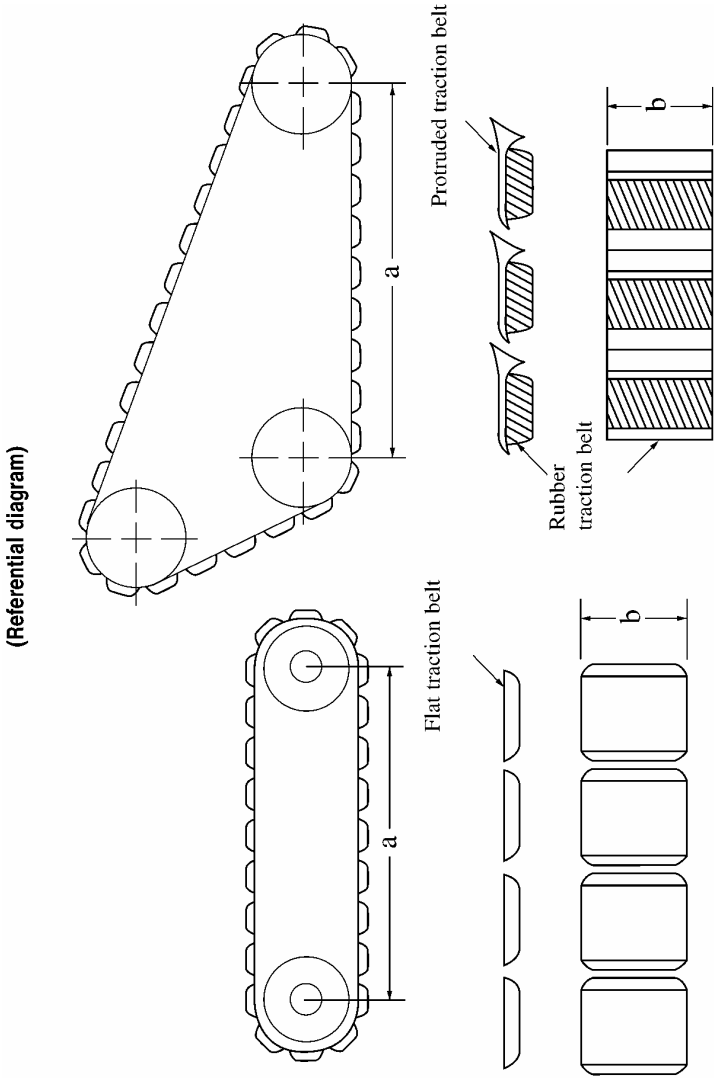
$A = a \bullet b$

where:

A : Virtual ground-contact area

a : Ground-contact length of traction belt

b : Ground-contact width of traction belt



(5) As regards ground-contact sections other than those in the preceding two Items as well as those of sleds, the ground-contact pressure shall not exceed 100 kg per cm of the width of the ground-contact section;

(6) For tractors, the requirements of the preceding three Items shall be met even when coupled with a trailer.

Article 10 (Engine and Power Train System)

The requirements prescribed in the Announcement of Paragraph 1 of Article 8 of the Safety Regulations in connection with the construction, etc. of the engine and power train system shall be the requirements prescribed in each of the following Items.

(1) The engine and power train system shall be constructed and have sufficient performance to fully withstand operations. In this case, those enumerated in the following Items shall be regarded as not complying this requirement:

A. Engines where starting is extremely difficult;

B. Engines emitting considerable abnormal noise or vibration during operation;

C. Engines where smooth rise in speed is not attained when the engine speed is increased from idling;

D. Engines where the lubrication system exhibits considerable oil leakage;

E. Engines where the cooling system exhibits considerable water leakage;

F. Engines where the fan belts, etc. are excessively loose or damaged;

G. Clutches whose operation is not proper or which exhibit excessive slippage, or the dust boot of the release cylinder is damaged;

H. Transmissions whose control mechanism exhibits excessive play;

I. Power train systems whose connections exhibit looseness;

J. Power train systems which exhibit considerable fluid or oil leakage;

K. Splines of propeller shafts, universal joints or centre bearings which exhibit excessive play;

L. Splines of drive shafts, universal joints or centre bearings which exhibit excessive play;

M. Propeller shafts or drive shafts which are damaged;

N. Universal joints whose bolts and nuts are missing or exhibit damage;

O. Universal joints whose dust boots exhibit damage or where the direction of the yoke is not correct;

P. Power train systems whose sprockets are damaged, whose mounting are loose or whose chains exhibit excessive looseness;

Q. Motor vehicles which do not comply with the requirements of Attachment 95 “Technical Standard for Running Performance of Motor Vehicles”;

R. Motor vehicles which do not comply with the requirements of Attachment 96 “Technical Standard for Running Performance of Coupled Motor Vehicles.”

(2) The rotational speed of the propeller shaft at the maximum speed of a motor vehicle shall be 75% or less of the critical rotational speed of the propeller shaft concerned.

2. The requirements prescribed in the Announcement of Paragraph 5 of Article 8 of the Safety Regulations in connection with the speed limiting performance, etc. of the speed limitation device shall be the requirements prescribed in Attachment 1 “Technical Standard for Speed Limitation Devices for Large-Sized Trucks.”

Article 11 (Running System)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 9 of the Safety Regulations in connection with the strength, etc. of the running system of a motor vehicle shall be the requirements prescribed in Attachment 2 “Technical Standard for Light-Alloy Disc Wheels” as well as the requirements prescribed in each of the following Paragraphs.

2. The running system of a motor vehicle shall be secure to ensure safe operation. In this case, each of the following Items shall be regarded as not complying with this requirement.

(1) Hub bolts, spindle nuts, clip bolts and nuts which exhibit looseness or omission, or where cotter pins are missing.

(2) Wheel bearings which exhibit considerable play or damage.

(3) Axles which exhibit damage.

(4) Rims or side rings which exhibit damage.

(5) Side rings which are not fitted completely into the rims.

(6) Wheels which exhibit considerable runout.

(7) Wheels which will not rotate smoothly.

3. The requirements prescribed in the Announcement of Paragraph 2 of Article 9 of the Safety Regulations in connection with the strength, anti-slip performance, etc. of pneumatic rubber tyres of a motor vehicle shall be the requirements prescribed in each of the following Items.

(1) Motor vehicles (except motor cycles with or without sidecar) used exclusively for carriage of passengers with a passenger capacity of less than 10 persons and trailers with a gross vehicle weight of 3.5 tons or less shall comply with the requirements prescribed in Attachment 3 "Technical Standard for Pneumatic Tyres of Passenger Motor Vehicles." However, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, "1.5%" appearing in the provision of Paragraph 3–1–5–4 of Attachment 3 "Technical Standard for Pneumatic Tyres of Passenger Motor Vehicles" shall read as "1.0%." Furthermore, the provision of Paragraph 2–2–5 of Attached Sheet 4 shall not apply.

(2) Motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or more, motor vehicles used for the transport of goods and trailers with a gross vehicle weight exceeding 3.5 tons shall comply with the requirements prescribed in Attachment 4 "Technical Standard for Pneumatic Tyres of Trucks, Buses and Trailers." However, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act,

"1.5%" appearing in the provision of Paragraph 3–1–5–3–3 of Attachment 4 "Technical Standard for Pneumatic Tyres of Trucks, Buses and Trailers" shall read as "1.0%," and "5%" appearing in the provision of Paragraph 3–1–4–2 shall read as "4%." Furthermore, the provision of Paragraph 2–2–2 of Attached Sheet 4 shall not apply.

(3) Motor Cycles with or without sidecar and three-wheeled motor vehicles shall comply with the requirements prescribed in Attachment 5 "Technical Standard for Pneumatic Tyres of Motor Cycles." However, "Dmin = d + (2H × a) or H – 6 mm (H = less than 70 mm), D – 7 mm (H = 70 mm or more)" appearing in the provision of Paragraph 3–1–5–2 of Attachment 5 "Technical Standard for Pneumatic Tyres of Motor Cycles" shall read as "Dmin = d + (2H × a)." Furthermore, the provision of Paragraphs 2–7 and 2–8 shall not apply.

Article 12 (Control System)

The requirements prescribed in the Announcement of Article 10 of the Safety Regulations in connection with the arrangement, identification marks, etc. of the control system shall be the requirements prescribed in each of the following Items.

(1) The devices enumerated in each Item of Article 10 of the Safety Regulations, which are necessary for operating a motor vehicle, shall be located within 500 mm to the right and left of the centre of the steering wheel and be constructed so that the driver in his normal driving position may easily operate them. In this case, the distance concerning the arrangement in relation to the centre of the steering wheel shall be the length of the perpendicular drawn from the centre of each control device to the vertical plane which is parallel to the motor vehicle longitudinal centre line including the centre of the steering wheel (the centre of the driver's seat in the case of a lever-type steering system). The centre of the transmission shall be the centre point of the grip of the shift lever located at the centre in the neutral position. The centre of a movable defroster control device, such as a lever-type control device, shall be the centre position of the movable range.

(2) The devices (except the starter switch, accelerator, clutch and control device of the transmission) enumerated in Item (1) of Article 10 of the Safety Regulations as well as the devices (except the control device of the direction indicator lamps) enumerated in Item (3) of the same Article shall have an identification mark thereon or nearby so that the driver in his seat may easily recognize the device concerned.

(3) The control device of the transmission shall have an identification mark thereon or nearby so that the driver in his seat may easily recognize the operating position of each gear.

(4) The control device of the direction indicator lamp shall have an identification mark thereon or nearby so that the driver in his seat may easily recognize the operating position of each direction indicated by the direction indicator lamp concerned.

(5) "An identification mark thereon or nearby so that the driver in his seat may easily recognize" mentioned in Items (2) through (4) shall mean an indication which enables the driver seated in his seat to easily distinguish the device concerned or the operating position thereof by means of characters, figures or marks provided at a position where the driver can see without assuming a strained posture. In this case, those identification codes which are posted in the Japanese Industrial Standards (hereinafter referred to as the "JIS") D0032 "Road vehicles – Symbols for controls, indicators and tell-tales" or ISO (International Organization for Standardization) 2575 "Road vehicles – Symbols for controls, indicators and tell-tales" shall be examples of such indications.

Article 13 (Steering System)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 11 of the Safety Regulations in connection with the strength, operating performance, etc. of the steering system of a motor vehicle shall be the requirements prescribed in each of the following Items.

(1) The steering system of a motor vehicle shall be secure to ensure safe operation. In this case, each of the following Items shall be regarded as not complying with this requirement.

A. Steering links, such as the knuckle arms, tie-rods, drag links and sector arms, which exhibit damage or which are liable to be damaged by contacting with other sections.

B. Mountings of each section specified in the preceding Item which exhibit considerable play or where cotter pins are missing.

C. Steering wheels which exhibit excessive play or whose mountings exhibit looseness.

D. Steering forks which exhibit damage.

E. Gear boxes which exhibit excessive oil leakage, which are liable to exhibit excessive oil leakage by contacting with other sections or whose mountings are loose.

F. Dust boots of steering systems which exhibit damage or which are liable to be damaged by contacting with other sections.

G. Power steering systems which exhibit excessive oil leakage, which are liable to exhibit excessive oil leakage by contacting with other sections or whose mountings are loose.

H. Belts of power steering systems which exhibit excessive looseness or damage, or which are liable to be damaged by contacting with other sections.

I. Motor vehicles with four or more wheels whose side slippage of the steering tyres exceeds 5 mm per 1 m driving when subjected to the measurement on a sideslip tester. However, this provision shall not apply to cases where the side slippage is within a range of the side slippage specified by the motor vehicle manufacturer, etc. when the steering tyres of the motor vehicle with four or more wheels are subjected to the measurement on a sideslip tester.

(2) The steering system shall be operated easily and securely by the driver in his normal position. Motor vehicles (except motor vehicles with a maximum speed of less than 20 km/h) which are not equipped with power steering and in which the total sum of wheel loads of the steering tyres is 4,700 kg or more shall be regarded as not complying with this requirement.

(3) No part of the steering system shall come in contact, when steered, with any other part of the motor vehicle, such as the frame and fender.

(4) There shall be no great difference between the left and right as respects the relationship between the turning angle of the steering wheel and the steering angle of the steering tyres.

(5) There shall be no considerable difference between the left and right as respects the steering force of the steering wheel.

(6) The steering joints exposed to the vehicle compartment or similar

devices shall be constructed so that clothes of the occupant, etc. may not be caught by these devices.

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 11 of the Safety Regulations in connection with the driver protection performance of the steering system shall be the requirements prescribed in Attachment 6 “Technical Standard for Impact Energy Absorbing Steering.”

Article 14 (Locking Device)

1. The requirements prescribed in the Announcement of Paragraph 2 of Article 11–2 of the Safety Regulations in connection with the construction, locking performance, etc. of the locking device shall be the requirements prescribed in Attachment 7 “Technical Standard for Locking Devices for Four-Wheeled Motor Vehicles, etc.” in the case of locking devices mounted on motor vehicles used exclusively for carriage of passengers (except handle bar type steering system-equipped motor cycles with or without sidecar and three-wheeled motor vehicles (hereinafter referred to as the “motor cycles, etc.”), motor vehicles with a passenger capacity of 11 persons or more, and trailers) and motor vehicles used for the transport of goods (except motor vehicles with a gross vehicle weight exceeding 3.5 tons and trailers); Attachment 8 “Technical Standard for Locking Devices for Motor Cycles, etc.” in the case of locking devices mounted on motor cycles, etc.; and the requirements prescribed in each of the following Items in the case of motor vehicles used exclusively for carriage of passengers with a passenger capacity of 11 persons or more and motor vehicles used for the transport of goods with a gross vehicle weight exceeding 3.5 tons.

(1) The locking device shall be so constructed that, when operated, it can positively prevent the function of the system provided with the locking system.

(2) The locking device shall be secure and constructed so that its function may not be easily damaged or its function may not be disabled.

(3) The locking device shall be such one that, when operated, it can prevent the activation of the starter. However, this provision shall not apply to mini-sized motor vehicles with caterpillar tracks and sleds.

(4) The locking device shall not be activated by vibration, shocks, etc. while running.

2. The requirements prescribed in the Announcement of Paragraph 3 of

Article 11–2 of the Safety Regulations in connection with the construction, locking performance, etc. of the immobilizer shall be the requirements prescribed in Attachment 9 “Technical Standard for Immobilizer.”

Article 15 (Brake System)

1. The requirements prescribed in the Announcement of Paragraph 1, Article 12 of the Safety Regulations in connection with the braking performance of decelerating and stopping the running motor vehicle and of holding the stopped motor vehicle standstill, etc. shall be the requirements enumerated in the next Paragraph through Paragraph 7.

2. Motor vehicles (except motor vehicles enumerated in the next Paragraph through Paragraph 6) shall be provided with two or more independently operating brake systems which comply with the requirements prescribed in Attachment 10 “Technical Standard for Brake Systems of Trucks and Buses,” Attachment 11 “Technical Standard for Anti-Lock Brake System” and the following requirements. In this case, the brake system which is constructed so that those sections from the brake pedal or the brake lever to the wheel cylinder or the brake chamber (up to the camshafts, etc. which directly actuate the brake shoes in the case of such systems which do not incorporate any wheel cylinders or brake chambers) are independent for each system shall be regarded as the “two or more independently operating brake systems.”

(1) The brake system shall be durable enough to fully withstand the operation and be mounted so as not to be damaged by vibration, impact, contact, etc. Furthermore, the brake system shall not be such one enumerated in the following Items.

A. Pipes or brake cables (excluding protective materials in cases where such protective materials are wound around the pipes or brake cables to protect them) of the brake system which are in contact with the drag links, propeller shafts, exhaust pipes, tyres, etc. or those which exhibit traces caused by contacting them during running;

B. Pipes or joints of the brake system which exhibit fluid leakage or air leakage, or which are likely to cause fluid leakage or air leakage by contacting other parts;

C. Brake rods or brake cables whose joints exhibit looseness;

D. Brake hoses which are attached in an excessively twisted state;

E. Brake pedals which have no free travel or brake pedals where there is no gap relative to the floor surface;

F. Brake levers which have no free travel or working travel;

G. Brake levers whose ratchets will not operate positively;

H. Other than those enumerated in Items A. through G., brake systems which are not durable or which have not been mounted so as not to be damaged by vibration, impact, contact, etc.

(2) The service brake system (which means the brake system commonly used for braking the vehicle being in operation; the same applies hereinafter) shall work on all wheels. In this case, the construction that the braking force-operating surface of the brake disc, brake drum, etc. is connected to the wheel by means of rigid parts, such as bolts, shafts and gears, shall be regarded as an example of "work on wheels."

(3) The brake fluid of the service brake system shall not deteriorate the function of the service brake system concerned by corroding the brake piping and forming bubbles due to heat from the engine, etc.

(4) The service brake system operated by fluid pressure shall have any of the following construction that the brake fluid level can be checked readily without opening the lid of the reservoir tank.

A. Construction where the reservoir tank of the brake fluid is transparent or semitransparent;

B. Construction equipped with a gauge by which the level of brake fluid can be checked;

C. Construction equipped with a fluid level drop warning device which gives a warning to the driver in his seat in the event that the brake fluid level drops;

D. Other than those enumerated in Items A. through C., construction that the brake fluid level can be checked readily without opening the lid of the reservoir tank.

(5) The service brake system for motor vehicles used exclusively for carriage of passengers with a gross vehicle weight exceeding 12 tons

(except motor vehicles for passenger carrying business (which mean motor vehicles used for passenger carrying business; hereinafter the same) running regularly along fixed routes other than those related to the national expressways, etc. (which mean the roads provided for in Paragraph 1, Article 4 of the National Expressway Law (Law No. 79 of 1957) and the fully-access-controlled highways provided for in Paragraph 1, Article 48–4 of the Road Law (Law No. 180 of 1952; the same applies hereinafter))) and for tractors with a gross vehicle weight exceeding 7 tons shall be provided with a device capable of preventing efficiently the locking of the rotation of wheels which affects significantly the braking of the vehicle being in operation.

3. Motor vehicles used exclusively for carriage of passengers with a passenger capacity of less than 10 persons (except motor vehicles in the next Paragraph through Paragraph 6) shall be provided with two or more independently operating brake systems which comply with the requirements prescribed in Attachment 12 "Technical Standard for Passenger Motor Vehicle Brake System." In this case, the provision of the latter portion of the preceding Paragraph shall apply mutatis mutandis. However, in cases other than those cases where the evaluation is made pursuant to the provision of Paragraph 3 of Article 75 of the Act or cases where the evaluation is made pursuant to the provision of Paragraph 3 of Article 75–2 of the Act (hereinafter referred to as the "cases other than the case of type designation, etc."), the requirement of "must satisfy the requirements in Paragraph 3–1 (A)" appearing in Item (a), Paragraph 5–2 of Annex 3 "Distribution of Braking Among the Axles of Vehicles" of Attachment 12 "Technical Standard for Passenger Motor Vehicle Braking System" shall read as "must satisfy the requirements of Paragraph 3–1 (A), or the curve of the rear axle must be below the straight line $z = 0.9k$ for all braking rates from 0.15 to 0.8 (see Fig. 2)," and the phrase "25% above the reference level" appearing in Paragraphs 2–2–2–2 and 2–3–2–2 of Annex 7 "Tests with Regard to Electromagnetic Compatibility of Braking System of Passenger Motor Vehicles" of the same Attachment shall read as "80% of the reference level."

4. Motor cycles with or without sidecar (except motor vehicles with a maximum speed of 25 km/h or less and motor vehicles of Paragraph 6) shall be provided with two or more brake systems complying with the requirements prescribed in Attachment 13 "Technical Standard of Two-Wheeled Vehicle Brake System" and the following requirements.

(1) The brake system shall comply with the requirements of Items (1) and (3) of Paragraph 2.

(2) The service brake system shall have two independent control devices

and shall work on the wheels including the front one by means of one of the control devices and on the wheels including the rear one by means of the other control device. However, this provision shall not apply to motor cycles with sidecar of Item B., Item (4) of Article 2, that have the service brake system in which one control device works on all wheels. In this case, the provision of the latter portion of Item (2) of Paragraph 2 shall apply mutatis mutandis.

(3) The service brake system operated by fluid pressure shall have any of the following construction that the brake fluid level can be checked readily without opening the lid of the reservoir tank.

A. Construction where the reservoir tank of the brake fluid is transparent or semitransparent;

B. Construction equipped with a gauge by which the level of brake fluid can be checked;

C. Construction equipped with a fluid level drop warning device which gives a warning to the driver in his seat in the event that the brake fluid level drops;

D. Other than those enumerated in Items A. through C., construction that the brake fluid level can be checked readily without opening the lid of the reservoir tank.

5. Large-sized special motor vehicles, small-sized special motor vehicles for agricultural use, mini-sized motor vehicles with caterpillar tracks and sleds and motor vehicles with a maximum speed of 25 km/h or less (except motor vehicles of the next Paragraph) shall be provided with two or more independently operating brake systems which comply with the requirements prescribed in Attachment 14 “Technical Standard for Brake Fluid Leakage Warning Devices” and the following requirements. In this case, the provision of the latter portion of Paragraph 2 shall apply mutatis mutandis. However, large-sized special motor vehicles with a maximum speed of less than 35 km/h, small-sized special motor vehicles for agricultural use and motor vehicles with a maximum speed of less than 25 km/h may have only one brake system, and this brake system need not comply with the requirements of Items (3), (5), (8) and (10).

(1) The brake system shall comply with the requirements of Items (1) and (3) of Paragraph 2.

(2) The brake system shall have a construction and functions which

operate without interfering with the steering performance.

(3) The service brake system shall work on at least half the number of wheels including the rear ones. In this case, the provision of the latter portion of Item (2), Paragraph 2 shall apply mutatis mutandis.

(4) The service brake system shall have a braking capacity specified in the following Table according to the maximum speed of the motor vehicle concerned on a dry, level paved road. In this case, the force to be applied by the driver shall not exceed 900 N for the foot-operated type and 300 N for the hand-operated type.

Maximum speed (km/h)	Initial braking speed (km/h)	Stopping distance (m)
80 or more	50	22 or less
35 or more, but less than 80	35	14 or less
20 or more, but less than 35	20	5 or less
Less than 20	Maximum speed	5 or less

(5) The service brake system shall be constructed to work on two or more wheels when the brake piping (which refers to, of the brake piping, the section used as a passage of oil or air for braking leading only to one wheel, except the section for common use of two or more wheels) is partly damaged. However, this provision shall not apply to motor vehicles provided with an emergency brake system (which means a brake system capable of working on two or more wheels of the vehicle being in operation when the service brake system fails).

(6) The brake system (one brake system in the case of motor vehicles provided with two or more brake systems) shall be capable of holding an unloaded vehicle standstill on a dry paved road with a gradient of 1/5 by a mechanical action when the driver is not in his seat. In this case, the force to be applied by the driver shall not exceed 900 N for the foot-operated type and 500 N for the hand-operated type. The brake system which utilizes hydraulic pressure, pneumatic pressure or electrical operations, even after the motor vehicle comes to the stationary state by applying the brake system concerned, shall be regarded as the brake system not complying with this requirement.

(7) In the case of tractors, the requirements of the preceding Item shall be

complied with when unloaded trailers are coupled with them.

(8) The service brake system operated by fluid pressure shall be provided with a buzzer or other warning device to give warning to the driver in his seat when the braking effect is affected by leakage of brake fluid from the brake piping (which refers to, of the brake piping, the section used as a passage of oil or air for braking leading only to one wheel, except the section for common use of two or more wheels). However, this provision shall not apply to motor vehicles provided for in the proviso in Item (5).

(9) The service brake system operated by pneumatic or vacuum pressure shall have a capacity of accumulating a sufficient pressure for braking and shall be provided with a buzzer or other warning device to give warning to the driver in his seat when the braking effect is liable to be affected by pressure change. However, this provision shall not apply to the service brake system constructed to comply with the requirements of Item (4) even when the pressure is reduced to zero.

(10) The service brake system for tractors with a gross vehicle weight exceeding 7 tons shall be provided with a device capable of preventing efficiently the locking of the rotation of wheels which affects significantly the braking of the vehicle being in operation, and with a buzzer or other warning device to give warning to the driver in his seat when the device concerned becomes liable to fail to operate normally.

6. Any trailer shall be provided with two or more brake systems which comply with the requirements prescribed in Attachment 11 “Technical Standard for Anti-Lock Brake System,” Attachment 15 “Technical Standard for Brake System for Trailers” and the following requirements.

(1) The brake system shall comply with the requirements of Items (1) through (3) of Paragraph 2.

(2) The service brake system shall be constructed to operate in interlocking with that of the tractor.

(3) The service brake system shall be capable of adjusting automatically the clearances of rotating and sliding parts. However, this provision shall not apply to trailers with a gross vehicle weight of 3.5 tons or less and trailers drawn by tractors with a maximum speed of 25 km/h or less.

7. Notwithstanding the requirements prescribed in Item (2) of the preceding

Paragraph, the service brake system for the following trailers may be constructed to operate when the trailer approaches the tractor drawing it, provided that the service brake system concerned complies with the requirements prescribed in Items (1) through (3) of Paragraph 2. In this case, the requirements prescribed in Attachment 15 "Technical Standard for Brake System for Trailers" shall not apply.

(1) Trailers (except semi-trailers) with a gross vehicle weight of 3.5 tons or less;

(2) Trailers drawn by tractors with a maximum speed of 25 km/h or less;

(3) Trailers drawn by large-sized special motor vehicles with a maximum speed of less than 35 km/h and small-sized special motor vehicles for agricultural use, which have a gross vehicle weight of less than 2 tons (except those enumerated in the two preceding Items).

Article 16 (Brake Systems for Tractors and Trailers)

1. The requirements prescribed in the Announcement of Article 13 of the Safety Regulations in connection with the braking performance under the coupled condition of the tractor and trailer shall be the requirements prescribed in the next Paragraph through Paragraph 8.

2. The brake systems for tractors and trailers shall comply with the requirements of Item (3), Paragraph 2 and Item (2), Paragraph 5 of the preceding Article as well as the following requirements when the tractor and trailer are in the coupled state.

(1) In cases where trailers are drawn by motor vehicles of Paragraph 2 or 3 of the preceding Article, the service brake system operated by pneumatic pressure, vacuum pressure or pressure of accumulated fluid shall have a capacity of accumulating a sufficient pressure for braking and shall be provided with a warning device to give warning to the driver in his seat when the braking effect is liable to be affected significantly by pressure change.

(2) In cases where trailers are drawn by motor vehicles of Paragraph 5 of the preceding Article, the requirements of Item (9) of the same Paragraph shall be complied with.

3. Trailers enumerated in Items (2) and (3), Paragraph 7 of the preceding Article need not be provided with a service brake system in cases where the

requirements of Items (2) and (4), Paragraph 5 of the said Article are complied with by only the service brake system of the tractor coupled therewith.

4. The brake systems for tractors and trailers (except those for trailers which are constructed to operate when the trailer approaches the tractor drawing it (hereinafter referred to as the "inertial brake system")) shall be constructed to stop the tractor and trailer, respectively, when they are detached during operation. However, this provision shall not apply to the brake system for trailers (except semi-trailers) with a gross vehicle weight of 1.5 tons or less and with one axle, which are capable of preventing the coupling device from coming into contact with the ground when detached and of keeping the trailer coupled with the tractor.

5. The service brake systems for tractors (except large-sized special motor vehicles with a maximum speed of less than 35 km/h, small-sized special motor vehicles for agricultural use and motor vehicles with a maximum speed of 25 km/h or less) and trailers (except motor vehicles provided with an inertial brake system) shall comply with the following requirements when the tractor and trailer are in the coupled state:

(1) In cases where trailers are drawn by motor vehicles of Paragraph 2 or 3 of the preceding Article, the service brake system operated by fluid pressure shall be so constructed that the level of brake fluid can be checked readily and shall be provided with a warning device to give warning to the driver in his seat when the braking effect is affected by leakage of brake fluid from the brake piping;

(2) In cases where trailers are drawn by motor vehicles of Paragraph 4 of the preceding Article, the requirements of Item (3) of the same Paragraph;

(3) In cases where trailers are drawn by motor vehicles of Paragraph 5 of the preceding Article, the requirements of Items (5) and (8) of the same Paragraph.

6. The service brake systems (except the inertial brake system) for tractors and trailers shall be constructed so that the service brake system of the trailer operates immediately after the operation of the service brake system of the tractor when the tractor and trailer are in the coupled state.

7. The service brake systems for tractors and trailers with a gross vehicle weight exceeding 7 tons (except trailers with a gross vehicle weight of 10 tons or less and trailers drawn by large-sized special motor vehicles with a

maximum speed of less than 35 km/h, small-sized special motor vehicles for agricultural use or motor vehicles with a maximum speed of 25 km/h or less) shall comply with the following requirements when the tractor and trailer are in the coupled state:

(1) In cases where trailers are drawn by motor vehicles of Paragraph 2 of the preceding Article, the requirements of Item (5) of the same Paragraph; and in the case of motor vehicles provided with a device capable of preventing efficiently the locking of the rotation of wheels which affects significantly the braking of the vehicle being in operation, the motor vehicles concerned shall be provided with a warning device to give warning to the driver in his seat when the device concerned becomes liable to fail to operate normally;

(2) In cases where trailers are drawn by motor vehicles of Paragraph 5 of the preceding Article, the requirements of Item (10) of the same Paragraph.

8. Trailers with a gross vehicle weight of 750 kg or less drawn by motor vehicles of Paragraph 3 of the preceding Article need not be provided with a service brake system in cases where the requirements prescribed in Paragraph 2–1–2 of Annex 1 of Attachment 12 "Technical Standard for Passenger Motor Vehicle Braking System" as well as the requirements prescribed in Item (2), Paragraph 5 of the preceding Article are complied with by only the service brake system of the tractor coupled therewith.

Article 17 (Suspension System)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 14 of the Safety Regulations in connection with the strength, suspension performance, etc. of the suspension system, such as springs, shall be the requirements prescribed in the following Paragraph.

2. The suspension system, such as springs, shall have sufficient capacity to absorb shocks from the ground and ensure safe operation. In this case,

(1) Springs which exhibit damage or spring leaves which exhibit excessive displacement of leaves or springs in which there is a considerable difference in deflection between the right and left springs.

(2) Centre bolts, U-bolts, clip bolts and nuts or clip bands which exhibit damage, missing or looseness.

(3) Brackets or sliding seats which exhibit damage, or whose mountings exhibit looseness.

(4) Arms, etc., such as suspension arms; rods, etc., such as torque rods, or stabilizers, etc. which exhibit damage, or whose mountings exhibit excessive play, or which are liable to be damaged by contacting with other sections.

(5) Dust boots of arms, etc., such as suspension arms, which exhibit damage or which are liable to be damaged by contacting with other sections.

(6) Air spring bellows, etc. which exhibit damage or air leakage, or which are liable to be damaged or exhibit air leakage by contacting with other sections, or air springs in which there is a considerable difference in height between the right and left air springs.

(7) Spring ends which are detached from their brackets or likely to detach therefrom.

(8) Struts which exhibit damage, or which are liable to be damaged by contacting with other sections, or strut mountings which exhibit looseness.

(9) Shock absorbers which exhibit excessive fluid leakage, gas leakage or damage, or shock absorber mountings which exhibit looseness, or which are liable to exhibit excessive fluid leakage, gas leakage or damage by contacting with other sections.

(10) Oleo systems which exhibit excessive fluid leakage or which are liable to exhibit excessive fluid leakage by contacting with other sections.

Article 18 (Fuel System)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 15 of the Safety Regulations in connection with the strength, construction, installation method, etc. of the fuel system of motor vehicles fueled by gasoline, kerosene, light oil, alcohol or any other inflammable liquid shall be the requirements prescribed in each of the following Items.

(1) The fuel tank and its piping shall be secure and fixed so that they may not be damaged by vibrations, impacts, etc. In this case, those enumerated below shall be regarded as not complying with this

requirement.

A. Pipes (excluding protective materials in cases where such protective materials are wound around the pipes) which exhibit traces caused by contacting with other sections during running.

B. Fuel tanks, pipes or joints which exhibit fuel leakage or which are liable to exhibit fuel leakage by contacting with other sections.

(2) The location of the fuel tank shall comply with the following requirements, except motor vehicles provided for in the next Paragraph.

A. No fuel tank shall be located in the engine compartment.

B. No fuel tank shall be located in such places where it is likely to receive direct damage in the event of head-on collision or collision from the rear.

(3) The piping of the fuel line shall comply with the following requirements.

