

***FIELD ASSEMBLY  
INSTRUCTION***

**GALEO  
HM300-1**

**ARTICULATED DUMP TRUCK**

MACHINE MODEL

SERIAL NUMBER

HM300-1

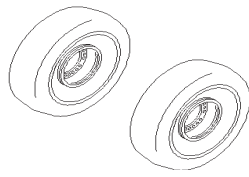
1001 and up

**KOMATSU**

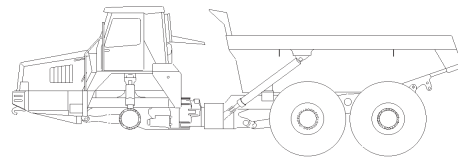
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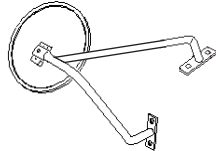
## 1 Drawings of removed units



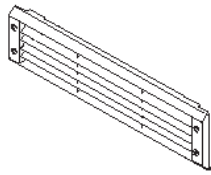
1. Tire and wheel assembly



4. Bare machine



2. Engine hood mirror



3. Front cover

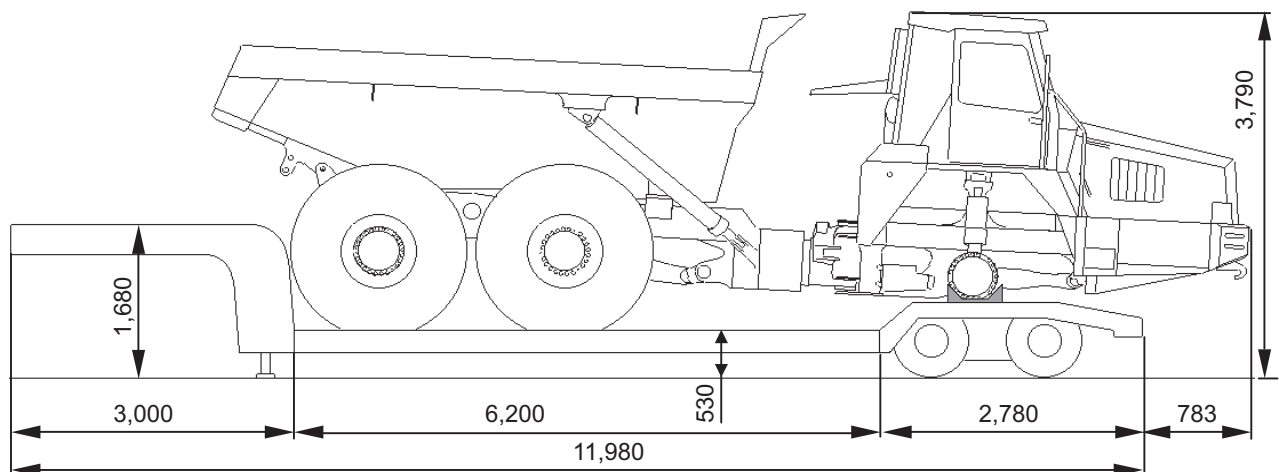
### Specifications of completed truck

Specifications	Related items			
	Weight (kg)	Overall length (mm)	Overall width (mm)	Overall height (mm)
Self-propelled travel	23,545 (Weight of machine)	10,095	3,195	3,500 (When empty)

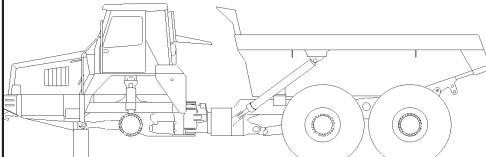
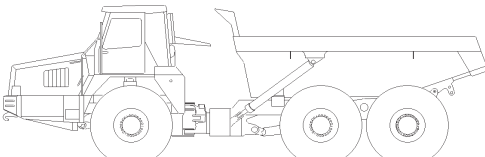
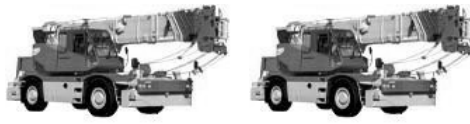






## 2 Dimensions of removed units

No.	Unit name	Weight (kg)	Overall length (mm)	Overall width (mm)	Overall height (mm)
1	Tire and wheel assembly	520	1,602	513	–
2	Engine hood mirror	1	500	200	200
3	Front cover	12	1,032	–	350
4	Bare machine	20,760	10,095	3,195	3,500

### Drawings of bare machine on trailer



### 3 Assembly procedure, necessary equipments, and schedule

Day Hour	1st day							
	1	2	3	4	5	6	7	8
Assembly unit	 (1) Positioning chassis on stand				 (1) Installing tires (2) Installing engine hood mirror (3) Installing front bumper			
Assembly manual No.	A-1				A-2 to A-4			
Crane (Hydraulic, with operator)	2 units  245 kN {25 ton}    245 kN {25 ton}							
Air compressor	3.7m <sup>3</sup> /min (KOMATSU EC35Z5 or equivalent)							
Generator	For driving air compressor							
Number of workers	3							
Forklift	 19.6 kN {2 ton}							
Remarks	Meeting before work Unloading Starting assembly				Removing wood blocks Completion of assembly			

