

# ***FIELD ASSEMBLY INSTRUCTION***

## **GALEO**

# **HD465-7**

# **HD605-7**

## **DUMP TRUCK**

MACHINE MODEL	SERIAL NUMBER
HD465-7	7001 and up
HD605-7	7001 and up

# **KOMATSU**

## CONTENTS

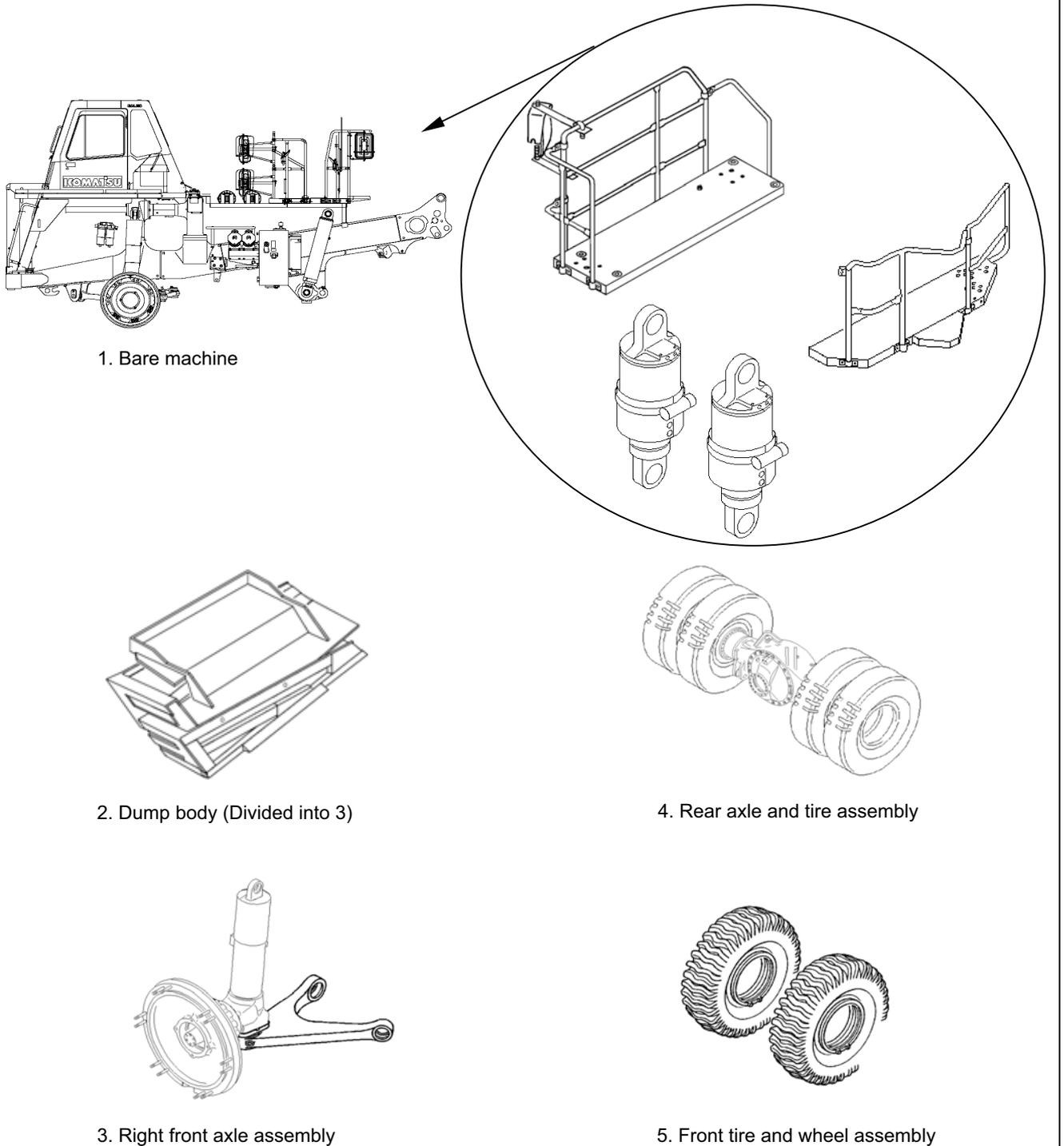
1. Points changed from model 5.....	1
2. Outline of division .....	1
3. Dimensions of main components .....	2
4. Rough schedule of assembly and welding .....	3
5. List of equipments, tools, and consumables .....	6
6. Assembly process No. ....	8
0010 Oil, grease, and coolant .....	8
0020 Levels of oil, grease, and coolant.....	9
0030 Positioning rear axle assembly.....	10
0040 Installing rear suspension.....	11
0050 Slinging bare machine.....	12
0060 Installing rear axle assembly (Connecting suspension) .....	13
0070 Installing rear axle assembly (Connecting axle rods).....	14
0080 Positioning bare machine .....	15
0090 Installing right front axle (Connecting A-arm).....	16
0100 Installing right front axle (Connecting steering cylinder and tie rod).....	17
0110 Installing right front axle (Connecting suspension).....	18
0120 Installing right front axle (Connecting brake hose) .....	19
0130 Installing right front axle (Connecting piping for automatic suspension) .....	20
0140 Installing tire and wheel assembly.....	21
0150 Installing body hinge grease tube.....	22
0160 Installing drive shaft.....	23
0170 Connecting cooling hose .....	24
0180 Connecting brake actuating hose.....	25
0190 Installing right front support .....	26
0200 Installing right fender .....	27
0201 Installing right fender [Muffler specification] .....	28
0210 Installing R.H platform assembly.....	29
0220 Installing L.H catwalk assembly .....	30
0230 Installing L.H handrail.....	31
0240 Installing radio antenna and fixing its cable.....	32
0250 Installing L.H fender .....	33
0260 Installing left side mudguard.....	34
0270 Installing right side mudguard .....	35
0280 Installing transmission underguard.....	36
0290 Removing hoist cylinder bracket .....	37
0300 Removing hoist piping blind plate.....	38
0310 Welding body.....	39