A. No connections or valves of the fuel line shall be located in close proximity to those systems which emit excessive heat, such as exhaust pipes or silencers. This, however, does not apply if suitable heat preventive devices are mounted to interrupt heat transmission.

B. The fuel lines shall be such ones whose weatherability and heat resistant properties have been proved sufficiently by the tests.

C. No fuel line shall be exposed directly to the interior of the vehicle compartment.

(4) Plastic fuel tanks shall comply with the following requirements, except motor vehicles provided for in the next Item.

A. Plastic fuel tanks shall be installed by a method which can comply with dimensional changes.

B. Plastic fuel tanks shall be installed so that temperature rises due to direct sunrays or heated parts of the engine, etc., can be kept to a minimum.

C. Plastic fuel tanks shall be constructed so that they may not hit the road surface if the vehicle overturns.

D. The plastic fuel tank shall be such a tank whose weatherability and heat resistant properties have been proved sufficiently by the tests.

(5) The plastic fuel tank of motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less (except motor cycles with or without sidecar) shall comply with the requirements prescribed in Attachment 16 "Technical Standard for Plastic Fuel Tanks for Passenger Motor Vehicles."

(6) The filler and gas vent of a fuel tank shall not leak fuel when the vehicle is shaken.

(7) The filler and gas vent of a fuel tank shall not have their openings facing the direction of the exhaust pipe. They shall be located at least 300 mm away from the opening of exhaust pipe.

(8) The filler and gas vent of a fuel tank shall be located at least 200 mm away from any exposed electric terminals or switches;

(9) The filler and gas vent of a fuel tank shall not open to the inside of any vehicle compartment with seats or standing space (except the driver's compartment separated by a partition).

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 15 of the Safety Regulations in connection with the performance, etc. of the fuel tank and pipes of ordinary-sized motor vehicles, small-sized motor vehicles or mini-sized motor vehicles fueled by gasoline, kerosene, light oil, alcohol or any other inflammable liquid (except motor vehicles with a passenger capacity of 11 persons or more, motor vehicles with a gross vehicle weight exceeding 2.8 tons, motor cycles with or without sidecar, and mini-sized motor vehicles with caterpillar tracks and sleds) shall be the requirements prescribed in Attachment 17 "Technical Standard for Fuel Leakage in Collisions, etc."

Article 19 (Fuel System of Motor Vehicles Whose Fuel Is Producer Gas)

The requirements prescribed in the Announcement of Article 16 of the Safety Regulations in connection with the strength, installation method, etc. of the fuel system of motor vehicles whose fuel is producer gas shall be the requirements prescribed in each of the following Items.

(1) The gas producer and its piping shall be secure and be mounted in such a way that they may not be damaged by vibration or impact, etc.

(2) The part of the vehicle body which faces the combustion chamber of the gas producer shall be covered with a suitable heat insulator.

(3) The distance between a gas producer and heat insulator shall be 50 mm or more.

(4) No hot parts of the piping shall be in contact with a combustible part of the body.

(5) If loaded goods are likely to come in contact with the gas producer, there shall be a suitable partition provided between the gas producer and the goods-loading accommodation.

Article 20 (Fuel System of Motor Vehicles Whose Fuel Is High-Pressure Gas)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 17 of the Safety Regulations in connection with the strength, installation method, etc. of the fuel system of motor vehicles whose fuel is high-pressure gas (except motor vehicles of Paragraph 3) shall be the requirements prescribed in each of the following Items.

(1) The gas container shall be constructed and have the performance in Articles 7 and 17 of the Safety Regulations for Containers (Ministry of International Trade and Industry Ordinance No. 50 of 1966). In this case, those which can be confirmed by any of the following methods shall be regarded as complying with this requirement.

A. High-pressure gas container which has not undergone the container re-inspection

It shall be confirmed whether the container concerned bears a valid stamping or a mark by the container inspection provided for in Article 45 of the High-Pressure Container Control Act (Law No. 204 of 1951) or by Article 49–25 (including cases where it applies mutatis mutandis in Paragraph 2 of Article 49–33 of the said Act). In this case, the container for the fuel system of compressed natural gas-fueled motor vehicles (referring to, of gas containers of motor vehicles fueled by compressed natural gas (referring to

high-pressure gas containing methane gas as main component. Hereinafter the same), the container for the fuel system of compressed natural gas-fueled motor vehicles provided for in Item (10) of Article 2 of the Safety Regulations for Containers) bears a mark near the fuel filling port according to Article 46 of the said Act. Hence, confirmation can be made by this mark.

B. High-pressure gas container which has undergone the container re-inspection

It shall be confirmed whether the container concerned bears a valid stamping or a mark according to Article 49 of the said Act. In the case of the container for the fuel system of compressed natural gas-fueled motor vehicles, confirmation shall be made as to whether a valid mark is put near the fuel filling port according to the said Article.

(2) The gas container and the conduit pipes for liquefied petroleum gas (which means the liquefied gas of the chief ingredient being propane or butane gas; hereinafter the same) shall be constructed so that gas may be filled without unfixing the container.

(3) The gas container, except those located outside the vehicle body, shall be located where an airtight partition wall against the vehicle compartment with seats or standing space is provided and also it is properly ventilated to the outside of the vehicle body.

(4) The gas containers and conduit pipes shall be securely fixed so that they may not move or be damaged. Any part thereof which is likely to be damaged shall be protected by suitable covering. Moreover, in the case of a gas container for soluble acetylene gas, the container shall be mounted so that the gascock opens upwards and that the original state of porous material inside the container may not be changed.

(5) If the gas container and conduit pipes are located in a position where they are likely to be exposed to considerable heat from the exhaust pipe, silencer, etc., there shall be a suitable heat-prevention device. In this case, those which are exposed to direct sunrays shall be covered with a suitable sunshade or the like.

(6) Conduit pipes shall be of fiberglass-reinforced plastics or annealed steel or copper (fiberglass-reinforced plastics or annealed steel for high-pressure gases containing acetylene gas). However, those used on the low-pressure side and for liquefied petroleum gas may be of

oil-proof rubber.

(7) The conduit pipe (except oil-proof rubber hoses), each end of which is fixed, shall be provided with flexible section in the middle and also by held by a stay every meter or less.

(8) For a fuel system using a high pressure gas containing acetylene gas, no copper material shall be used on any part which comes into contact with the gas in the fuel system.

(9) The high-pressure pipe line shall be able to withstand the pressure of 1.5 times of the gas filling pressure in the gas container. In this case, the “high-pressure pipe line” refers to a pipe from the gas container to the first pressure-reducing valve.

(10) The main stop valve shall be located in a place easily operated by the driver, and a gas-filling valve near the gas filling inlet port.

(11) The fuel system of a motor vehicle whose fuel is high pressure gas other than liquefied petroleum gas shall be provided with a pressure gauge which indicates the inlet port pressure of the first pressure-reducing valve.

(12) The fuel system of a motor vehicle whose fuel is compressed natural gas shall be provided with a safety device capable of efficiently preventing significant pressure rise on the low-pressure side. However, this provision shall not apply to such a fuel system in which the low-pressure side of the final pressure-reducing valve is open to the air.

(13) Safety devices shall be mounted so that the gas discharged may not leak into the vehicle compartments.

(14) The fuel system of a motor vehicle whose fuel is high pressure gas containing acetylene gas shall be provided, between the final pressure-reducing valve and the intake manifold of the engine, with a back-fire prevention device.

(15) Motor vehicles used exclusively for carriage of passengers fueled by liquefied petroleum gas or compressed natural gas shall be provided with a device in the route of the high-pressure piping, which will automatically interrupt the supply of fuel when the engine stops.

(16) Of motor vehicles used exclusively for carriage of passengers fueled by liquefied petroleum gas or compressed natural gas, for those in

which a gas container is mounted in the luggage compartment and the gas-filling valve is located in the luggage compartment, the gas filling port lid shall be so constructed that it cannot be opened, unless the lid of the luggage compartment is opened.

(17) Motor vehicles used exclusively for carriage of passengers fueled by liquefied petroleum gas or compressed natural gas shall be so constructed as to comply with the requirements prescribed in Attachment 18 "Technical Standard for Installation of Fuel Gas Container for Motor Vehicles" and Attachment 19 "Technical Standard for Fuel Gas Airtightness and Ventilation for Motor Vehicles."

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 17 of the Safety Regulations in connection with the strength, installation method, etc. of the fuel system of motor vehicles whose fuel is liquefied petroleum gas shall be the requirements prescribed in each Item of the preceding Paragraph as well as the requirements prescribed in Items (7) and (8), Paragraph 1 of Article 18. In this case, the phrase "The filler and gas vent of a fuel tank" shall read as "the filling port of a gas container."

3. The requirements prescribed in the Announcement of Paragraph 1 of Article 17 of the Safety Regulations in connection with the strength, construction, installation method, etc. of fuel systems of motor vehicles fueled by compressed hydrogen gas (except motor cycles with or without sidecar) shall be the requirements prescribed in each of the following Items:

(1) Gas containers shall have construction and performance prescribed in Articles 7 and 17 of the Safety Regulations for Containers. In this case, those which can be confirmed by any of the following methods shall be regarded as complying with this requirement:

A. High-pressure gas containers which have never undergone re-inspection of container

It shall be confirmed that the container bears a valid stamping or a mark according to Article 45 of the High-Pressure Gas Safety Act or Article 49–25 (including cases where application is made mutatis mutandis in Paragraph 2 of Article 49–33 of the said Law).

B. High-pressure gas containers which have undergone re-inspection of container

It shall be confirmed that the container bears a valid stamping or

a mark according to Article 49 of the said Law.

(2) Fuel systems shall comply with the requirements prescribed in Attachment 100 "Technical Standard for Fuel Systems of Motor Vehicles Fueled by Compressed Hydrogen Gas."

4. The requirements prescribed in the Announcement of Paragraph 3 of Article 17 of the Safety Regulations in connection with the performance of preventing fuel leakage, etc. of the gas container, piping, or other devices on the hydrogen gas flow passage of ordinary-sized motor vehicles or small-sized motor vehicles used exclusively for carriage of passengers, or mini-sized motor vehicles, fueled by compressed hydrogen gas (except motor vehicles with a passenger capacity of 11 persons or more, motor vehicles with a gross vehicle weight exceeding 2.8 tons, motor cycles with or without sidecar, and mini-sized motor vehicles with caterpillar tracks and sleds) shall be the requirements prescribed in Attachment 17.

Article 21 (Electrical System)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 17–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the electrical system shall be the requirements prescribed in each of the following Items.

(1) Electrical wiring located inside the vehicle compartment or the place for a gas container with a partition wall, such as the luggage compartment (hereinafter referred to as "the vehicle compartment, etc."), shall be covered with an insulator and fixed to the body.

(2) Electric terminals, switches and other electrical systems which are likely to spark and are located in the vehicle compartment, etc. shall be suitably covered so that they may not be damaged or shorted by occupants or loaded goods and they may not injure occupants and damage loaded goods by electric sparks, etc. In this case, electric terminals and switches located behind the instrument panel or mounted at a closed section under the seats shall be regarded as being suitably covered.

(3) The storage battery shall be fixed so that it may not move or be damaged by vibration, impacts, etc. In this case, the battery in the vehicle compartment, etc. shall be covered with a wooden case or other insulating material. In this case, the phrase "shall be covered with a wooden case or other insulating material" refers to a condition where

the terminal section of the battery (the upper section of the battery box) is covered completely by appropriate insulating material. The side or lower section of the battery need not be covered by insulating material.

(4) The radio wave emitted from the electrical system shall not cause continuous and serious damage to the function of the wireless equipment. In this case, motor vehicles which do not have a radio interference control device, such as high-voltage resistive wire, external resistor, etc. for preventing motor vehicle radio noise, shall be regarded as not complying with this requirement.

(5) The wiring of the electrical system shall be secured with clamps, etc., and shall be suitably protected or routed at a position way so that it is not damaged.

(6) Any terminals, etc. of the electrical system shall be suitably protected or mounted at a safe position so that they are not damaged by loaded goods.

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 17–2 of the Safety Regulations in connection with the performance and construction of protecting the occupants as the one that is unlikely to cause injuries, etc. to the occupants by high voltage of the electrical system of fuel cell vehicles (except motor cycles with or without sidecar) shall be the requirements prescribed in Attachment 101 "Technical Standard for Protection of Occupants Against High Voltage in Fuel Cell Vehicles."

Article 22 (Frame and Body)

1. The requirements prescribed in the Announcement of Item (1), Paragraph 1 of Article 18 of the Safety Regulations in connection with the strength, installation method, etc. of the frame and body shall be the requirements prescribed in each of the following Items.

(1) The frame and body shall be secure so that they may fully withstand vehicle operation.

(2) The body shall be firmly fixed to the frame so that it may not be loosened by vibration, impacts, etc.

2. The requirements prescribed in the Announcement of Item (2), Paragraph 1 of Article 18 of the Safety Regulations in connection with the external shape of the vehicle body and other shape of motor vehicles shall be the

requirements prescribed in each of the following Items.

(1) Motor vehicles used exclusively for carriage of passengers (except motor vehicles with a passenger capacity of 10 persons or more, motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds and trailers) shall comply with the requirements prescribed in Attachment 20 "Technical Standard for External Projections," Attachment 21 "Technical Standard for Luggage Racks of External Projection" and Attachment 22 "Technical Standard for Radio Receiving and Transmitting Aerials of External Projections." However, this provision shall not apply to air spoilers which are mounted on motor vehicles manufactured on or before December 31, 2008, and comply with the requirement of Item (3) of Paragraph 3.

(2) The side stands, kick-starters, etc. of motor cycles shall be constructed in such a way that there is no possibility for these parts catching the clothes of pedestrians, etc.

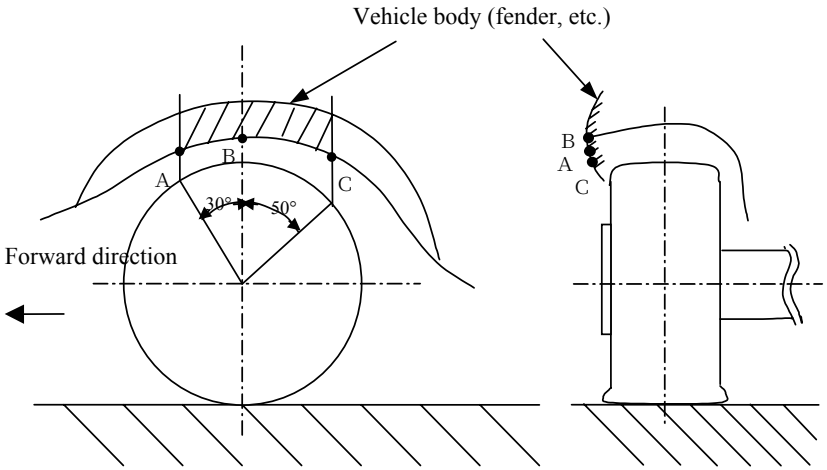
(3) For motor vehicles other than those provided for in Item (1) (except motor vehicles provided for in the proviso of the said Item), those sections between the rear part of the cab and the front part of the loading platform shall be so constructed that no loaded goods, etc. may drop into these sections, or no upper surface of the high-temperature section of the exhaust pipe, etc. is exposed.

(4) In addition to the provisions up to the preceding Item, the external shape of the vehicle body and other shape of motor vehicles shall not have any sharp edge or rotating protrusions which are likely to endanger other traffic.

3. The following frame and body shall be regarded as complying with the requirement of Item (4) of the preceding Paragraph.

(1) When a motor vehicle is in a straight-ahead posture, the rotating parts of the running system (e.g. tyres, wheel-steps, and wheel caps) which lie between two planes; one plane is passing through the axle centre and intersecting with the vertical plane including the axle centre at an angle of 30 degrees forward, and the other plane passing through the axle centre and intersecting with the vertical plane including the axle centre at an angle of 50 degrees backward; which are not protruding in the outward direction of the motor vehicle from the body sections (e.g. fenders) immediately above the said rotating parts.

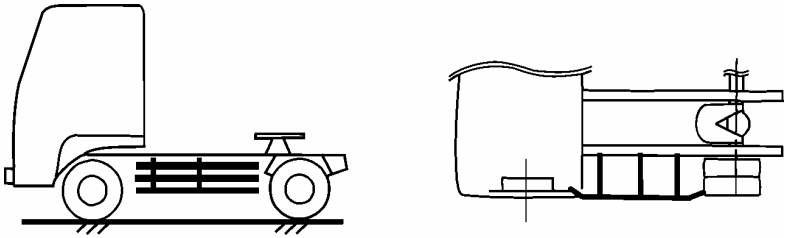
(Referential diagram)



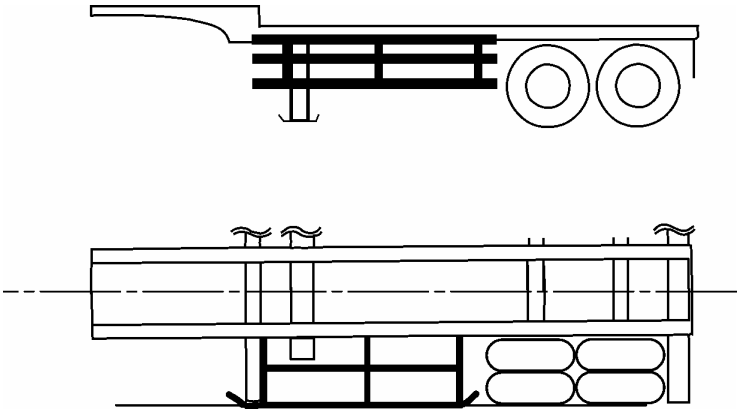
(2) Rear wheels of an ordinary-sized motor vehicles for carriage of goods which are equipped with pedestrian protection side-guards, etc. which comply with the requirements of Paragraph 1 of Article 18–2 of the Safety Regulations and whose flat portions are at the outer side of the straight line which connects each of the intersections of a vertical line at the outermost point (excluding those portions below the axle centres) of the rotating parts, such as wheels, on the vertical planes passing through the respective axle centres of the outermost front and rear wheels and the ground-contact section (in the case of a trailer without any front wheels, the straight line which passes the intersection of a vertical line at the outermost point (excluding those portions below the axle centres) of the rotating parts, such as wheels, on the vertical plane passing through the axle centre of the outermost rear wheels and the ground-contact section and in parallel with the longitudinal centre line of the motor vehicle).

(Referential diagram)

(Example 1)



(Example 2)



(3) Air spoilers mounted on motor vehicles provided for in the proviso of Item (1) of the preceding Paragraph, motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons, and motor vehicles used for the transport of goods with a gross vehicle weight of 2.8 tons or less (except those mounted on motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds), which comply with the following requirements.

A. The air spoiler shall not constitute the most forward point or the most backward point of the motor vehicle at any point of the front part or the rear part of the motor vehicle. However, this provision shall not apply to those parts that are situated below the lower edge of each bumper and where the curvature radius of the corner parts

of those areas where a 100 mm diameter sphere can make static contact (except for its parts lower than the geometrical locus of the contact point when a cone, in which the angle between the vertical line and the generatrix is 30°, is moved while being statically brought in contact with the external surface of the motor vehicle) is 5 mm or more, or where the hardness of corner parts is 60 shore (A) or less.

B. The air spoiler (except for its parts lower than the lower edge of each bumper and its parts higher than a 1.8 m high point above the ground) shall not have any corner parts with a curvature radius of less than 2.5 mm at those areas where a 100 mm diameter sphere can make static contacts. However, this provision shall not apply to cases where the hardness of the corner parts is 60 shore (A) or less, or the height of the corner parts is less than 5 mm, or the distance between the adjacent corner parts (referring to the distance between the contact points when a 100 mm diameter sphere makes static contacts with the two corner parts concerned) is 40 mm or less and the corner parts concerned comply with the requirements regarding the shapes of the corner parts set forth in the next table.

Height of corner parts (h)	Shape of corner parts	Distance of adjacent corner parts (δ)	Shape of corner parts
$h < 5$ mm	The corner parts shall not have any parts pointed outward or sharp edge.	$25 < \delta \leq 40$ mm	The curvature radius of the corner of the corner parts shall be 1.0 mm or more.
		$\delta \leq 25$ mm	The curvature radius of the corner parts shall be 0.5 mm or more.

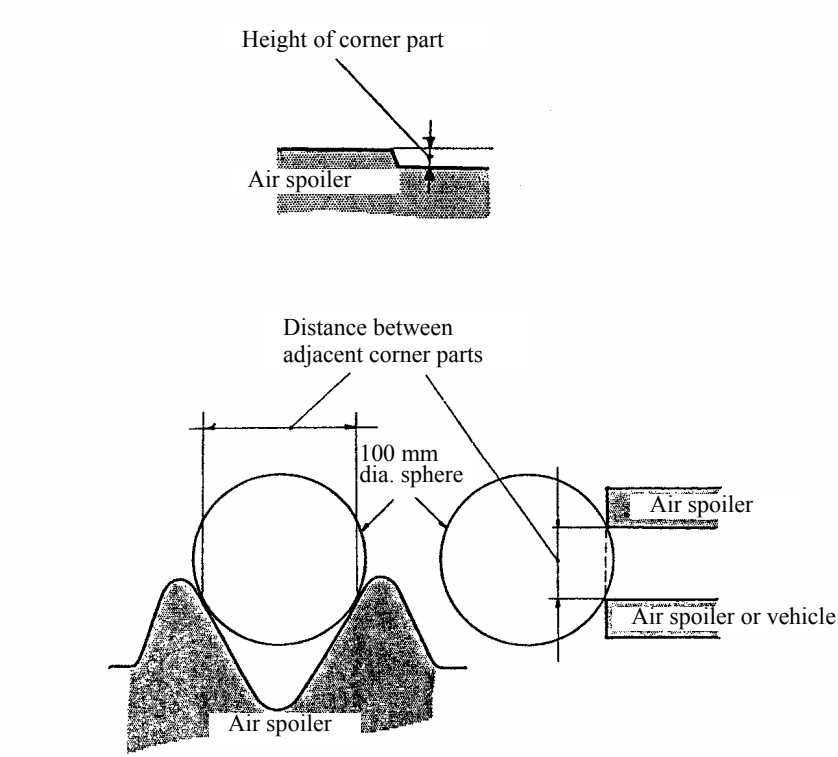
C. The air spoiler shall not constitute the outermost part of the vehicle body at its adjacent sections (the outermost part of the motor vehicle for the parts below the upper edge of each bumper).

D. The air spoiler shall have no wing-shaped overhangs extending to the side (hereinafter referred to as the “Wings”). However, this provision shall not apply to cases where the gap between the side edge of the wing and the vehicle body is extremely small, for example, the gap between the side edge of the wing and the vehicle body is not exceeding 20 mm, or cases where the side edge of the wing is situated 165 mm or more inward from the outermost part of the body of the motor vehicle concerned, or cases where the

parts of the wing whose side edge is not situated 165 mm or more inward from the outermost part of the vehicle body are constructed so that they my reduce the impact in the event of contact with pedestrians. In this case, those whose wing section not situated 165 mm or more inward from the outermost part of the vehicle body can yield, turn, or drop shall be regarded as an example of "the parts of the wing whose side edge is not situated 165 mm or more inward from the outermost part of the vehicle body are constructed so that they my reduce the impact in the event of contact with pedestrians."

E. The air spoiler shall be securely attached to the vehicle body by welding, bolts, nuts, adhesive agents and so forth.

(Example) Examples of Height and Distance Concerning Corner parts



4. The frame and body which fall under any of the following Items when the windows, entrance doors, etc. of the motor vehicle are all closed shall be regarded as the examples not complying with the requirements of Item (4) of Paragraph 2:

(1) Edges of bumpers which are likely to catch the clothes of pedestrians;

(2) Rear-view mirrors whose installation has sharp projections;

(3) Ornaments in shape of propeller to be installed on wheels, such as spinners and wing nuts;

(4) Lever door handles whose tip ends are oriented in the direction of forward movement of the vehicle (excluding those unlikely to impede the traffic safety, such as handles with the tip ends bent inside or those with protection devices);

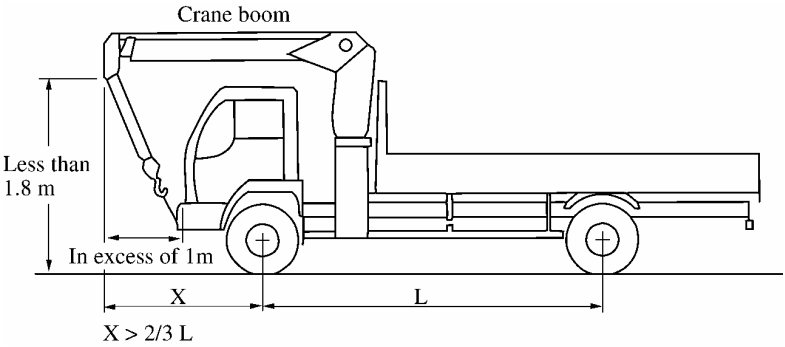
(5) Crane booms of simple cranes mounted on trucks whose forward projection amount and the installation height of the forward end of the crane boom come under the categories given below:

A. Cases where the horizontal distance between the centre of the most forward axle and the most forward point of the crane boom exceeds 2/3 of the wheelbase;

B. Cases where the horizontal distance between the most forward point of the motor vehicle, except for the crane section, and the most forward point of the crane boom exceeds one meter;

C. Cases where the height of the lower edge of the most forward point of the crane boom is less than 1.8 m above the ground.

(Referential diagram)



(6) The door handles and filling port, etc. mounted on motor vehicles used exclusively for carriage of passengers (except for motor vehicles with a passenger capacity of less than 10 persons) which are protruding from the outermost part of their mounting position and whose front contours are not rounded off properly, or whose front edges are not chamfered properly;

(7) The antenna or the upper-hinged windows mounted on motor vehicles used exclusively for carriage of passengers (except for motor vehicles with a passenger capacity of less than 10 persons) which protrude from the outmost part of their mounted positions;

(8) Fairings installed on motor cycles, having sharp projections.

5. Motor vehicles other than those used exclusively for carriage of passengers with a passenger capacity of less than 10 persons (motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds and trailers) and motor vehicles provided for in the proviso of Item (1) of the Paragraph 2, which are enumerated below, shall be regarded as not complying with the requirement of Item (4) of Paragraph 2.

(1) Rear bumpers (limited to those bumpers whose edges are located at a point near the side at the rear section of the body) which are installed at the rear section of passenger motor vehicles and motor vehicles whose shape is similar to that of passenger motor vehicles (e.g. trucks used for carriage of passengers, police patrol motor vehicles, etc.), and which do not come under the categories given below:

A. Bumpers which are built into the recessed part of the body;

B. Bumpers whose gap between the bumper's edge and the vehicle body is less than 20 mm, in which the end of the bumper will not contact with a sphere of a 100 mm diameter when such sphere is brought into contact with the vehicle body and bumper, and the outermost part of the bumper is turned in toward the vehicle body.

(2) Antenna mounting sections which are provided at a point 1.8 m or less above the ground and which are projected above the outermost point of the vehicle body in close proximity to the antenna.

6. The requirements prescribed in the Announcement of Item (3), Paragraph 1 of Article 18 of the Safety Regulations in connection with the horizontal distance between the centre of the rearmost axle of the motor vehicle and the rearmost part of the vehicle body (referring to the length measured, using a measuring tape or the like, in parallel with the longitudinal centre line of the motor vehicle with the motor vehicle placed on a flat surface in the unloaded state. Hereinafter the same) shall be that the horizontal distance between the centre of the rearmost axle and the rearmost part of the vehicle body is 1/2 (2/3 in the case of motor vehicles which are so constructed that they may not carry a load protruding out of the rearmost part of the vehicle body, or 11/20 in the case of small-sized motor vehicles except those corresponding with the former) or less of the distance between the foremost and rearmost axles. In this case, the crane booms of the crane trucks or the goods loading accommodation provided on the outside of the passenger compartment of ski buses are included in the vehicle body, but the attached parts, such as bumpers, hooks and hinges, are not included. In the case of motor vehicle with automatic axle-lift device, the measurement shall be conducted, on one hand, for the status where the axle is lifted and, on the other hand, for the condition where the axle is forcibly lowered.

7. Motor vehicles enumerated below shall be regarded as "motor vehicles which are so constructed that they may not carry a load protruding out of the rearmost part of the vehicle body."

(1) Motor vehicles with no device to accommodate goods.

(2) Motor vehicles whose devices to accommodate goods come under the following categories given below:

A. Tanks or the like;

B. Clamping devices used exclusively for carriage of containers.

(3) Motor vehicles whose rear gate panels are not folded types and the gate panel height is 155 cm or more above the loading platform floor level.

(4) Van type motor vehicles, etc. which have double doors, a single-side opening door or shutter type doors over the entire sections of the loading/unloading section at the rear.

8. The requirements prescribed in the Announcement of Paragraph 2 of Article 18 of the Safety Regulations in connection with the occupant protection performance, etc. of the frame and body in the event of frontal collision shall be the requirements prescribed in Attachment 23 "Technical Standard for Occupant Protection in Frontal Collision."

9. The requirements prescribed in the Announcement of Paragraph 3 of Article 18 of the Safety Regulations in connection with the occupant protection performance of the frame and body in the event of offset collision (referring to a collision in which part of the front face of the motor vehicle at the driver's seat side is collided. Hereinafter the same.) shall be the requirements prescribed in Attachment 100 "Technical Standard for Passenger Protection at Time of Offset Collision."

10. The requirements prescribed in the Announcement of Paragraph 4 of Article 18 of the Safety Regulations in connection with the occupant protection performance, etc. of the frame and body in the event of lateral collision shall be the requirements prescribed in Attachment 24 "Technical Standard for the Protection of the Occupants in the Event of A Lateral Collision." However, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the phrase "Belts should conform to Attachment 32 "Technical Standard for Seat Belt Assemblies" or the Agreement Regulation No. 16; and seat belt anchorages to Attachment 31 "Technical Standard for Seat Belt Anchorages" or the Agreement Regulation No. 14." appearing in the provision of Paragraph 6–2 of Annex 2 of Attachment 24 "Technical Standard for the Protection of the Occupants in the Event of A Lateral Collision" shall read as "Belts should conform to the Agreement Regulation No. 16 or other equivalent requirements; and seat belt anchorages to the Agreement Regulation No. 14 or other equivalent requirements."

11. The requirements prescribed in the Announcement of Paragraph 4 of Article 18 of the Safety Regulations in connection with the performance of the frame and body concerning the protection of the heads of pedestrians shall be the requirements prescribed in each of the following Items:

(1) The hood (those equivalent to the hood, such as the front panel, in the case of motor vehicles equipped with no hood) shall have no sharp protrusion on its surface.

(2) Attachment 99 "Technical Standard for Protection of Heads of Pedestrians" shall be complied with.

12. On the rear surface of the body of a motor vehicle, the maximum loading capacity (the maximum loading capacity, the maximum loading volume and the name of loaded goods in the case of a tank motor vehicle) shall be marked.

13. The indication to be attached, pursuant to Paragraph 7 of Article 18 of the Safety Regulations, on the front, rear and each side of the vehicle body of any motor vehicle (only limited to those motor vehicles with a passenger capacity of 11 persons or more) used exclusively for carriage of students, children or infants of middle schools, primary schools, schools for the blind, schools for the deaf, schools for physically handicapped or mentally retarded children, kindergartens or nursery schools, indicating that this particular vehicle is used for carriage of the above mentioned passengers, shall be in accordance with the example of the form prescribed below.

(1) The shape shall be an equilateral triangle with its apex is directed upwards, with a length of each side of 50 cm or more, and the thickness of the frame and the triangle line shall be approximately 12 mm. However, for a motor vehicle whose body is so constructed that it may not ensure the aforesaid dimensions (referring to motor vehicles in which the specified dimensions cannot be ensured because of the function components of motor vehicles, such as the windshield screen, headlamps, signal lamps or the like, air inlet port of the cooling system, or the motor vehicle registration number plate), it may reduce the length of the side to 30 cm.

(2) The colour of the triangle line, the characters and symbols shall be in black and the frame and ground shall be in yellow.

(3) The characters in the form shall be Japanese words which mean "school bus," "kindergarten bus," etc.

(Example of form)

Article 23 (Pedestrian Protection Side Guard)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 18–2 of the Safety Regulations in connection with the strength, shape, etc. of the pedestrian protection side guard shall be the requirements prescribed in each of the following Items.

(1) It shall be robust. In this case, those whose installation is not secure due to corrosion, etc. shall be regarded as not complying with this requirement.