## 4 Necessary tools and equipments

### (1) Necessary tools

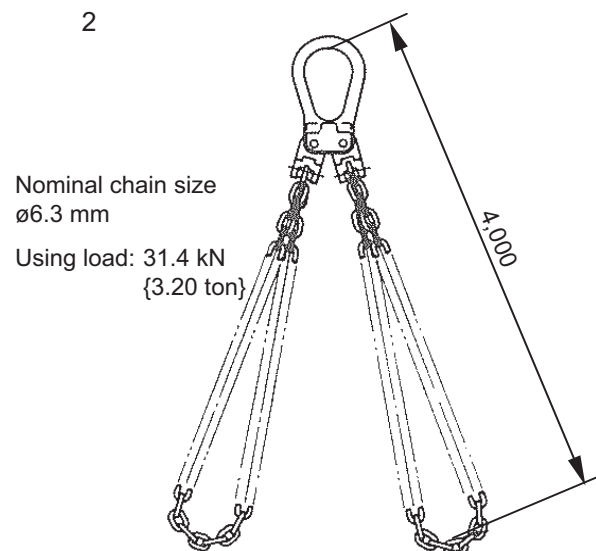
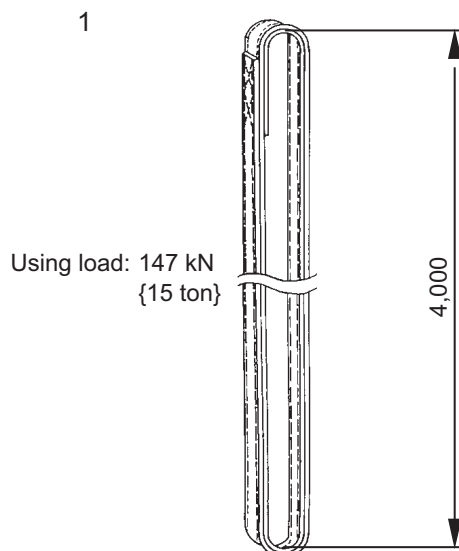
No.	Tool name	Specifications	Q'ty	Remarks
1	Ring wrench	19 mm	1	For installing hood mirror and front cover
2	Socket	36 mm (Insertion angle: 25.4°)	1	For installing tire
3	Extension bar	25.4° × L160 mm	1	For installing tire
4	Impact wrench	GT-S22M or equivalent	1	For installing tire
5	Torque wrench	For measurement of 927 Nm {94.5 kgm}	1	For installing tire
6	Bar		1	For adjusting holes of tire
7	Paint spray can	Clear	2	For touching up bolt head

### (2) Necessary equipments

No.	Equipment name	Specifications	Q'ty	Remarks
1	Truck crane	Min. 245 kN {25 ton}	2	For slinging bare machine
2	Forklift	Min. 19.6 kN {2 ton}	1	For installing tire
3	Compressor	Capacity: Min. 32 ℓ	1	For impact wrench
4	Stepladder (Work stand)	4 steps (About 1.5 m)	1	For work
5	Steel plate	t9 × 1,219 × 2,438 mm	1	For positioning bare machine
6	Wood block	400 × 400 × 900 mm	6	For positioning bare machine

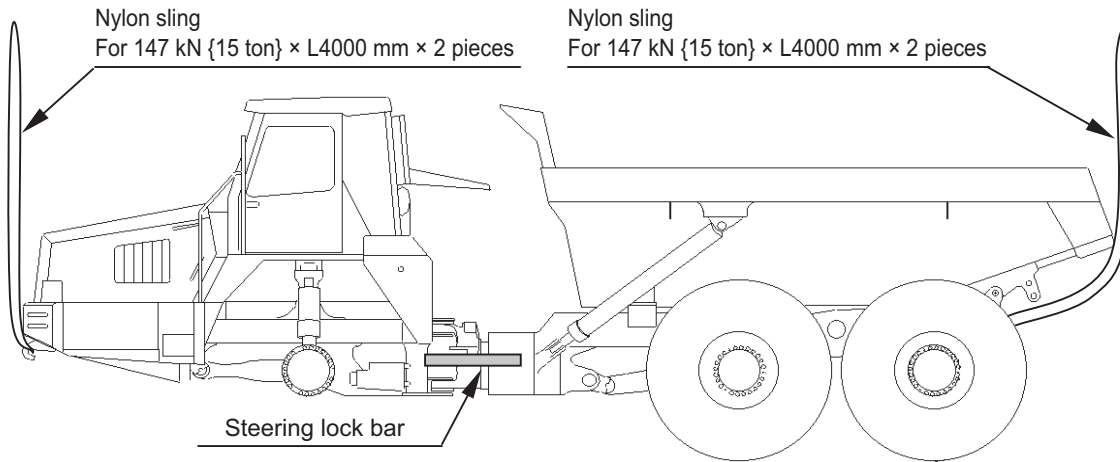
### (3) Necessary slings

No.	Sling name	Specifications	Q'ty	Remarks
1	Nylon sling	For 147 kN {15 ton} × L4000 mm	4	For slinging bare machine
2	Tire sling	L4000, nominal chain size: ø6.3 mm	1	For slinging tire



