

JAPAN's Comments

Informal document GRSG-102-34
(102nd GRSG, 16-20 April 2012
agenda item 6)

On OICA document Submitted by the expert from OICA

1) Paragraph 16.1.

The ground clearance with respect to the underside of the protective device, even when the vehicle is unladen, shall not exceed:

- (a) 450 mm for vehicles with hydropneumatic, hydraulic or pneumatic suspension or a device automatic levelling according to load, and**
- (b) 550 mm for vehicles [of category M1, M2, M3, N1, N2 and N3G] [M1] with a type of suspension other than in (a) above and for the vehicles referred to in item 1.2. of Annex 6**

[M1]Is it really necessary to list these categories ?

- (c) for the vehicles where the ground clearance requirements in (a) and (b) above are not compatible with their intended use, 600 mm or the height permitting a departure angle, whichever is the lowest, of:**
 - i 8° for vehicles mentioned in item (a) above;**
 - ii 10° for vehicles [mentioned in item (b) above;] of category N2**
 - iii 15° for off-road vehicles of category M1G, M2G, M3G, N1G, N2G and N3G [M1] .**

[M1]To be repeated for 25.1

This requirement applies over its the entire width of the vehicle and shall be such that the height above the ground of the points of application of the test forces applied to the device according to Part I of this Regulation and recorded in the type approval communication form (Annex 1, item 7) does not exceed 600 mm the values mentioned in (a), (b) and (c) for the respective vehicle categories added with half the height of the cross member as defined in paragraph 7.1.

1. Questions regarding the current proposal by OICA

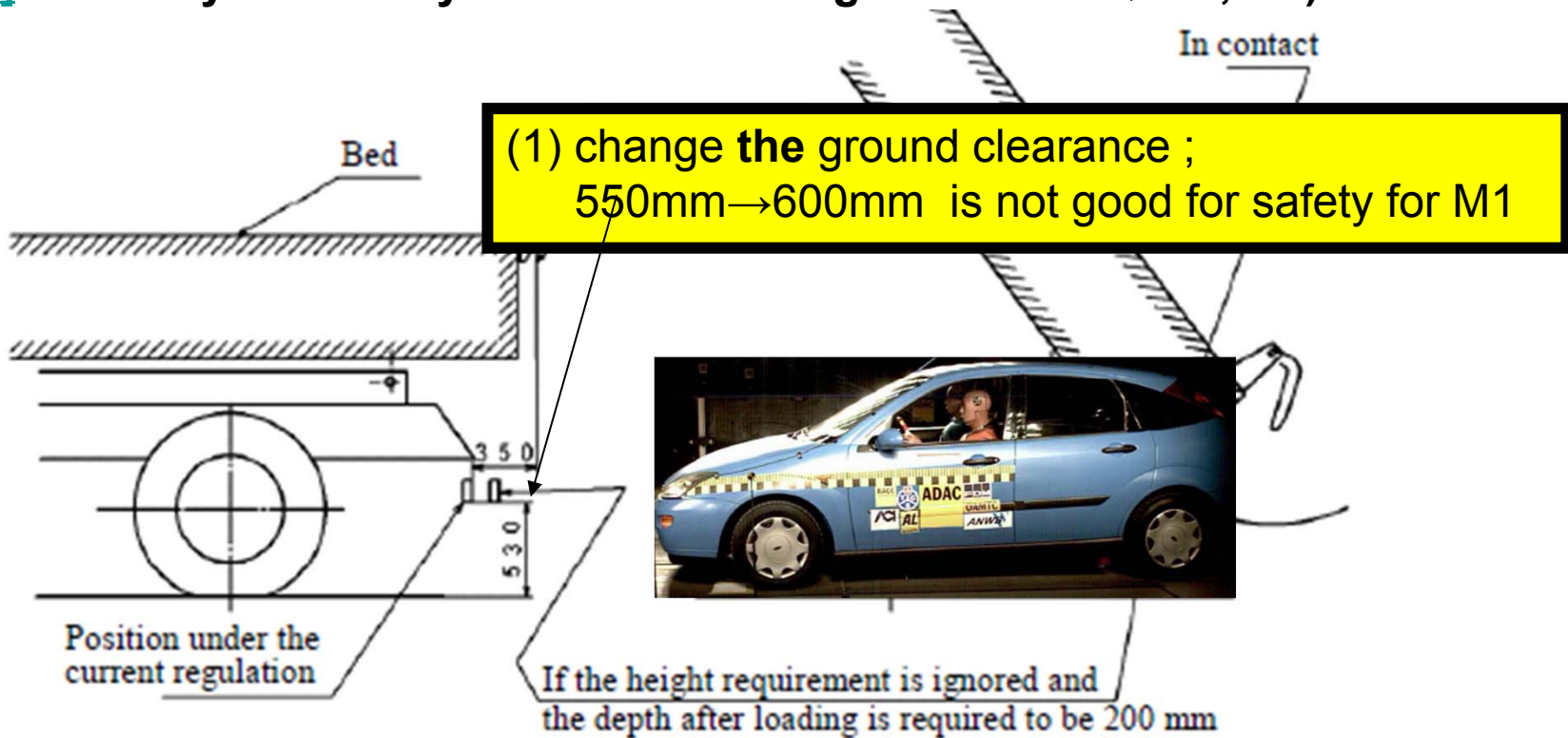
(1) By this document, about N3 category, change the ground clearance ;
550mm→600mm

In Japan, dump& concrete mixer is in N3, and driving in town and highway road, this change is not good for safety.

■ JAPAN proposes. Are as follows.

(b) 550 mm for vehicles [of category M1, M2, M3, N1, N2, N3 and N3G] [M1] with a type of suspension other than in (a) above and for the vehicles referred to in item 1.2. of Annex 6

[M1] Is it really necessary to list these categories ? (add; N3)



Category ; N3 in JAPAN and in EUROPE

IN JAPAN <N3=N3>

Use mainly in town and street

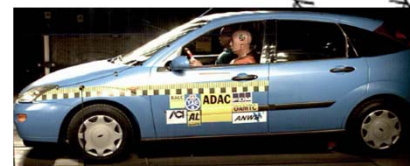
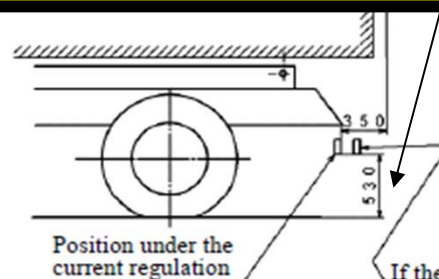


IN EUROPE: <N3=N3G>

Use mainly in off road



(1) change the ground clearance ; 550mm → 600mm is not good for safety for M1 and N1



If the height requirement is ignored and the depth after loading is required to be 200 mm

1. Questions regarding the current proposal by OICA

(1) By this document, about N3 category, change the ground clearance ; 550mm→600mm
In Japan, dump& concrete mixer is in N3, and driving in town and highway road, this change is not good for safety.

■ JAPAN proposes. Are as follows. About 16.1.

- (a) 450 mm for vehicles with hydropneumatic, hydraulic or pneumatic suspension or a device for automatic levelling according to load, and
- (b) 550 mm for vehicles other than those in (a) above.