(2) It shall be a sheet or have a shape which can effectively prevent pedestrians, bicycle riders, etc. from being caught under the rear wheels of the motor vehicle. In this case, the phrase “a sheet or a shape which can effectively prevent pedestrians, bicycle riders, etc. from being caught under the rear wheels of the motor vehicle” shall mean that the shape of the flat section of the pedestrian protection side guard be the shape of integral sheets, grating, mesh, rods (3 pcs. or more) or shape similar to these.

2. With regard to the application of the provision of Item (2) of the preceding Paragraph in the case of ordinary-sized motor vehicles used for the transport of goods (except those with a gross vehicle weight of 8 tons or more or with a maximum loading capacity of 5 tons or more), the phrase “shall be

a sheet or have a shape which can effectively prevent pedestrians, bicycle riders, etc. from being caught under the rear wheels of the motor vehicle" shall read as "shall be constructed so that pedestrians are not likely to be caught under the rear wheels of the motor vehicle" pursuant to the provision of Paragraph 4 of the Supplementary Provisions of the "Ministry Ordinance That Amends Part of the Safety Regulations for Road Vehicles" (Ministry of Transport Ordinance No. 8 of 1979). In this case, pedestrian protection side guards having a shape of one steel pipe or the like shall be regarded as complying with this requirement.

3. The "motor vehicles having a structure stipulated by the Announcement as the one with which pedestrians, bicycle riders, etc. are not likely to be caught under the rear wheels of the motor vehicle" shall be motor vehicles which are constructed so as to effectively prevent pedestrians, bicycle riders, etc. from being caught under the rear wheels of the motor vehicle concerned by means of the original construction, etc. of the motor vehicle to the same degree as or more than the pedestrian protection side guard.

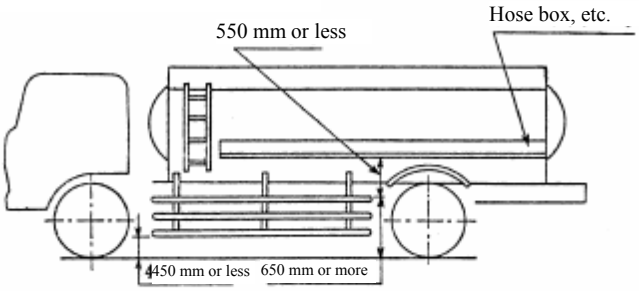
4. The requirements prescribed in the Announcement of Paragraph 2 of Article 18–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the pedestrian protection side guard shall be the requirements prescribed in each of the following Items.

(1) The pedestrian protection side guard shall be mounted so that, in the unloaded state, the height of its lower edge is 450 mm or less above the ground and the height of its upper edge is 650 mm or more above the ground.

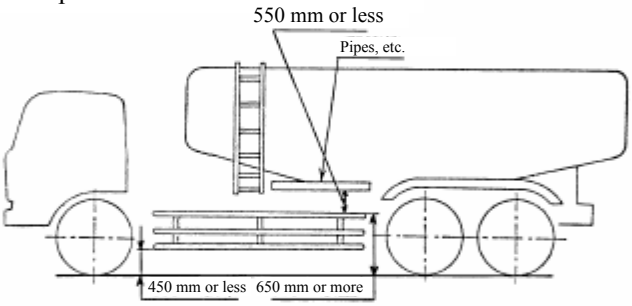
(2) The pedestrian protection side guard shall be mounted so that the distance between the upper edge of the pedestrian protection side guard and the loading platform, etc. may effectively prevent pedestrians, bicycle riders, etc. from being caught under the rear wheels of the motor vehicle. In this case, pedestrian protection side guards that are mounted in such a way that the distance between the upper edge of the flat section thereof and the loading platform, etc. is 550 mm or less shall be regarded as complying with this requirement.

(Example)

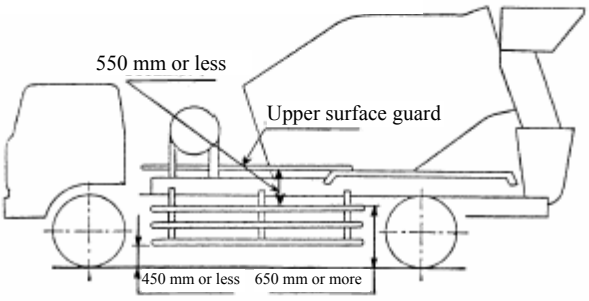
(1) Case of tank trucks



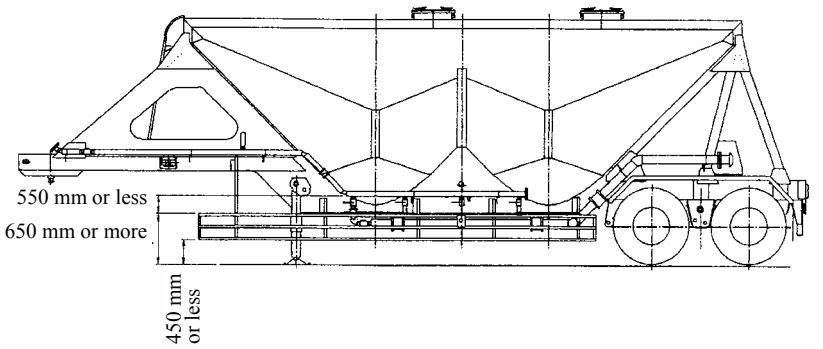
(2) Case of powder cement motor vehicles



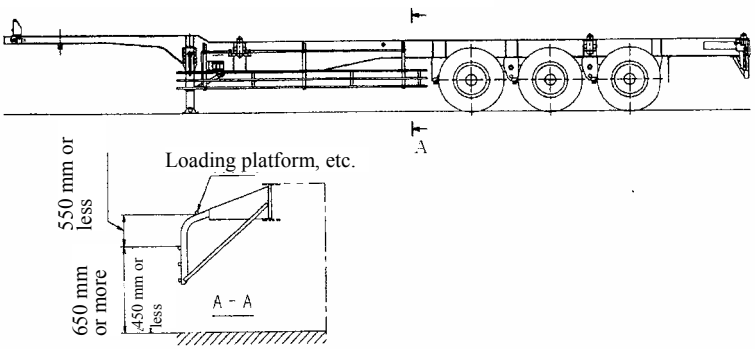
(3) Case of concrete mixer vehicles



(4) Case of powder cement semi-trailers



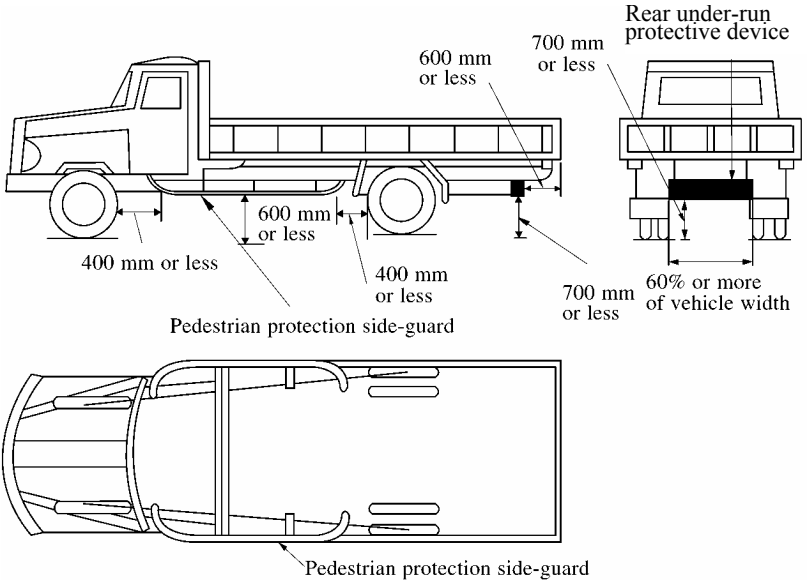
(5) Case of container semi-trailers



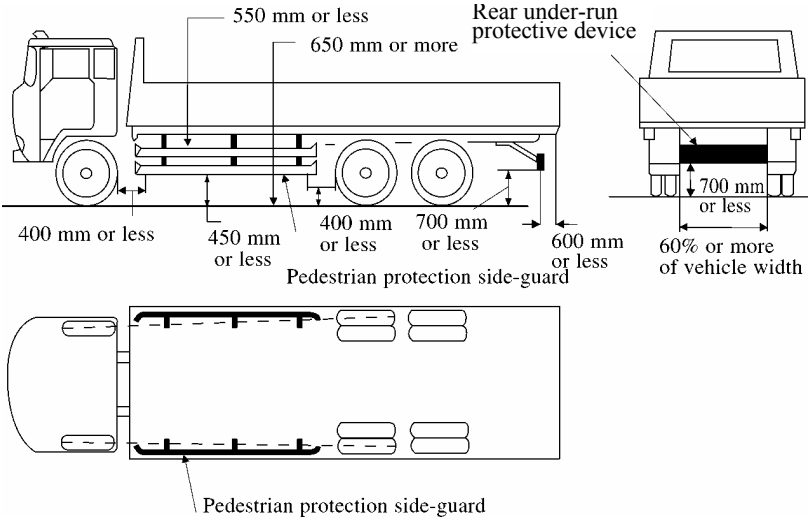
(3) The pedestrian protection side guard shall be mounted so that the distance between a vertical plane, which includes the forward end of the flat section (except the curved section. Hereinafter the same) thereof and is perpendicular to the longitudinal centre plane of the motor vehicle, and a vertical plane, which includes the rear end of the rearmost front tyre and is perpendicular to the longitudinal centre plane of the motor vehicle, as well as the distance between a vertical plane, which includes the rear end of the flat section and is perpendicular to the longitudinal centre plane of the motor vehicle, and a vertical plane, which includes the front end of the most forward rear tyre and is perpendicular to the longitudinal centre plane of the motor vehicle, is 400 mm or less. However, the pedestrian protection side guard to be

mounted on a semi-trailer shall be mounted so that the front end of flat sections is located forward of the auxiliary leg.

(Example 1)　(Example of installation on ordinary-sized truck)

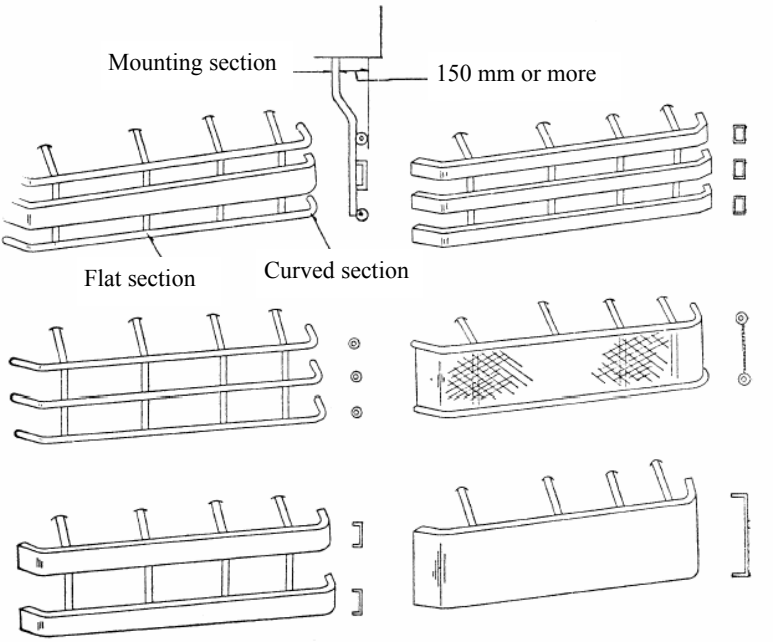


(Example 2) (Example of installation on large-sized truck with a gross vehicle weight of 8 tons or more, or with a maximum loading capacity of 5 tons or more)



(4) The pedestrian protection side guard shall be mounted so that the flat section thereof is located outside of a straight line connecting the centres of the road contact sections of the outermost front wheel and outermost rear wheel, and the mounting section thereof is located 150 mm or more inside of the flat section.

(Example)



(5) The pedestrian protection side guard shall be securely mounted so that it does not become loose due to vibrations, shocks, etc.

5. With regard to the application of the provisions of Items (1) and (2) of the preceding Paragraph in the case of ordinary-sized motor vehicles used for the transport of goods (except those with a gross vehicle weight of 8 tons or more or with a maximum loading capacity of 5 tons or more), notwithstanding the provisions of Items (1) and (2) of the preceding Paragraph, the pedestrian protection side guard shall be mounted so that, in the unloaded state, the height of its lower edge is 600 mm or less above the ground, except sections near the entrance of the driver's seat, pursuant to the provision of Paragraph 4 of the Supplementary Provisions of the "Ministry Ordinance That Amends Part of the Safety Regulations for Road Vehicles" (Ministry of Transport Ordinance No. 8 of 1979).

Article 24 (Rear Underrun Protection Devices)

1. The requirements prescribed in the Announcement of Paragraph 3, Article 18–2 of the Safety Regulations in connection with strength, shape, etc. of the rear underrun protection device shall be the requirements prescribed in each of the following Items.

(1) The rear underrun protection device mounted on ordinary-sized motor vehicles used for the transport of goods (only limited to those with a gross vehicle weight of 3.5 tons or less) shall be robust, and it shall be a sheet or have a shape which can effectively prevent the front part of a colliding motor vehicle from running under the rear part of the motor vehicle concerned during a rear-end collision. The length of a rear underrun protection device shall be 60% or more of the width of the motor vehicle to which it is attached.

(2) The rear underrun protection device mounted on motor vehicles other than those provided for in the preceding Item shall comply with the requirements prescribed in Attachment 25 "Technical Standard for Rear Underrun Protection Devices." However, this provision shall not apply to cases where the rear underrun protection construction and devices comply with the requirements prescribed in Attachment 26 "Technical Standard for Installation of Rear Underrun Protective Devices."

2. The "motor vehicles prescribed in the Announcement as ones having such construction that can prevent the front part of the colliding motor vehicle from plunging into the rear part of the motor vehicle concerned in the case of rear-end collision, to the same degree as with motor vehicles equipped with a rear underrun protection device" appearing in the proviso of Paragraph 3 of Article 18–2 of the Safety Regulations shall be those motor vehicles having such construction that complies with the following requirements.

(1) In the case of motor vehicles with a gross vehicle weight of 7 tons or more, the cross-section of the flat section of the construction section (that refers to a construction section, consisting of the vehicle frame or the vehicle body, capable of preventing the front part of the colliding motor vehicle from plunging into the rear part of the motor vehicle concerned in the case of rear-end collision, to the same degree as with rear underrun protection devices. Hereinafter the same.) at the rear surface of the vehicle body shall be at a height of 100 mm or more on a vertical plane parallel to the vehicle longitudinal centre plane and the outermost edge of the flat section concerned shall be located within

100 mm inward from the outermost edge of the wheel of the rear axle.

(2) In the case of motor vehicles with a gross vehicle weight of less than 7 tons, the length of the construction section at the rear surface of the vehicle body shall be 60% or more of the width of the motor vehicle concerned (in cases where the horizontal distance between the centre of the rearmost axle and the rear end of the vehicle body is 1500 mm or less, the width or more of the vehicle frame at the rear end of the motor vehicle concerned).

(3) The height of the lower edge of the construction section at the rear end of the vehicle body shall be 550 mm or less (in the case of motor vehicles with a gross vehicle weight of less than 7 tons (limited only to those in which the horizontal distance between the centre of the rearmost axle and the rear end of the vehicle body is 1,500 mm or less), 600 mm or less) above the ground under the unloaded state.

(4) The horizontal distance between the flat section of the construction section at the rear end of the vehicle body and the rear end of the other part of the motor vehicle concerned at a height of 1,500 mm or less above the ground under the unloaded condition shall be 450 mm or less.

3. The requirements prescribed in the Announcement of Paragraph 4, Article 18–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the rear underrun protection device shall be the requirements enumerated in each of the following Items:

(1) The rear underrun protection device of ordinary-sized motor vehicles used for the transport of goods (only limited to those with a gross vehicle weight of 3.5 tons or less) shall comply with the following requirements:

A. The rear underrun protection device shall be mounted so that the height at its lower edge is 700 mm or less above the ground in the unloaded state;

B. The rear underrun protection device shall be mounted so that its flat section is symmetrical relative to the longitudinal centre plane of the vehicle on the vertical plane perpendicular to the longitudinal centre plane of the vehicle;

C. The rear underrun protection device shall be mounted so that the horizontal distance between the flat section and the rear end of

the other part of the motor vehicle concerned at a height of 1,500 mm or less above the ground under the unloaded condition is 600 mm or less;

D. The rear underrun protection device shall be securely mounted so that it may not be loosened by vibrations, shocks, etc.

(2) The rear underrun protection device mounted on motor vehicles other than those provided for in the preceding Item shall comply with the requirements prescribed in Attachment 26 "Technical Standard for Installation of Rear Underrun Protection Devices." However, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the phrase "exceeding 1,500 mm above the ground" appearing in the provisions of Paragraphs 3–2–3 and 3–3–6 of Attachment 26 "Technical Standard for Installation of Rear Underrun Protection Devices" shall read as "exceeding 3,000 mm above the ground."

Article 25 (Coupling Device)

1. The requirements prescribed in the Announcement of Article 19 of the Safety Regulations in connection with the strength, construction, etc. of coupling devices between a tractor and a trailer shall be the requirements prescribe in each of the following Items:

(1) The coupling device between a tractor and a trailer shall be secure so that it may fully withstand vehicle operation;

(2) The coupling device between a tractor and a trailer shall be constructed so that it may securely connect the tractor with the trailer;

(3) The coupling device of a tractor or a trailer shall be provided with a suitable safety device to prevent accidental separation by vibration, shocks, etc. while running.

2. In the preceding Paragraph, an emergency drawing hook, etc. which is provided at the front end of the frame of trucks, etc. and is not intended to tow a trailer shall not be included in coupling devices.

Article 26 (Riding Accommodation)

1. The requirements prescribed in the Announcement of Paragraph 1 of

Article 20 of the Safety Regulations in connection with the construction of the riding accommodation of a motor vehicle shall be the requirements prescribed in each of the following Items.

(1) The riding accommodation of a motor vehicle shall be constructed so that it may secure safe boarding and may not cause the occupants to fall off or stumble by vibrations, impact, etc. In this case, the following Items shall be regarded as complying with this requirement:

A. In the case of motor vehicles whose sides are not provided with doors, chains, ropes, etc., passenger seats provided with arm rests or grip handles;

B. In the case of motor cycles, rear seats provided with grip handles and foot rests;

C. In the case of fire trucks, standing spaces provided with grip bars and tread plates (with a depth of 30 cm or more) which has employed slip preventive measures;

D. In the case of bus type motor vehicles, standing spaces provided with straps, grip bars or grip handles.

(2) The distance from the point on the seat surface level that is 200 mm behind from the front edge of the seat to the point on the ceiling that is obtained by a line parallel to the seat back shall be 800 mm or more. This, however, shall not apply to instances where the above distance is 850 mm or more with a person seated.

(3) Link type door opening/closing devices which shall not be liable to pinch passenger's feet because of their construction, thereby not assuring safe boarding.

2. The requirements prescribed in the Announcement of Paragraph 4 of Article 20 of the Safety Regulations shall be the requirements prescribed in Attachment 27 "Technical Standard for Flame-Resistant Interior Materials for Motor Vehicles."

3. The requirements prescribed in the Announcement of Paragraph 5 of Article 20 of the Safety Regulations in connection with the occupant protection performance, etc. of the instrument panel of motor vehicles used exclusively for carriage of passengers shall be the requirements prescribed in Attachment 28 "Technical Standard for Instrument Panel Impact Absorption." However, this provision shall not apply to motor vehicles with a passenger

capacity of 11 persons or more, motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds and motor vehicles with a maximum speed of less than 20 km/h.

Article 27 (Driver's Seat)

1. The requirements prescribed in the Announcement of Article 21 of the Safety Regulations in connection with the field of vision of the driver in his seat, the partition wall, etc. from the goods-loading accommodation, etc.

(1) The driver's seat of motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less (except motor cycles with or without sidecar, three-wheeled motor vehicles, mini-sized motor vehicles with caterpillar tracks and sleds, and trailers) and motor vehicles used for the carriage of goods with a gross vehicle weight of 3.5 tons or less (except three-wheeled motor vehicles and trailers) shall comply with the requirements prescribed in Attachment 29 "Technical Standard for Direct Front Field of Vision."

(2) The driver's seat of motor vehicles other than those provided for in the preceding Item shall have a field of vision necessary for driving.

(3) The crane boom of a crane truck, etc. (including the post, hook and so forth) in its retracted state shall not hinder greatly the driver's field of vision to the front side or to the right and left sides.

(4) The driver's seat shall be such one that the driving operations may not be hampered by occupants, loaded goods, etc. In this case, the following driver's seats which exhibit no damage liable to hamper its operation shall be regarded as "one that the driving operations may not be hampered by occupants, loaded goods, etc."

A. The driver's seat of a bus used for passenger carrying business, where a protection bar or partition wall is provided.

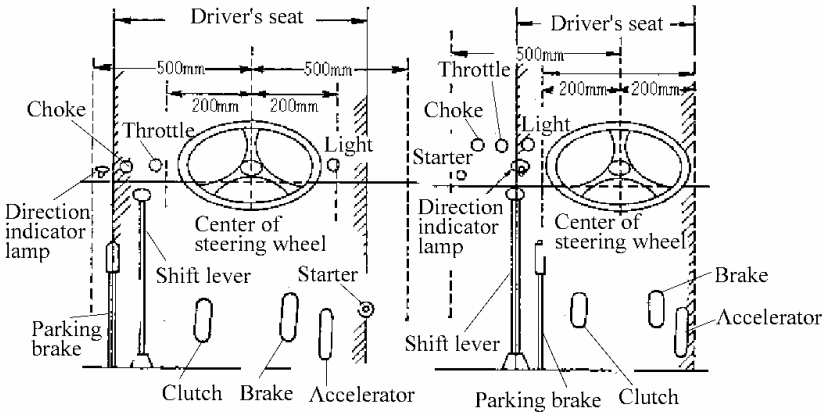
B. The driver's seat of a truck, where a partition wall or protecting partition is provided between the driver's seat and the goods-loading accommodation. In this case, trucks with a maximum loading capacity of 500 kg or less where it is recognized that the driver's seat is protected from loaded goods, etc. by means of the seatback of the driver's seat, the seatback of the driver's seat shall be regarded as a protecting partition.

C. The seat on the right side of the driver's seat in a three-wheeled motor vehicle whose steering wheel turning angle is less than 7 times of that of the steering tyres, where the front edge of the seat is 20 cm or more backward from the front edge of the driver's seat, or the seat which is provided on the left side and whose front edge is behind the front edge of the driver's seat.

Article 28 (Seats)

1. The requirements prescribed in the Announcement of Paragraph 1, Article 22 of the Safety Regulations in connection with a space for sitting in and direction of the seats concerned shall be the requirements enumerated in each of the following Items.

(1) The driver's seat of a motor vehicle shall be the range up to the outermost device among those enumerated in each Item of Article 10 of the Safety Regulations (except devices which may not be obstructed by passengers, loaded goods, etc.). In this case, the minimum range shall be up to 200 mm to the right and to the left from the centre of the steering wheel.



(2) The seats for passengers other than the driver of a motor vehicle (except saddle-type seats and seats for infants of a motor vehicle which is used exclusively for carriage of children (hereinafter referred to as "infant-carrying vehicle")) shall have a space of 400 mm or more in width for sitting-in per person. In this case, the following seats shall

be deemed as an example not complying with this requirement:

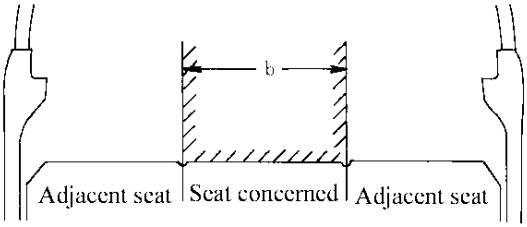
A. Of the three or more seats arranged side by side, those of less than 400 mm in width, excluding the seats at each of the extremities;

B. Of the three or more seats arranged side by side, but except the seats at each of the extremities, those which have no space of 400 mm or more in width in the compartment, excluding spaces necessary for sitting-in at any seat adjacent to the seat concerned;

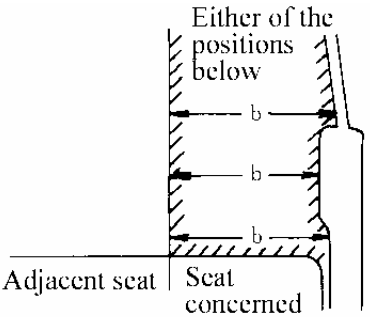
C. Of the three or more seats arranged side by side, seats at each of the extremities, which have no space of 400 mm or more in width in the compartment, that is measured at any point above the surface of the seat concerned, excluding spaces necessary for setting-in at any seat adjacent to the seat concerned.

(Example)

(1) Of the three or more seats arranged side by side, those of less than 400 mm in width, excluding the seats at each of the extremities, or width of space other than spaces necessary for sitting-in at any seat adjacent to the seat concerned



(2) Of the three or more seats arranged side by side, seats at each of the extremities, and width of a space other than spaces necessary for sitting-in at any seat adjacent to the seat concerned



(3) The seats for infants on an infant-carrying vehicle shall be provided facing forwards.

(4) There shall be at least the following spaces (in cases where the seat concerned and the front seat are facing each other, the said space shall be twice or more those below) between the seat and its front seat, partition, etc.

A. In the case of seats (except seats for infant of an infant-carrying vehicle) of a motor vehicle (except emergency motor vehicles) with a passenger capacity of 11 persons or more, 200 mm;

B. In the case of seats for infant of an infant-carrying vehicle, 150 mm.

2. The requirements prescribed in the Announcement of Paragraph 2, Article 22 of the Safety Regulations in connection with the dimensions of the seats other than the driver's seat shall be the requirements enumerated in each of the following Items.

(1) The size of seats for passengers other than the driver of a motor vehicle (except saddle-type seats and seats for infant of an infant-carrying vehicle) shall be 380 mm or more in width and 400 mm or more in

depth per person (In the case of seats near the emergency exit, 380 mm or more in width and 250 mm or more in depth; in the case of seats listed below, 300 mm or more in width and 250 mm or more in depth).

A. Spare seats (which mean one-person seats which may be folded easily, provided in aisles, loading platforms, or floor spaces other than those used exclusively for installing seats; hereinafter the same);

B. One-person seats for the conductor or similar seats, and one-person seats for driver's assistant which are respectively provided on motor vehicles with a passenger capacity of 11 persons or more;

C. One-person seats on the side of the driver's seat of a three-wheeled motor vehicle where the rotational angle of the steering wheel is less than seven times the rotational angle of the steering tyre.

(2) The size of a seat for infant on an infant-carrying vehicle shall be 270 mm or more in width and 230 mm or more, but not exceeding 270 mm in depth, and 250 mm or less in height from the floor per person.

3. The space provided for in Item (4) of Paragraph 1 and the seat width and depth provided for in the preceding Paragraph shall be defined as follows:

(1) The space shall be the shortest horizontal distance between the front edge of the seat at a height of the front edge of the seat and the rear edge of the seatback of its front seat, partition, etc. (excluding local protrusions). In this case, the adjusting mechanism of the seat shall be set to the following conditions:

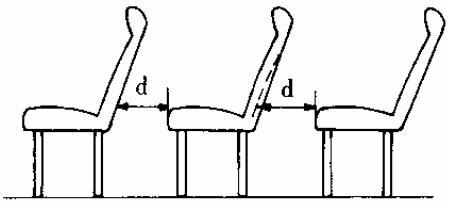
A. In the case of the driver's seat (including seats operating integral with the driver's seat or seats parallel to the driver's seat. Hereinafter the same in this Item) equipped with reclining mechanisms, the seatback shall be reclined 30° backward from the vertical plane.

B. In the case of the driver's seat equipped with sliding mechanisms, such mechanisms shall be adjusted so that the space may become the shortest distance.

C. In the case of seats other than the driver's seat, equipped with adjusting mechanisms, such as the sliding mechanism and reclining mechanism, such mechanisms shall be adjusted so that the space may become the shortest distance.

(Example) Space between the seats

d: Space



(2) The width shall be the shortest horizontal distance between both edges (inner edges of the armrest, in cases where an armrest is provided) of the seat that has been measured at right angles to the depth direction at a distance 200 mm in the depth direction from the centre of the front edge of the seat. In this case, those seats where the positions of their separated portions can be adjusted respectively and these portions can be set to integral conditions shall be set to such conditions.

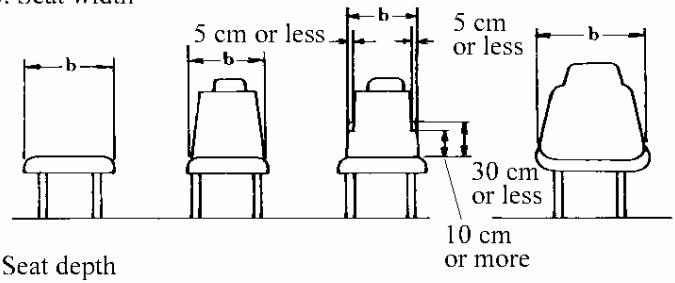
Moreover, for armrests mounted at a height between 100 mm and 300 mm from the seat surface, they shall be handled as having conformity if they protrude toward the inside of the seat by 50 mm per armrest.

(3) The depth shall be the shortest horizontal distance between the front edge and rear edge of the seat (the front edge of the seatback if a seatback is provided) at the centre thereof.

(Example)

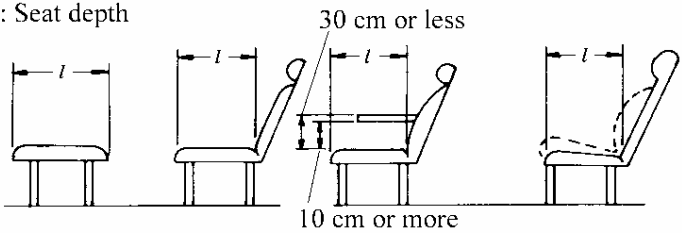
(1) Seat width

b: Seat width



(2) Seat depth

l: Seat depth



4. Motor vehicles with a passenger capacity of 11 persons or more may be provided with spare seats on the aisles, only for the cases where available opening of most windows are 500 mm or more in width and 300 mm or more in height.

5. Infant-carrying vehicles cannot be provided with any spare seat for infant.

6. The requirements prescribed in the Announcement of Paragraphs 3 and 4, Article 22 of the Safety Regulations in connection with the performance of withstanding the load applied by the occupants, etc. and the performance of protecting the head, etc. of occupants sitting behind the seat concerned when subjected to impacts due to a collision, etc. shall be the requirements prescribed in Attachment 30 “Technical Standard for Seats and Seat Anchorages.” However, in cases where the device type designation is made pursuant to the provision of Article 75–2 of the Act, the phrase “Saddle-type seats” in the provision of Item (1), Paragraph 1 of Attachment 30 “Technical Standard for Seats and Seat Anchorages” shall read as “Folding seats,

side-facing seats and rear-facing seats" and the provisions of Items (2) through (6) shall not apply.

Article 29 (Capacity of Auxiliary Seats)

The requirements prescribed in the Announcement of Article 22–2 of the Safety Regulations shall be that the capacity of seats other than those enumerated in A. through C. of Item (1), Paragraph 2 of the preceding Article is a half or more of the seat capacity, and one third or more of the passenger capacity when the calculation is made on the assumption that no standing space is provided on the floor surface used for wheelchairs. In this case, the "floor surface used for wheelchairs" shall mean a floor space which is designated to be used for wheelchairs, equipped with anchors for fixing the wheelchair or a grip bar provided on the floor surface or on the wall in the vicinity, and separated distinctively from the floor surface for standing space. Furthermore, the minimum required floor surface to be used for wheelchairs shall be 1200 mm in effective length and 800 mm in effective width.

Article 30 (Seat belts, etc.)

1. The "seats adjacent to either side of the motor vehicle" in the table of Paragraph 1 of Article 22–3 of the Safety Regulations shall mean any seat other than those in which the horizontal distance exceeds 20 cm when measured between the seat side at a position 20 cm deep horizontally from the front edge of the seat centre and the wall at that height of the passenger compartment (excluding the wheel house, armrest, other protrusion and local recessed sections).

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 22–3 of the Safety Regulations in connection with the strength, installation position, etc. of seat belt anchorages shall be the requirements prescribed in Attachment 31 "Technical Standard for Seat Belt Anchorages."

3. The requirements prescribed in the Announcement of Paragraph 3 of Article 22–3 of the Safety Regulations in connection with the construction, operation performance, etc. of seat belts shall be the requirements prescribed in Attachment 32 "Technical Standard for Seat Belt Assemblies."