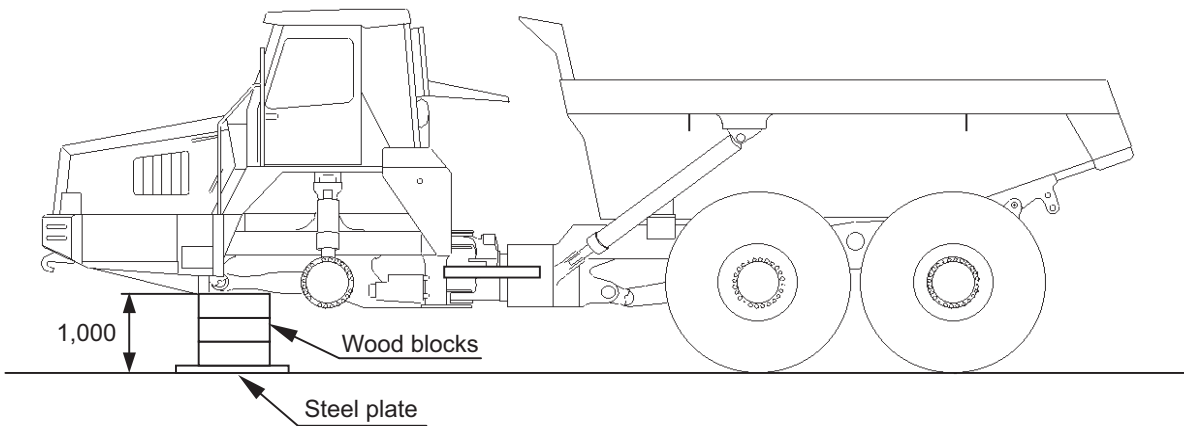
# Positioning bare machine

## 1. Slinging bare machine



1. Set the steering lock bar securely.
2. Sling the bare machine with two 245 kN {25 ton} cranes.  
 Sling: Nylon sling (For 147 kN {15 ton}, L4000 mm × 4 pieces)  
 Front sling position: Lifting eye under bumper  
 Rear sling position: Body lock pin mounting part (Use body lock pin)

## 2. Positioning bare machine



Position the bare machine as shown above.  
 (Secure the ground clearance shown above so that you can install the tire and wheel assembly.)  
 When positioning the bare machine on the ground, place a steel plate under the wood blocks so that the bare machine will not sink and lean. (1219 × 2438 × 9t × 1 piece)

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Before starting the work, set the steering lock bar securely.			Crane (245 kN {25 ton})	2
			Nylon sling	4
			Steel plate (1219 × 2438 × t9)	1
			Wood blocks (400 × 400 × 900)	6
	Others			

# Installing tire and wheel assembly

## 1. Slinging tire and wheel assembly

How to sling tire and wheel assembly

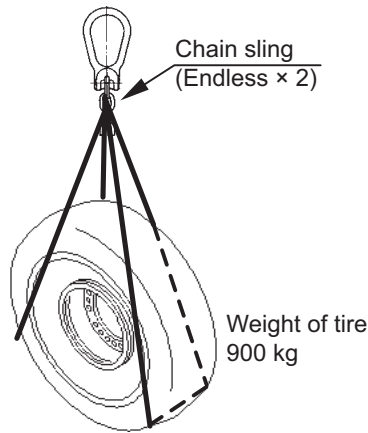
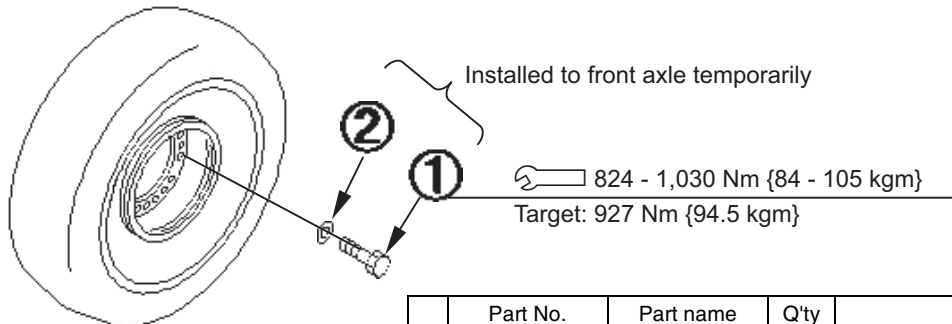


Image of mounting tire



1. Set the sling to the tire and wheel assembly.  
Sling: Chain sling (L4000 mm, nominal chain size:  $\phi 6.3$  mm)
2. Sling the tire and wheel assembly with the 245 kN {25 ton} crane and mount it on the forklift.