COMMENTS FROM JAPAN;

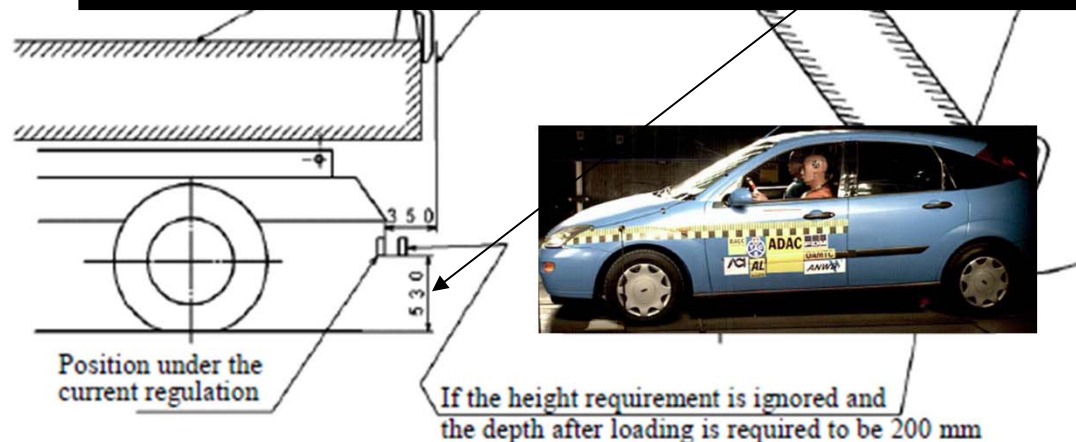
● ECE/TRANS/WP.29/GRSG/2011/19 ; Submitted by the expert from Germany

● Informal document No. GRSG-100-25; Submitted by the expert from Germany

improvement for the relevant accidents of this rear under run scenario occur on motorways, by this exchange for hydraulic suspension trucks, main problem will be solved.



(1) change the ground clearance ; 550mm→450mm is good for safety on motorways accidents .



Japan's Comments

On Informal document No. GRSG-102-xx Submitted by the expert from Germany

1. The requirements that are difficult to meet for Japan with the changes from the 02 series of amendments as proposed by Germany (GRSG/2011/19 and GRSG-102-XX). For the examples, see diagram Nos. [1] to [20].

(1) Paragraph 7.1.

The reason for changing the section height is unclear. In some vehicles, the section height cannot be changed.

(2) Paragraph 16.2.

Specification of the height of the RUPD's underside for vehicles to which paragraph 16.1 is not applicable:

GRSG/2011/19 "departure angle and ground clearance" ->

Japan's proposal "ground clearance (no more than 550 mm)"

(3) Paragraph 16.3. -> 16.4.

For vehicles fitted with a work mechanism at the rear, the distance between the rear of the RUPD and the rear extremity of the vehicle must not exceed 350 mm.

2. Questions regarding the current proposal by Germany (GRSG/2011/19 and GRSG-102-XX)

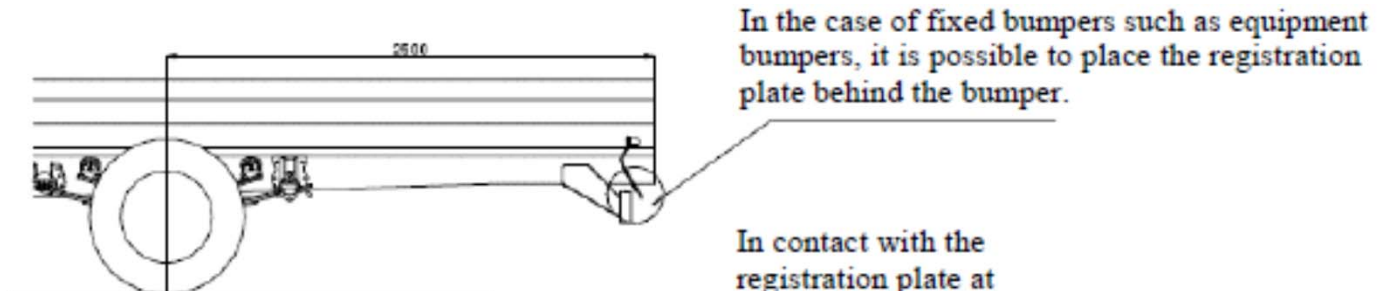
(1) Germany proposes to delete Paras. 1.2.1. and 1.2.2. and newly move them to Annex 6 and to add a load requirement as Para. 3.1.4., Annex 5. Does this mean that the RUPDs with no load requirement will be now required to meet the load requirement?

(2) Germany proposes to specify separate performance requirements for N3-G category vehicles, but is it not true that the G category vehicles are exempted from the requirements as "incompatible with their use" in Para. 1.2.3.?

(3) We cannot understand the content of rigid test bench, which was added to Annex 5. Would you clarify?

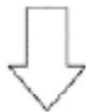
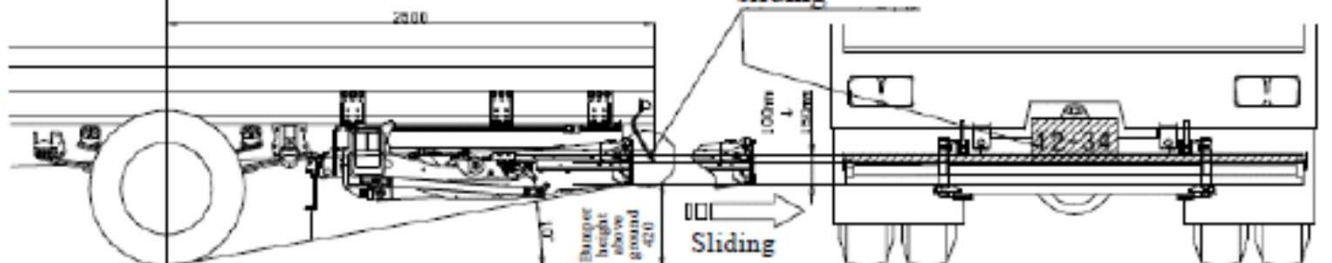
Cases where the change in the RUPD height from 100 mm to 150 mm will be difficult (Vehicles with retractable tailgate lift)

1. Fixed bumper:

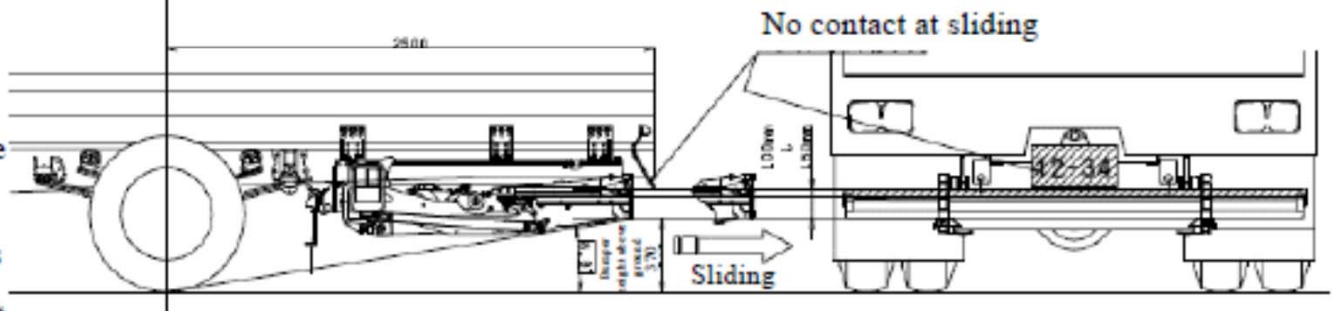


2. Tailgate retractable under the floor:

- * If the bumper is extended upwards to keep the departure angle, the tailgate will come in contact with the registration plate when it slides backwards.



- * If the tailgate installation position is lowered by 50 mm in order to avoid contact with the registration plate, the departure angle will be below 10°, making some vehicles unable to run.



- * If the bumper is extended downwards without lowering the tailgate installation position, it will still result in the situation depicted at right.