4. The requirements prescribed in the Announcement of Paragraph 4 of Article 22–3 of the Safety Regulations in connection with the warning performance, etc. of warning devices to give warning to the driver in his seat when the seat belt for the driver in his seat is not worn shall be the

requirements prescribed in Attachment 33 “Technical Standard for Warning Devices That Give Warning Signals in Event of Non-Use of Driver’s Seat Belt.”

Article 31 (Head Restraints)

The requirements prescribed in the Announcement of Paragraph 1, Article 22–4 of the Safety Regulations in connection with the head restraint’s performance of protecting the heads of occupants in the seats concerned, etc. when subjected to impacts in the event of rear-end collision, etc. shall be the requirements prescribed in Attachment 34 “Technical Standard for Head Restraints.” However, in cases where the device type designation is made pursuant to the provision of Article 75–2 of the Act, the phrase “Saddle-type seats” in the provision of Item (1), Paragraph 1 of Attachment 34 “Technical Standard for Head Restraints” shall read as “Folding seats, side-facing seats and rear-facing seats” and the provisions of Items (2) through (5) shall not apply. Furthermore, the phrase “can return to the position of normal use” in the provision of Paragraph 3–4–3–4 shall read as “returns automatically to the position of normal use.”

Article 32 (Child Restraints)

The requirements prescribed in the Announcement of Paragraph 1 of Article 22–5 of the Safety Regulations in connection with the construction, operation performance, etc. of child restraints shall be the requirements prescribed in Attachment 35 “Technical Standard for Child Restraints.” However, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provision of Paragraph 6 of Attachment 35 “Technical Standard for Child Restraints” shall not apply.

Article 33 (Aisles)

1. Based on Paragraph 2 of Article 23 of the Safety Regulations, an aisle, which leads from the entrance to any seat, to be mounted on motor vehicles with a passenger capacity of 11 persons or more (except emergency motor vehicles), buses used for passenger carrying business with a passenger capacity of 10 persons or less and infant-carrying motor vehicles shall have an effective width of 300 mm or more (effective width when the spare seats are folded away if such seats exist in the aisle) and an effective height of 1,600 mm or more (1,200 mm if the shortest distance in the direction of the

longitudinal centre line of the motor vehicle between the front edge of all seats concerned with the said aisle and the nearest entrance is less than 2 m). However, this provision shall not apply to the seats directly accessible from the entrance.

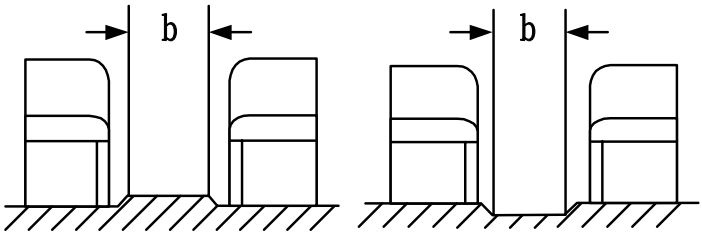
2. The “effective width” and “effective height” provided for in the preceding Paragraph shall be the width and height of those sections which can be used effectively as the aisles. In cases where the effective width of the aisle varies because of the slide, etc. of the seats, the effective width shall be the value at a setting where the effective width of the aisle becomes the minimum value.

(Example)

A. Effective width

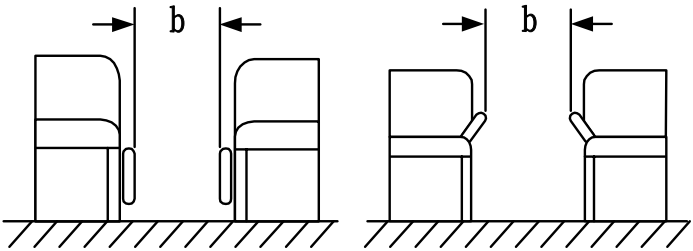
(1) Cases where aisle and seat floor surface differ in height:

b: Effective width



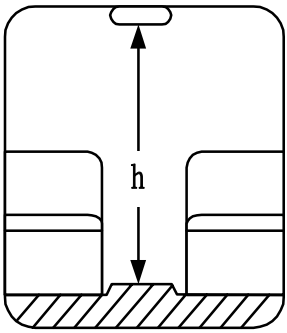
(2) Cases where part of seat protrudes above aisle:

b: Effective width



B. Effective height

b: Effective width



3. Those seats whose positional relationship with the aisle which leads from the entrance to the seat comes under one of the following Items given below shall be regarded as “leading ..... to any seat” provided for in Paragraph 1 in respect to the seat concerned.

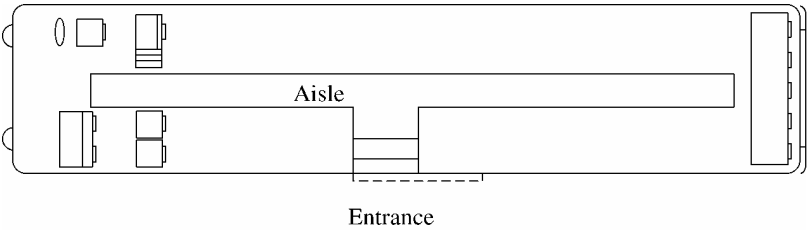
(1) Seats whose side is adjacent to the aisle or seats which are located near the aisle.

(2) The most forward front-facing seats (except those specified in the preceding Item), the orthogonal projection of whose seatback on the floor surface is adjacent to the aisle or is located near the aisle.

(3) Side-facing seats or the most rearward seats, etc. where the floor surface to be used for the seat concerned is adjacent to the aisle.

(4) Seats which are provided next to those specified in Item (1) through the preceding Item and whose seating capacity is up to two persons, respectively.

(Referential diagram)

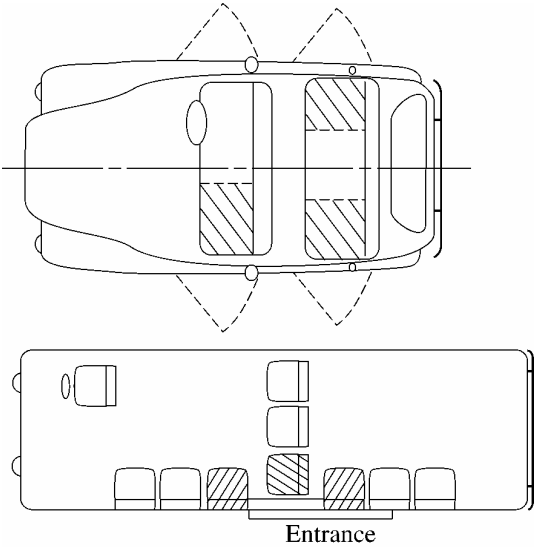


4. The following seats readily accessible from the entrance shall be regarded as “seats directly accessible from the entrance” provided for in the proviso of Paragraph 1.

(1) Seats provided next to the entrance.

(2) Seats provided next to the side of those seats specified in preceding Item and whose seating capacity is up to two persons, respectively.

(Referential diagram)



(Note) Those shaded portions denote seats provided next to the entrance.

5. In applying the provision of Paragraph 1, the floor surface to an extent of 250 mm from the front edge of a seat shall be regarded as the floor surface to be used exclusively for a seat.

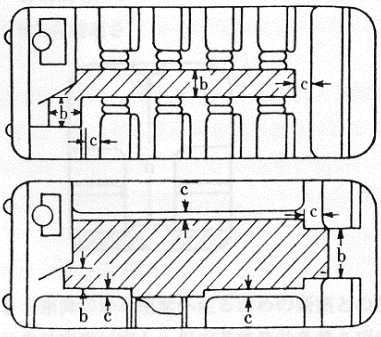
Article 34 (Standing Space)

1. The floor surface prescribed in the Announcement in the passenger compartment where a standing space can be provided pursuant to the provision of Paragraph 1 of Article 24 of the Safety Regulations shall be a floor surface having an effective width of 300 mm or more and an effective height of 1,800 mm or more in the passenger compartment, other than floor surfaces used exclusively for seats. However, this provision shall not apply to the standing space of an emergency motor vehicle, the standing space used for a conductor, the standing space equivalent to this, or the standing space used for the driver's assistant.

2. With regard to the application of the provision of the preceding Paragraph, the floor surface to an extent of 250 mm from the front edge of a seat shall be regarded as the floor surface to be used exclusively for a seat.

3. In Paragraph 1, the “effective width” and “effective height” shall be the width and height of the section which can be used effectively as the standing space in the passenger compartment. When the height of the vehicle compartment is measured, grip bars, straps, individual interior lamps, etc. installed to the ceiling of the vehicle compartment shall be regarded as not being installed. Moreover, in the case of motor vehicles having protrusions with a certain width and length, such as line light and ventilation duct, in which the height from the floor surface to the lower surface thereof is less than 1,800 mm, the projected area of the construction objects concerned shall be subtracted from the area of the aisle.

(Referential diagram)



b: 30 cm or more
c: 25 cm

Note: Those shaded portions denote sections for the standing space.

4. Infant-carrying vehicles shall not be provided with standing space.

5. The area prescribed in the Announcement in connection with the space to be occupied by one standee pursuant to the provision of Paragraph 3 of Article 24 of the Safety Regulations shall be 0.14 m^2.

Article 35 (Entrance)

1. The entrance of a passenger compartment shall be provided with a door which can be securely closed pursuant to the provision of Paragraph 3 of Article 25 of the Safety Regulations. However, this provision shall not apply to an entrance which is provided with such safety device as chain and rope, to protect passengers from falling out while the motor vehicle is running.

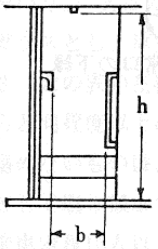
2. The requirements prescribed in the Announcement of Paragraph 4 of Article 25 of the Safety Regulations in connection with the construction of entrance doors shall be the requirements prescribed in Attachment 36 "Technical Standard for Prevention of Door Opening." However, in cases where the device type is designated pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions of Paragraphs 2–2, 2–3 and 4–1 of Attachment 36 "Technical Standard for Prevention of Door Opening" shall not apply. Moreover, the phrase "entrance doors of motor vehicles (except motor vehicles with a passenger capacity of 11 persons or more, large-sized special motor vehicles, mini-sized special motor vehicles for agricultural use and motor vehicles whose maximum speed is less than 20 km/h)" shall read as "entrances provided at the side of motor vehicles used exclusively for carriage of passengers (except motor vehicles with a passenger capacity of 10 persons or more, motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds and trailers) and motor vehicles used for the transport of goods (except three-wheeled motor vehicles, mini-sized motor vehicles with caterpillar tracks and sleds and trailers) with a gross vehicle weight of 3.5 tons or less." Furthermore, the phrase "sliding door that provides direct access to vehicle compartment containing one or more passenger seats." appearing in the provision of Paragraph 2–1 of the same Attachment shall read as "sliding door that provides direct access to vehicle compartment containing one or more passenger seats. Also, folding doors or wind-up doors which are so designed that they can be easily installed and removed shall not be included." In addition, the phrase "for Doors Other Than Special Doors and Simple Doors" appearing in the provision of Paragraph 3 of the same Attachment shall read as "for Doors."

3. The requirements prescribed in the Announcement of Paragraph 5 of Article 25 of the Safety Regulations in connection with the size, construction, etc. of entrances shall be the requirements prescribed in each of the following Items. However, this provision shall not apply to an entrance only for the seats directly accessible from the entrance.

(1) The effective width (referring to the width of the section which can be used effectively as the entrance. Hereinafter the same in this Article) of an entrance shall be 600 mm or more;

(2) The effective height (referring to the height of the section which can be used effectively as the entrance. Hereinafter the same in this Article) of an entrance shall be 1,600 mm or more (1,200 mm or more in the case of a motor vehicle whose effective height on an aisle may be reduced to 1,200 mm under the provision of Paragraph 1 of Article 33);

(Referential diagram)



b: Effective width
h: Effective height

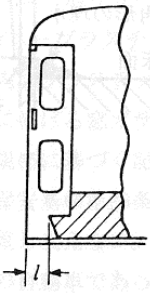
(3) The entrance of a motor vehicle whose floor height exceeds, in the unloaded state, 450 mm above the ground shall be provided with steps, each of which is 400 mm or less (450 mm in the case of the lowermost step) in height;

(4) The steps at an entrance shall be constructed so they do not cause passengers to slip;

(5) In the case of the entrance in Item (3), an entrance railing to secure safe boarding and alighting shall be provided.

4. The requirements prescribed in the Announcement of Paragraph 6 of Article 25 of the Safety Regulations in connection with the size, construction, etc. of entrances of infant-carrying motor vehicles shall be the requirements prescribed in each of the following Items. However, this provision shall not apply to an entrance only for the seats directly accessible from the entrance.

(1) The entrance of a motor vehicle whose floor height exceeds, in the unloaded state, 300 mm above the ground shall be provided with steps, each of which is 200 mm or less (300 mm in the case of the lowermost step) in height and also 200 mm or more in effective depth (which means the depth of the section of a step which can be used effectively during entry/exit and a horizontal distance between the front end of a step and that of the next step; hereinafter the same). However, in cases where it is difficult for a step other than the lowermost one to have the said dimension, due to the doors, etc., it may be constructed so that it has an effective depth of 200 mm or more at the part where an effective width of the entrance is as long as 350 mm or more;



l: Effective depth

(2) The requirements of the preceding Paragraph (except Item (3)) shall apply mutatis mutandis to the entrance and steps.

Article 36 (Emergency Exits)

The requirements prescribed in the Announcement of Paragraph 1 of Article 26 of the Safety Regulations in connection with the installation position, size, etc. of emergency exits shall be the requirements prescribed in each of the following Items:

(1) The emergency exit shall be located on the right side at the rear (referring to those sections located back from the centre of the passenger compartment on the right side in the longitudinal direction) or on the rear of the passenger compartment. In this case, those emergency exits whose centre of the effective width is located back from the rear on the right side shall be regarded as complying with this requirement;

(2) The emergency exit of a motor vehicle with a passenger capacity of 30 persons or more, except the case of the next Item and Item (4), shall be 400 mm or more in effective width and 1,200 mm or more in effective height;

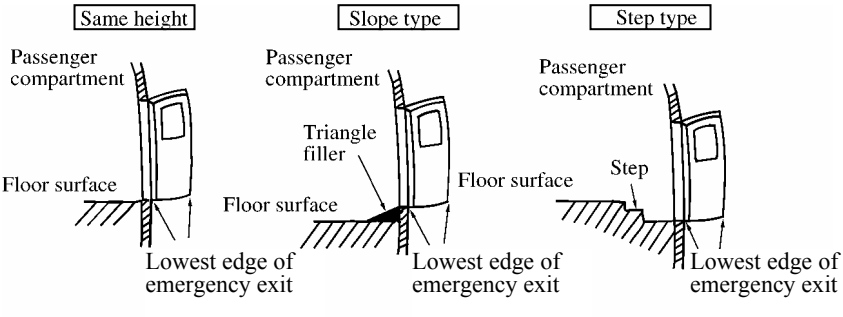
(3) In unavoidable cases due to the protrusion of wheel covers, etc. next to an emergency exit, the emergency exit located on the right side at the rear of the passenger compartment shall be 250 mm or more in effective width at the part up to the height of 450 mm above the floor surface and 400 mm or more at other parts in effective width, and moreover 1,200 mm or more in effective height;

(4) In unavoidable cases (except the case of the preceding Item) due to the presence of forward-facing seats next to an emergency exit, the emergency exit located on the right side at the rear of the passenger compartment shall be 300 mm or more in effective width at the part up to the height of 650 mm and 400 mm or more in effective width at other parts in effective width, and moreover 1,300 mm or more in effective height;

(5) The emergency exit of an infant-carrying vehicle with a passenger capacity of less than 30 persons shall be 300 mm or more in effective width and 1,000 mm or more in effective height;

(6) The emergency exit shall have an outward opening door which can be securely closed under normal conditions and which may be opened from both inside and outside of the passenger compartment without using any key or other special tool in the event of fire, collisions and other emergencies. In this case, the door will not be closed by its own weight after it is opened;

(7) Any obstacles, such as the bumper, drawing hooks, and any other object which is liable to hamper exiting, shall not protrude around the emergency exit and no step shall be provided between the lower edge of the exit and the floor. In this case, the phrase "no step shall be provided between the lower edge of the exit and the floor" shall mean a construction whereby no person is likely stumble while exiting. The emergency exits shown in the following figures shall be regarded as complying with this requirement;



(8) The seat near the emergency exit shall be easily detached or folded so as not to obstruct escape. In this case, the phrase "not to obstruct escape" shall refer to a seat, in the detached or folded state, where the

effective width and effective height of the section from the aisle to the emergency exit comply with the requirements of Item (5) in the case of the motor vehicles specified in the said Item; the requirements of Items (2), (3) or (4) in the case of other motor vehicles, and such construction which makes it possible to retain the conditions above.

2. On motor vehicles provided with an emergency exit, the location of the emergency exit and the method of opening the door shall be legibly indicated at or near the emergency door pursuant to the provision of Paragraph 2 of Article 26 of the Safety Regulations. In this case, when a lamp is used to indicate the location of the emergency exit, the colour of the light shall be green.

3. Motor vehicles provided with an emergency exit shall be equipped with a warning device to notify the driver when the door of the emergency exit is opened pursuant to the provision of Paragraph 3 of Article 26 of the Safety Regulations

Article 37 (Goods-Loading Accommodation)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 27 of the Safety Regulations in connection with the strength, construction, etc. of goods-loading accommodations, such as loading platforms, shall be that the goods-loading accommodation of a motor vehicle, such as loading platforms, shall be secure and be constructed so that goods can be loaded safely and securely. In this case, those enumerated in each of the following Items shall be regarded as not complying with this requirement:

(1) Goods-loading accommodations, such as loading platforms, which exhibit severe damage;

(2) Loading platforms (only limited to loading platforms which can be tilted. Hereinafter the same in this Paragraph) of motor vehicles used exclusively for transport of soil and sand (except motor vehicles provided for in the next Paragraph. Hereinafter the same in this Paragraph), where the value that is obtained by dividing the maximum loading capacity of the motor vehicle concerned by the capacity of the loading platform concerned (values of less than 0.1 m^3 shall be discarded) is less than 1.5 tons/m^3 in the case of ordinary-sized motor vehicles; and less than 1.3 tons/m^3 in the case of small-sized motor vehicles;

(3) Loading platforms of motor vehicles other than those specified in the

preceding Item, having the attaching metal ware of inserting frames;

(4) In the case of motor vehicles used exclusively for transport of soil and sand, which do not come under the categories specified in each of the preceding Items, loading platforms where parts, such as rear gate panels and side gate panels, of the loading platform are higher than the remaining parts and those designed for aiming at overloading in excess of the maximum loading capacity.

2. The goods-loading accommodation prescribed in the Announcement of Paragraph 2 of Article 27 of the Safety Regulations in connection with large-sized motor vehicle for transport of sand, etc. provided for in Article 4 of the "Special Measures Act for Prevention of Traffic Accidents by Large-sized Motor Vehicles for Transport of Sand, etc." (Law No. 131 of 1967) shall be the goods-loading accommodation prescribed in each of the following Items:

(1) Loading platforms of a motor vehicle, where the value that is obtained by dividing the maximum loading capacity of the motor vehicle concerned by the capacity of the loading platform concerned (values of less than 0.1 m^3 shall be discarded) is less than 1.5 tons/m^3;

(2) Loading platforms of motor vehicles other than those specified in the preceding Item, having the attaching metal ware of inserting frames;

(3) Loading platforms of motor vehicles which do not come under the categories specified in each of the preceding Items, where parts, such as rear gate panels and side gate panels, of the loading platform are higher than the remaining parts and those designed for aiming at overloading in excess of the maximum loading capacity.

Article 38 (High-Pressure Gas Transport Devices)

The requirements prescribed in the Announcement of Article 28 of the Safety Regulations in connection with the strength, installation method, etc. of the gas transport device of a motor vehicle for the transport of high-pressure gas shall be the requirements prescribed in each of the following Items:

(1) For gas-transporting containers, the requirements of Items (1) and (5), Paragraph 1 of Article 20 shall apply mutatis mutandis;

(2) For the piping of a gas transport device, the requirements of Items (5)

through (7) and (9), Paragraph 1 of Article 20 shall apply mutatis mutandis;

(3) For parts where the gas comes in contact with the gas transport device, the requirement of Item (8), Paragraph 1 of Article 20 shall apply mutatis mutandis;

(4) For the installation of the gas transport device and piping, the requirement of Item (4), Paragraph 1 of Article 20 shall apply mutatis mutandis;

(5) The gas-filling valve shall be located near the gas-filling inlet port, and the gas-feeder valve shall be near the gas-feeder outlet port;

(6) In the case of a gas-transporting containers for transportation of poisonous gas (except liquefied gas) in Item (2) of Article 2 of the "Safety Regulations for General High-Pressure Gases" (Ministry of International Trade and Industry Ordinance No. 53 of 1966), a pressure gauge, which indicates the pressure of each container, shall be provided in a position easily seen by the driver for each group of containers partitioned by gas stopper valves

(7) The pressure gauge in the preceding Item shall be graduated from zero to the value 1.5 times or more, but twice or less of the gas filling pressure;

(8) The pressure gauge in Item (6) shall either be provided with lighting equipment or a plate or pointer painted with self-illuminating paint.

Article 39 (Window Glass)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 29 of the Safety Regulations in connection with the safety glass, etc. of the window glass, the requirements prescribed in the Announcement of Paragraph 2 of Article 29 of the Safety Regulations in connection with the strength, etc. of the windshield glass of motor vehicles (except large-sized special motor vehicles, small-sized special motor vehicles for agricultural use, motor vehicles with a maximum speed of less than 20 km/h and trailers) and the requirements prescribed in the Announcement of Paragraph 3 of Article 29 of the Safety Regulations in connection with the distortion of the windshield glass and side glass of motor vehicles (except trailers), the rate of visible light transmission, etc. shall be the requirements prescribed in Attachment 37 "Technical Standard for Window Glass." In this case, the

"place prescribed in the Announcement to be where there is less possibility that occupants be insured by pieces of glass concerned" of the proviso of Paragraph 1 of Article 29 of the Safety Regulations shall be the place separated from the driver's compartment and passenger compartment by a partition wall which will not allow fragments of a broken glass to easily pass through.

2. The sections prescribed by the Announcement of Paragraph 3 of Article 29 of the Safety Regulations shall be those sections at the rear of the driver's seat. In this case, the ranges enumerated in each of the following Items shall be regarded as sections at the rear of the driver's seat:

(1) Side glass of those seats, etc. at the rear of the driver's seat;

(2) Side glass located at the rear side of a vertical place that is including the forward edge of the head restraint provided at the driver's seat (the forward edge at the top of the seatback provided at the driver's seat in the case of a motor vehicle without a head restraint at the driver's seat; and the rear edge of the driver's head under normal driving posture in the case of a motor vehicle without a head restraint and a seatback at the driver's seat) and is perpendicular to the motor vehicle longitudinal centre line. Here, in the case of the driver's seat equipped with a sliding mechanism, etc., the driver's seat shall be adjusted to the most backward position. In the case of the seatback of the driver's seat equipped with a reclining mechanism, the seatback shall be adjusted to such an angular position that is as close to 25 degrees as possible in the backward direction from the vertical line.

3. The substance prescribed in the Announcement of Item (6), Paragraph 4 of Article 29 of the Safety Regulations in connection with mounting, affixing, painting or stamping to the window glass shall be those enumerated in each of the following Items:

(1) Affixed-type rear-view mirrors provided in the vehicle compartment;

(2) Equipment used for communicating with the communication facilities provided on the road, etc., cameras used to obtain information about the road and traffic conditions, equipment which measures the distance relative to other vehicles, sensors which actuate the wipers automatically when sensing raindrops, etc., or sensors which detect the receiving light amount and actuate automatically the headlamps, position lamps, etc., which meet the following requirements enumerated below:

A. In the case of motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less (hereinafter referred to as the "passenger motor vehicles" in this Article), it shall be affixed within the range set forth in the following Item ① or ②.

① When the driver in his seat views the front from the point V provided for in Paragraph 2–9 of Attachment 37 "Technical Standard for Window Glass," the range on the windshield glass screened by the interior rear-view mirror.

② The range other than the test zone B of the windshield glass (hereinafter referred to as the "test zone B") provided for in Paragraph 2–8 of Attachment 37 "Technical Standard for Window Glass" and the area which is produced by enlarging the test zone B in the horizontal direction of the windshield glass.

B. In the case of motor vehicles other than passenger motor vehicles, it shall be affixed within the range set forth in the following Item ① or ②.

① When the driver in his seat views the front from the point O provided for in Paragraph 2–9 of Attachment 37 "Technical Standard for Window Glass," the range on the windshield glass screened by the interior rear-view mirror.

② The range other than the test zone I of the windshield glass (hereinafter referred to as the "test zone I") provided for in Paragraph 2–8 of Attachment 37 "Technical Standard for Window Glass" and the area which is produced by enlarging the test zone I in the horizontal direction of the windshield glass.

(3) Antennas affixed on the windshield glass to receive public radio waves. In this case, the requirements of the following Items A and B shall be met in the case of passenger motor vehicles in which the antenna is affixed on the test zone A of the windshield glass (hereinafter referred to as the "test zone A") provided for in Paragraph 2–8 of Attachment 37 "Technical Standard for Window Glass" or the test zone B; and the requirements of the following Item C shall be met in the case of motor vehicles other than passenger motor vehicles in which the antenna is affixed on the test zone I.

A. When affixed on the test zone A, the width of the equipment shall be 0.5 mm or less and the number of pieces of the

equipment shall not exceed three.

B. When affixed on the test zone B (except the area which overlaps the test zone A), the width of the equipment shall be 1.0 mm or less.

C. When affixed on the test zone I, the width of the equipment shall be 1.0 mm or less.

(4) Equipment which prevents the wipers from freezing and which meets the following requirements enumerated below:

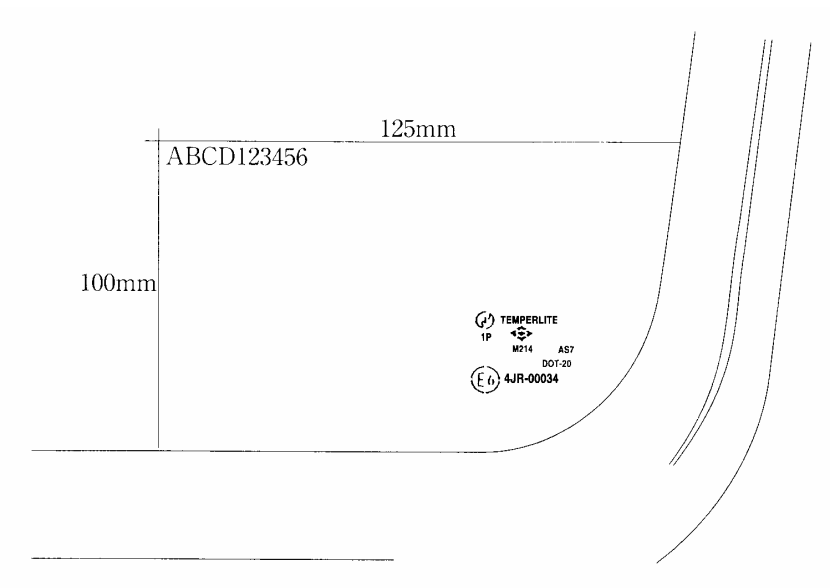
A. In the case of passenger motor vehicles, the equipment concerned shall be affixed in the range below the lower edges of the test zone B and the area which is produced by enlarging the test zone B in the horizontal direction of the windshield glass.

B. In the case of motor vehicles other than passenger motor vehicles, the equipment concerned shall be affixed in the range below the lower edges of the test zone I and the area which is produced by enlarging the test zone I in the horizontal direction of the windshield glass.

(5) Markings for the motor vehicle registration issued by the stationed military police;

(6) Besides those enumerated in each of the preceding Items, such substances which are transparent and also ensure the rate of visible light transmission of 70% or more at those sections concerned with the range of the driver's view necessary for recognizing the traffic conditions under a mounted, affixed or painted condition;

(7) Markings indicating that a motor vehicle is equipped with a theft-control device or characters and codes stamped on the window glass for preventing the theft of the motor vehicle, which are affixed or stamped in such a way that the height of the upper edge of the marking or stamp is 100 mm or less from the lower edge of the glass opening section (except those sections overlapped with the weather strips and moldings as well as sections covered with masking. Hereinafter the same in this Article.) near the side glass and that the front edge of the marking or stamp is within 125 mm from the rear edge of the glass opening section near the side glass;



4. "The range of the driver's view necessary for recognizing the traffic conditions" provided for in Item (7) of the preceding Paragraph shall be a range other than the ranges prescribed in each of the following Items (except those ranges necessary for recognizing the rear-view mirrors in Paragraph 1 of Article 44 of the Safety Regulations and the mirrors and other devices in Paragraph 5 of the same Article as well as, among the window glass of a motor vehicle in the proviso of the said Paragraph, those ranges necessary for directly recognizing obstacles in the said Paragraph).

(1) Ranges within 20% of the actual length, at the upper edge of the windshield glass, of the glass opening on the vertical plane that is parallel to the motor vehicle longitudinal centre line;

(2) For side glass, ranges of the window glass located at the upper part of the door, etc. provided at the side of the motor vehicle;

(3) For side glass, ranges of the window glass located at the lower part of the door, etc. provided at the side of the motor vehicle;

(4) Besides those ranges specified in the preceding Items, of the window glass of the doors at the side of motor vehicles with a passenger capacity of 11 persons or more or motor vehicles whose shape is similar to that of motor vehicles with a passenger capacity of 11

persons or more, ranges below a horizontal place which includes the seating surface of the driver's seat.

5. If the driver can recognize the objects enumerated in each of the following Items under a mounted, affixed or painted condition on the window glass, those objects shall be regarded as "being transparent" as in Item (7) of Paragraph 3.

(1) For those sections concerning the driver's view necessary for recognizing the traffic conditions, other motor vehicles, pedestrians, etc.;

(2) In the case of Items (1) and (2) of the preceding Paragraph, traffic signals;

(3) In the case of Items (3) and (4) of the preceding Paragraph, pedestrians, etc.

Article 40 (Noise Control Device)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 30 of the Safety Regulations in connection with the construction, noise level, etc. so that motor vehicles (except trailers. Hereinafter the same in this Article) may not emit considerable noise shall be the requirements prescribed in each of the following Items.

(1) Motor vehicles shall be so constructed that the steady running noise level, expressed in dB, that has been measured according to the method prescribed in Attachment 39 "Measurement Procedure for Steady Running Noise Level" may not exceed 85 dB;

(2) Motor vehicles (except motor vehicles equipped with no exhaust pipe, and motor vehicles equipped with an exhaust pipe, but whose engine will not operate when the motor vehicle is in a stopped state) posted in the "Category of motor vehicles" column of the following table shall be constructed so that the proximity stationary noise level, expressed in dB, that has been measured according to the method prescribed in Attachment 38 "Measurement Procedure for Proximity Stationary Noise Level" may not exceed the noise level posted in the "Noise level" column of the following table, respectively;

Category of motor vehicles		Noise level
Large-sized special motor vehicles and small-sized special motor vehicles		110
Ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles (except motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less and motor cycles (including those with sidecar; the same applies hereinafter in this Article, Attachment 38 "Measurement Procedure for Proximity Stationary Noise Level," Attachment 39 "Measurement Procedure for Steady Running Noise Level" and Attachment 40 "Measurement Procedure for Acceleration Running Noise Level."))	With a gross vehicle weight exceeding 3.5 tons and a maximum engine output exceeding 150kW	99
	With a gross vehicle weight exceeding 3.5 tons and a maximum engine output of 150kW or less	98
	With a gross vehicle weight of 3.5 tons or less	97
Ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less (except motor cycles)	Those having engine at rear end thereof	100
	Other than those having engine at rear end thereof	96
Small-sized motor vehicles and mini-sized motor vehicles (limited to motor cycles)		94

(3) Motor vehicles posted in the "Category of motor vehicles" column of the following table shall be so constructed that the steady running noise level, expressed in dB, that has been measured according to the method prescribed in Attachment 39 "Measurement Procedure for Steady Running Noise Level" and the acceleration running noise level, expressed in dB, that has been measured according to the method prescribed in Attachment 40 "Measurement Procedure for Acceleration Running Noise Level" may not exceed the noise level posted in the "Steady running noise level" and "Acceleration running noise level" columns of the following table, respectively, at the time of the inspection provided for in Paragraph 4 of Article 75 of the Act or the inspection provided for in Paragraph 5 of Article 62–3 of the Enforcement Regulations or Article 62–4 of the same Regulations (the initial inspection or preliminary inspection in the case of motor vehicles designated by the Minister of Land, Infrastructure and Transport (except type-designated motor vehicles, motor vehicles with designated noise control device and motor vehicles whose type has been approved pursuant to the provision of Paragraph 1 of Article 62–3

of the said Regulations)).