## 2. Installing tire and wheel assembly



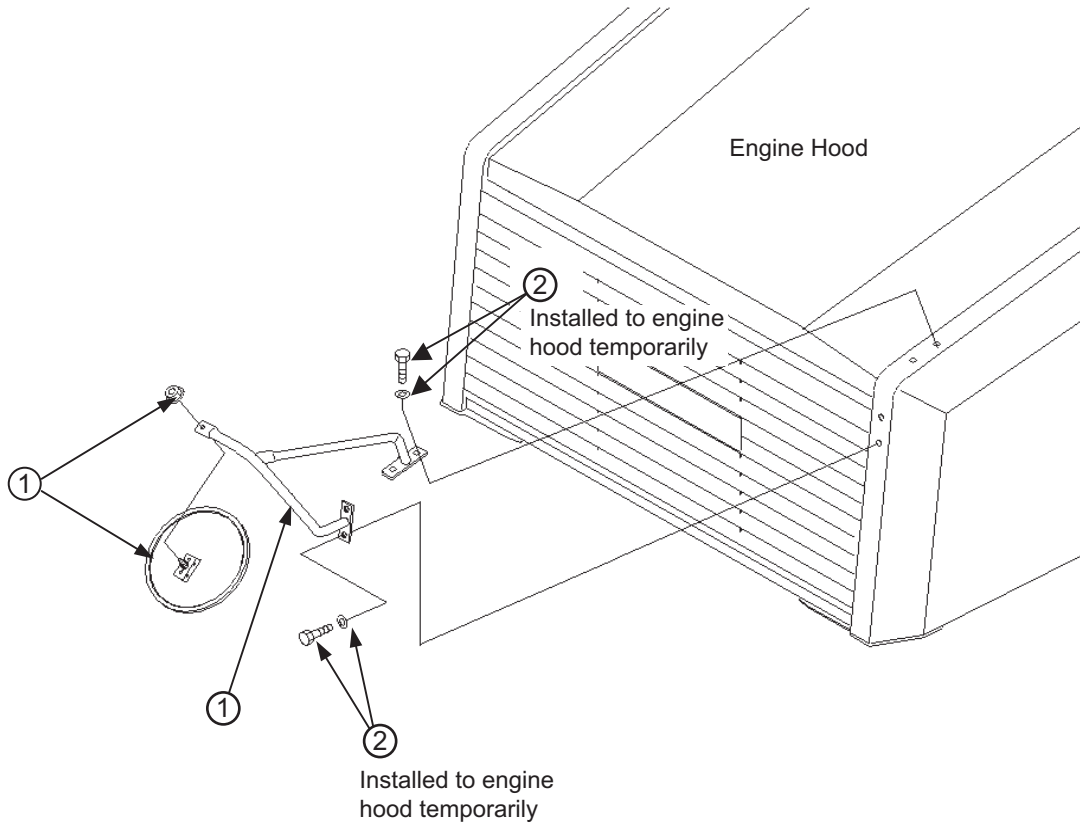
	Part No.	Part name	Q'ty	State of parts
(1)	56D-30-11910	BOLT	30	Installed to front axle temporarily
(2)	01643-32460	WASHER	30	Installed to front axle temporarily

1. Remove the bolts and washers installed to the axle temporarily.
2. Install the tire to the axle with the forklift and then install the bolts and washers.  
★ Take care that the tire will not fall from the forklift.  
When positioning the tire and wheel assembly, take care not to damage the tube for inflating the tire.
3. Tighten the tire mounting bolts with the impact wrench temporarily.
4. Lift up the front part of the bare machine with the 245 kN {25 ton} crane and remove the wood blocks.  
Sling: Nylon sling (For 147 kN {15 tons}, L4000 mm  $\times$  2 pieces)
5. Tighten the tire mounting bolts to the specified torque with the torque wrench.
6. Touch up the bolt heads with paint spray (clear) (to prevent rusting).

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1) When carrying the tire and wheel assembly, take care that it will not fall from the forklift. 2) When positioning the tire and wheel assembly, take care not to damage the tube for inflating the tire.	36 mm socket	1	Crane (245 kN {25 ton})	1
	Impact wrench (GT-S22M or equivalent)	1	Forklift (Min. 19.6 kN {2 ton})	1
	Torque wrench (927 Nm {94.5 kgm})	1	Tire sling	1
	Extension bar	1		
	Bar	1		
	Paint spray can	2		
Others				

## Installing engine hood mirror

### 1. Installing engine hood mirror



	Part No.	Part name	Q'ty	State of parts
(1)	56D-54-11510	STAY	1	Mounted in cab
	23S-54-36270	MIRROR	1	
(2)	01024-81225	BOLT	4	Installed to engine hood temporarily