Diagram [2] Vehicles with movable RUPD for dumping ;N3

Cases where the change in the RUPD height from 100 mm to 150 mm will be difficult

Vehicles with movable RUPD for dumping (vehicles with retractable bumpers for asphalt finisher docking)

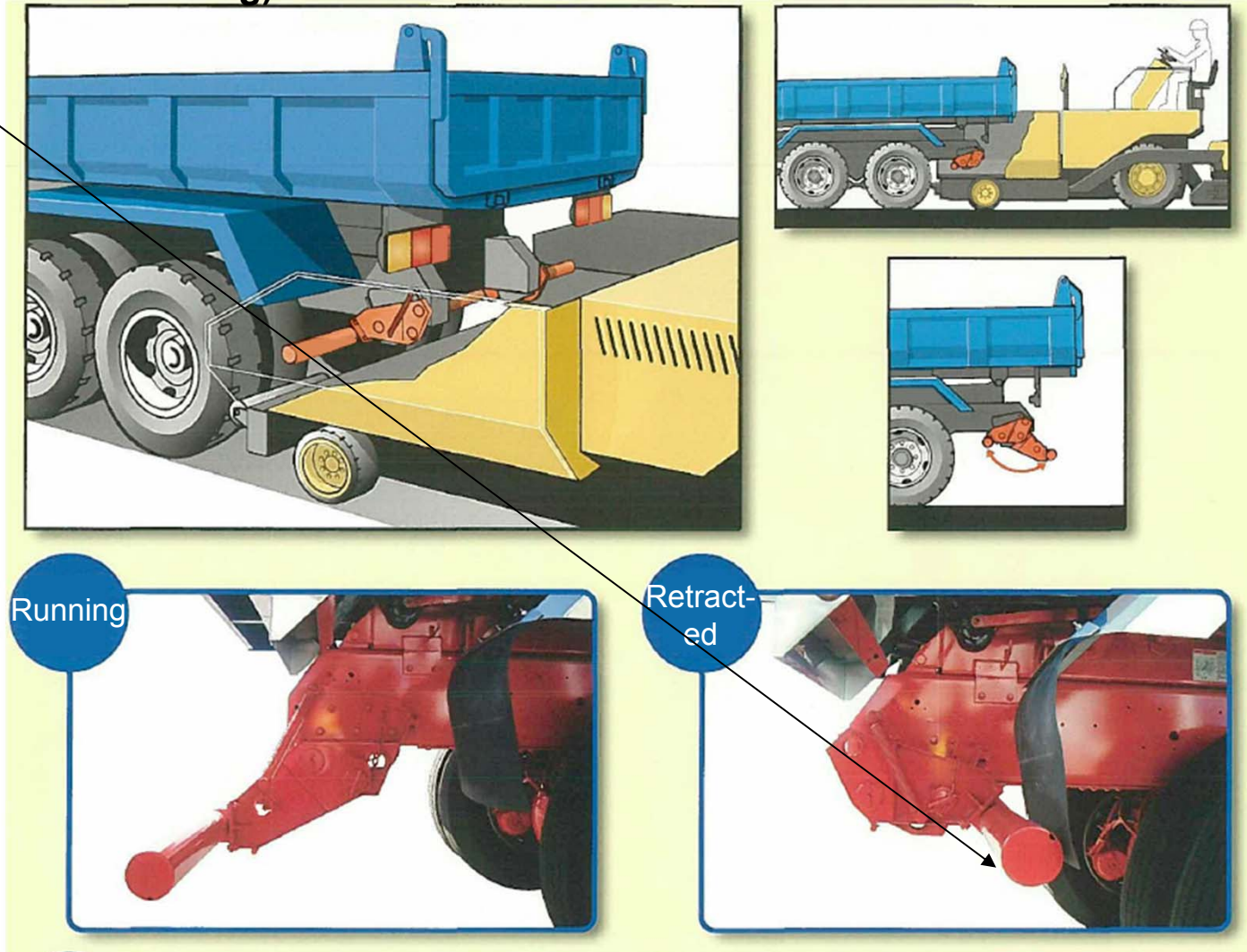


Diagram [3] N2 vehicles with GVW 7 t or less ; N2

Cases where the change in the RUPD height from 100 mm to 150 mm will be difficult

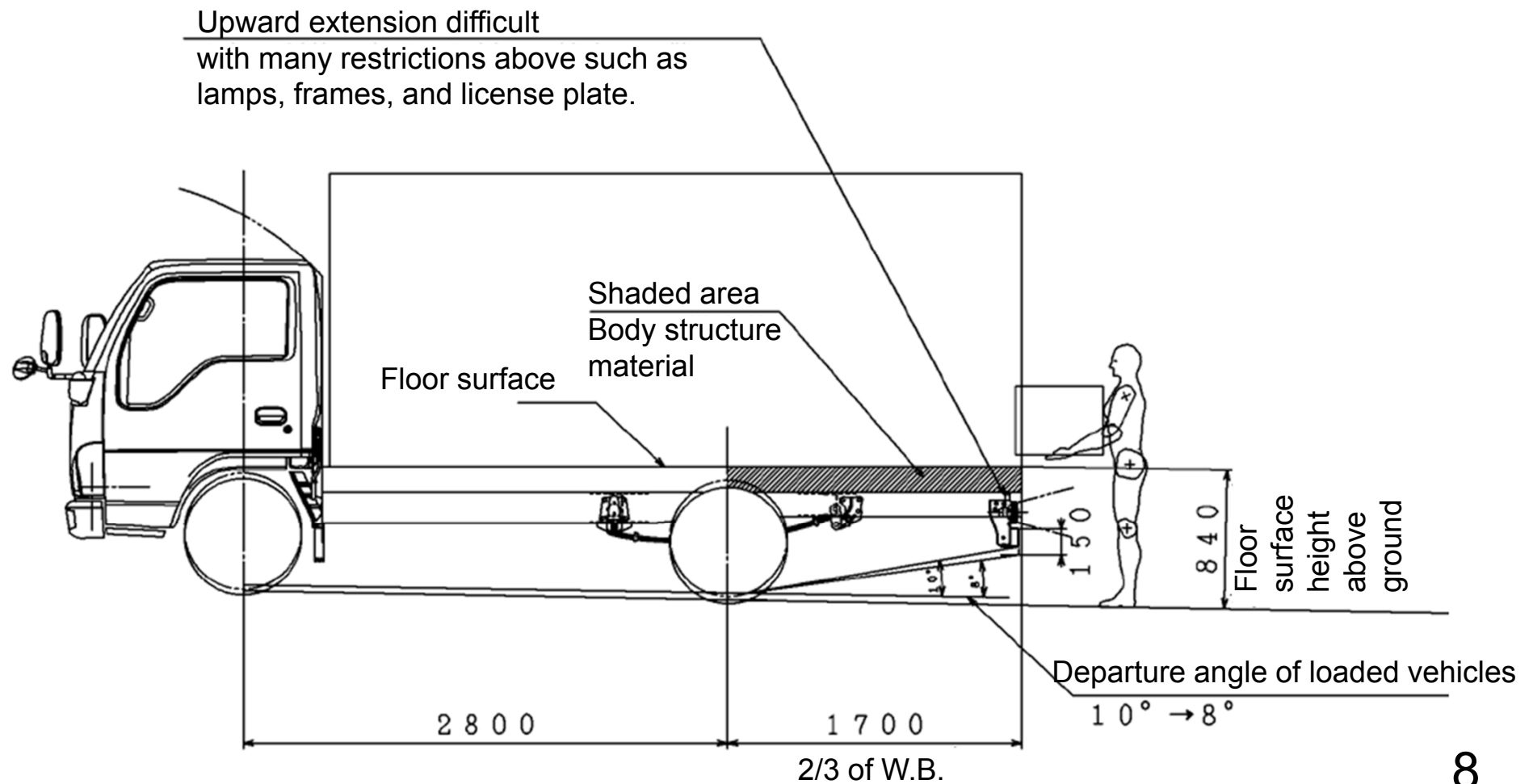


Diagram [4] refer;GRSG-101-27 P5 – 8

;N3

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure .

The distance of 350 mm is necessary for vehicles with Dump trucks.