Category of motor vehicles			Noise level	
			Steady running noise level	Acceleration running noise lever
Ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles (except motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less and motor cycles)	With a gross vehicle weight exceeding 3.5 tons and a maximum engine output exceeding 150kW	Those having power train system which transmits power to every wheel (hereinafter referred to as the “all-wheel drive motor vehicles), tractors drawing semi-trailers and crane trucks	83	82
		Those other than all-wheel drive motor vehicles, tractors drawing semi-trailers and crane trucks	82	81
	With a gross vehicle weight exceeding 3.5 tons and a maximum engine output of 150 kW or less	All-wheel drive motor vehicles	80	81
		Those other than all-wheel drive motor vehicles	79	80
	With a gross vehicle weight of 3.5 tons or less		74	76
Ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less (except motor cycles)			72	76
Small-sized motor vehicles (limited to motor cycles)			72	73
Mini-sized motor vehicles (limited to motor cycles)			71	73

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 30 of the Safety Regulations in connection with the construction,

noise control performance, etc. so that the silencer mounted on a motor vehicle having an internal combustion engine as the prime mover controls generation of noise effectively shall be that the silencer exhibit no damage and corrosion.

[Exhaust Emission Regulations]

Article 41 (Emission Control Device)

1. The requirements prescribed in the Announcement of Paragraph 2 of Article 31 of the Safety Regulations in connection with the emission control performance on carbon monoxide, hydrocarbons, nitrogen oxides, particulate matters and diesel smoke contained in the exhaust emission emitted from the exhaust pipe of a motor vehicle to the atmosphere shall be the requirements prescribed in each of the following Items. However, the requirements of Items (1), (2), (5), (6), (9) and (10) shall not apply to ordinary-sized motor vehicles and small-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less (including motor cycles (including motor cycles with sidecar. Hereinafter the same in this Article.)). Moreover, the requirements of Items (3), (4), (7), (8), (11), (12), (18) and (19) shall not apply to motor cycles, and the requirements of Items (9) through (12) shall not apply to fuel cell vehicles whose fuel is compressed hydrogen gas and liquefied hydrogen gas.

[JE05-Mode Mean Value Regulations at Time of Completion Inspection, etc. for Gasoline・LPG Motor Vehicles (with GVW exceeding 3.5 tons)]

(1) Of gasoline- or liquefied petroleum gas-fueled ordinary-sized motor vehicles and small-sized motor vehicles (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), those with a gross vehicle weight exceeding 3.5 tons shall comply with the following requirements at the time of the inspection of Paragraph 4 of Article 75 of the Act in the case of type-designated motor vehicles; and the inspection of Article 63 of the Enforcement Regulations (hereinafter referred to as the "completion inspection, etc.") in the case of motor vehicles with designated exhaust emission control device:

The emission mass, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated

according to the JE05-mode method provided for in Attachment 41 "Measurement Procedure for Exhaust Emission of Heavy-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the said JE05-mode method, respectively. The mean value of the thus-obtained values for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. shall not exceed 16.0 in the case of carbon monoxide; 0.23 in the case of non-methane hydrocarbons; and 0.7 in the case of nitrogen oxides.

[JE05-Mode Upper Limit Value Regulations at Time of Initial Inspection, etc. for Gasoline・LPG Motor Vehicles (with GVW exceeding 3.5 tons)]

(2) Of gasoline- or liquefied petroleum gas-fueled ordinary-sized motor vehicles and small-sized motor vehicles (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), those with a gross vehicle weight exceeding 3.5 tons shall comply with the following requirements at the time of the initial inspection or preliminary inspection (hereinafter referred to as the "initial inspection, etc."):

The emission mass, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated according to the JE05-mode method provided for in Attachment 41 "Measurement Procedure for Exhaust Emission of Heavy-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the said JE05-mode method, respectively. The thus-obtained values shall not exceed 21.3 in the case of carbon monoxide; 0.31 in the case of non-methane hydrocarbons; and 0.9 in the case of nitrogen oxides.

[10・11/15-Mode Mean Value Regulations at Time of Completion Inspection, etc. for Gasoline・LPG Motor Vehicles (with GVW of 3.5 tons or less)]

(3) Of gasoline- or liquefied petroleum gas-fueled ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), motor vehicles

other than those subjected to the application of the provision of Item (1) shall comply with the following requirements at the time of the completion inspection, etc.:

The emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated according to the 10•15-mode method provided for in Attachment 42 “Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles” and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.88. Also, the emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated according to the 11-mode method provided for in the said Attachment and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.12. The mean value of the sum of these products for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. shall not exceed the value posted in the “Carbon monoxide,” “Non-methane hydrocarbons” and “Nitrogen oxides” columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon monoxide	Non-methane hydrocarbons	Nitrogen oxides
A. Ordinary-sized motor vehicles, small-sized motor vehicles or mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less	1.15	0.05	0.05
B. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 1.7 tons or less, except those posted in Item A	1.15	0.05	0.05
C. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 3.5 tons or less, except those posted in Items A and B	2.55	0.05	0.07
D. Mini-sized motor vehicles, except those posted in Item A	4.02	0.05	0.05

[10•11/15-Mode Mean Value Regulations at Time of Initial Inspection, etc. for Gasoline•LPG Motor Vehicles (with GVW of 3.5 tons or less)]

(4) Of gasoline- or liquefied petroleum gas-fueled ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), motor vehicles other than those subjected to the application of the provision of Item (2) shall comply with the following requirements at the time of the initial inspection, etc.:

The emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated according to the 10•15-mode method provided for in Attachment 42 “Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles” and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.88. Also, the emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been

converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated according to the 11-mode method provided for in the said Attachment and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.12. The sum of these products shall not exceed the value posted in the "Carbon monoxide," "Non-methane hydrocarbons" and "Nitrogen oxides" columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon monoxide	Non-methane hydrocarbons	Nitrogen oxides
A. Ordinary-sized motor vehicles, small-sized motor vehicles or mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less	1.92	0.08	0.08
B. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 1.7 tons or less, except those posted in Item A	1.92	0.08	0.08
C. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 3.5 tons or less, except those posted in Items A and B	4.08	0.08	0.10
D. Mini-sized motor vehicles, except those posted in Item A	6.67	0.08	0.08

[JE05-Mode Mean Value Regulations at Time of Completion Inspection, etc. for Diesel Motor Vehicles (with GVW exceeding 3.5 tons)]

(5) Of diesel-powered ordinary-sized motor vehicles and small-sized motor vehicles (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), those with a gross vehicle weight exceeding 3.5 tons shall comply with the following requirements at the time of the completion inspection, etc.:

The emission mass, expressed in gram (the value, expressed in gram,

that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the JE05-mode method provided for in Attachment 41 "Measurement Procedure for Exhaust Emission of Heavy-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the said JE05-mode method, respectively. The mean value of the thus-obtained values for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. shall not exceed 2.22 in the case of carbon monoxide; 0.17 in the case of non-methane hydrocarbons; 2.0 in the case of nitrogen oxides; and 0.027 in the case of particulate matters.

[JE05-Mode Upper Limit Value Regulations at Time of Initial Inspection, etc. for Diesel Motor Vehicles (with GVW exceeding 3.5 tons)]

(6) Of diesel-powered ordinary-sized motor vehicles and small-sized motor vehicles (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), those with a gross vehicle weight exceeding 3.5 tons shall comply with the following requirements at the time of the initial inspection, etc.:

The emission mass, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the JE05-mode method provided for in Attachment 41 "Measurement Procedure for Exhaust Emission of Heavy-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the said JE05-mode method, respectively. The thus-obtained values shall not exceed 2.95 in the case of carbon monoxide; 0.23 in the case of non-methane hydrocarbons; 2.7 in the case of nitrogen oxides; and 0.036 in the case of particulate matters.

[10•11/15-Mode Mean Value Regulations at Time of Completion Inspection, etc. for Diesel Motor Vehicles (with GVW of 3.5 tons or less)]

(7) Of diesel-powered ordinary-sized motor vehicles and small-sized motor vehicles (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), motor vehicles other than those subjected to the application of the provision of Item (5) shall comply with the following requirements at the time of the completion inspection, etc.:

The emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 10•15-mode method provided for in Attachment 42 "Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.88. Also, the emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 11-mode method provided for in the said Attachment and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.12. The mean value of the sum of these products for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. shall not exceed the value posted in the "Carbon monoxide," "Non-methane hydrocarbons," "Nitrogen oxides" and "Particulate matters" columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon mon-oxide	Non-methane hydro-carbons	Nitrogen oxides	Particu-late matters
A. Ordinary-sized motor vehicles or small-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less and with a vehicle weight of 1,265 kg or less	0.63	0.024	0.14	0.013
B. Ordinary-sized motor vehicles or small-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less, except those posted in Item A	0.63	0.024	0.15	0.014
C. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 1.7 tons or less, except those posted in Items A and B	0.63	0.024	0.14	0.013
D. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 3.5 tons or less, except those posted in Items A through C	0.63	0.024	0.25	0.015

[10・11/15-Mode Upper Limit Value Regulations at Time of Initial Inspection, etc. for Diesel Motor Vehicles (with GVW of 3.5 tons or less)]

(8) Of diesel-powered ordinary-sized motor vehicles and small-sized motor vehicles (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), motor vehicles other than those subjected to the application of the provision of Item (6) shall comply with the following requirements at the time of the initial inspection, etc.:

The emission mass per running distance of 1 km, expressed in gram

(the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 10•15-mode method provided for in Attachment 42 "Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.88. Also, the emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 11-mode method provided for in the said Attachment and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.12. The sum of these products shall not exceed the value posted in the "Carbon monoxide," "Non-methane hydrocarbons," "Nitrogen oxides" and "Particulate matters" columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon mon-oxide	Non-methane hydro-carbons	Nitrogen oxides	Particu-late matters
A. Ordinary-sized motor vehicles or small-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less and with a vehicle weight of 1,265 kg or less	0.84	0.032	0.19	0.017
B. Ordinary-sized motor vehicles or small-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less, except those posted in Item A	0.84	0.032	0.20	0.019
C. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 1.7 tons or less, except those posted in Items A and B	0.84	0.032	0.19	0.017
D. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 3.5 tons or less, except those posted in Items A through C	0.84	0.032	0.33	0.020

[JE05-Mode Mean Value Regulations at Time of Completion Inspection, etc. for Motor Vehicles Fueled by Other Fuel (with GVW exceeding 3.5 tons)]

(9) Of ordinary-sized motor vehicles and small-sized motor vehicles fueled by fuel other than gasoline, liquefied petroleum gas or diesel fuel (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), those with a gross vehicle weight exceeding 3.5 tons shall comply with the following requirements at the time of the completion inspection, etc.:

The emission mass, expressed in gram (the value, expressed in gram,

that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the JE05-mode method provided for in Attachment 41 "Measurement Procedure for Exhaust Emission of Heavy-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the said JE05-mode method, respectively. The mean value of the thus-obtained values for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. shall not exceed 16.0 in the case of carbon monoxide; 0.23 in the case of non-methane hydrocarbons; 2.0 in the case of nitrogen oxides; and 0.027 in the case of particulate matters.

[JE05-Mode Upper Limit Value Regulations at Time of Initial Inspection, etc. for Motor Vehicles Fueled by Other Fuel (with GVW exceeding 3.5 tons)]

(10) Of ordinary-sized motor vehicles and small-sized motor vehicles fueled by fuel other than gasoline, liquefied petroleum gas or diesel fuel (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), those with a gross vehicle weight exceeding 3.5 tons shall comply with the following requirements at the time of the initial inspection, etc.:

The emission mass, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the JE05-mode method provided for in Attachment 41 "Measurement Procedure for Exhaust Emission of Heavy-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the said JE05-mode method, respectively. The thus-obtained values shall not exceed 21.3 in the case of carbon monoxide; 0.31 in the case of non-methane hydrocarbons; 2.7 in the case of nitrogen oxides; and 0.036 in the case of particulate matters.

[10•11/15-Mode Mean Value Regulations at Time of Completion Inspection, etc. for Motor Vehicles Fueled by Other Fuel (with GVW of 3.5 tons or less)]

(11) Of ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles fueled by fuel other than gasoline, liquefied petroleum gas or diesel fuel (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device), motor vehicles other than those subjected to the application of the provision of Item (9) shall comply with the following requirements at the time of the completion inspection, etc.:

The emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 10•15-mode method provided for in Attachment 42 "Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.88. Also, the emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 11-mode method provided for in the said Attachment and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.12. The mean value of the sum of these products for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. shall not exceed the value posted in the "Carbon monoxide," "Non-methane hydrocarbons," "Nitrogen oxides" and "Particulate matters" columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon mon-oxide	Non-methane hydro-carbons	Nitrogen oxides	Particu-late matters
A. Ordinary-sized motor vehicles, small-sized motor vehicles or mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less and with a vehicle weight of 1,265 kg or less	1.15	0.05	0.14	0.013
B. Ordinary-sized motor vehicles, small-sized motor vehicles or mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less, except those posted in Item A	1.15	0.05	0.15	0.014
C. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 1.7 tons or less, except those posted in Items A and B	1.15	0.05	0.14	0.013
D. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 3.5 tons or less, except those posted in Items A, B and C	2.55	0.05	0.25	0.015
E. Mini-sized motor vehicles, except those posted in Items A and B	4.02	0.05	0.15	0.014

[10・11/15-Mode Upper Limit Value Regulations at Time of Initial Inspection, etc. for Motor Vehicles Fueled by Other Fuel (with GVW of 3.5 tons or less)]

(12) Of ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles fueled by fuel other than gasoline, liquefied petroleum gas and diesel fuel (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control

device), motor vehicles other than those subjected to the application of the provision of Item (10) shall comply with the following requirements at the time of the initial inspection, etc.:

The emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 10•15-mode method provided for in Attachment 42 "Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.88. Also, the emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of non-methane hydrocarbons), of carbon monoxide, non-methane hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the 11-mode method provided for in the said Attachment and emitted from the exhaust pipe to the atmosphere shall be multiplied by 0.12. The sum of these products shall not exceed the value posted in the "Carbon monoxide," "Non-methane hydrocarbons," "Nitrogen oxides" and "Particulate matters" columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon mon-oxide	Non-methane hydro-carbons	Nitrogen oxides	Particu-late matters
A. Ordinary-sized motor vehicles, small-sized motor vehicles or mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less and with a vehicle weight of 1,265 kg or less	1.92	0.08	0.19	0.017
B. Ordinary-sized motor vehicles, small-sized motor vehicles or mini-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less, except those posted in Item A	1.92	0.08	0.20	0.019
C. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 1.7 tons or less, except those posted in Items A and B	1.92	0.08	0.19	0.017
D. Ordinary-sized motor vehicles or small-sized motor vehicles with a gross vehicle weight of 3.5 tons or less, except those posted in Items A, B and C	4.08	0.08	0.33	0.020
E. Mini-sized motor vehicles, except those posted in Items A and B	6.67	0.08	0.20	0.019

[8-Mode Mean Value Regulations at Time of Completion Inspection, etc. for Diesel Large-Sized and Small-Sized Special Motor Vehicles]

(13) Of diesel-powered large-sized special motor vehicles (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device) and small-sized special motor vehicles (only limited to motor vehicles whose type has

been approved pursuant to the provision of Paragraph 1 of Article 62–3 of the Enforcement Regulations (hereinafter referred to as the "type-approved motor vehicles")), those equipped with an engine with rated output of 19 kW or more and less than 560 kW shall comply with the following requirements at the time of the completion inspection, etc. in the case of large-sized special motor vehicles; and the inspection of Paragraph 5 of Article 62–3 of the Enforcement Regulations in the case of small-sized special motor vehicles:

The emission mass, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of hydrocarbons), of carbon monoxide, hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the diesel-powered special motor vehicle 8-mode method provided for in Attachment 43 "Measurement Procedure for 8-Mode Exhaust Emission of Diesel-Powered Special Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the same method. The mean value of the thus-obtained values for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. or the type approval inspection shall not exceed the value posted in the "Carbon monoxide," "Hydrocarbons," "Nitrogen oxides" and "Particulate matters" columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon mon-oxide	Hydro-carbons	Nitrogen oxides	Particu-late matters
A. Large-sized special motor vehicles or small-sized special motor vehicles equipped with an engine with rated output of 19 kW or more and less than 37 kW	5.00	1.50	8.00	0.80
B. Large-sized special motor vehicles or small-sized special motor vehicles equipped with an engine with rated output of 37 kW or more and less than 75 kW	5.00	1.30	7.00	0.40
C. Large-sized special motor vehicles or small-sized special motor vehicles equipped with an engine with rated output of 75 kW or more and less than 130 kW	5.00	1.00	6.00	0.30
D. Large-sized special motor vehicles or small-sized special motor vehicles equipped with an engine with rated output of 130 kW or more and less than 560 kW	3.50	1.00	6.00	0.20

[8-Mode Upper Limit Value Regulations at Time of Initial Inspection, etc. for Diesel Large-Sized Special Motor Vehicles]

(14) Diesel-powered large-sized special motor vehicles (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device) shall comply with the following requirements at the time of the initial inspection, etc.:

The emission mass, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of hydrocarbons), of carbon monoxide, hydrocarbons, nitrogen oxides and particulate matters contained in the exhaust emission generated when the motor vehicle is operated according to the diesel-powered special motor vehicle 8-mode method

provided for in Attachment 43 “Measurement Procedure for 8-Mode Exhaust Emission of Diesel-Powered Special Motor Vehicles” and emitted from the exhaust pipe to the atmosphere shall be divided by the work done, expressed in kWh, generated when the motor vehicle is operated according to the same method. The thus-obtained values shall not exceed the value posted in the “Carbon monoxide,” “Hydrocarbons,” “Nitrogen oxides” and “Particulate matters” columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon mon-oxide	Hydro-carbons	Nitrogen oxides	Particu-late matters
A. Large-sized special motor vehicles equipped with an engine with rated output of 19 kW or more and less than 37 kW	6.50	1.95	10.40	1.04
B. Large-sized special motor vehicles equipped with an engine with rated output of 37 kW or more and less than 75 kW	6.50	1.69	9.10	0.52
C. Large-sized special motor vehicles equipped with an engine with rated output of 75 kW or more and less than 130 kW	6.50	1.30	7.80	0.39
D. Large-sized special motor vehicles equipped with an engine with rated output of 130 kW or more and less than 560 kW	4.55	1.30	7.80	0.26

[Motor Cycle Mode Mean Value Regulations at Time of Completion Inspection, etc. for Gasoline Motor Cycles]

(15) Of gasoline-fueled motor cycles, small-sized motor vehicles (only limited to type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device) and mini-sized motor vehicles (only limited to type-approved motor vehicles) shall comply with the following requirements at the time of the completion inspection, etc. in the case of small-sized motor vehicles; and the type approval inspection in the case of mini-sized motor vehicles:

The mean value of the emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of hydrocarbons), of carbon monoxide, hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated according to the motor cycle mode method provided for in Attachment 44 "Measurement Procedure for Motor Cycle Mode Exhaust Emission" and emitted from the exhaust pipe to the atmosphere for the motor vehicle concerned and all motor vehicles which are of the same type as the motor vehicle concerned and have already finished the completion inspection, etc. or the type approval inspection shall not exceed the value posted in the "Carbon monoxide," "Hydrocarbons" and "Nitrogen oxides" columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon monoxide	Hydrocarbons	Nitrogen oxides
A. Small-sized motor vehicles or mini-sized motor vehicles with a four-cycle engine	13.0	2.00	0.30
B. Small-sized motor vehicles or mini-sized motor vehicles with a two-cycle engine	8.00	3.00	0.10

[Motor Cycle Mode Upper Limit Value Regulations at Time of Initial Inspection, etc. for Gasoline Motor Cycles]

(16) Gasoline-fueled motor cycles (except type-designated motor vehicles and motor vehicles with type-designated exhaust emission control device) shall comply with the following requirements at the time of the initial inspection, etc.:

The emission mass per running distance of 1 km, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent in the case of hydrocarbons), of carbon monoxide, hydrocarbons and nitrogen oxides contained in the exhaust emission generated when the motor vehicle is operated according to the motor cycle mode method provided for in Attachment 44 "Measurement Procedure for Motor Cycle Mode Exhaust Emission" and emitted from the exhaust pipe to the atmosphere shall not exceed the value posted in the "Carbon monoxide," "Hydrocarbons" and "Nitrogen oxides" columns of the

following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon monoxide	Hydrocarbons	Nitrogen oxides
A. Small-sized motor vehicles with a four-cycle engine	20.0	2.93	0.51
B. Small-sized motor vehicles with a two-cycle engine	14.4	5.26	0.14

[Idling Regulations for Gasoline • LPG Motor Vehicles]

(17) Gasoline- or liquefied petroleum gas-fueled ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles shall comply with the following requirements:

The measured value of carbon monoxide, expressed in volumetric ratio, and the measured value of hydrocarbons, expressed in volumetric ratio by normal-hexane equivalent, contained in the exhaust emission generated when the engine is in idling operation according to the operating conditions provided for in Attachment 42 “Measurement Procedure for Exhaust Emission of Light- and Medium-Duty Motor Vehicles” in the case of motor vehicles posted in Items A (except motor cycles), C and D which are subjected to the application of the provision of Item (3) or (4); Attachment 41 “Measurement Procedure for Exhaust Emission of Heavy-Duty Motor Vehicles” in the case of those subjected to the application of Item (1) or (2); and Attachment 44 “Measurement Procedure for Motor Cycle Mode Exhaust Emission” in the case of motor vehicles posted in Items A (only limited to motor cycles) and B of the following table, respectively, and emitted from the exhaust pipe to the atmosphere shall not exceed the value posted in the “Carbon monoxide” and “Hydrocarbons” columns of the following table, respectively, according to the category of motor vehicle posted in the left column of the same table.

Category of motor vehicles	Carbon monoxide	Hydro-carbons
A. Motor vehicles with a two-cycle engine	4.5%	7,800 ppm
B. Motor cycles with a four-cycle engine	4.5%	2,000 ppm
C. Mini-sized motor vehicles with a four-cycle engine (except motor cycles)	2%	500 ppm
D. Motor vehicles other than those posted in Items A through C	1%	300 ppm

[Diesel Smoke Mode Regulations at Time of Completion and Initial Inspections, etc. for Diesel Motor Vehicles]

(18) Of diesel-powered motor vehicles, those of Items (5) through (8), (13) and (14) shall comply with the following requirements at the time of the completion inspection, etc. or the initial inspection, etc. (the inspection of Paragraph 5 of Article 62–3 of the Enforcement Regulations in the case of small-sized special motor vehicles):

The degree of pollution by diesel smoke contained in the exhaust emission generated when the motor vehicle is operated according to the diesel smoke 4-mode method provided for in Attachment 45 "Measurement Procedure for Diesel 4-Mode Smoke" and emitted from the exhaust pipe to the atmosphere shall not exceed 25%. (In the case of large-sized special motor vehicles and small-sized special motor vehicles, the degree of pollution by diesel smoke contained in the exhaust emission generated when the motor vehicle is operated according to the diesel special motor vehicle 8-mode method provided for in Attachment 43 "Measurement Procedure for 8-Mode Exhaust Emission for Diesel-Powered Special Motor Vehicles" and emitted from the exhaust pipe to the atmosphere shall not exceed 40%.)

[No-Load Rapid Acceleration Diesel Smoke Regulations for Diesel Motor Vehicles]

(19) Diesel-powered motor vehicles shall comply with the following requirements:

The degree of pollution by diesel smoke contained in the exhaust emission generated since the time when the accelerator pedal is depressed during the rapid acceleration while the engine is operated under a no-load condition according to the operating conditions provided for in Attachment 46 "Measurement Procedure for Diesel Smoke During Rapid Acceleration Under No-Load Condition" and

emitted from the exhaust pipe to the atmosphere shall be 25% or less (40% or less in the case of large-sized special motor vehicles and small-sized special motor vehicles).

[Maintenance Regulations for Function of Exhaust Emission Control Device]

2. The requirements prescribed in the Announcement of Paragraph 3 of Article 31 of the Safety Regulations in connection with the construction, function, performance, etc. of the exhaust emission control device to be mounted on a motor vehicle in order to comply with the provisions of the preceding Paragraph that will not hamper the function of the said device and other devices shall be the requirements prescribed in each of the following Items. However, the provisions of Items (2) through (4) shall not apply to motor cycles as well as diesel-powered large-sized special motor vehicles and small-sized special motor vehicles.

(1) The device shall be constructed so that it may function efficiently while the engine is in operation. Moreover, those in which the catalyst, etc. is not mounted securely or the catalyst, etc. exhibits damage shall be regarded as not complying with this requirement;

(2) The device shall have heat-shields or other appropriate measures in order not to hamper the function of other devices when the temperature of the device concerned has risen. However, this requirement shall not apply to motor vehicles equipped with an ignition device whose contact breaker is of no-contact type;

(3) The device shall have a warning system which gives a warning to the driver in his seat when the temperature of the device concerned has risen or is likely to rise beyond the temperature at which it may likely hamper the function of the device itself or other devices (hereinafter referred to as the “abnormal temperature”) and which complies with Attachment 47 “Technical Standard for Heat-Damage Warning Devices, etc. Concerning Exhaust Emission Control Devices of Motor Vehicles.” However, this requirement shall not apply to motor vehicles equipped with a device that prevents the temperature of the device concerned from rising beyond the abnormal temperature and motor vehicles equipped with an ignition device whose contact breaker is of no-contact type;

(4) The device shall have a warning system which gives a warning to the driver in his seat when the function of the device concerned has failed and which complies with Attachment 48 “Technical Standard for On-Board Diagnostic (OBD) System for Exhaust Emission Control

Devices of Motor Vehicles."

[Blow-by Gas Regulations]

3. As regards the blow-by gas recirculation device (referring to a device that recirculates the leaked gases from the combustion chamber of the engine to the crankcase. Hereinafter the same.) to be mounted on ordinary-sized motor vehicles, small-sized motor vehicles and mini-sized motor vehicles having an internal combustion engine as the prime mover, fueled by gasoline, liquefied petroleum gas or diesel fuel, the requirements prescribed in the Announcement of Paragraph 4 of Article 31 of the Safety Regulations in connection with its function, performance, etc. of preventing the emission of hydrocarbons, etc. shall be that its installation is secure and exhibits no damage.

[Fuel Evaporative Gas Regulations for Gasoline Motor Vehicles]

4. For gasoline-fueled ordinary-sized motor vehicles, small-sized motor vehicles (except motor cycles) and mini-sized motor vehicles (except motor cycles), the requirements prescribed in the Announcement of Paragraph 5 of Article 31 of the Safety Regulations in connection with the emission mass of hydrocarbons evaporated from the motor vehicle concerned and its fuel in order to effectively prevent the emission of hydrocarbons shall be that the emission mass, expressed in gram (the value, expressed in gram, that has been converted from the value expressed in volumetric ratio by carbon equivalent), of hydrocarbons evaporated from the fuel, that is measured according to the operating conditions and measurement conditions provided for in Attachment 49 "Measurement Procedure for Fuel Evaporative Emissions" shall not exceed 2.0 g. Moreover, those in which the device controlling the emission of fuel evaporative gas is not mounted securely or exhibits damage shall be regarded as not complying with this requirement.

[Air Conditioning System Requirements]

5. As regards the piping and safety devices of an air conditioner (hereinafter referred to as the "air conditioning system") for the passenger compartment of a motor vehicle, the requirements prescribed in the Announcement of Paragraph 6 of Article 31 of the Safety Regulations in connection with the installation position, installation method, etc. of the air conditioning system to be unlikely to injure occupants shall be the requirements prescribed in each of the following Items.

(1) The piping (except the parts protected by a cover from damage) shall not be located in the passenger compartment;

(2) The safety devices shall be mounted so that the gas may not be discharged to the vehicle compartments.

[Exhaust Pipe Requirements]

6. The requirements prescribed in the Announcement of Paragraph 7 of Article 31 of the Safety Regulations in connection with the installation position, installation method, etc. of the exhaust pipe to be unlikely to injure occupants, etc. by the exhaust gas, etc. emitted from the exhaust pipe of a motor vehicle and not to hamper the function of the brake system, etc. shall be the requirements prescribed in each of the following Items.

(1) No exhaust pipe shall have its opening directed rightwards or leftwards. Moreover, the opening of the exhaust pipe which has an inclination not exceeding 30° rightwards or leftwards in relation to the vertical plane including the motor vehicle longitudinal centre line and is recognized that the emitting gases are not likely to affect other traffic adversely shall be regarded as complying with this requirement.

(2) No exhaust pipe shall have its opening at such a position that the indication of the numbers, etc. on the motor vehicle registration number plate of Paragraph 1 of Article 11 of the Act or the vehicle number plate of Paragraph 1 of Article 73 of the Act (including cases where it applies mutatis mutandis in Paragraph 2 of Article 97–3 of the Act) is hampered by the emitting gases, etc.

(3) No exhaust pipe shall be located in the vehicle compartment. Moreover, exhaust pipes which are not mounted securely or exhibit damage shall be regarded as not complying with this requirement.

(4) No exhaust pipe shall set fire on the motor vehicle (including a trailer drawn by the motor vehicle concerned) or the loaded goods and shall hamper the function of other systems, such as the brake system and electrical system, because of the interference with the exhaust pipe or emitting exhaust gas, etc.

Article 42 (Headlamps, etc.)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 32 of the Safety Regulations in connection with the colour of light, brightness, etc. of the headlamps with driving beams shall be the requirements prescribed in Attachment 50 “Technical Standard for

Headlamps" in the case of motor vehicles other than trailers, motor vehicles with a maximum speed of less than 20 km/h, motor vehicles used for snow removal, civil engineering works and other special use that have been designated by the Director-General of the District Transport Bureau, large-sized special motor vehicles with a maximum speed of less than 35 km/h, motor cycles with or without sidecar, small-sized special motor vehicles for agricultural use, and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements enumerated in each of the following Items in the case of trailers, motor vehicles with a maximum speed of less than 20 km/h, motor vehicles used for snow removal, civil engineering works and other special use that have been designated by the Director-General of the District Transport Bureau, large-sized special motor vehicles with a maximum speed of less than 35 km/h, motor cycles with or without sidecar, small-sized special motor vehicles for agricultural use, and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 51 "Device Type Designation Standard for Headlamps."

(1) The headlamps with driving beam, when all lit at the same time, shall be capable of illuminating with such an intensity that the driver may discern any traffic obstacle on the road at a distance of 100 m (50 m for those installed to motor vehicles used for snow removal, civil engineering work and other special use that have been designated by the Director-General of District Transport Bureau, and large-sized special motor vehicles with a maximum speed of less than 35 km/h and small-sized special motor vehicles for agricultural use) ahead of them in the nighttime, and the total maximum luminous intensity thereof shall not exceed 225,000 cd.

(2) Notwithstanding the provisions of the preceding Item, the headlamp with driving beam mounted on motor vehicles with a maximum speed of less than 20 km/h shall have an adequate luminous intensity to ensure safe operation.

(3) The colour of light of a headlamp with driving beam shall be white.

2. With regard to headlamps with driving beam mounted on motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds, motor vehicles used for snow removal, civil engineering works and other special use that have been designated by the Director-General of the District Transport Bureau, large-sized special motor vehicles with a maximum speed of less than 35 km/h, and small-sized special motor vehicles

for agricultural use, if the measured value of luminous intensity, when measured in a straight-ahead condition, complies with the requirements enumerated in the following Items, those headlamps shall be handled as complying with the requirements of Item (1) of the preceding Paragraph.

(1) For motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds, the point where the luminous intensity of the headlamp with driving beam (main driving beam in the case of a four-unit type headlamp (referring to a headlamp in which four driving beams go on simultaneously; hereinafter the same)) takes on a maximum value (hereinafter referred to as the "maximum luminous intensity point") shall be, at a distance of 10 m in front of the motor vehicle, in the range between the horizontal plane including the centre of the illuminating surface of the headlamp with driving beam and the plane downward from the said horizontal plane by 1/5 of the height of the centre of the illuminating surface of the headlamp concerned. Furthermore, the luminous intensity of the headlamp with driving beam at the maximum luminous intensity point shall be at least the luminous intensity given below.