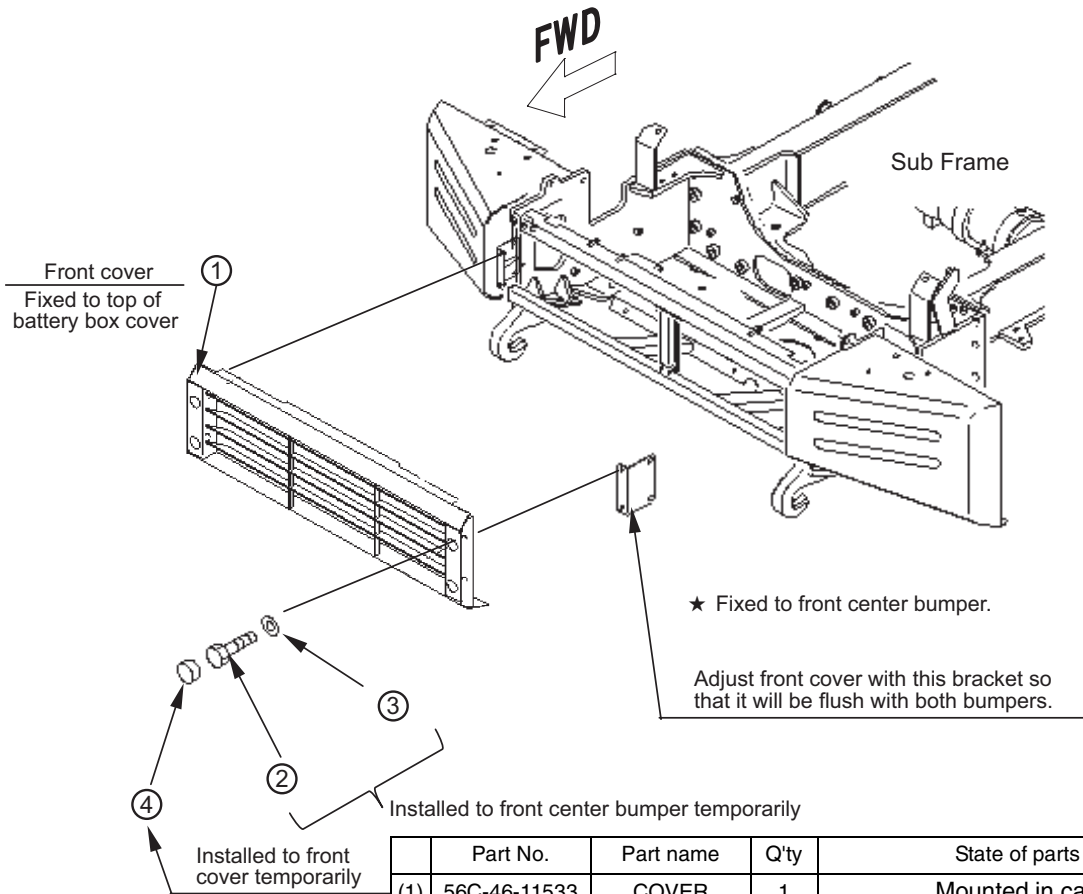
1. Remove the bolts and washers installed to the engine hood temporarily.
2. Take the engine hood mirror out of the cab and install it to the engine hood.
3. Adjust the angle of the mirror.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
	Ring wrench (19 mm)	1	Stepladder (Work stand)	1
Others				



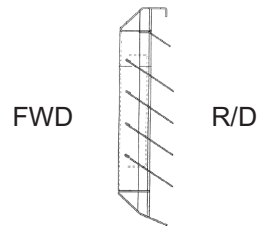
# Installing front cover

## 1. Installing front cover



	Part No.	Part name	Q'ty	State of parts
(1)	56C-46-11533	COVER	1	Mounted in cab
(2)	01010-81220	BOLT	4	Installed to front center bumper temporarily
(3)	01643-31232	WASHER	4	Installed to front center bumper temporarily
(4)	09415-02512	CAP	4	Installed to front cover temporarily

1. Remove the bolts, washers, and caps installed to the center bumper.
2. Take the front cover out of the cab and install it to the center bumper.
3. Adjust front cover so that it will be flush with both bumpers.
4. Install the front cover as shown at right (Take care not to install it reversely).
5. After installing the front cover, move the engine hood up and down and check that it will not interfere with the front cover.



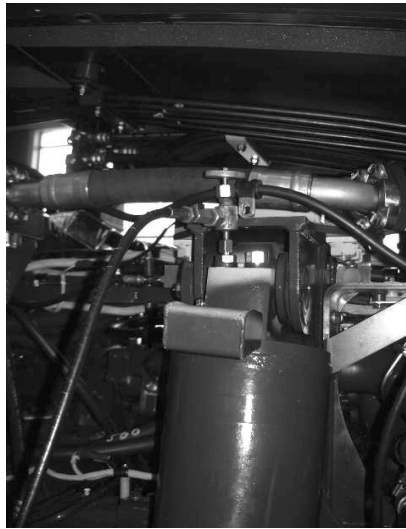
Installed direction of front cover (section)

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
	Socket wrench (19 mm)	1		
	Others			

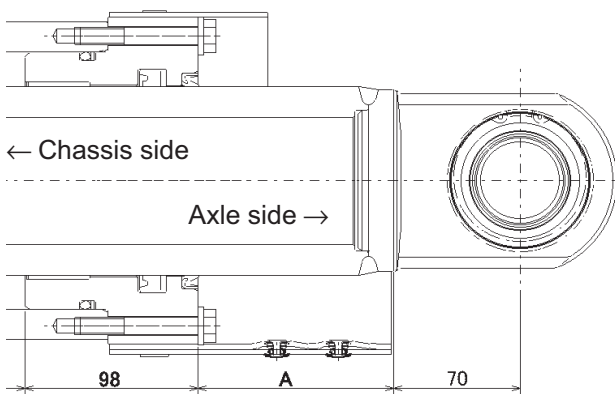
# Adjusting N2 gas of front and rear suspensions

## 1. Adjusting N2 gas of front and rear suspensions

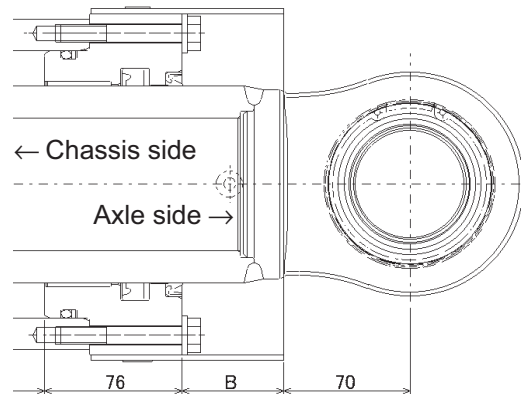
Adjust the quantity of N2 gas (4 places).