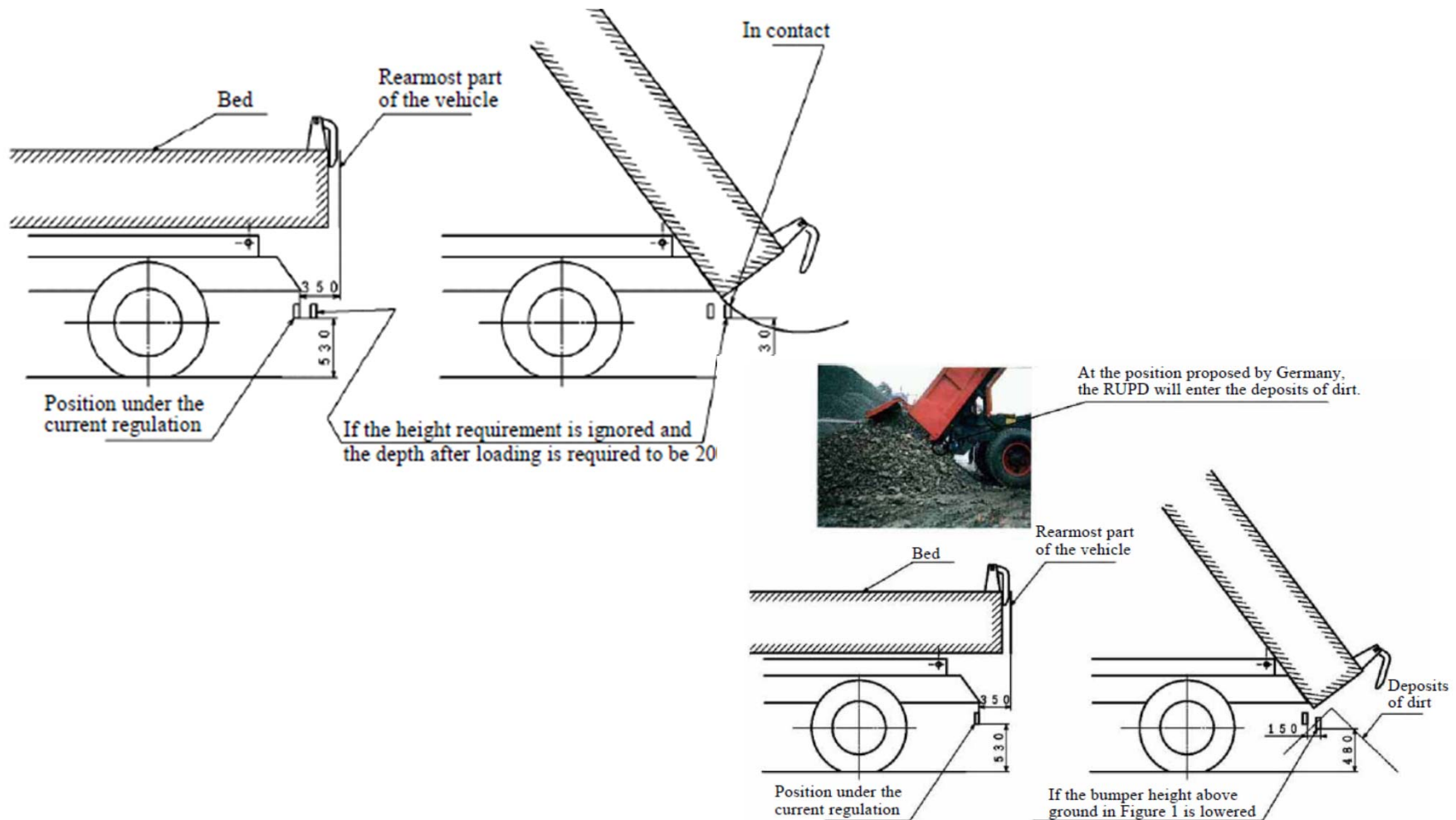


Diagram [5] and [13] Vehicles that carry powder and granular materials (dump type only) ;N3

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure .

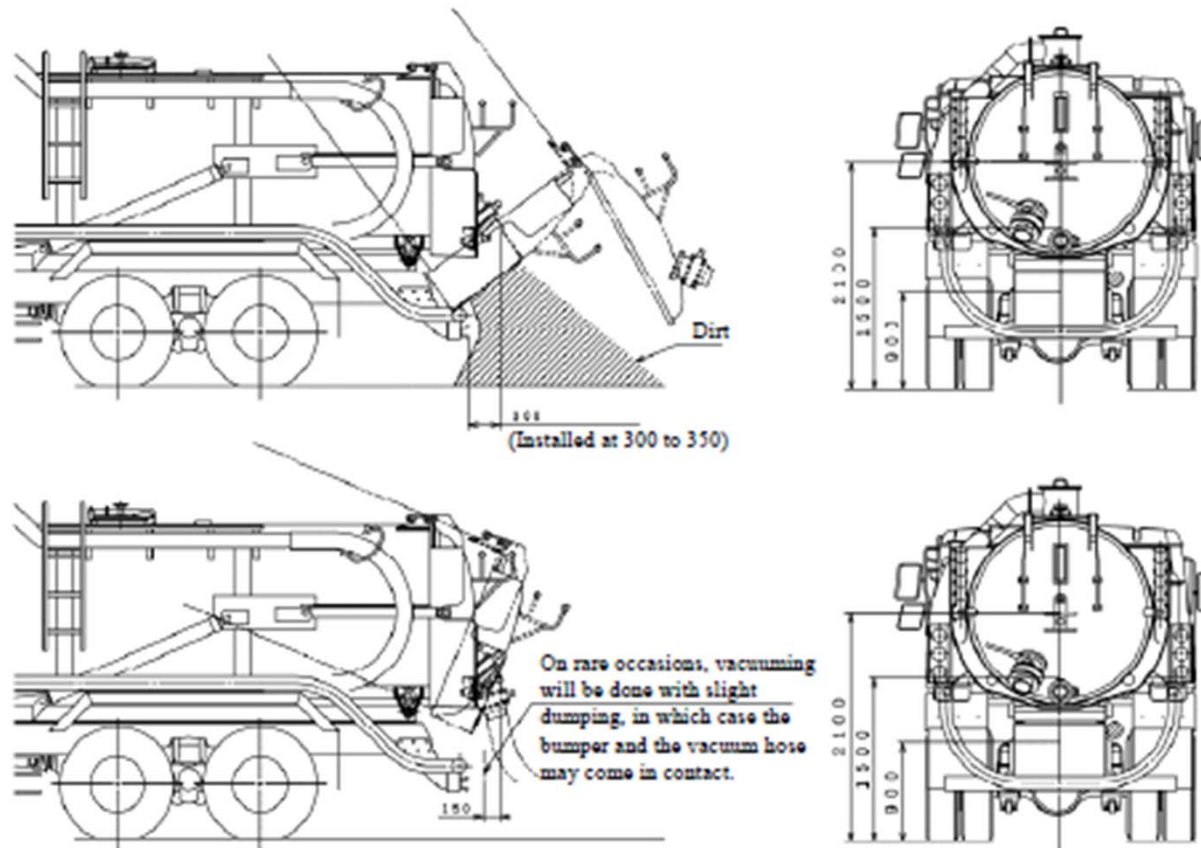
The distance of 350



Diagram [6] refer;GRSG-101-27 P10 ;N3

Cases where the RUPD installation position of 200 mm (from the rearmost part of the vehicle) will cause difficulties in usage

Vacuum Trucks: When the truck dumps the load, it will come in contact with the RUPD, making the dumping work difficult. With the RUPD being located too close to the vacuum hose, handling of the hose will be difficult when the truck vacuums the load.



Concrete mixers: When the concrete is discharged, the RUPD location will be farther away than the current position, which will cause danger in the discharge work.