A. 15,000 cd per lamp in the case of headlamps which, other than the four-unit type headlamps, have such construction that the headlamps with passing beam do not go on simultaneously.

B. 12,000 cd per lamp in the case of headlamps which, other than the four-unit type headlamps, have such construction that the headlamps with passing beam go on simultaneously. However, in cases where the luminous intensity is less than 12,000 cd, the sum together with luminous intensities of the headlamps with passing beam that go on simultaneously shall be 15,000 cd.

C. The main driving beam shall be 12,000 cd per lamp in the case of the four-unit type headlamps. However, in cases where the luminous intensity is less than 12,000 cd, the sum together with luminous intensities of other headlamps with driving beam shall be 15,000 cd.

(2) For motor vehicles used for snow removal, civil engineering works and other special use that have been designated by the Director-General of the District Transport Bureau, large-sized special motor vehicles with a maximum speed of less than 35 km/h, and small-sized special motor vehicles for agricultural use, the maximum luminous intensity point of the headlamp with driving beam (in the case of four-unit type headlamps, the main driving beam) shall be, at a distance of 10 m in

front of the motor vehicle, in the range between the horizontal plane including the centre of the illuminating surface of the headlamp with driving beam and the plane downward from the said horizontal plane by 3/10 of the height of the centre of the illuminating surface of the headlamp concerned. Furthermore, the luminous intensity of the headlamp with driving beam at the maximum luminous intensity point shall be at least 10,000 cd per lamp.

3. The requirements prescribed in the Announcement of Paragraph 3, Article 32 of the Safety Regulations in connection with the installation position, installation method, etc. of the headlamps with driving beam shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

4. The motor vehicles provided with headlamps with driving beam whose luminous intensity is less than the value prescribed in the Announcement, which need not be provided with headlamps with passing beam pursuant to the provision of the proviso in Paragraph 4, Article 32 of the Safety Regulations, shall be motor vehicles (limited only to those with a maximum speed of less than 20 km/h) provided with headlamps with driving beam whose luminous intensity is less than 10,000 cd.

5. The requirements prescribed in the Announcement of Paragraph 5, Article 32 of the Safety Regulations in connection with the colour of light, brightness, etc. of the headlamps with passing beam shall be the requirements prescribed in Attachment 50 "Technical Standard for Headlamps" in the case of motor vehicles other than trailers, motor vehicles with a maximum speed of less than 20 km/h, motor vehicles used for snow removal, civil engineering works and other special use that have been designated by the Director-General of the District Transport Bureau, large-sized special motor vehicles with a maximum speed of less than 35 km/h, motor cycles with or without sidecar, small-sized special motor vehicles for agricultural use, and mini-sized motor vehicles with caterpillar tracks and sleds; and the

requirements enumerated in the following Item through Item (3) in the case of trailers, motor vehicles with a maximum speed of less than 20 km/h, motor vehicles used for snow removal, civil engineering works and other special use that have been designated by the Director-General of the District Transport Bureau, large-sized special motor vehicles with a maximum speed of less than 35 km/h, motor cycles with or without sidecar, small-sized special motor vehicles for agricultural use, and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 51 "Device Type Designation Standard for Headlamps."

(1) The beams from the headlamps with passing beam shall not disturb other traffic and, when all lit, shall be capable of illuminating with such an intensity that the driver may discern any traffic obstacle on the road at a distance of 40 m (15 m for those installed to the motor vehicles used for snow removal, civil engineering works and other special use that have been designated by the Director-General of the District Transport Bureau, large-sized special motor vehicles with a maximum speed of less than 35 km/h, and small-sized special motor vehicles for agricultural use) ahead of them in the nighttime.

(2) In the case of motor vehicles with a maximum speed of less than 20 km/h which are equipped with headlamps with driving beam whose luminous intensity is 10,000 cd or more, notwithstanding the provisions of the preceding Item, the beams from the headlamps with passing beam shall not disturb other traffic.

(3) The colour of light of a headlamp with passing beam shall be white.

6. The requirements prescribed in the Announcement of Paragraph 6, Article 32 of the Safety Regulations in connection with the installation position, installation method, etc. of the headlamps with passing beam shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicating Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type

Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

7. The requirements prescribed in the Announcement of Paragraph 7, Article 32 of the Safety Regulations in connection with the performance, etc. of adjusting the aiming direction of the headlamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the limits provided for in Items (1) through (3) of Paragraph 4–2–6–1–2 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as follows. Furthermore, Paragraphs 2–1–1–2 through 2–1–1–5 of Annex 3 of the said Attachment shall not apply.

(1) $h < 0.8$

limits: between -0.2% and -2.8%

(2) $0.8 \leq h \leq 1.0$

limits: between -0.2% and -2.8%, or between -0.7% and -3.3%

(3) $1.0 < h \leq 1.2$

limits: between -0.7% and -3.3%

(4) $h > 1.2$

limits: between -1.2% and -3.8%

8. The requirements prescribed in the Announcement of Paragraph 9, Article 32 of the Safety Regulations in connection with the washing performance, etc. for the lens surface of the headlamps shall be the

requirements prescribed in Attachment 55 "Technical Standard for Headlamp Cleaners." However, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provision of Paragraph 3–2–1 of Attachment 55 "Technical Standard for Headlamp Cleaners" shall not apply to cases where the parts of the headlamps and headlamp cleaners related to Paragraph 3–2–1 have been type-designated as a complete integral part at the time of the type designation of the headlamp.

9. The requirements prescribed in the Announcement of Paragraph 10, Article 32 of the Safety Regulations in connection with the installation position, installation method, etc. of the headlamp cleaners shall be the requirements prescribed in Attachment 56 "Technical Standard for Installation of Headlamp Cleaners."

Article 43 (Front Fog Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 33 of the Safety Regulations in connection with the colour of light, brightness, etc. of the front fog lamps shall be Attachment 57 "Technical Standard for Front Fog Lamps." However, in cases other than the case of type designation, etc., the phrase "Photometric characteristics on the screen (See Attachment 1.) shall satisfy the requirements specified in Table 2." appearing in the first portion of Paragraph 4–9 of Attachment 57 "Technical Standard for Front Fog Lamps" shall read as "Photometric characteristics on the screen (See Attachment 1.) shall satisfy the requirements specified in Table 2. However, it is permissible for the minimum illumination to be 80% of the minimum illumination given in Table 2 for photometric characteristics, and for the maximum illumination to be 120% of the maximum illumination given in Table 2 for photometric characteristics." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–11, 2–12 and 4–3 as well as the provision of Paragraph 4–5 of Attachment 57 "Technical Standard for Front Fog Lamps" shall not apply, and the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 4–3 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 33 of the Safety Regulations in connection with the installation position, installation method, etc. of the front fog lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar

and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Article 44 (Cornering Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 33–2 of the Safety Regulations in connection with the colour of light, brightness, etc. of the cornering lamps shall be the requirements prescribed in Attachment 101 "Technical Standard for Cornering Lamps." However, in cases other than the case of type designation, etc., the phrase "shall comply with ....." appearing in the provision of Paragraph 4–1 of Attachment 101 "Technical Standard for Cornering Lamps" shall read as "shall comply with ..... However, it is permissible for the minimum luminous intensity of the cornering lamp to be 80% of the minimum luminous intensity requirements, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 33–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the cornering lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Article 45 (Position Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 34 of the Safety Regulations in connection with the colour of light, brightness, etc. of the position lamps shall be the requirements prescribed in Attachment 58 "Technical Standard for Position Lamps." However, in cases other than the case of type designation, etc., the phrase "shall not exceed the total maximum intensity requirements" appearing in the provision of Paragraph 4–1–1–1 of Attachment 58 "Technical Standard for Position Lamps" shall read as "shall not exceed the total maximum intensity requirements. However, it is permissible for the minimum luminous intensity of the position lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 1 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 1 for photometric characteristics." Furthermore, the phrase "shall conform to the standards of Table 2" appearing in the provision of Paragraph 4–1–2–1 shall read as "shall conform to the standards of Table 2. However, it is permissible for the minimum luminous intensity of the position lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 2 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 2 for photometric characteristics." Moreover, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–4 through 3–6 and 5–1, the provision of Paragraph 5–2 and the provision of the proviso in Annex 1 of Attachment 58 "Technical Standard for Position Lamps" shall not apply, and the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 2–2 of Annex 2 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 34 of the Safety Regulations in connection with the installation position, installation method, etc. of the position lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type

Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraphs 4–11–5–1 and 4–11–5–2 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 46 (Front-End Outline Marker Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 34–2 of the Safety Regulations in connection with the colour of light, brightness, etc. of the front-end outline marker lamps shall be the requirements prescribed in Attachment 59 "Technical Standard for Front-End Outline Marker Lamps." However, in cases other than the case of type designation, etc., the phrase "shall not exceed the total maximum intensity requirements" appearing in the provision of Paragraph 4–1–1–1 of Attachment 59 "Technical Standard for Front-End Outline Marker Lamps" shall read as "shall not exceed the total maximum intensity requirements. However, it is permissible for the minimum luminous intensity of the front-end outline marker lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 1 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 1 for photometric characteristics." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–3, 3–4 and 5–1 as well as the provision of Paragraph 5–2 of Attachment 59 "Technical Standard for Front-End Outline Marker Lamps" shall not apply, and the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 2–2 of Annex 2 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 34–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the front-end outline marker lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for

Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–15–5 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 47 (Front Reflex Reflectors)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 35 of the Safety Regulations in connection with the colour of the reflecting light, brightness, shape of the reflecting section, etc. of the front reflex reflectors shall be the requirements prescribed in Attachment 60 "Technical Standard for Front Reflex Reflectors." However, in cases other than the case of type designation, etc., the phrase "The coefficient of luminous intensity for front reflecting devices must be at least the values given in the table below for the angles of observation and illumination, respectively" appearing in the provision of Paragraph 3–1 of Annex 5 of Attachment 60 "Technical Standard for Front Reflex Reflectors" shall read as "The coefficient of luminous intensity for reflecting devices must be at least 80% of the values given in the table below for the angles of observation and illumination, respectively." Furthermore, the phrase "As for the coefficient of luminous intensity within the solid angle having the reference centre (V = H = 0°) as its apex and bounded by the planes intersecting along the following six lines, they must be the values given in the table above." shall read as "As for the coefficient of luminous intensity within the solid angle having the reference centre (V = H = 0°) as its apex and bounded by the planes intersecting along the following six lines, they must be at least 80% of the values given in the table above." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions of the provisos in Paragraphs 1, 2–16 and 5–1 as well as the provision of Paragraph 6 of Attachment 60 "Technical Standard for Front Reflex Reflectors" shall not apply.

2. The requirements prescribed in the Announcement of Paragraph 3, Article 35 of the Safety Regulations in connection with the installation

position, installation method, etc. of the front reflex reflectors shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–18–5 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 48 (Side Marker Lamps and Side Reflex Reflectors)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 35–2 of the Safety Regulations in connection with the colour of light, brightness, etc. of the side marker lamps shall be the requirements prescribed in Attachment 61 "Technical Standard for Side Marker Lamps." However, in cases other than the case of the type designation, etc., the phrase "shall comply with the requirements posted in the table below according to the category of the side marker lamp" appearing in the provision of Paragraph 4–1 of Attachment 61 "Technical Standard for Side Marker Lamps" shall read as "shall comply with the requirements posted in the table below according to the category of the side marker lamp. However, it is permissible for the minimum luminous intensity of the side marker lamp concerned to be 80% of the minimum luminous intensity requirements given in Paragraph 4–1–1, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Paragraph 4–1–2." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–3 through 3–5 and 6–1 as well as the provision of Paragraph 6–3 of Attachment 61 "Technical Standard for Side Marker Lamps" shall not apply. Also, the provision concerned with the tests to be conducted with the lamps mounted on the vehicle in Annex 1 of the same Attachment shall not

apply. Furthermore, the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 6–1 and Paragraph 3–2 of Annex 2 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 35–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the side marker lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–21–5 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

3. The requirements prescribed in the Announcement of Paragraph 4, Article 35–2 of the Safety Regulations in connection with the colour of the reflecting light, brightness, shape of the reflecting section, etc. of the side reflex reflectors shall be the requirements prescribed in Attachment 62 "Technical Standard for Side Reflex Reflectors." However, in cases other than the case of type designation, etc., the phrase "The coefficient of luminous intensity for reflecting devices must be at least the values given in the table below for the angles of observation and illumination, respectively" appearing in the provision of Paragraph 3–1 of Annex 5 of Attachment 62 "Technical Standard for Side Reflex Reflectors" shall read as "The coefficient of luminous intensity for reflecting devices must be at least 80% of the values given in the table below for the angles of observation and illumination, respectively." Furthermore, the phrase "As for the coefficient of luminous intensity within the solid angle having the reference centre (V = H = 0°) as its apex and bounded by the planes intersecting along the following six lines, they must be the values given in the table above." shall read as "As for the coefficient of luminous intensity within the solid angle having the

reference centre (V = H = 0°) as its apex and bounded by the planes intersecting along the following six lines, they must be at least 80% of the values given in the table above." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions of the provisos in Paragraphs 1, 2–16 and 5–1 of Attachment 62 "Technical Standard for Side Reflex Reflectors" shall not apply.

4. The requirements prescribed in the Announcement of Paragraph 5, Article 35–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the side reflex reflectors shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–20–5 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 49 (Number Plate Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 36 of the Safety Regulations in connection with the colour of light, brightness, etc. of the number plate lamps shall be the requirements prescribed in Attachment 63 "Technical Standard for Number Plate Lamps." In this case, the illuminated character type motor vehicle registration number plate provided at the rear, which is functioning normally and has been recognized as complying with Paragraph 3 of Article 11 of the Enforcement Regulations, shall be regarded as complying with these requirements.

2. The requirements prescribed in the Announcement of Paragraph 3 of Article 36 of the Safety Regulations in connection with the installation

position, installation method, etc. of the number plate lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Article 50 (Rear Position Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 37 of the Safety Regulations in connection with the colour of light, brightness, etc. of the rear position lamps shall be the requirements prescribed in Attachment 64 "Technical Standard for Rear Position Lamps." However, in cases other than the case of type designation, etc., the phrase "shall conform to the standards of Table 1" appearing in the provision of Paragraph 4–1–1–1 of Attachment 64 "Technical Standard for Rear Position Lamps" shall read as "shall conform to the standards of Table 1. However, it is permissible for the minimum luminous intensity of the rear position lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 1 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 1 for photometric characteristics." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–4 through 3–6 and 5–1, the provision of Paragraph 5–3 as well as the provision of the proviso appearing in Annex 1 of Attachment 64 "Technical Standard for Rear Position Lamps" shall not apply. Furthermore, the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 2–2 of Annex 2 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 37 of the Safety Regulations in connection with the installation position, installation method, etc. of the rear position lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in

the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraphs 4–12–5–1 and 4–12–5–2 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 51 (Rear Fog Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 37–2 of the Safety Regulations in connection with the colour of light, brightness, etc. of the rear fog lamps shall be the requirements prescribed in Attachment 65 "Technical Standard for Rear Fog Lamps." However, in cases other than the case of type designation, etc., the phrase "measured in relation to the axis of reference in the direction shown below (expressed in degrees of angle with the axis of reference)" appearing in the provision of Paragraph 4–1 of Attachment 65 "Technical Standard for Rear Fog Lamps" shall read as "measured in relation to the axis of reference in the direction shown below (expressed in degrees of angle with the axis of reference). However, it is permissible for the minimum luminous intensity of the rear fog lamp concerned to be 80% of the minimum luminous intensity requirements given in Paragraph 4–2 and Annex, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Paragraph 4–3." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8 and 5–1 as well as the provision of Paragraph 5–3 of Attachment 65 "Technical Standard for Rear Fog Lamps" shall not apply, and the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 4–2 of Annex shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 37–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the rear fog lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–13–5 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 52 (Parking Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 37–3 of the Safety Regulations in connection with the colour of light, brightness, etc. of the parking lamps shall be the requirements prescribed in Attachment 66 "Technical Standard for Parking Lamps." However, in cases other than the case of type designation, etc., the phrase "specified below" appearing in the provision of Paragraph 4–1 of Attachment 66 "Technical Standard for Parking Lamps" shall read as "specified below. However, it is permissible for the minimum luminous intensity of the parking lamp concerned to be 80% of the minimum luminous intensity requirements given in Paragraphs 4–1–1 and 4–1–2, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Paragraphs 4–1–1 and 4–1–2." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–3, 3–4 and 5–1 as well as the provision of Paragraph 5–3 of Attachment 66 "Technical Standard for Parking Lamps" shall not apply. Furthermore, the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 37–3 of the Safety Regulations in connection with the installation position, installation method, etc. of the parking lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–14–6 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 53 (Rear-End Outline Marker Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 37–4 of the Safety Regulations in connection with the colour of light, brightness, etc. of the rear-end outline marker lamps shall be the requirements prescribed in Attachment 67 "Technical Standard for Rear-End Outline Marker Lamps." However, in cases other than the case of type designation, etc., the phrase "shall conform to the standards of Table 1" appearing in the provision of Paragraph 4–1–1–1 of Attachment 67 "Technical Standard for Rear-End Outline Marker Lamps" shall read as "shall conform to the standards of Table 1. However, it is permissible for the minimum luminous intensity of the rear-end outline marker lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 1 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 1 for photometric characteristics." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–3, 3–4 and 5–1 as well as the provision of Paragraph 5–2 of Attachment 67 "Technical Standard for

Rear-End Outline Marker Lamps" shall not apply. Furthermore, the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 2–2 of Annex 2 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 37–4 of the Safety Regulations in connection with the installation position, installation method, etc. of the rear-end outline marker lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–15–5 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 54 (Rear Reflex Reflectors)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 38 of the Safety Regulations in connection with the colour of the reflecting light, brightness, shape of the reflecting section, etc. of the rear reflex reflectors shall be the requirements prescribed in Attachment 68 "Technical Standard for Rear Reflex Reflectors." However, in cases other than the case of type designation, etc., the phrase "The coefficient of luminous intensity for reflecting devices must be at least the values given in the table below for the angles of observation and illumination, respectively" appearing in the provision of Paragraph 3–1 of Annex 5 of Attachment 68 "Technical Standard for Rear Reflex Reflectors" shall read as "The coefficient of luminous intensity for reflecting devices must be at least 80% of the values given in the table below for the angles of observation and illumination, respectively." Furthermore, the phrase "As for the coefficient of luminous intensity within the solid angle having the reference centre (V = H

= 0°) as its apex and bounded by the planes intersecting along the following six lines, they must be the values given in the table above" appearing in the provision of Paragraph 3–2 of the same Attachment shall read as "As for the coefficient of luminous intensity within the solid angle having the reference centre (V = H = 0°) as its apex and bounded by the planes intersecting along the following six lines, they must be at least 80% of the values given in the table above." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions of the provisos in Paragraphs 1, 2–16 and 5–1 as well as the provision of Paragraph 6 of Attachment 68 "Technical Standard for Rear Reflex Reflectors" shall not apply.

2. The requirements prescribed in the Announcement of Paragraph 3, Article 38 of the Safety Regulations in connection with the installation position, installation method, etc. of the rear reflex reflectors shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–16–6 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 55 (Large-Sized Rear Reflex Reflectors)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 38–2 of the Safety Regulations in connection with the colour of the reflecting light, brightness, shape of the reflecting section, etc. of the large-sized rear reflex reflectors shall be the requirements prescribed in Attachment 69 "Technical Standard for Large-Sized Rear Reflex Reflectors." However, when device type designation is made pursuant to the provision of

Paragraph 1 of Article 75–2 of the Act, the provisions of Paragraphs 2–13 and 4–4 of Attachment 69 "Technical Standard for Large-Sized Rear Reflex Reflectors" shall not apply.

2. The requirements prescribed in the Announcement of Paragraph 3, Article 38–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the large-sized rear reflex reflectors shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds.

Article 55–2 (Retro-Reflective Marking Materials)

1. The requirements prescribed in the Announcement of Paragraph 2 of Article 38–2 of the Safety Regulations in connection with the colour of the reflecting light, brightness, shape of the reflecting section, etc. of the retro-reflective marking material shall be the requirements prescribed in Attachment 102 "Technical Standard for Retro-Reflective Marking Materials." However, in cases other than the case of type designation, etc., the phrase "the value or more in Table 1" appearing in the provision of Paragraph 1 of Annex 5 of Attachment 102 "Technical Standard for Retro-Reflective Marking Materials" shall read as "80% or more in relation to the value in Table 1"; and the phrase "the value or more in Table 2" shall read as "80% or more in relation to the value in Table 2." In the case of the type designation pursuant to the provision of Paragraph 1 of Article 75 of the Act, the provisions of Paragraph 2–6 and the proviso of Paragraph 5–1 of Attachment 102 "Technical Standard for Retro-Reflective Marking Materials" shall not apply.

2. The requirements prescribed in the Announcement of Paragraph 3 of Article 38–3 of the Safety Regulations in connection with the installation position, installation method, etc. of the retro-reflective marking material shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps." However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and

Direction Indicator Lamps."

Article 56 (Stop Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 39 of the Safety Regulations in connection with the colour of light, brightness, etc. of the stop lamps shall be the requirements prescribed in Attachment 70 "Technical Standard for Stop Lamps." However, in cases other than the case of type designation, etc., the phrase "shall not exceed the specified total maximum intensity requirements" appearing in the provision of Paragraph 4–1–1–1 of Attachment 70 "Technical Standard for Stop Lamps" shall read as "shall not exceed the specified total maximum intensity requirements. However, it is permissible for the minimum luminous intensity of the stop lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 1 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 1 for photometric characteristics." Also, the phrase "shall conform to the standards of Table 2" appearing in the provision of Paragraph 4–1–2–1 of the same Attachment shall read as "shall conform to the standards of Table 2. However, it is permissible for the minimum luminous intensity of the stop lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 2 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 2 for photometric characteristics." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–3, 3–4 and 5–1, the provision of Paragraph 5–3 of Attachment 70 "Technical Standard for Stop Lamps" as well as the provision of the proviso of Annex 1 of the same Attachment shall not apply. Furthermore, the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 2–2 of Annex 2 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 39 of the Safety Regulations in connection with the installation position, installation method, etc. of the stop lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor

vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–9–5–1 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 57 (Auxiliary Stop Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 39–2 of the Safety Regulations in connection with the colour of light, brightness, etc. of the auxiliary stop lamps shall be the requirements prescribed in Attachment 71 "Technical Standard for Auxiliary Stop Lamps." However, in cases other than the case of type designation, etc., the phrase "shall conform to the standards of Table 1" appearing in the provision of Paragraph 4–1–1–1 of Attachment 71 "Technical Standard for Auxiliary Stop Lamps" shall read as "shall conform to the standards of Table 1. However, it is permissible for the minimum luminous intensity of the auxiliary stop lamp concerned to be 80% of the minimum luminous intensity requirements given in Table 1 for photometric characteristics, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Table 1 for photometric characteristics." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8, 3–3, 3–4 and 5–1 as well as the provision of Paragraph 5–2 of Attachment 71 "Technical Standard for Auxiliary Stop Lamps" shall not apply. Furthermore, the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 2–2 of Annex 2 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 39–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the auxiliary stop lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for

Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–9–5–2 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 58 (Reversing Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 40 of the Safety Regulations in connection with the colour of light, brightness, etc. of the reversing lamps shall be the requirements prescribed in Attachment 72 "Technical Standard for Reversing Lamps." However, in cases other than the case of type designation, etc., the phrase "specified below" appearing in the provision of Paragraph 4–1 of Attachment 72 "Technical Standard for Reversing Lamps" shall read as "specified below. However, it is permissible for the minimum luminous intensity of the reversing lamp concerned to be 80% of the minimum luminous intensity requirements given in Paragraph 4–4 and Paragraph 2 of Annex 1, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in Paragraph 4–3." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the provision of the proviso in Paragraph 1, the provisions in parentheses ( ) of Paragraphs 2–7, 2–8 and 5–1 as well as the provision of Paragraph 5–3 of Attachment 72 "Technical Standard for Reversing Lamps" shall not apply. Furthermore, the phrase "standard filament lamp or rated filament lamp" appearing in Paragraph 5–1 shall read as "standard filament lamp."

2. The requirements prescribed in the Announcement of Paragraph 3, Article 40 of the Safety Regulations in connection with the installation position, installation method, etc. of the reversing lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar

and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provision of Paragraph 4–5–5 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 59 (Direction Indicator Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 41 of the Safety Regulations in connection with the colour of light, brightness, etc. of the direction indicator lamps shall be the requirements prescribed in Attachment 73 "Technical Standard for Direction Indicator Lamps" in the case of direction indicator lamps to be equipped on the front or the rear of motor vehicles other than motor cycles with or without sidecar, three-wheeled motor vehicles and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements enumerated in each of the following Items in the case of direction indicator lamps equipped on motor cycles with or without sidecar, three-wheeled motor vehicles and mini-sized motor vehicles with caterpillar tracks and sleds. However, in cases other than the case of type designation, etc., the phrase "in the case of direction indicator lamps of category 1, 1a, 1b, 2a, 2b, 3 or 4" appearing in the provision of Paragraph 4–1 of Attachment 73 "Technical Standard for Direction Indicator Lamps" shall read as "in the case of direction indicator lamps of category 1, 1a, 1b, 2a, 2b, 3 or 4. However, it is permissible for the minimum luminous intensity of the direction indicator lamp concerned to be 80% of the minimum luminous intensity requirements given in the following Table, and for the maximum luminous intensity to be 120% of the maximum luminous intensity requirements given in the following Table." In cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the phrase "4. and 6. shall not apply" in the provision of Paragraph 1 of Attachment 73 "Technical Standard for Direction Indicator Lamps" shall read as "shall not apply." Also, the phrase "standard filament

lamp or rated filament lamp" appearing in Paragraph 5–1 and Paragraph 2–2 of Annex 2 shall read as "standard filament lamp." Moreover, in the provision of Note) of Paragraph 4–1, the phrase "the direction indicator lamp provided on both sides of motor cycles with or without sidecar, three-wheeled motor vehicles, and mini-sized motor vehicles with caterpillar tracks and sleds (limited only to those with direction indicator lamps provided only on the sides)" shall read as "the side direction indicator lamp to be used by providing the direction indicator lamp of this category on motor vehicles"; "Category 5" as "Categories 5 and 6"; "the direction indicator lamp provided on the sides of motor vehicles other than Categories 3, 4 and 6" as "the side direction indicator lamp to be used together with the direction indicator lamp of Categories 1, 1a or 1b, and 2a or 2b." Furthermore, the phrase "However, in case of conducting the test with the direction indicator lamp of category 1, 1a, 1b, 2a, 2b, 3 and 5 mounted on the vehicle, and ….. of the direction indicator lamp" appearing in Annex 1 shall read as "However, ….. of the direction indicator lamp." Also, the provisions of Paragraphs 2–7, 2–8, 3–3 and 3–4, the provision concerned with the definition of "Category 6" appearing in Note) of Paragraph 4–1, the provision in parentheses ( ) of Paragraph 5–1, and the provision of Paragraph 5–5 shall not apply.

(1) Direction indicator lamps when lit shall be visible in the daytime at a distance of 100 m in the intended direction. Furthermore, the beams from the direction indicator lamps shall not disturb other traffic;

(2) The colour of light of a direction indicator lamp shall be amber;

Category of direction indicator lamps	Range
a. Direction indicator lamps to be mounted on both sides of motor vehicles other than those specified in “b”	Range enclosed by planes 15° above and 15° below the horizontal plane, including the horizontal line which passes the centre of the direction indicator lamp and is perpendicular to the forward direction of the motor vehicle, and enclosed by planes 5° outward of the direction indicator lamp and 60° outward of the direction indicator lamp from the vertical plane which includes the centre of the direction indicator lamp and is parallel to the forward direction of the motor vehicle and lies backward from the centre of the direction indicator lamp
b. Direction indicator lamps to be mounted on both sides of motor vehicles in which direction indicator lamps are mounted only on the sides thereof	Range enclosed by planes 15° above and 15° below the horizontal plane, including the horizontal line which passes the centre of the direction indicator lamp and is perpendicular to the forward direction of the motor vehicle, and enclosed by planes 5° inward of the direction indicator lamp and 45° outward of the direction indicator lamp from the vertical plane (limited only to the plane that lies forward of the motor vehicle from the centre of the direction indicator lamp) which includes the centre of the direction indicator lamp and is parallel to the forward direction of the motor vehicle and planes 5° inward of the direction indicator lamp and 60° outward of the direction indicator lamp from the vertical plane (limited only to the plane that lies backward of the motor vehicle from the centre of the direction indicator lamp) which includes the centre of the direction indicator lamp and is parallel to the forward direction of the motor vehicle

2. Direction indicator lamps equipped on the front or rear of motor cycles with or without sidecar, three-wheeled motor vehicles and mini-sized motor vehicles with caterpillar tracks and sleds, whose light source is 10 W or more,

but 60 W or less, and whose illuminating surface area is 7 cm^2, shall be handled as complying with the requirements of Item (1) of the preceding Paragraph.

3. The requirements prescribed in the Announcement of Paragraph 3, Article 41 of the Safety Regulations in connection with the installation position, installation method, etc. of the direction indicator lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Moreover, in cases other than the case of type designation, etc., the phrase "angles α and β" appearing in the provisions of Paragraphs 4–6–6–1 and 4–6–6–2 of Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" shall read as "angles α and β (an allowance of ±3° shall be permitted for the angles α and β)."

Article 60 (Auxiliary Direction Indicator Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 41–2 of the Safety Regulations in connection with the colour of light, brightness, etc. of the auxiliary direction indicator lamps shall be the following requirements.

(1) The colour of light of an auxiliary direction indicator lamp shall be amber.

2. The requirements prescribed in the Announcement of Paragraph 3, Article 41–2 of the Safety Regulations in connection with the installation position, installation method, etc. of the auxiliary direction indicator lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps"

in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds.

Article 61 (Hazard Warning Lamps)

1. The requirements prescribed in the Announcement of Paragraph 2, Article 41–3 of the Safety Regulations in connection with the colour of light, brightness, etc. of the hazard warning lamps shall be the requirements enumerated in each of the following Items.

(1) Hazard warning lamps when lit shall be visible in the daytime at a distance of 100 m in the intended direction. The beam from the hazard warning lamps shall not disturb other traffic; Provided, however, for the hazard warning lamps to be mounted on both sides of the following motor vehicles (for hazard warning lamps to be mounted on both sides of motor vehicles prescribed in A below, limited to those to be mounted at the front on both sides), they are in compliance if they are visible when lit at a distance of 30 m in intended direction.

A. Motor vehicles with a maximum loading capacity of 5 tons or more or with a gross vehicle weight of 8 tons or more (except tractors towing semi-trailers, motor vehicles with a passenger capacity of 11 persons or more, and motor vehicles whose form is similar to that of motor vehicles whose passenger capacity is 11 persons or more).
B. Two-wheeled vehicles
C. Two-wheeled vehicles with side cars
D. Mini-sized motor vehicles with caterpillar tracks and sledges
E. Motor vehicles with a width of 0.8 m or less and motor vehicles with a maximum speed of less than 20 km/h whose distance between the centre of the steering wheel and the outmost edge is less than 650 mm and whose driver's seat if not in the compartment.
F. Trailers

(2) The colour of light of a hazard warning lamp shall be amber;

(3) For hazard warning lamps to be equipped on the front or the rear of a motor vehicles other than motor cycles with or without sidecars and

mini-sized motor vehicles with caterpillar tracks and sleds, the illuminating surface shall be visible from every position in the range enclosed by planes 15° above and 15° below the horizontal plane, including the horizontal line which passes the centre of the hazard warning lamp and is perpendicular to the forward direction of the motor vehicle, and enclosed by planes 45° inward of the hazard warning lamp and 80° outward of the hazard warning lamp from the vertical plane which includes the centre of the hazard warning lamp and is parallel to the forward direction of the motor vehicle.

2. The requirements prescribed in the Announcement of Paragraph 3, Article 41–3 of the Safety Regulations in connection with the installation position, installation method, etc. of the hazard warning lamps shall be the requirements prescribed in Attachment 52 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps" in the case of motor vehicles other than motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds; and the requirements prescribed in Attachment 53 "Technical Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps for Motor Cycles, etc." in the case of motor cycles with or without sidecar and mini-sized motor vehicles with caterpillar tracks and sleds. However, the requirements to be applied in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act shall be the requirements prescribed in Attachment 54 "Device Type Designation Standard for Installation of Lamps, Reflex Reflectors and Direction Indicator Lamps."