F.SUS.CYL



R.SUS.CYL



Dimension A

When cylinder is retracted fully:	MIN	(83 ± 1 mm)
Specified quantity of filled oil:	OIL	113 ± 3 mm
When empty :	EMPTY	(163 ± 10 mm)
When cylinder is extracted fully:	MAX	(196 ± 1 mm)

Dimension B

When cylinder is retracted fully:	MIN	(31 ± 1 mm)
Specified quantity of filled oil:	OIL	51 ± 3 mm
When empty :	EMPTY	(101 ± 5 mm)
When cylinder is extracted fully:	MAX	(121 ± 1 mm)

- ★ Judge the quantity of the filled N2 gas by dimensions A and B when the truck is empty.
- ★ Stop the truck slowly without using the foot brake, and then measure the dimensions.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
The suspension pressure is set a little higher than the specification when the truck is delivered. Accordingly, adjust it according to the above procedure.				
Others				

# SLINGING PROCEDURE

## Contents

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## CAUTION

This section describes the procedure for slinging a completed truck with 1 crane when it needs to be slung and carried in a harbor, etc.

For the ordinary work, sling the truck with 2 cranes described in Assembly procedure No. A-1.

Slinging procedure No.  
for completed truck

1

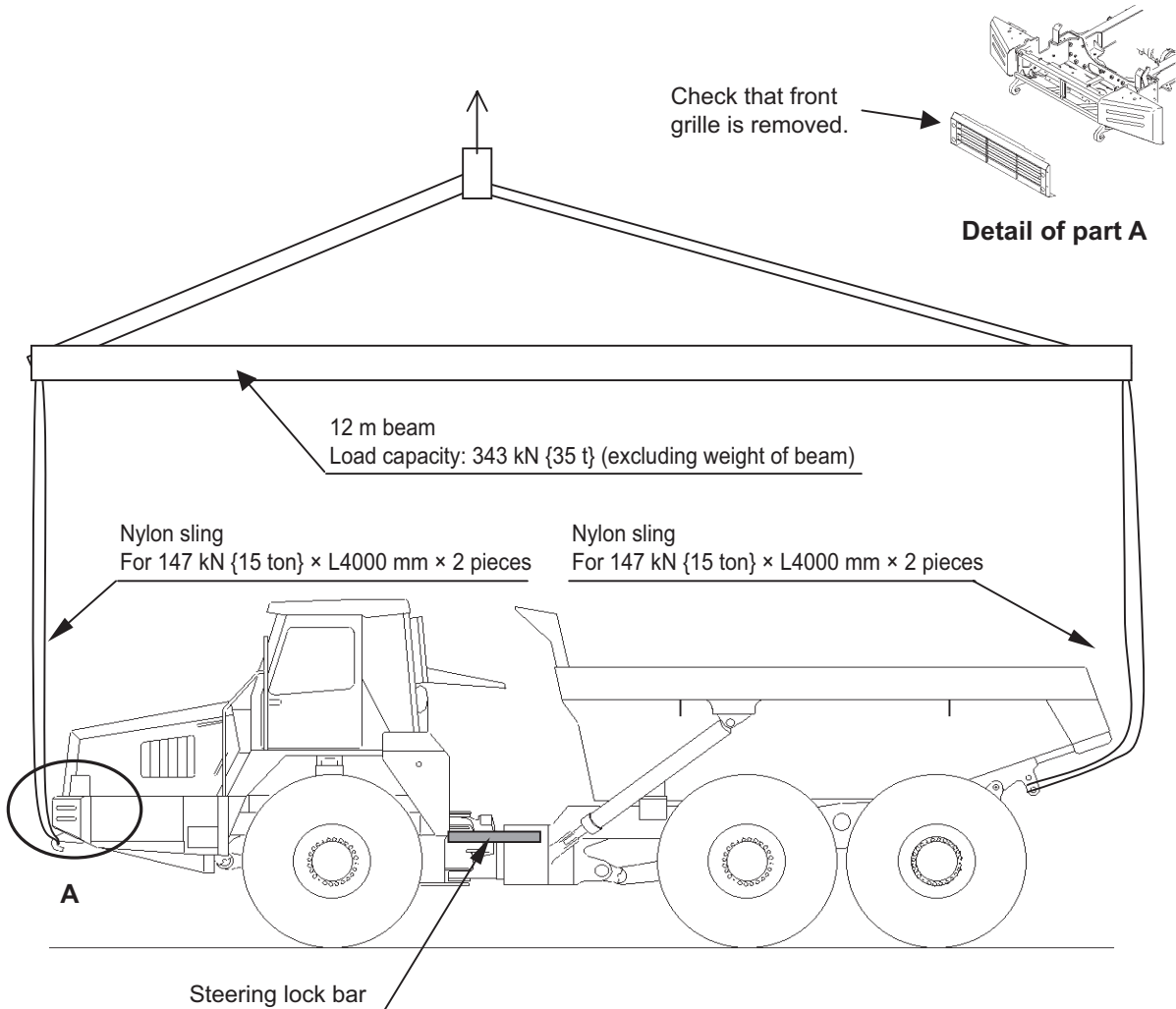
## Preparation (When slinging with 1 crane)