**Diagram [7] Construction equipment carriers - Tilt type vehicles with front jacks
;N2**

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

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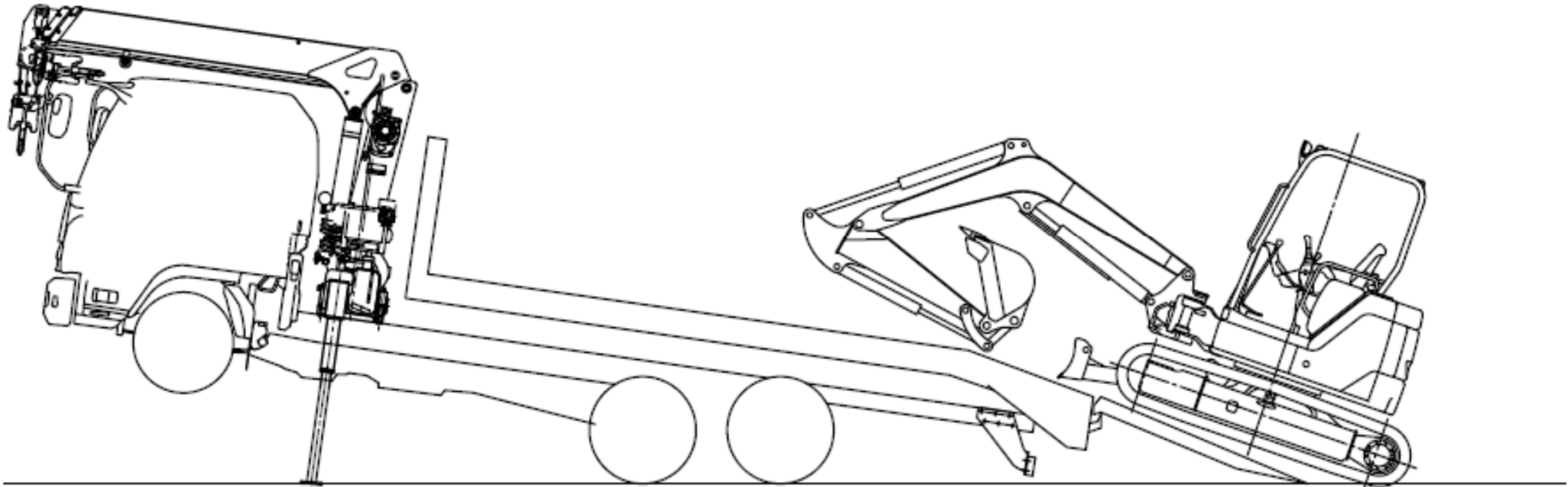


Diagram [8] Container carriers with devices for attaching/detaching ; N2

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure .

The distance of 350 mm is necessary for vehicles with Dump trucks.



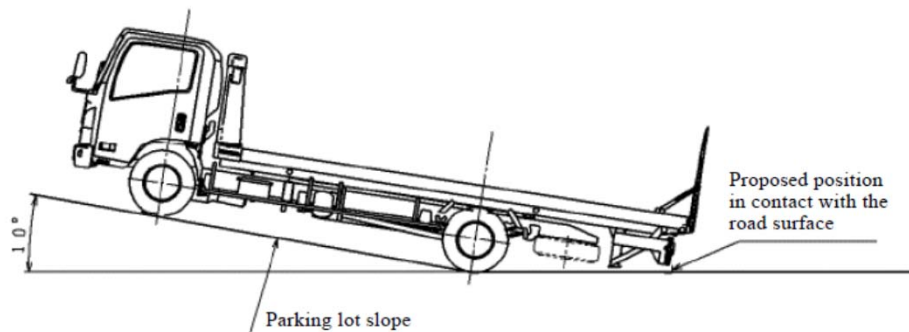
Diagram [9] Construction equipment carriers - N2, Vehicle carriers - N2

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure .

The distance of 350 mm is necessary for vehicles with Dump trucks.

Parking lot uphill slope



Specifications applicable on the flat ground

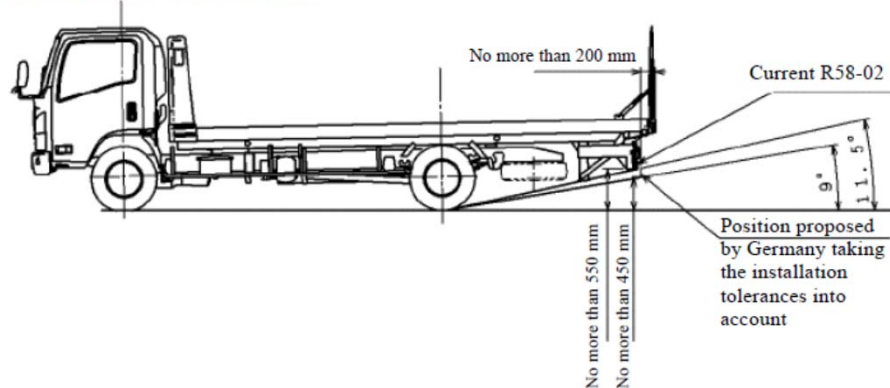


Diagram [10] refer;GRSG-101-27 P4 ;N2

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure (Vehicles with platform tailgate lift)

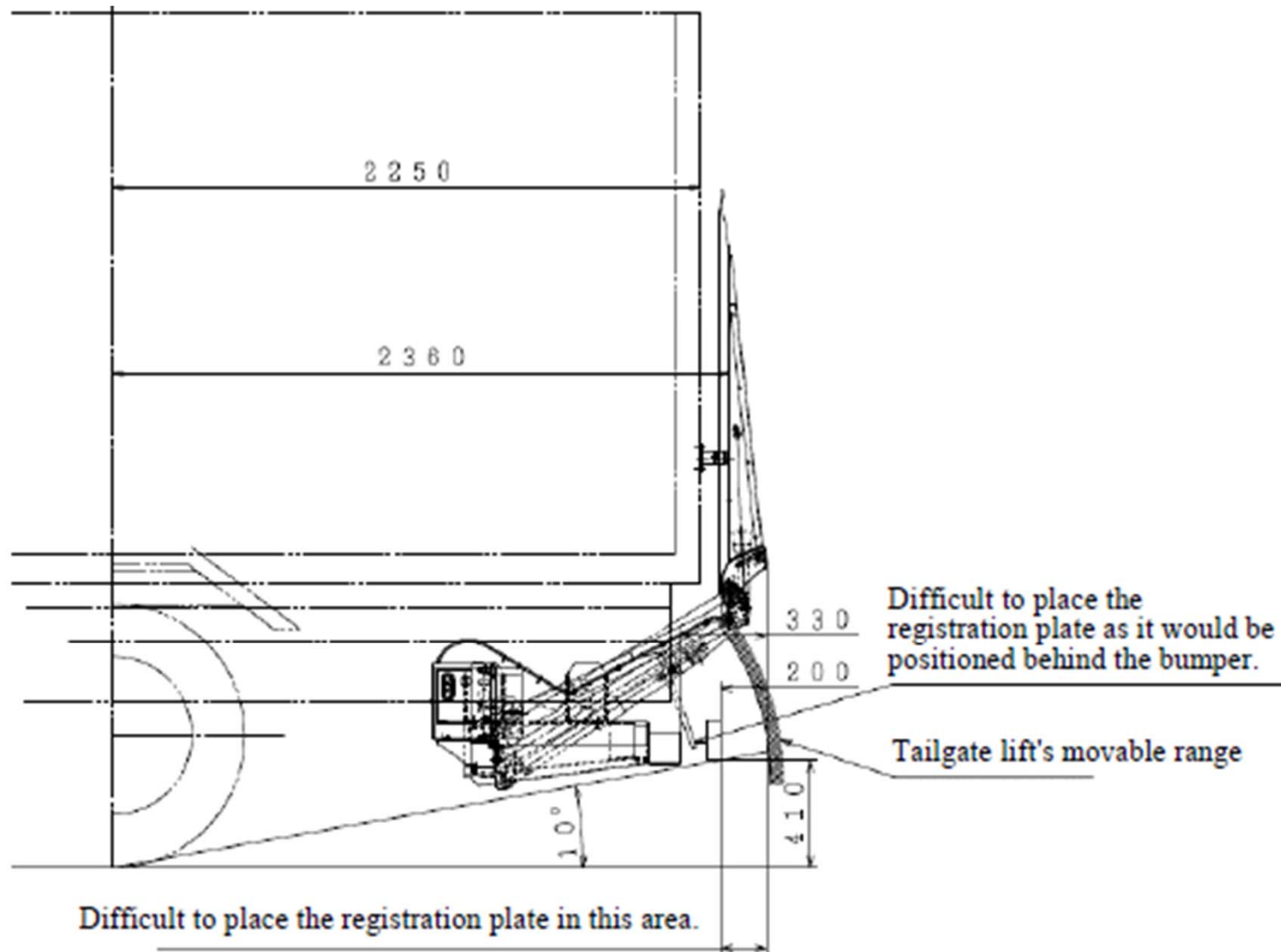


Diagram [11] Water spraying vehicles ;N2

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure .

The distance of 350 mm is necessary for vehicles with Dump trucks.



Diagram [12] refer;GRSG-101-27 P11 ; N2

Cases where the RUPD installation position of 200 mm (from the rearmost part of the vehicle) will cause difficulties in usage

Concrete mixers: When the concrete is discharged, the RUPD location will be farther away than the current position, which will cause danger in the discharge work.

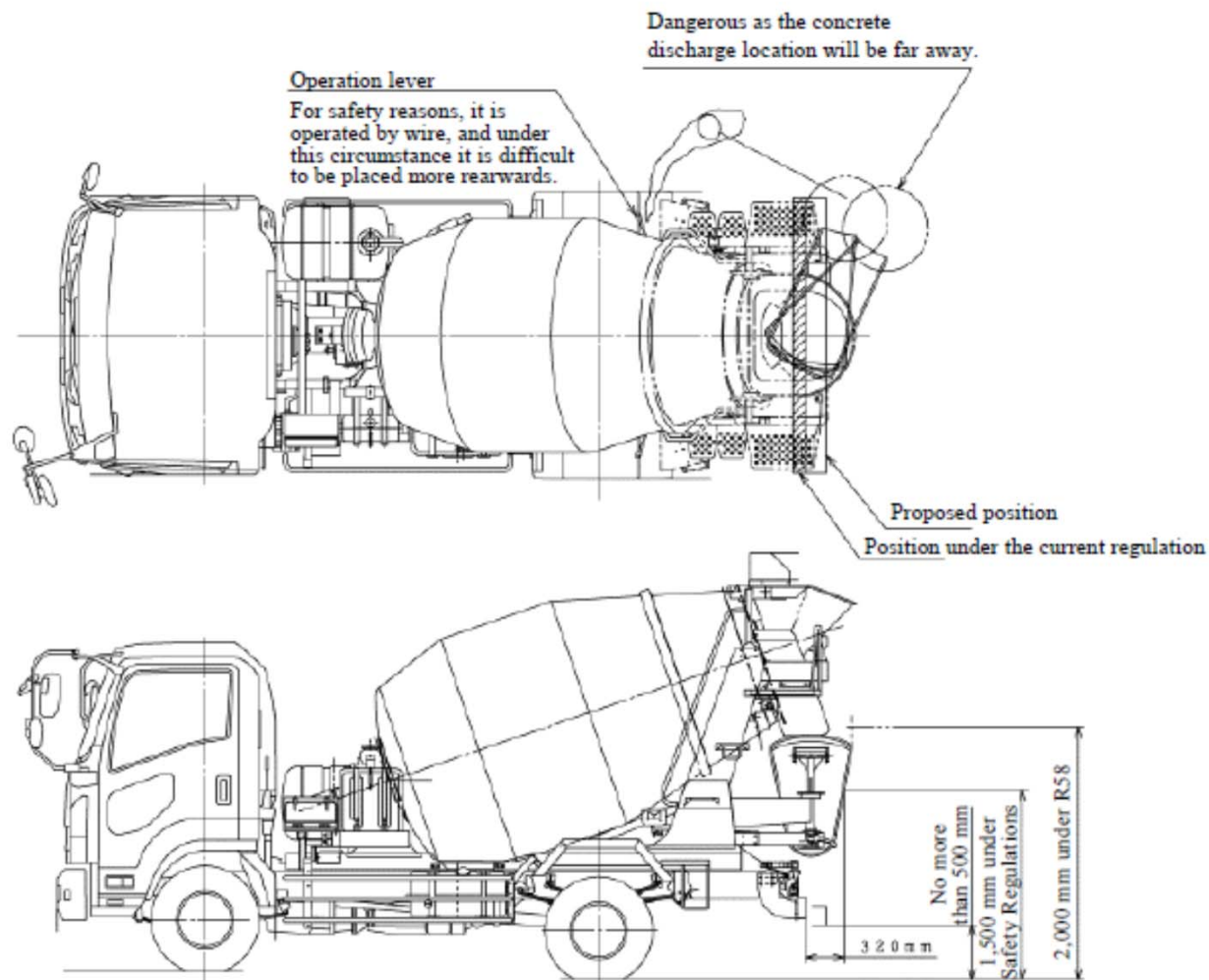


Diagram [14] Cesspool emptiers

;N2

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure .

The distance of 350 mm is necessary for vehicles with Dump trucks.



Diagram [15] Sweepers

;N2

Cases where the ground clearance with respect to the underside of the protective device of 550mm is necessary

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure .

The distance of 350 mm is necessary for vehicles with Dump trucks.



Diagram [16] refer;GRSG-101-27 P10 ;N3

Cases where the RUPD installation position of 200 mm (from the rearmost part of the vehicle) will cause difficulties in usage

Vacuum Trucks: When the truck dumps the load, it will come in contact with the RUPD, making the dumping work difficult. With the RUPD being located too close to the vacuum hose, handling of the hose will be difficult when the truck vacuums the load.

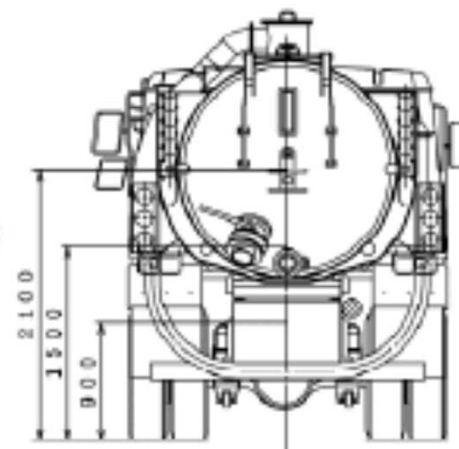
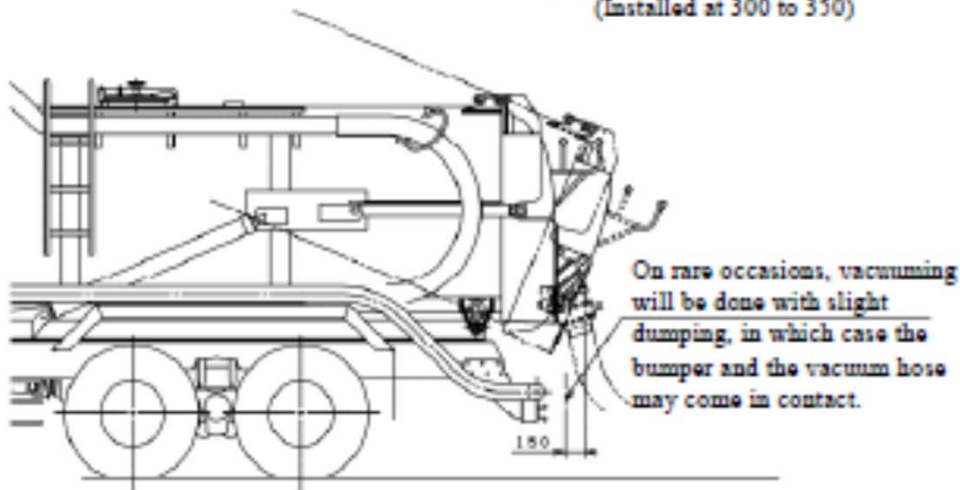
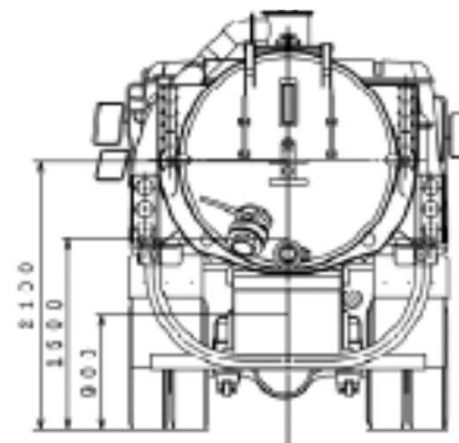
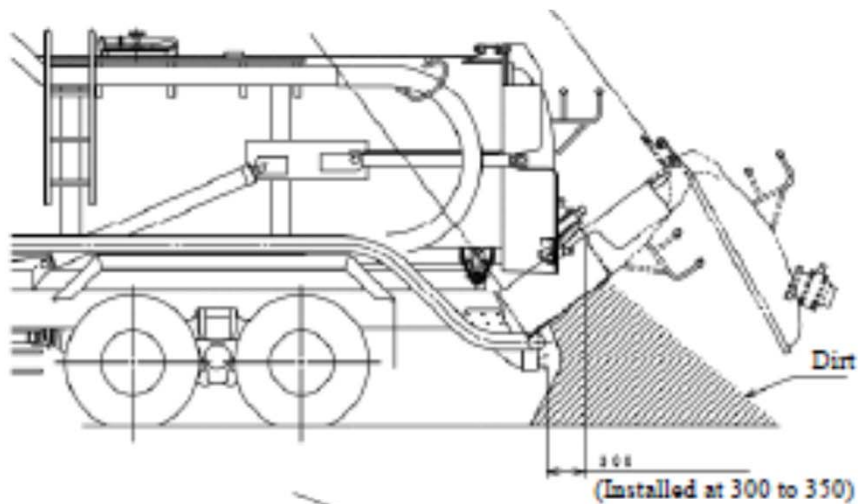