Article 62 (Restrictions on Other Lamps, etc.)

1. The requirements prescribed in the Announcement of Article 90 of the Safety Regulations shall be the requirements enumerated in each of the following Paragraphs.

2. No motor vehicles shall be provided with such lamps which are amber in the colour of light for illumination of, or indication to, the rear and the upper edges of the illuminating surfaces of which are at a height of 2.5 m or less above the ground or which are red in the colour of light, except the following lamps:

(1) Side marker lamps;

(1–2) Rear position lamps;

(1–3) Rear fog lamps;

(1–4) Parking lamps;

(1–5) Rear-end outline marker lamps;

(2) Stop lamps;

(2–2) Auxiliary stop lamps;

(3) Direction indicator lamps;

(4) Auxiliary direction indicator lamps;

(4–2) Hazard warning lamps;

(5) Warning lamps of emergency motor vehicles;

(6) Identification lamps of motor vehicles carrying gunpowder or radioactive materials, etc.;

(7) Marker lamps for the rear of motor vehicles for passenger carrying business mounted at a height of more than 2.5 m above the ground (except for the lamp provided for in (1–5))

(8) "The Last Bus" indication lamps on passenger buses (which mean buses used for passenger carrying business. Hereinafter the same);

(9) "Vacant" indication lamps and fare-indication lamps of taxies (which mean taxies used for passenger carrying business. Hereinafter the same);

(10) Emergency lamps of motor vehicles for passenger carrying business;

(11) Red lamps provided at the step lift for moving up/down of wheelchairs in buses for passenger carrying business, which cannot be turned on at the driver's seat, and other lamps not turned on during running;

(12) Lamps that operate in interlocking with the overload prevention device mounted on mobile cranes provided for in Item (8), Paragraph 1 of Article 1 of the Enforcement Order of the Industrial Safety and Health Law (Cabinet Order No. 318 of 1972).

3. No motor vehicles shall be provided with such lamps which are white in

the colour of light for illumination of, or indication to, the rear, except the following lamps:

(1) Number plate lamps;

(2) Reversing lamps;

(3) Compartment lamps;

(4) Route-board illumination lamps of passenger buses;

(5) Carrier-name-plate illumination lamps of taxies;

(6) Lamps for work whose construction comes under one of the following Items A. and B., and other lamps not turned on during running;

A. Lamps which cannot be turned on at the driver's seat;

B. Lamps equipped with a device which enables the driver in his seat to confirm that they are illuminated;

(7) White coach lamps mounted on the sides of a motor vehicle, whose luminous intensity is less than 0.3 cd in any direction, among directions enclosed by the following four planes, that reaches a vertical plane perpendicular to the longitudinal centre line of the vehicle which includes the rear end of the vehicle;

A. For a vertical direction, the range enclosed by a plane which includes the rear end of the upper edge of the illuminating surface of the said lamp and which extends toward the rear of the vehicle at an angle of 10 degrees above the horizontal plane and a plane which includes the rear end of the lower edge of the same illuminating surface and which extends toward the rear of the vehicle at an angle of 5 degrees below the horizontal plane.

B. For a horizontal direction, the range enclosed by a vertical plane which includes the rear end of the outer edge of the illuminating surface of the said lamp and which forms an angle of 20 degrees toward the outside of the vehicle from a plane parallel to the longitudinal centre plane of the vehicle and a plane which includes the rear end of the inner edge of the same illuminating surface and which is parallel to the longitudinal centre plane of the vehicle.

4. No motor vehicle (except passenger buses) shall have lamps whose colour of light is purple, above the front windshield.

5. No motor vehicle shall have lamps likely to be mistaken for the speed indicator lamps of the speed indicating device above the front windshield.

6. No motor vehicle shall have a flashing lamp or a lamp whose intensity may vary, except the following lamps:

(1) Adaptive front lighting system (referring to headlamps capable of illuminating the curved section of road ahead of the motor vehicle more intensively. Hereinafter the same.);

(2) Side marker lamps;

(3) Direction indicator lamps;

(4) Auxiliary direction indicator lamps;

(5) Hazard warning lamps;

(6) Warning lamps of emergency motor vehicles;

(7) Lamps of motor vehicles for road maintenance service;

(8) Electric indicators capable of continuously indicating the destination, etc. of passenger buses;

(9) Emergency lamps (only limited to those mounted on motor vehicles for passenger carrying business or those shared in common with compartment lamps);

(10) Lamps that operate in interlocking with the overload prevention device mounted on crane trucks provided for in Item (8), Paragraph 1 of Article 1 of the Enforcement Law of Labor, Safety and Health Act (Cabinet Order No. 318 of 1972);

(11) Lamps which are constructed so that their flashing or the variation in luminous intensity can be made only manually.

7. No motor vehicle shall have a red reflex reflector at the front, or a white reflex reflector at the rear. However, this provision shall not apply to red reflective objects at the front end of a motor vehicle (hereinafter referred to as “reflective objects”) having a reflective performance of 0.02 cd or 10.76 lx or

less when the measurement is conducted, following the procedure given below:

(1) When a light projector (the diameter of whose projection surface is approximately 50 mm) using standard light A specified in JIS Z–8701 is employed and the angles of incidence are 10 degrees above and below the centre axis of the reflective object, respectively, and 20 degrees to the right and to the left of the said axis, respectively, the reflective light shall be measured with the observation angle set at 0.2 degree.

(2) In this case, the observation angle shall refer to an angle formed by a straight line connecting the centre of the reflective object with the centre of the light projector and a straight line connecting the observation point with the centre of the reflective object. Furthermore, the angle of incidence shall refer to an angle formed by the centre axis of the reflective object and a straight line connecting the centre of the reflective object with the centre of the light projector.

8. The direct light or the reflected light from the lamps installed to a motor vehicle shall not interfere with the driving operation of the motor vehicle concerned and any other motor vehicle.

9. The lamps enumerated in Item (1) through (2–2) and (7) of Paragraph 2 (for the lamps of Item (1) of the same Paragraph, only those of red colour provided on both sides at the rear end of the motor vehicle; and for the lamps of Item (1–4) of the same Paragraph, only those provided at the rear end of the motor vehicle) shall not illuminate nor indicate to the front.

10. The lamps installed to motor vehicles shall be 300 cd or less in luminous intensity, except the headlamps, front fog lamps, cornering lamps, side marker lamps, number plate lamps, parking lamps at the rear end, stop lamps, reversing lamps, direction indicator lamps, auxiliary direction indicator lamps, hazard warning lamps, speed indication lamps of speed indication devices, vehicle compartment lamps, warning lamps of emergency motor vehicles, lamps of motor vehicles for road maintenance service, identification lamps of motor vehicles loaded with gunpowder, radioactive substances, etc., emergency lamps of motor vehicles for passenger carrying business, and lamps not turned on during running (except the parking lamps at the front end).

11. The identification lamps of motor vehicles loaded with gunpowder, radioactive substances, etc., shall not be in combination with other lamps.

Article 63 (Horns)

1. The requirements prescribed in the Announcement of Paragraph 2 of Article 43 of the Safety Regulations in connection with the tone, sound level, etc. of the audible warning device of a horn shall be the requirements prescribed in Attachment 74 "Technical Standard for Audible Warning Devices of Horn."

2. The requirements prescribed in the Announcement of Paragraph 3 of Article 43 of the Safety Regulations in connection with the tone, sound level, etc. of a horn shall be the requirements prescribed in Attachment 75 "Technical Standard for Horns."

Article 64 (Emergency Signals)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 43–2 of the Safety Regulations in connection with the colour of light, brightness, installation position, etc. of an emergency signal shall be the requirements prescribed in each of the following Items:

(1) Emergency signal equipment shall be capable of displaying a red light which is visible from a distance of 200 m at night;

(2) Emergency signal equipment shall be self-illuminating type;

(3) Emergency signal equipment shall be stored where it is easily accessible to the user. In this case, those enumerated below shall be regarded as not complying with this requirement:

A. Emergency signal equipment located in places which cannot be directly recognized from the driver's seat or from the entrance of the driver (including places, such as the inside of a door pocket and a glove compartment which may not be directly recognized because of accommodation of other goods, etc.);

B. Emergency signal equipment that cannot be detached readily.

(4) Emergency signal equipment shall be constructed so that it may not be damaged nor actuated as a result of vibration, shocks, etc.

2. Those enumerated in each of the following Items shall be regarded as not complying with the requirements of the preceding Paragraph:

(1) Red signal lamps where the lens of the luminescent surface of the red lamp is less than 35 mm in diameter;

(2) Red signal lamps incorporating bulbs which do not have performance rating of 2.5V, 0.3A or equivalent;

(3) Red signal lamps incorporating batteries which do not have performance rating of R14P (“Manganese UM-2 dry cell”) specified in JIS C8501 “Carbon Zinc Batteries” or LR6 (“Alkaline Manganese UM-3 dry cell”) specified in JIS C8511 “Alkaline Primary Batteries” or equivalent;

(4) Red signal lamps which exhibit damage or whose lens surfaces are smeared badly or whose performance has dropped significantly due to worn or dead batteries;

(5) Smoke flares which do not have performance ratings of JIS D5711 “Red Fusee for Motor Vehicles” or equivalent;

(6) Smoke flares whose performance has dropped significantly due to damage or absorbed humidity.

Article 65 (Warning Reflex Reflectors)

The requirements prescribed in the Announcement of Article 43–3 of the Safety Regulations in connection with the shape of the warning reflex reflector, colour of reflected light, brightness, etc. shall be the requirements prescribed in Attachment 76 “Technical Standard for Warning Reflex Reflectors.”

Article 66 (Emergency Stop Indication Devices)

The requirements prescribed in the Announcement of Paragraph 1 of Article 43–4 of the Safety Regulations in connection with the shape, brightness of fluorescent or reflecting light, colour, etc. of an emergency stop indication device shall be the requirements prescribed in Attachment 77 “Technical Standard for Advance-Warning Triangles.”

Article 67 (Unauthorized-Use Warning Devices)

The requirements prescribed in the Announcement of Paragraph 2 of Article 43–5 of the Safety Regulations in connection with the performance, etc. of unauthorized-use detection and warning of an unauthorized-use warning device shall be the requirements prescribed in Attachment 78 "Technical Standard for Unauthorized-Use Warning Devices."

Article 68 (Rear-View Mirrors, etc.)

1. The requirements prescribed in the Announcement of Paragraph 2 of Article 44 of the Safety Regulations in connection with the performance, etc. concerning the field of vision of the driver by means of the rear-view mirror concerned, protection of pedestrians, etc. of rear-view mirrors mounted on motor vehicles (except motor cycles with or without sidecar and three-wheeled motor vehicles that are equipped with a handle bar type steering equipment and with no passenger room (except those in which the driver in his seat can clearly recognize the traffic conditions near the left side of the motor vehicle itself. Hereinafter the same in this Article)) shall be the requirements prescribed in each of the following Items. However, the provisions of Items (2) and (3) shall not apply to rear-view mirrors mounted on motor cycles with or without sidecar, large-sized special motor vehicles, small-sized special motor vehicles for agricultural use and motor vehicles with a maximum speed of less than 20 km/h, and the provision of Item (3) shall not apply to ordinary-sized motor vehicles (except those used exclusively for carriage of passengers) and motor vehicles with a passenger capacity of 11 persons or more.

(1) The mounting of a rear-view mirror shall be easily adjustable and designed to be kept in a certain direction.

(2) The rear-view mirror, the height of whose lowest part that protrudes beyond the outermost part of the vehicle body in the vicinity of the mounting section is 1.8 m or less above the ground, shall comply with the requirements prescribed in Attachment 79 "Technical Standard for Impact Reduction of Outside Rear-View Mirrors."

(3) The mirror provided inside the compartment shall comply with the requirements prescribed in Attachment 80 "Technical Standard for Impact Reduction of Inside Rear-View Mirrors."

(4) The mirror shall enable a driver in his or her seat to clearly recognize the traffic conditions of other vehicles at each side of the right and left of the motor vehicle (of the trailer when drawing a trailer), straight backwards up to 50 m, and the traffic conditions near the left side

(except the area which the driver in his seat may directly confirm) of the motor vehicle itself (of the tractor and trailer when drawing a trailer of a larger width than the tractor). However, rear-view mirrors may enable a driver to recognize clearly the traffic conditions straight backwards up to 50 m at each side of the right and left of a motor cycle with or without sidecar and a mini-sized motor vehicle with caterpillar and sleds, and at the right side only for a small-sized special motor vehicle, straight backwards up to 50 m.

2. Outside rear-view mirrors mounted on ordinary-sized motor vehicles used exclusively for carriage of passengers with a passenger capacity of 10 persons or less, ordinary-sized motor vehicles used for the transport of goods (except motor vehicles with a gross vehicle weight exceeding 2.8 tons), small-sized motor vehicles and mini-sized motor vehicles (except trailers, motor cycles with or without sidecar, and mini-sized motor vehicles with caterpillar tracks and sleds) which comply with the requirements prescribed in each of the following Items shall be regarded as complying with the requirements of Item (4) of the preceding Paragraph. In the case of motor vehicles equipped with plural rear-view mirrors on one side of the motor vehicle, it shall be satisfactory if any one of the rear-view mirrors complies with the requirements of Items (1) and (2).

(1) The angle between a vertical plane passing through the centre of the eye point and the centre of the rear-view mirror and the longitudinal centre plane of the motor vehicle shall be 55° or less (75° or less in the case of left-hand drive vehicles) in the forward direction in the case of a rear-view mirror mounted on the right side of the motor vehicle and 75° or less (55° or less in the case of left-hand drive vehicles) in the forward direction in the case of a rear-view mirror mounted on the left side of the motor vehicle, respectively. In this case, the mirror surface of a rear-view mirror shall be adjusted to and held in the normal position of use.

(2) Rear-view mirrors shall be visible through the windshield glass or side glass and shall comply with the following requirements. In this case, the mirror surface of a rear-view mirror shall be adjusted to and held in the normal position of use.

A. In the case of rear-view mirrors which are visible through the windshield glass (e.g. fender mirrors), 80% or more of the effective reflecting surface of the rear-view mirror shall be visible from either of the two eye points through the wiping range of the wiper.

B. In the case of rear-view mirrors which are visible through the side glass at the passenger seat side (e.g. door mirrors), the rear-view mirror shall be visible from either of the two eye points through the range of the side glass where mist, such as water droplets, can be demisted by the defroster for the side glass (including defrosters for the windshield glass which are capable of directing the register in the direction of the side glass) (In cases where no defroster for the windshield glass is provided, the range of the side glass equivalent to the range where mist, such as water droplets, can be demisted by the defroster for the side glass). However, this provision shall not apply to motor vehicles having a vehicle body constructed so that the window glass is not likely to be misted, motor vehicles equipped with an air conditioner device having a dehumidifying function, and motor vehicles in which the distance between a plane which passes through the centre of the steering wheel and is parallel to the longitudinal centre plane of the motor vehicle and the side glass at the passenger seat side (only limited to the section necessary for viewing the rear-view mirror) is within 900 mm.

C. In the case of rear-view mirrors which are visible through the tinted side glass, the effective reflecting surface of the rear-view mirror shall not be tinted significantly.

3. The requirements prescribed in the Announcement of Paragraph 3 of Article 44 of the Safety Regulations in connection with the performance, etc. concerning the field of vision of the driver by means of the rear-view mirror concerned, protection of pedestrians, etc. of rear-view mirrors mounted on motor cycles with or without sidecar and three-wheeled motor vehicles that are equipped with a handle bar type steering equipment and with no passenger room shall be the requirements prescribed in Attachment 82 “Technical Standard for Rear-View Mirrors of Motor Cycles, etc.”

4. The requirements prescribed in the Announcement of Paragraph 4 of Article 44 of the Safety Regulations in connection with the installation position, installation method, etc. of the rear-view mirrors in the preceding Paragraph shall be the requirements prescribed in Attachment 83 “Technical Standard for Installation of Rear-View Mirrors of Motor Cycles, etc.”

5. The obstacle prescribed in the Announcement of Paragraph 5 of Article 44 of the Safety Regulations shall be a round column having a height of 1 m and a diameter of 30 cm, that has been placed as prescribed in Attachment 81 “Technical Standard for Mirror for Confirming the Immediate Front and Left Side.”

6. The requirements prescribed in the Announcement of Paragraph 6 of Article 44 of the Safety Regulations in connection with the performance, etc. of a mirror for confirming the obstacle and other devices concerning the field of vision of the driver, protection of pedestrians, etc. by means of the said device shall be the requirements prescribed in Attachment 81 "Technical Standard for Mirror for Confirming the Immediate Front and Left Side."

Article 69 (Windshield Wipers, etc.)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 45 of the Safety Regulations in connection with the performance, etc. of windshield wipers concerning ensuring of a view shall be the requirements prescribed in each of the following Items:

(1) The requirements prescribed in Attachment 84 "Technical Standard for Windshield Wiping and Washing Systems for Passenger Motor Vehicles, etc." in the case of windshield wipers mounted on ordinary-sized motor vehicles or small-sized motor vehicles used exclusively for carriage of passengers or mini-sized motor vehicles (except motor vehicles with a passenger capacity of 11 persons or more, motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds, motor vehicles with a maximum speed of less than 20 km/h and trailers);

(2) In the case of windshield wipers provided at the windshield glass of motor vehicles other than those enumerated in the preceding Item (except motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds and trailers), they shall be automatic windshield wipers to ensure a view immediate before the windshield glass (In cases where wipers are provided on right and left sides, they shall operate together).

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 45 of the Safety Regulations in connection with the performance, etc. of windshield washing systems and windshield defrosting and demisting systems concerning ensuring of a view shall be the requirements prescribed in each of the following Items:

(1) The requirements prescribed in Attachment 84 "Technical Standard for Windshield Wiping and Washing Systems for Passenger Motor Vehicles, etc." in the case of windshield washing systems mounted on ordinary-sized motor vehicles or small-sized motor vehicles used

exclusively for carriage of passengers or mini-sized motor vehicles (except motor vehicles with a passenger capacity of 11 persons or more, motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds, motor vehicles with a maximum speed of less than 20 km/h and trailers);

(2) The requirements prescribed in Attachment 86 "Technical Standard for Defrosting and Demisting Systems" in the case of defrosting and demisting systems mounted on motor vehicles enumerated in the preceding Item;

(3) The requirements prescribed in Attachment 85 "Technical Standard for Windshield Washing Systems for Buses and Trucks" in the case of windshield washing systems mounted on motor vehicles other than those enumerated in Item (1) (except motor cycles with or without sidecar, mini-sized motor vehicles with caterpillar tracks and sleds, large-sized special motor vehicles, small-sized special motor vehicles for agricultural use, motor vehicles with a maximum speed of less than 20 km/h and trailers);

(4) Windshield washing systems as well as defrosting and demisting systems shall not be likely damaged nor actuated as a result of vibration, impact, etc. while running.

3. With regard to the performance, etc. of sunvisors mounted on motor vehicles (except motor vehicles with a passenger capacity of 11 persons or more, large-sized special motor vehicles, small-sized special motor vehicles for agricultural use and motor vehicles with a maximum speed of less than 20 km/h) concerning the protection of occupants, the requirements prescribed in the Announcement of Paragraph 3 of Article 45 of the Safety Regulations shall be the requirements prescribed in Attachment 87 "Technical Standard for Sunvisor Impact Absorption."

Article 70 (Speedometers, etc.)

The requirements prescribed in the Announcement of Paragraph 1 of Article 46 of the Safety Regulations in connection with the installation position, accuracy, etc. of speedometers shall be the requirements prescribed in Attachment 88 "Technical Standard for Speedometers." However, in cases other than those cases where type designation, etc. is made, the phrase "$0 \leq V_1 - V_2 \leq V_2 / 10 + 4$" appearing in the provision of Paragraph 3–3 of Attachment 88 "Technical Standard for Speedometers" shall read as "$0 \leq V_1 - V_2 \leq V_2 / 10 + 6$ ($0 \leq V_1 - V_2 \leq V_2 / 10 + 8$ in the case of motor cycles with

or without sidecar and three-wheeled motor vehicles).” Furthermore, in cases where the device type designation is made pursuant to the provision of Paragraph 1 of Article 75–2 of the Act, the phrase “The indicated speed value intervals need not be uniform” appearing in Paragraph 3–1–2–3 shall read as “In the case of motor vehicles manufactured for sale in any country where imperial units are used, the speedometer shall also be marked in miles per hour (mph). In this case, the graduations of the speedometer shall be of 1, 2, 5 or 10 mph. The value of the speed of the speedometer shall be indicated at intervals not exceeding 20 mph and commencing at 10 or 20 mph. However, the indicated speed value intervals need not be uniform.”

Article 71 (Fire Extinguishers)

1. The nomenclature and quantity prescribed in the Announcement of Item (3), Paragraph 1 of Article 47 of the Safety Regulations shall be the nomenclature and quantity posted in the following table.

Nomenclature	Quantity (kg)
(1) Oil paper, oil cloth, etc.	750
(2) Waste silk	750
(3) Oil cake	2,000
(4) Flammable solid, etc.	1,500
(5) Flammable liquid, etc.	2,000
(6) Cotton, etc.	2,000
(7) Wood wool	2,000
(8) Straw, etc.	2,000
(9) Synthetic resin, etc.	2,000
(10) Matches	150

2. The requirements prescribed in the Announcement of Paragraph 2 of Article 47 of the Safety Regulations in connection with the kind of the extinguishing agent of the fire extinguisher, construction, installation position, etc. shall be the requirements prescribed in each of the following Items:

(1) Fire extinguishers to be provided on motor vehicles enumerated in Items (1) through (5), Paragraph 1 of Article 47 of the Safety Regulations shall be the ones that are applicable for extinguishing the carried good posted in the following table. However, in the case of motor cycles with or without sidecar, mini-sized motor vehicles or small-sized special motor vehicles, the filling capacity of the applicable fire extinguisher may be the capacity posted in Items A through E of the next Item.

Carried goods / Fire extinguishers		Gunpowder	Dangerous articles										Inflammable articles		High-pressure gas	
			1st class		2nd class			3rd class								
			Peroxide of alkali metals or those containing these	Other miscellaneous article	Iron powder, metal powder or magnesium or those containing any of these	Combustible solids	Other miscellaneous article	Water prohibition goods	Goods other than water prohibition goods	4th class	5th class	6th class	Inflammable solids, etc. and inflammable liquids, etc.	Other miscellaneous article	Inflammable gas	Oxygen
Fire extinguishers ejecting atomized reinforcing agent with a filling capacity of 8 liters or more		○		○		○	○		○	○	○	○	○	○		○
Fire extinguishers ejecting carbon dioxide with a filling capacity of 3.2 kg or more						○				○			○			○
Fire extinguishers ejecting monochloride monobromomethane with a filling capacity of 2 liters or more						○				○			○			○
Fire extinguishers ejecting dibromide tetrafluoride ethane with a filling capacity of 1 liter or more						○				○			○			○
Fire extinguishers ejecting fire extinguishing powder	With a filling capacity of phosphates, etc. of 3.5 kg or more			○		○	○			○		○	○	○	○	○
	With a filling capacity of bicarbonate of natrium or potassium of 3.5 kg or more		○		○	○		○		○			○		○	○

Remarks:

*1: The ○ mark shows that the fire extinguisher concerned is applicable for extinguishing the carried goods.

*2: "Phosphates, etc." means phosphates, sulphates and other flame-proof materials.

(2) Fire extinguishers mounted on motor vehicles of Paragraph 1 of Article 47 of the Safety Regulations (except motor vehicles provided for in the preceding Item) shall be such ones enumerated below:

A. Fire extinguishers ejecting atomized reinforcing agent with a filling capacity of 6 liters or more;

B. Fire extinguishers ejecting carbon dioxide with a filling capacity of 2.2 kg or more;

C. Fire extinguishers ejecting monochloride monobromomethane with a filling capacity of 1 liter or more;

D. Fire extinguishers ejecting dibromide tetrafluoride ethane with a filling capacity of 0.4 liter or more;

E. Fire extinguishers ejecting fire extinguishing powder with a filling capacity of 1.8 kg or more.

(3) Fire extinguishers mounted on motor vehicles of Paragraph 1 of Article 47 of the Safety Regulations shall comply with the following requirements in addition to the provisions of the preceding two Items:

A. The structure and performance of fire extinguishers shall comply with the technical standards provided for in Paragraph 2 of Article 21–2 of the Fire Prevention Act;

B. Fire extinguishers shall not be damaged nor actuated by vibration, impacts, etc. while the motor vehicle is running;

C. Fire extinguishers shall be installed where it may easily be detached when needed;

D. Fire extinguishers shall be located at the following places:

① Places convenient for watchman's use in the case of motor

vehicles carrying gunpowders, etc. or tractors drawing the said motor vehicle;

② Places convenient for use by drivers, assistants, conductors, watchmen or persons in charge in the case of motor vehicles other than those in Item ①.

(4) Fire extinguishers with an indication pursuant to the provision of Paragraph 3 of Article 38 of the Ministry Ordinance Prescribing Technical Standards for Fire Extinguishers (Ministry of Home Affairs Ordinance No. 27 of 1964) shall be regarded as complying with the requirements of Items A and B of the preceding Item.

Article 72 (Pressure Containers and Accessories Thereof)

1. The requirements prescribed in the Announcement of Article 48 of the Safety Regulations in connection with the standards, indication, installation, etc. of the pressure containers and accessories thereof of motor vehicles shall be the requirements prescribed in each of the following Items:

(1) Pressure containers shall comply with the standards prescribed by the Minister of Health, Labour and Welfare, based on the provision of Article 42 of the Industrial Safety and Health Law (Law No. 57 of 1972) in connection with the second class pressure containers provided for in Item (7) of Article 1 of the Enforcement Order of the Industrial Safety and Health Law (Cabinet Order No. 318 of 1972);

(2) Pressure containers for compressed air shall have a drain cock;

(3) Pressure containers shall have an indication of the maximum permissible pressure at a place easily seen under a condition where the pressure container is mounted on a motor vehicle;

(4) Pressure containers shall be installed at a place convenient for inspection;

(5) Pressure containers and conduits thereof shall be so mounted that they may not be damaged by vibrations, impacts, etc. while the motor vehicle is running;

(6) Pressure containers shall have a pressure gauge to indicate the internal pressure of the container at a position easily seen by the driver;

(7) The pressure gauge scale shall indicate the minimum effective working pressure of the system operated by the compressed gas.

In this case, the scale of the pressure gauge shall be indicated in the SI unit;

(8) The pressure gauge of Item (6) shall be equipped with an illuminating device or a luminous painted dial plate and pointer.

2. When a detailed statement which bears a "pass stamp" provided for in Article 4 of the Machinery Verification Regulations (Ministry of Labour Ordinance No. 45 of 1972) is submitted, the pressure container shall be regarded as complying with the requirements of Item (1) of the preceding Paragraph.

Article 73 (Tachographs)

The requirements prescribed in the Announcement of Paragraph 2 of Article 48–2 of the Safety Regulations in connection with the recording performance, accuracy, etc. of tachographs shall be the requirements prescribed in Attachment 89 "Technical Standard for Tachographs."

Article 74 (Speed Indication Devices)

The requirements prescribed in the Announcement of Paragraph 2 of Article 48–3 of the Safety Regulations in connection with the indicating method of the speed indication device, colour of light, brightness, accuracy, etc. as well as the requirements prescribed in the Announcement of Paragraph 3 of Article 48–3 of the Safety Regulations in connection with the installation position, installation method, etc. of the speed indication device shall be the requirements prescribed in Attachment 90 "Technical Standard for Speed Indication Devices."

Article 75 (Emergency Motor Vehicles)

The requirements prescribed in the Announcement of Paragraphs 1 and 2 of Article 49 of the Safety Regulations in connection with the colour of the warning lamp mounted on emergency motor vehicles, brightness, sound level of the siren and paint colour of the vehicle body shall be the requirements prescribed in each of the following Items:

(1) The warning lamp shall display a red light clearly visible from a distance of 300 m to the front. In this case, red lamps which function in interlocking with the warning lamp shall be regarded as complying with this requirement;

(2) The sound level of a siren shall be, when measured at a distance of 20 m to the front, 90 dB or more and 120 dB or less. In this case, when it is recognized that the sound level of the siren is likely to be out of this range, the sound level shall be measured by means of a sound level meter according to the method given below:

A. Prior to the operation, the sound level meter shall be warmed up thoroughly and calibrated after the warming-up period.

B. The microphone shall be placed at a height of 1 m above the ground at a distance of 20 m from the forward edge of the motor vehicle on the motor vehicle longitudinal centre line, horizontally and in parallel with the motor vehicle longitudinal centre line so that it faces the motor vehicle;

C. The audibility compensator circuit shall be set to the "C"-weighting characteristics;

D. The engine shall be stopped;

E. The measurement site shall be virtually level place that is not affected by reflecting sounds due to surrounding objects;

F. The measured values shall be handled as follows:

① The measurement shall be conducted twice. The measured value of the noise level of less than 1 dB shall be discarded;

② If the difference in noise levels between two measured values exceeds 2 dB, the these two measured values shall be nullified. However, if each of these measured values is within the range provided for in this Announcement, it shall be valid;

③ The mean value of these two measured values (the compensated value in cases where the measured values have been compensated in accordance with Item ④) shall be regarded as the noise level;

④ When the difference in measured value between the noise level

to be measured and the ambient noise level is 3 dB or more and less than 10 dB, the compensation value specified in the following table shall be deducted from the measured value. If the said difference is less than 3 dB, the measured values shall be nullified.

(Unit: dB)

Difference in measured value between noise level to be measured and ambient noise level	3	4	5	6	7	8	9
Compensation value	3	2		1			

(3) The paint colour of the vehicle body of emergency motor vehicles shall be red in the case of fire-fighting motor vehicles; and white in the case of other emergency motor vehicles. However, this provision shall not apply to police motor vehicles, motor vehicles used by the Public Prosecutor's Office for criminal investigations or motor vehicles used by the Defense Agency for emergency purpose, motor vehicles used for emergency surveillance at prisons or other reformatories, motor vehicles used for interning suspects or exercising surveillance over prisoners at Immigration Centres or Regional Immigration Bureaus, motor vehicles used for emergency public services, motor vehicles used by the Japan Coast Guard and handled as emergency motor vehicles, and motor vehicles used by the Ministry of Public Management, Home Affairs, Posts and Telecommunications to detect illegal radio stations.

(4) When most part of the body of an emergency motor vehicle is painted in the colour prescribed in the preceding Item, it shall be regarded as complying with the requirements of the preceding Item.

Article 76 (Motor Vehicles for Road Maintenance)

The requirements prescribed in the Announcement of Article 49–2 of the Safety Regulations in connection with the colour of the lamp mounted on motor vehicles for road maintenance, brightness, etc. shall be the requirements prescribed in each of the following Items:

(1) The lamp shall be a flashing yellow lamp.

(2) The lamp shall be clearly visible from a distance of 150 m.

Article 77 (Motor Vehicles for Passenger Carrying Business)

1. The requirements prescribed in the Announcement of Article 50 of the Safety Regulations in connection with the performance and construction necessary for the passenger carrying business shall be the requirements prescribed in Attachment 91 "Construction Requirements for Articulated Buses" and Attachment 92 "Construction Requirements for Double-Decker" as well as the requirements enumerated in each of the following Items.

(1) The suspension system and passengers' seats shall not give uncomfortable vibrations and impacts to passengers thereon;

(2) The passenger compartment shall be constructed so that proper lighting is available;

(3) The passenger compartment shall have adequate compartment lamps;

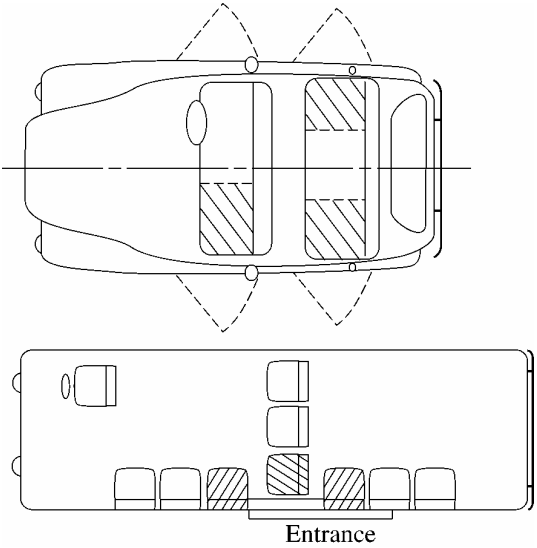
(4) The side window of the driver's seat shall be constructed to open 270 mm or more in both effective width and effective height by a simple operation;

(5) The entrances only for the seats directly accessible from the entrance (except the entrance only for the driver) shall be 900 mm or more in effective height and 470 mm or more in effective opening width (which means the minimum opening width on the horizontal plane at a height of 800 mm above the lower edge of the entrance, when the door is fully opened; hereinafter the same). In this case, the following seats which are readily accessible from the entrance shall be regarded as examples of "the seats directly accessible from the entrance" and the effective height and effective opening width of the entrance shall be the height and width of the section which can be used effectively as the entrance.