### 1. Preparation of sling and crane

- Beam Length: Min. 12 m, Load capacity: Min. 343 kN {35 ton} (excluding weight of beam)  
 Crane Lifting capacity shall be total of 343 kN {35 ton} and weight of beam and sling. Lifting height shall be total of 7 m and necessary height of lifted chassis.  
 Nylon sling 4 × 147 kN {15-ton} slings (Apply pads to parts of truck (4 places) which interfere with chassis.)

### 2. Preparation of chassis

- Check that the front grille is removed.  
 Set the steering lock bar securely.



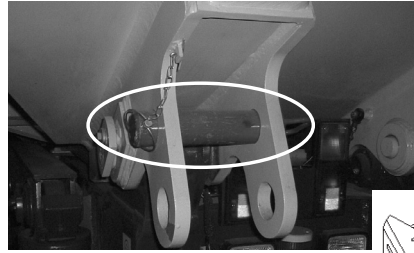
Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Before starting the work, set the steering lock bar securely. Check that the front grille is removed.			Crane	1
			Nylon sling	4
			Beam (Min. 12 m long)	1
	Others			

# How to install sling (When slinging with 1 crane)

## 1. Installing points of sling

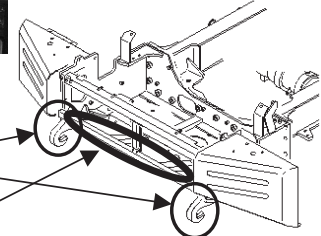
Install the sling to the following 4 points. Apply pads to the parts of chassis which interfere with the sling to protect the chassis.

1. Towing hooks at the bottom of the front side  
Install the sling to the 2 circled points in the figure at right.
2. Body lock pin  
Install the sling to pins B shown in the following figure.

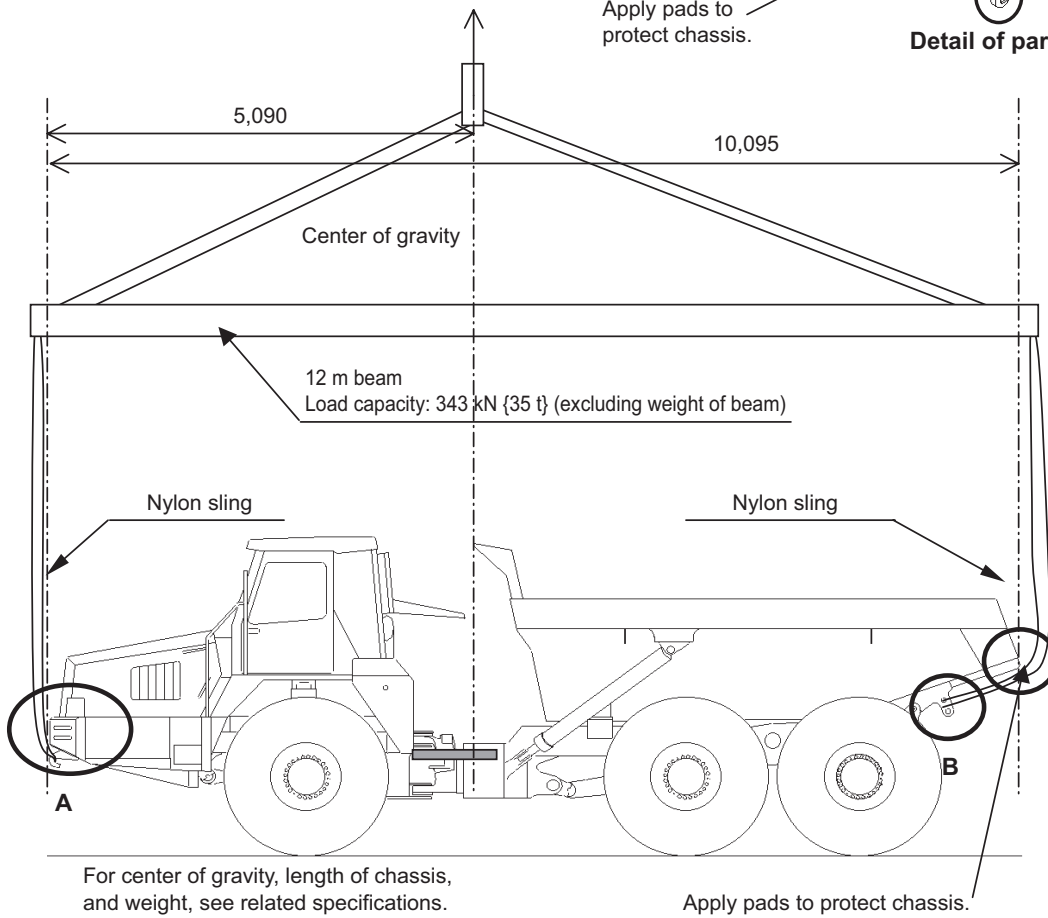


Install nylon sling to pins.