Diagram [17] Dump trucks, Concrete mixer trucks refer;GRSG-101-27 P9 ;N3
Cases where the RUPD underside height of 500 mm will cause difficulties in usage (Dump &Concrete mixers)

In Japan, some of these vehicles are stored on hills, where the maximum gradient can be around 15°. The RUPD will come in contact with the road surface while the vehicle is running, making it unable to keep running to enter the site.

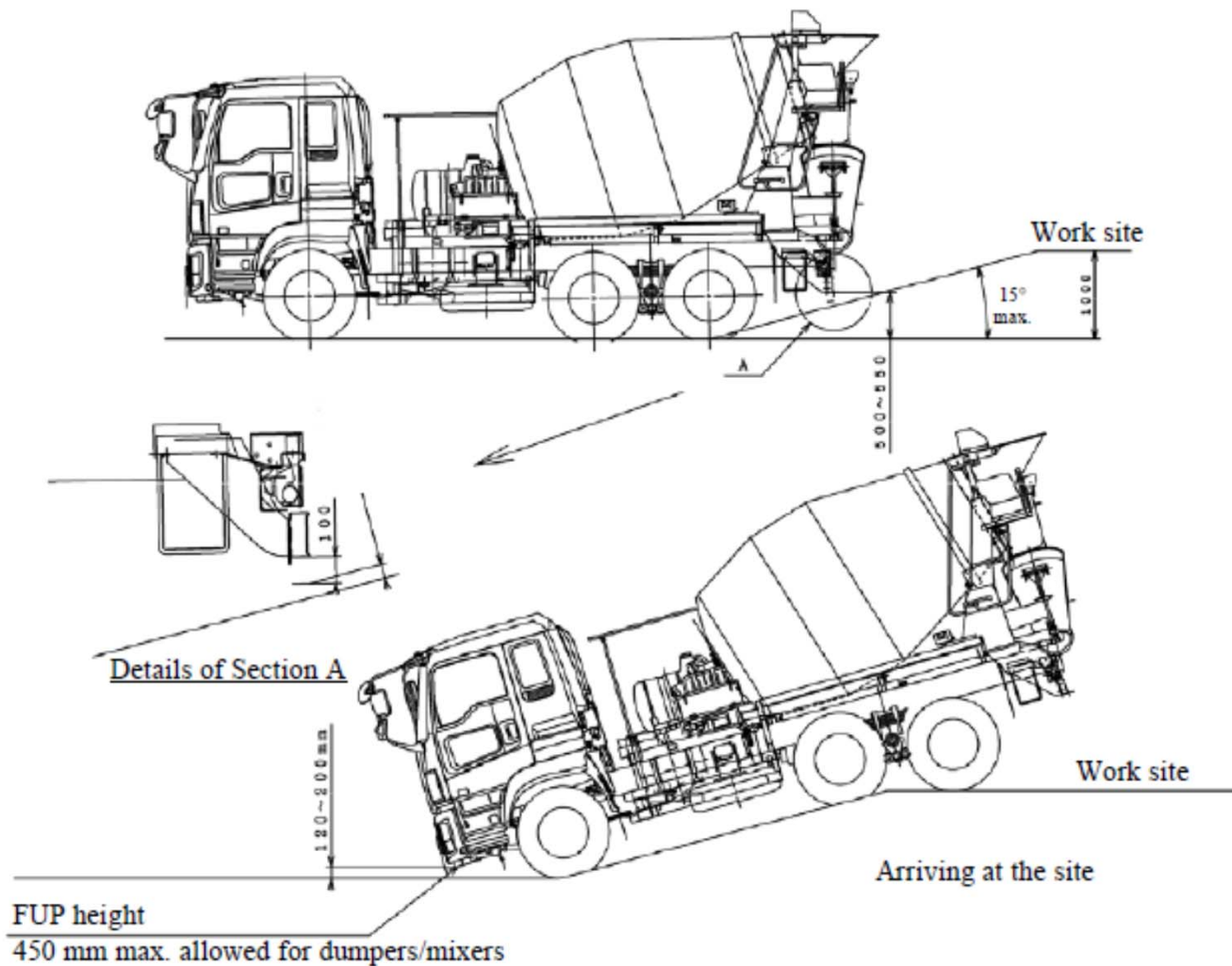
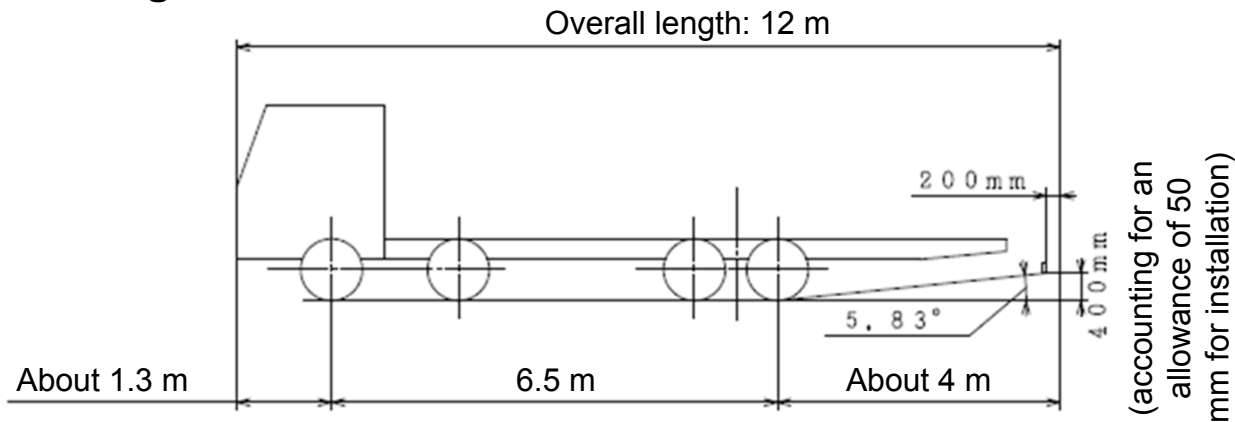
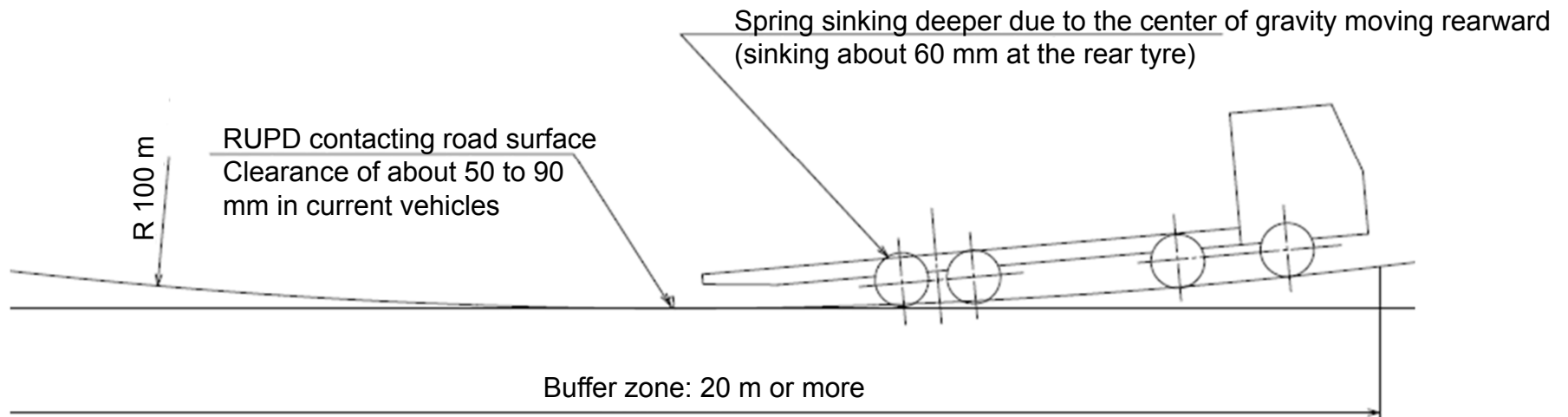