① Seats provided next to the entrance;

② Seats provided next to the side of those seats specified in Item ① above and whose seating capacity is up to two persons.

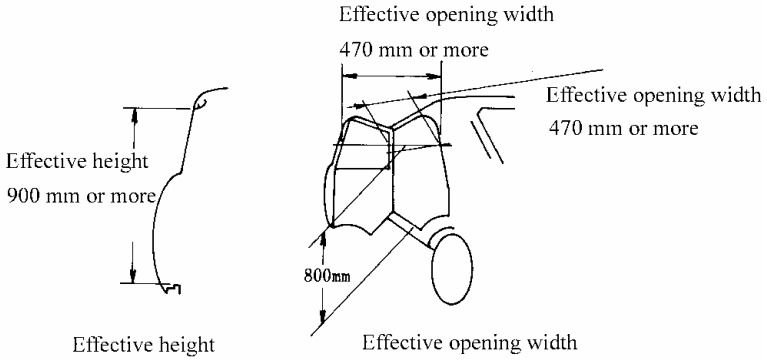
(Referential diagram)



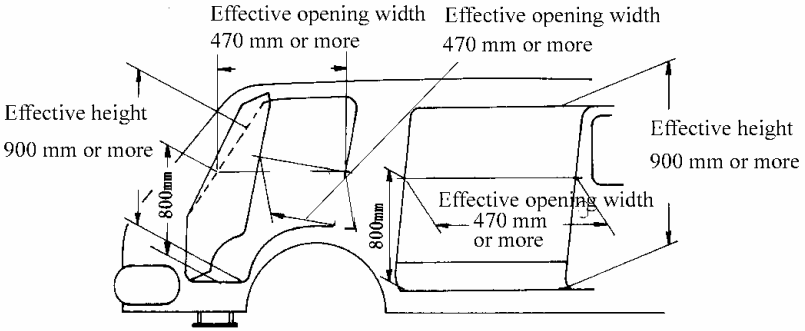
(Note) Those shaded portions denote seats provided next to the entrance.

(Reference diagram)

(Box type)



(Station wagon type)



2. Motor vehicles for passenger carrying business with a passenger capacity of 11 persons or more shall comply with the following requirements, in addition to the provisions of the preceding Item:

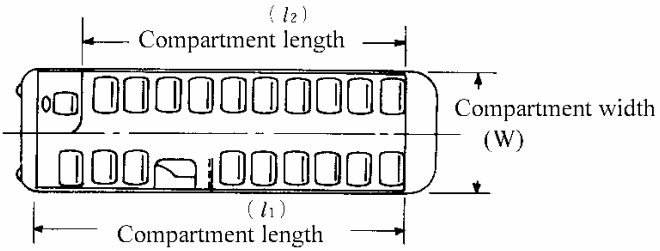
(1) The compartment lamp shall illuminate the interior of the compartment evenly and the light source shall be 5 watts (2 watts for fluorescent lamps) or more per square meter of the compartment floor area (which means the product that is obtained by multiplying the compartment length (If the compartment length differs between the right and left

sides, the mean length shall be used) by the compartment width).

(Formula)

$$\text{Compartment floor area} = \left(\frac{l_1 + l_2}{2}\right) \times w$$

(Referance diagram)



(2) The step attached to an entrance shall be 300 mm or more in effective depth. However, if it is difficult for a step other than the lowest one to have the said dimension, due to the door of the entrance, etc., it may be so constructed that an effective depth of 300 mm (when the height to the next upper step is 250 mm or less, 290 mm) or more is secured at the part where an effective width of the entrance is as long as 350 mm or more.

(3) On motor vehicles other than those provided for in the next Paragraph, the seat for a conductor shall be provided near the entrance in such a way that it may not hinder the entry and exit of passengers and not hamper the business of the conductor.

(4) On motor vehicles other than those provided for in the next Paragraph, in cases where the distance (which means the shortest distance between the centres of these seats, respectively, measured parallel to the floor surface. In this case, if the position of the seat for a conductor cannot be determined clearly, the rear edge of the entrance opening section at the side of the vehicle body shall be regarded as the position of the conductor.) between the driver's seat and the seat for a conductor is 3 m or more, a communication device (which means a device by which the conductor can communicate with the driver), such as buzzers, shall be provided. In this case, if two entrances are provided and two

conductors are riding, the communication device, such as buzzers, may be such ones by which one conductor can communicate via the other conductor.

(5) Entrance doors actuated by mechanical power shall be provided, near the entrance concerned, with a device to open the door manually in the event of failure, etc. Furthermore, the location of the device and how to open the door shall be indicated.

3. Motor vehicles for passenger carrying business (except trailers) with a passenger capacity of 11 persons or more intended to operate without a conductor shall comply with the following requirements (the requirements of Items (1) through (6) for motor vehicles for passenger carrying business with a passenger capacity of 30 persons or more without a standing capacity, that are running regularly along fixed routes; the requirements of Items (1) through (3) and Item (5) for motor vehicles for passenger carrying business with a passenger capacity of 29 person or less without a standing capacity, that are running regularly along fixed routes; and the requirements of Items (1), (3) and (5) for motor vehicles other than those for passenger carrying business that are running regularly along fixed routes), in addition to the provisions of the preceding two Paragraphs.

(1) The entrance door shall be so constructed that passengers may not open it easily, and in the case of the entrance door of one-man-operated buses, the opening method shall be clearly indicated near the door in the event of emergency.

(2) The entrance door shall be so constructed that the driver in his seat may control its opening and closing.

(3) The entrance door shall be so constructed that the motor vehicle may not be started with any door (except the doors of the entrance which is located near the driver's seat so that the driver may discern directly the opening and closing conditions thereof) opened, and an indicator lamp or other device which informs the driver in his seat of the doors' opening and closing conditions shall be provided. In this case, if the forward edge of the opening section of the entrance is located behind a vertical plane that includes a point 200 mm from the forward edge of the driver's seat and is perpendicular to the vehicle longitudinal centre plane, the entrance concerned shall not be regarded as the entrance which is located near the driver's seat. Moreover, if the unlocking device of the construction that the motor vehicle may not be started can be operated in the driver's seat, such system shall be regarded as examples not complying with this requirement.

(4) An indicator lamp or other device which informs the driver in his seat whether a passenger is on the step of an entrance shall be provided for each entrance (except the entrances which are located near the driver's seat so that the driver may discern directly the presence of passengers).

(5) Mirrors or other devices which allow the driver in his seat to discern the conditions near the entrance and inside the compartment shall be provided.

(6) Broadcasting equipment which allows the driver in his seat to announce to passengers (limited only to those which will not require the driver to hold a microphone in his hand when announcing) shall be provided.

(7) Buzzers or other devices which allow passengers to signal to the driver that they wish to get off shall be provided near the passengers.

4. Motor vehicles for passenger carrying business with a passenger capacity of 10 persons or less shall comply with the following requirements, in addition to the provisions of Item (1).

(1) The space (which means the shortest horizontal distance between the front edge of the seat at a height of the front edge of the seat and the rear edge of the seatback of the seat located ahead thereof, partition, etc. (excluding local protrusions) with the seatback reclined 30° backward from the vertical plane in the case of the driver's seat (including a seat that operates as a unit integral with the driver's seat or a seat parallel to the driver's seat) equipped with reclining mechanisms, and with the sliding mechanisms adjusted so that the space may become the shortest distance in the case of seats equipped with sliding mechanisms) between the front edge of a seat used for passengers and a seat located ahead thereof or the partition, etc. shall be 200 mm (in the case of a seat facing with the seat located ahead thereof, 400 mm) or more.

(2) The method of opening the door shall be indicated at or near the entrance door opening control device.

(3) The driver's seat and seats adjacent to the side of the motor vehicle shall be equipped with head restraints complying with the requirements of Article 31.

Article 78 (Motor Vehicles with Gas-Transporting Containers)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 50–2 of the Safety Regulations in connection with the strength, installation position, etc. of the bumper and other buffer systems of motor vehicles provided with gas-transporting containers and motor vehicles having other construction and devices for transporting gas containers shall be the requirements prescribed in each of the following Items:

(1) Motor vehicles provided with a gas-transporting container and motor vehicles having other construction and devices for transporting gas containers shall be equipped with bumpers and other buffer systems at the rear of the chassis so that the gas container and accessories thereof may be protected from damage in the event of collision. In this case, the "motor vehicles provided with a gas-transporting container" shall mean any motor vehicle provided with a gas container fixed to the chassis for transporting high-pressure gas (high-pressure gas tank lorry). Furthermore, the "motor vehicles having other construction and devices for transporting gas containers" shall mean any motor vehicle capable of loading containers used exclusively for the storage of gas containers and equipped with mechanical devices for facilitating the loading and unloading of containers and securing devices for securing the containers to the motor vehicle (hereinafter referred to as the "container motor vehicle with loading and unloading device").

(2) The "bumper" in the preceding Item shall mean a device having the construction, as indicated in Fig. 1, consisting of the main body and an installation section connecting the main body to the chassis and shall comply with the requirements prescribed below:

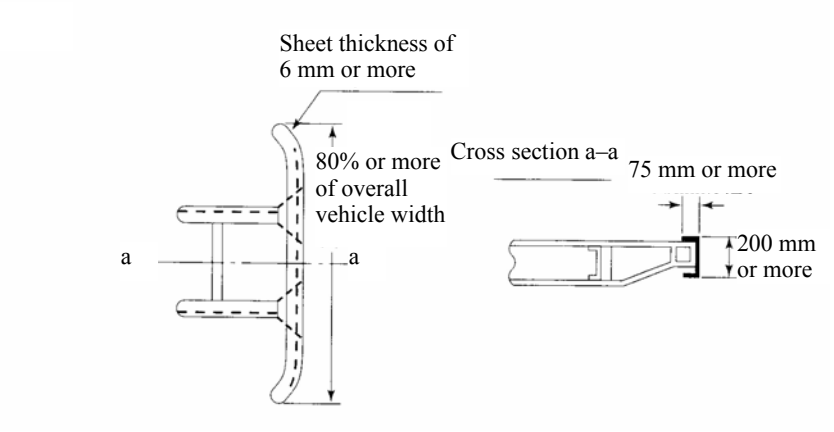
A. The bumper shall have adequate strength and rigidity and shall be installed securely to the chassis;

B. The edge of the main body as well as the installation section shall be so constructed that pedestrians and other motor vehicles may not be injured;

C. The main body shall be installed symmetrically in relation to the motor vehicle longitudinal centre line. Furthermore, its length shall be at least 80% of the width of the motor vehicle concerned;

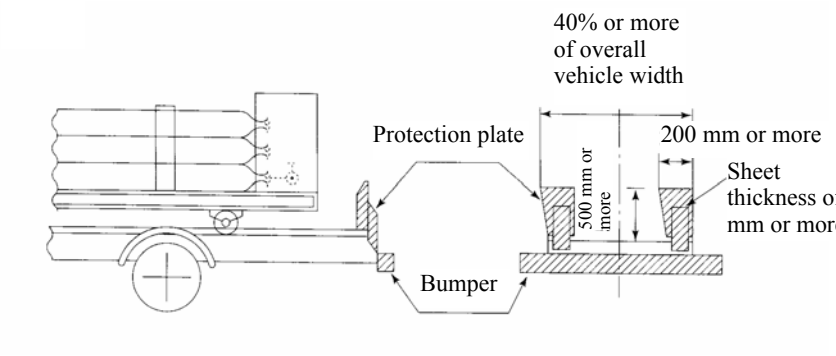
D. The bumper shall not hamper the indication of the motor vehicle registration number plate and lamps, etc.

Fig. 1



(3) The device (protection plate) to be mounted on a container motor vehicle with loading and unloading device, as indicated in Fig. 2, shall be regarded as "other buffer system." In this case, a bumper complying with the requirements of the preceding Item shall be installed in addition to the protection plate.

Fig. 2

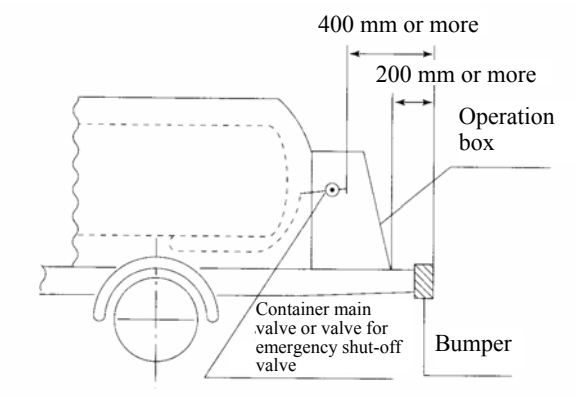


2. The requirements prescribed in the Announcement of Paragraph 2 of Article 50–2 of the Safety Regulations shall be that the buffer system of the preceding Paragraph be located at a sufficient distance from the rear surface of the gas-transporting container and accessories thereof. In this case, the

phrase “located at a sufficient distance” shall mean the compliance with the requirements prescribed in each of the following Items:

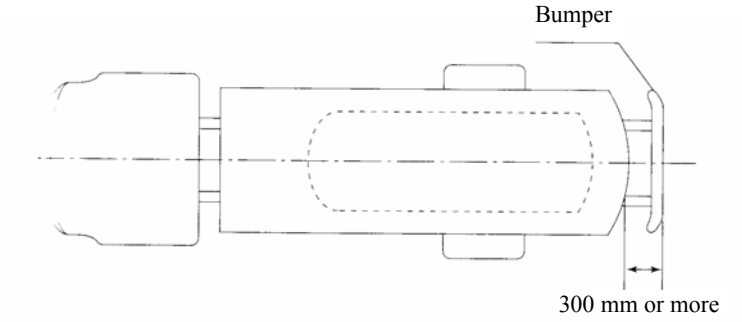
(1) In the case of containers with rear valve (referring to containers in which the valve used for sending and receiving gas (hereinafter referred to as the “container main valve”) is provided at the rear surface thereof), the distance from the container main valve and valve for the emergency shut-off device to the rear surface of the bumper shall be at least 40 cm, as indicated in Fig. 3.

Fig. 3 Containers with rear valve



(2) In the case of containers other than those with rear valve, the distance from the rear surface of the container to the rear surface of the bumper shall be at least 30 cm, as indicated in Fig. 4.

Fig. 4 Those other than containers with rear valve



(3) In cases where the container main valve, valve for the emergency shut-off device, and other main accessories are housed in the operation box, in addition to complying with the requirements of the preceding two Items, the distance from the operation box to the rear surface of the bumper shall be at least 20 cm, as indicated in Fig. 3.

Article 79 (Motor Vehicles Carrying Gunpowder)

1. The requirements prescribed in the Announcement of Article 51 of the Safety Regulations in connection with the construction, devices, etc. of motor vehicles carrying gunpowder shall be the requirements prescribed in each of the following Items:

(1) No fuel system shall employ an acetylene gas generator nor gas generator;

(2) The loading platform and any other places where gunpowder is loaded shall be separated from the engine by non-flammable walls;

(3) The electric wiring on the outside of the vehicle body and at the loading platform and any other places where gunpowder is loaded shall be covered with insulators and firmly fixed to the vehicle body;

(4) Electric terminals, circuit breakers and any other electric equipment which is likely to spark, located on the outside of the vehicle body and at the loading platform and any other places where gunpowder is loaded, shall be properly covered.

2. Each of the following Items shall be regarded as not complying with the requirements of Item (3) or (4) of the preceding Paragraph:

(1) The insulator of the electric wiring is broken;

(2) The electric wiring is likely to be damaged by the contact, etc. with other metal sections;

(3) The terminal cover of the battery or the terminal cover of the electric wiring is broken.

Article 80 (Motor Vehicles Carrying Dangerous Articles)

1. The requirements prescribed in the Announcement of Article 52 of the Safety Regulations in connection with the construction, devices, etc. of motor vehicles carrying dangerous articles shall be the requirements prescribed in each of the following Items:

(1) No fuel system shall employ an acetylene gas generator nor gas generator;

(2) The electric wiring on the outside of the vehicle body and at the loading platform and any other places where dangerous articles are loaded shall be covered with insulators and firmly fixed to the vehicle body;

(3) Electric terminals, circuit breakers and any other electric equipment which is likely to spark, located on the outside of the vehicle body and at the loading platform and any other places where dangerous articles are loaded, shall be properly covered.

2. Each of the following Items shall be regarded as not complying with the requirements of Item (2) or (3) of the preceding Paragraph:

(1) The insulator of the electric wiring is broken;

(2) The electric wiring is likely to be damaged by the contact, etc. with other metal sections;

(3) The terminal cover of the battery or the terminal cover of the electric wiring is broken.

3. With regard to motor vehicles carrying dangerous articles of the specified quantities or greater posted in Attached Table 3 of the Cabinet Order for Control of Dangerous Articles, in addition to the provision of Paragraph 1, the loading platform and any other places where dangerous articles are loaded shall be separated from the engine by non-flammable walls.

4. Motor vehicles which are provided with a tank on the chassis for the purpose of carrying explosive liquids shall comply with the requirements prescribed in each of the following Items, in addition to the provisions of Paragraphs 1 and 3:

(1) The motor vehicles shall have pneumatic rubber tyres and be equipped with bumpers or other buffer systems at the rear of the chassis so that

the tanks and accessories thereof may be protected from damage in the event of collision;

(2) The tanks and accessories thereof shall be constructed so that they comply with the requirements of Article 15 (except Item (1) of Paragraph 1) of the Cabinet Order for Control of Dangerous Articles or shall have special construction or equipment approved under the provision of Article 23 of the said Order to have at least the performance equivalent to those complying with the requirements of Article 15 (except Item (1) of Paragraph 1) of the said Order;

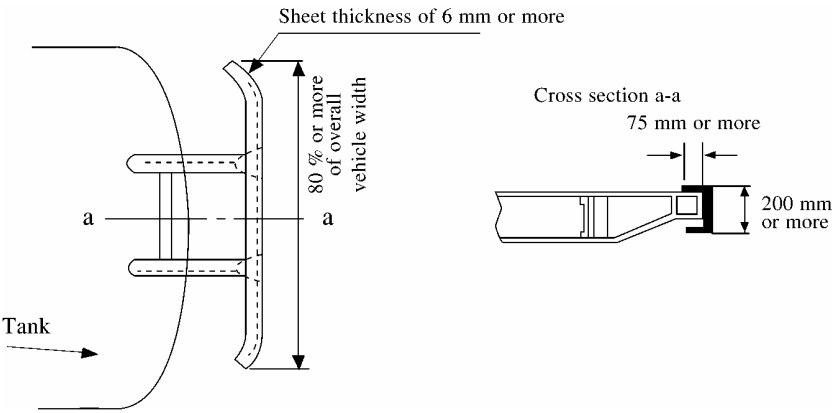
(3) The tanks shall be firmly secured to the chassis to be free from any movement or damage;

(4) The exhaust pipes and silencers shall be free from any leakage of exhaust gas from the joints, etc., and shall have proper heat insulating measures at the part where the distance from the surface of the tank is less than 200 mm;

(5) No exhaust pipes and silencers of a motor vehicle carrying explosive liquids enumerated in the Item “Class 4” of the Attached Table of the Fire Prevention Act shall be located just under the valve or joints of the tank or accessories thereof.

5. Devices mounted symmetrically relative to the motor vehicle longitudinal centre line, whose length is 80% or more of the width of the motor vehicle concerned and which has adequate strength and rigidity and is mounted securely to the chassis to protect the tank from damage, shall be regarded as complying with the requirements of Item (1) of the preceding Paragraph.

(Reference diagram)



6. As for the tank, when a tank certificate is submitted, the tank concerned and accessories thereof shall be regarded as complying with the requirements of Item (2) of Paragraph 4.

Article 81 (Passenger Capacity and Maximum Loading Capacity)

1. The requirements prescribed in the Announcement of Paragraph 1 of Article 53 of the Safety Regulations in connection with the passenger capacity of a motor vehicle shall be the requirements prescribed in each of the following Items:

(1) The passenger capacity shall be the total capacity of the driver's seat, seats, devices corresponding to seats and standing space. In this case, beds provided on patient carrying vehicles, vehicles for transporting physically handicapped persons or ambulances as well as spaces and devices for securing wheelchairs at a space provided exclusively for accommodating wheelchairs shall be handled as devices corresponding to seats.

(2) The seating capacity for contiguous seats shall be the value determined pursuant to the following Items:

A. For motor vehicles other than infant-carrying motor vehicles, an integer obtained by dividing the width of the seat concerned by 40 cm shall be used. However, the value obtained by the

following calculation may be used: subtract 76 cm from the seat width; the thus-obtained value is divided by 40 cm to determine an integer to which 2 is added.

B. For infant-carrying motor vehicles, an integer obtained by dividing the seat width by 27 cm shall be used.

(3) The capacity of a standing space shall be an integer obtained by dividing the total area of the standing space by 0.14 cm^2.

(4) In the case of bus type motor vehicles with a standing space of a passenger capacity of 11 persons or more, which are equipped with auxiliary seats, the passenger capacity shall be calculated with these auxiliary seats in their folded state. However, in the case of motor vehicles enumerated below in which passengers will not be carried in excess of the passenger capacity, it is permissible to calculate the passenger capacity with these auxiliary seats in their use state:

A. General chartered motor vehicles for passenger carrying business;

B. Of passenger buses, those used for long-distance expressway and regular sightseeing business use;

C. Motor vehicles for specific passenger carrying business.

(5) The passenger capacity of infant-carrying motor vehicles shall be the sum of an integer that is obtained by dividing the passenger capacity of children by 1.5 and the passenger capacity of adults.

2. The requirements prescribed in the Announcement of Paragraph 1 of Article 53 of the Safety Regulations in connection with the maximum loading capacity of a motor vehicle shall be the requirements prescribed in each of the following Items:

(1) The maximum loading capacity shall be calculated as follows:

A. The maximum loading capacity of trucks (except the case of Item B) shall be calculated according to the circulars enumerated below. Here, in the case of designated motor vehicles, etc. in which the construction, etc. of the vehicle body has been changed (except motor vehicles designated by the Minister of Land, Infrastructure and Transport), the maximum loading capacity shall be designated within the loading capacities of

standard motor vehicles that employ the chassis of the motor vehicle concerned.

① Attachment 95 “Technical Standard for Running Performance of Motor Vehicles”

② Attachment 96 “Technical Standard for Running Performance of Coupled Motor Vehicles”

B. In cases where the use is changed from the passenger motor vehicle or the bus to the truck (including cases where the maximum loading capacity is designated to special-purpose motor vehicles), the maximum loading capacity shall be calculated as follows, in addition to Item A ①.

① In the case of designated motor vehicles, etc. for which the permissible limits of the gross vehicle weight and axle weight are clear from the specification table or the like, the maximum loading capacity shall be designated within a range not exceeding the said permissible limits.

② In the case of motor vehicles for which the permissible limits of the gross vehicle weight and axle weight are indicated by means of a label showing that the Federal Motor Vehicle Safety Standards are complied with, the maximum loading capacity shall be designated within a range not exceeding the said permissible limits (including the permissible limit of the maximum loading capacity in cases where the permissible limit of the maximum loading capacity is also indicated).

③ In the case of motor vehicles for which the permissible limits of the gross vehicle weight and axle weight are clear by means of a compliance certificate of a complete motor vehicle issued by the motor vehicle manufacturer pursuant to the European Economic Community directive, the maximum loading capacity shall be designated within a range not exceeding the said permissible limits.

④ In the case of designated motor vehicles, etc. for which the permissible limits of the gross vehicle weight and axle weight are not clear, the maximum loading capacity shall be designated within a range not exceeding the maximum gross vehicle weight in the variant classification of the same type.

⑤ In the case of motor vehicles other than those provided for in Items ① through ④, the maximum loading capacity shall be designated within a range not exceeding the weight obtained by multiplying the capacity of the riding accommodation that has been removed by 55 kg.

(2) The fifth wheel load shall be calculated in the same way as the provisions of the preceding Item.

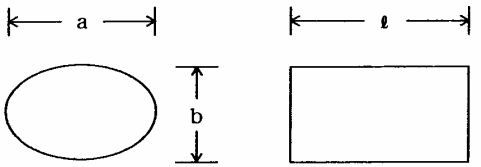
(3) Of semi-trailers approved for relaxation of the application in connection with Items of the Safety Regulations in which the regulated value is exceeded on conditions that only indivisible goods are transported pursuant to the provision of Article 55 of the Safety Regulations, the maximum loading capacity (reference maximum loading capacity) of standard relaxation semi-trailers in cases where divisible goods are transported within the range of the Safety Regulations shall be calculated according to the provision of Item (1).

(4) For motor vehicles that employ a tank, etc. as a loading accommodation (except tank motor vehicles carrying dangerous articles, tank motor vehicles carrying high-pressure gas and tank motor vehicles used exclusively for transport of powdered goods), the tank volume (for the tank volume of 1,000 liters or less, the volume less than 10 liters is rounded off; in the same way, for the tank volume exceeding 1,000 liters but 5,000 liters or less, the volume less than 50 liters is rounded off (If the last two figures are 50 liters or more and less than 100 liters, they are counted as 50 liters.); and for the tank volume exceeding 5,000 liters, the volume less than 100 liters is rounded off (the same applies in Items (5) and (8) below)) shall be multiplied by the specific gravity of the loaded goods concerned enumerated in the table below to obtain a value (which can be multiplied by a value from 0.9 to 1.0) which shall be used as the weight of loaded goods (the weight less than 10 kg is rounded off; the same applies in Items (5), (6), (7) and (8)).

Moreover, for tanks whose volume is difficult to be calculated, it shall be determined by approximation of the volume of the tank concerned according to the examples below (the same applies in Items (5), (6) and (8) below).

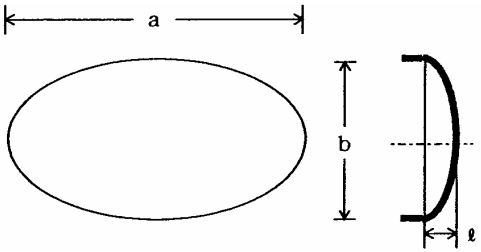
A. Oval tanks

① Calculation of cylinder



$$V = \frac{\pi a b}{4} \ell$$

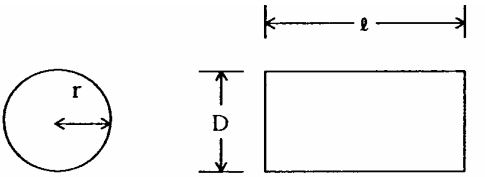
② Calculation of end plates



$$V = \frac{\pi a b}{4} \frac{\ell}{2}$$

B. Cylinder tanks

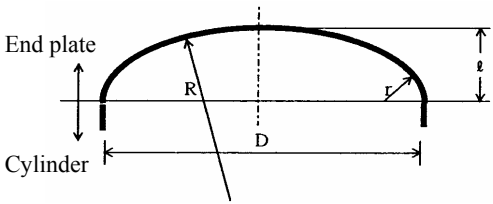
① Calculation of cylinder



$$V = \pi r^2 \ell$$
$$= \frac{\pi}{4} D^2 \ell$$

② Calculation of end plates

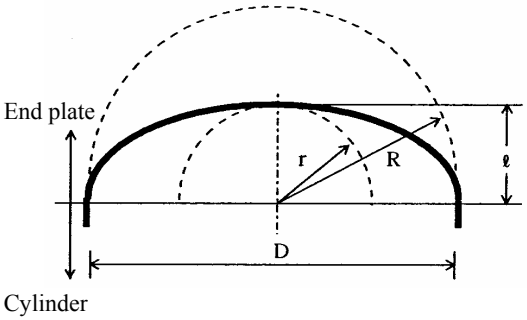
a. 10% dish type end plate



$D = R$
$r = 0.1D$
$\ell = 0.194D$

$V = 0.09896D^3$

b. 2:1 semi-oval end plate

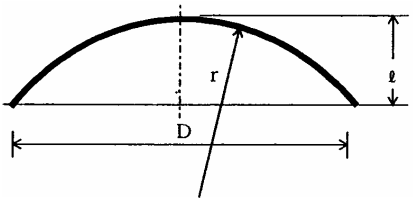


$\ell = D / 4$

$R : r = 2 : 1$

$$V = \frac{\pi}{24} D^3$$

c. Spherical end plate



$$V = \frac{1}{3} \pi (3r - \ell) \ell^2$$

(Table of Specific Gravity (Example))

Nomenclature of loaded articles	Specific gravity
Asphalt solution	0.90
Formalin	1.05
Water, sea water, milk, excrement	1.00

(5) As regards tank motor vehicles carrying dangerous articles, the value obtained by multiplying the tank volume (which shall be multiplied by a value from 0.90 to 0.95) by the specific gravity of the loaded article concerned enumerated in the table below shall be used as the weight of the loaded article. Here, in the case of tank motor vehicles whose installation is approved pursuant to the provisions of the Fire Prevention Act as a tank motor vehicle for carrying several kinds of dangerous goods within the range in which the category of the dangerous article is the same category pursuant to the provisions of the Fire Prevention Act, the value calculated, based on the tank volume, by

a value of an article for which the installation has been approved among those given in the installation permit concerned shall be used as the weight of the loaded article.

(Table of Specific Gravity (Example))

Nomenclature of loaded goods	Specific gravity
Category 4	
Petroleum class 1	
Gasoline	0.75
Alcohols	
Alcohol	0.80
Acetate	
Acetic ester	0.90
Petroleum class 2	
Kerosene	0.80
Light oil	0.85
Acetic acid	1.06
Petroleum class 3	
Heavy oil	0.93
Petroleum class 4	
Lubricating oil	0.95

(6) As regards tank motor vehicles carrying high-pressure gas, the value obtained by the calculation method of the mass of the liquefied gas provided for in Article 45 of the Safety Regulations for Containers shall be used as the weight of the loaded article. In this case, the tank capacity shall be the value stamped or the value stamped on the sticker pursuant to the provision provided for in Article 45 of the High-Pressure Gas Control Act.

(7) For concrete mixers and agitator trucks, the maximum mixing capacity of the drum shall be multiplied by 2.4 tons/m^3 (2.2 tons/m^3 in the case of dry types where only cement and aggregate are loaded into the drum; and the value concerned in cases where the virtual specific gravity of goods to be transported is apparent by a reliable data) and shall be multiplied by a figure of 0.9 to 1.0. Next, the weight of the full water tank shall be added to the aforesaid value. The thus-obtained

sum shall be used as the weight of the loaded article.

However, for dry types, a study shall be made under two conditions: one under which only cement and aggregate are loaded into the drum; and the other under which ready-mixed concrete is prepared in the drum. Here, the weight of the water in the water tank when only cement and aggregate are loaded into the drum shall be represented by the weight when the water tank is filled fully with water. On the other hand, the weight of the water in the water tank when ready-mixed concrete is prepared in the drum shall be represented by the value which is obtained by subtracting the product of the maximum mixing capacity of the drum multiplied by 200 kg/m^3 from the weight of the water tank which is filled fully with water.

(8) For tank motor vehicles used exclusively for transport of powdered goods, the tank volume shall be multiplied by the virtual specific gravity in the next table (the value concerned in cases where the virtual specific gravity of goods to be transported is apparent by a reliable data). This product shall be further multiplied by a figure of 0.9 to 1.0. The thus-calculated figure shall be used as the weight of the loaded article.

(Table of Virtual Specific Gravity)

Nomenclature of loaded goods	Virtual specific gravity
Loose cement	1.0
Flyash	0.8
Livestock feed	0.5
Vinyl powder	0.45
Flour	0.5
Carbon black	0.32

(9) For special-purpose motor vehicles with a specified loading capacity, except those without a specified maximum loading capacity, the maximum loading capacity shall be calculated according to the provisions of Items (1) through (8).

Article 82 (Temporary Passenger Capacity)

The requirements prescribed in the Announcement of Paragraph 2 of Article 54 of the Safety Regulations in connection with the temporary passenger capacity shall be the sum of the seating capacity and the standing capacity calculated without applying the provision of Paragraph 2 of Article 34. In this case, the standing capacity shall be the integral value obtained by dividing the sum of the standing spaces by 0.14 m^2.