Detail of part B



Detail of part A



Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Apply pads to the front grille mounting parts and rear parts of the body to protect the chassis.			Crane	1
			Nylon sling	4
			Beam (Min. 12 m long)	1
	Others			

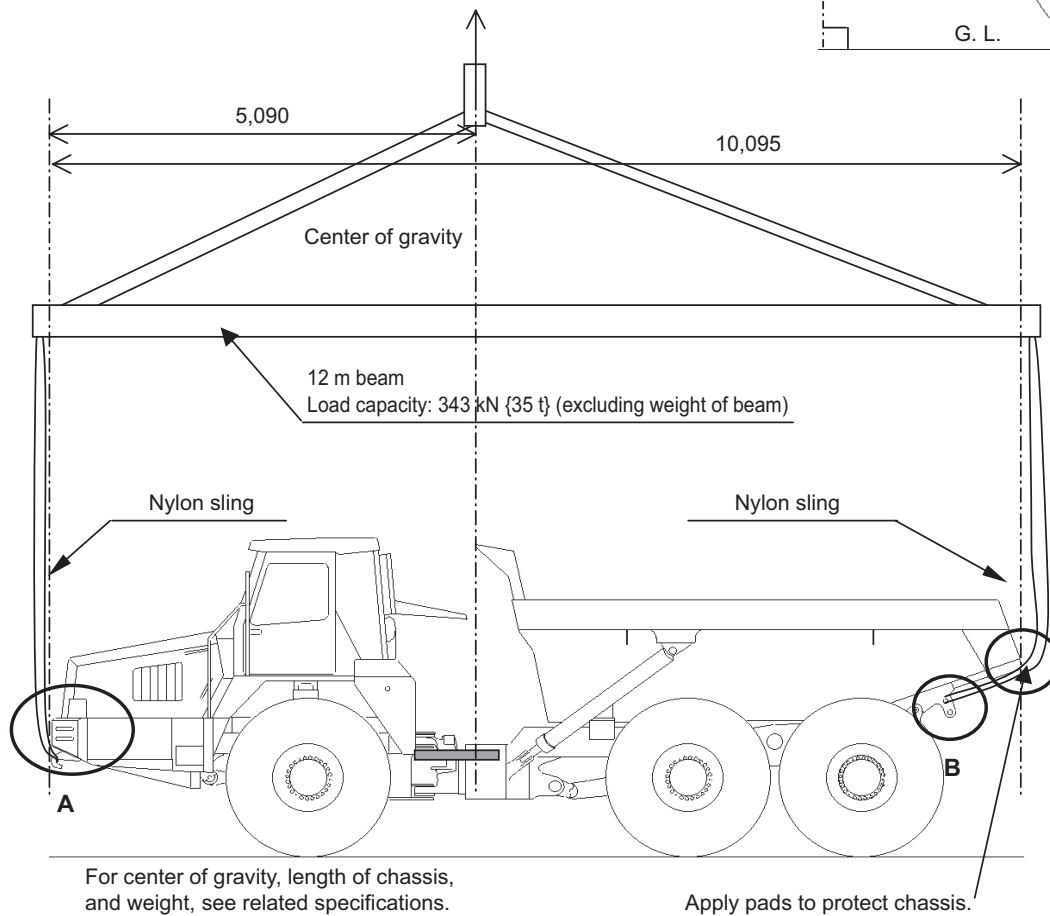
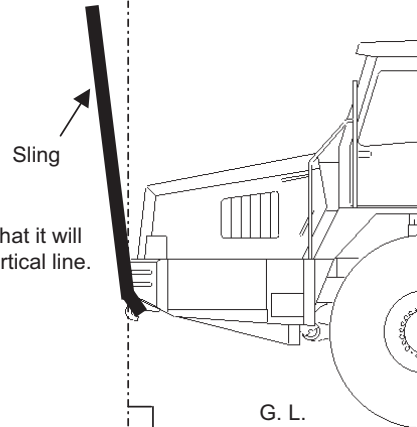
Slinging procedure No.  
for completed truck

**3**

## Slinging (When slinging with 1 crane)

### 1. Precautions for slinging

1. Install the sling for the front side so that it will be in front of the vertical line to prevent it from interfering with the engine hood.
2. Sling the chassis horizontally.  
For the center of gravity of each model, see the related specifications.



Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Apply pads to the front grille mounting parts and rear parts of the body to protect the chassis.			Crane	1
			Nylon sling	4
			Beam (Min. 12 m long)	1
	Others			

Slings procedure No.  
for completed truck

**4**

**Related specifications (Reference)**

**1. Specifications**

The specifications necessary for slinging the completed truck are shown below.

	HM300-1
Total weight of empty truck	23,545 kg
Overall length	10,095 mm
Overall width	3,195 mm
Overall height	3,500 mm
Distance from front end of chassis to center of gravity	Approx. 5,090 mm

**CAUTION**

The above are the standard data. Note that the total weight, dimensions, center of gravity, etc. may change, depending on the installed options and attachments.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
When installing an option or an attachment, change the above data accordingly.				
Others				