Diagram [18] Vehicles that come in contact with road surface when entering ;N3 motorway /ferry ramps with a large gradient (8 deg.) (Departure angle of 8 deg. or more is necessary.)

Cases where the RUPD installation position of 200 mm will cause technical problems in constructing the vehicle structure



An example of vehicle in the proposed revision
(the standard vehicle in Road Structure Ordinance)



Large vehicle running on road with 12% gradient (6.8 deg.) fore and aft

Diagram [19] refer;GRSG-101-27 P2

;N2

Cases where the departure angle of 10° or above is necessary

From the standpoint of practicability on the market, the departure angle of 10° is specified. If it is 8°, the RUPD will come in contact with the road surface while the vehicle is running, making it unable to keep running. For medium-sized vehicles, some manufacturers in Japan have established voluntary regulations regarding the departure angle as these vehicles often enter parking lots and/or narrow streets. (The cases where they came in contact with the road surface at a departure angle of 9° or below have been reported.)

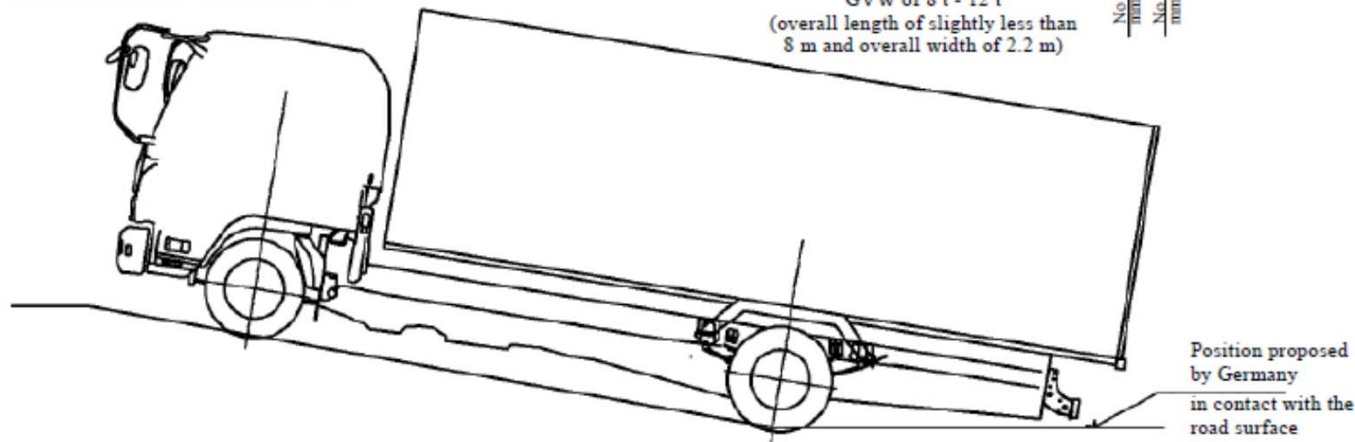
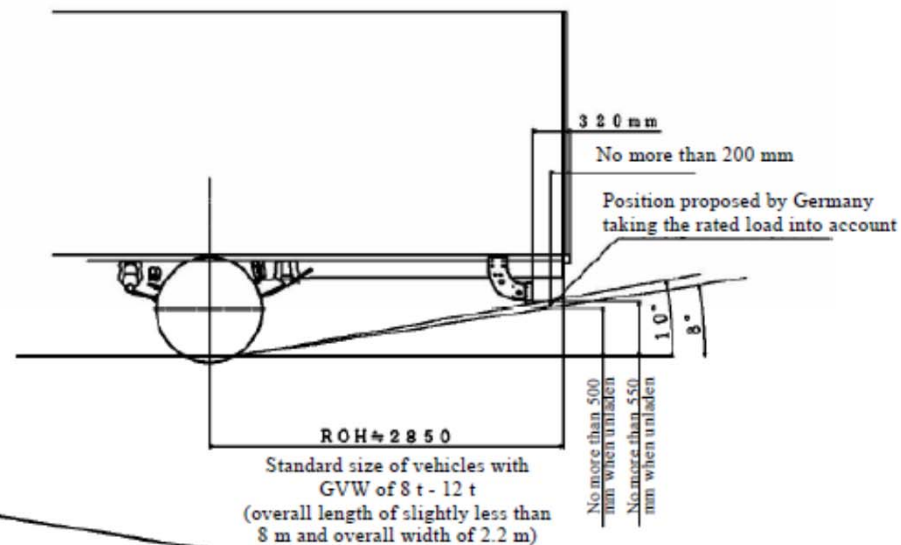
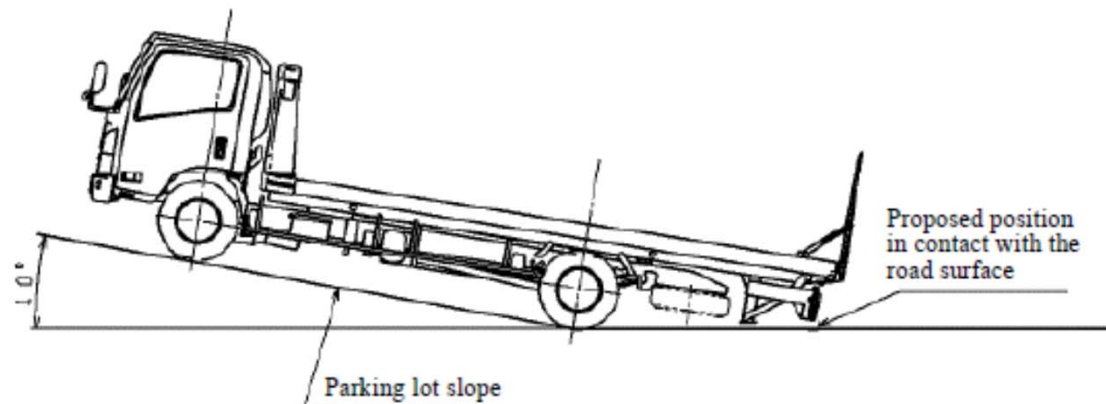


Diagram [20] refer;GRSG-101-27 P3 ;N2

Cases where the departure angle of 10° or above is necessary (Car carrier vehicles)

The RUPD will come in contact with the road surface while the vehicle is running, making it unable to keep running. (The device will come in contact with the road surface when the vehicle enters parking spaces in urban areas, etc.)

Parking lot uphill slope



Specifications applicable on the flat ground