0320	Slinging body.....	40
0330	Installing hinge pin .....	41
0340	Connecting hoist cylinder .....	42
0350	Welding protective cover by actually positioning it on machine .....	43
0360	Installing body mount .....	44
0370	Procedure for adjusting body mount shim.....	45
0380	Welding exhaust tube by actually positioning it on machine .....	46
0390	Installing poke ejector .....	47
0400	Installing body lock pin .....	48
0410	Installing body mudguard .....	49
0420	Connecting dump sensor .....	50
0430	Procedure for adjusting dump sensor .....	51
0440	Calibrating dump control .....	52
0450	Bleeding air from brake system.....	53
0460	Adjusting suspension .....	54
0470	Fitting floating seal .....	55
0480	Painting .....	56
0490	Sticking body decal .....	57
	ASR (Anti Sliped Regulation) (If equipped).....	59
	Procedure for welding and assembling three separated body parts .....	65
	Additional manual for Korea (If equipped).....	85
APPENDIX		
Field assembly inspection report		

## 1. Points changed from model 5

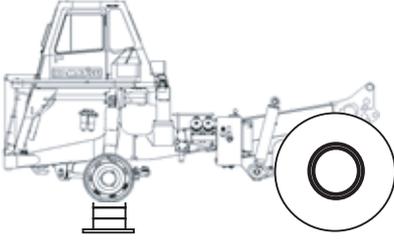
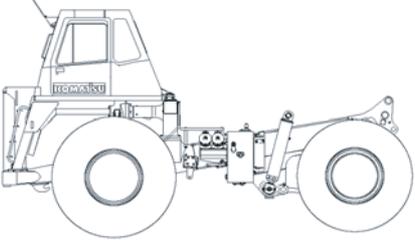
- The cab having the ROPS guard in it is employed and installation of it in the field is abolished.
- As the shape of the fuel tank is changed, installation of it and its piping in the field is abolished.
- As the position of the battery box is changed, wiring of the battery in the field is abolished.
- As the right platform is divided, piping of the air cleaner in the field is abolished.
- Connection of the rear suspension and rear axle in the field is added.

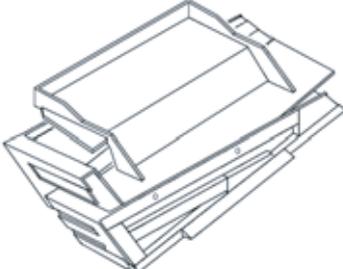
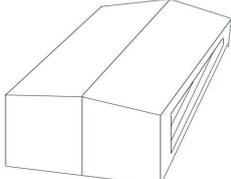
## 2. Outline of division (Only main components)



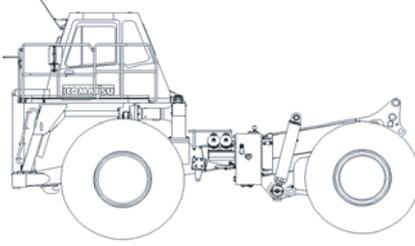
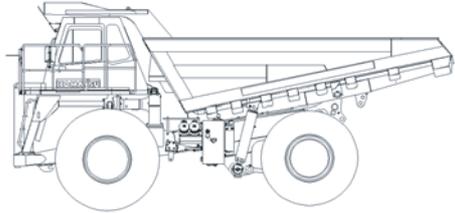


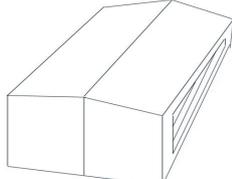
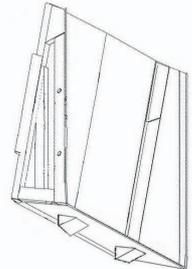
### 4-1. Rough schedule of assembly and welding

Day	1st day							
	Hour	1	2	3	4	5	6	7
Condition of chassis								
Rough contents of assembly work	Positioning rear axle Positioning chassis				Installing front axle Installing tires			
Crane	 245 kN {25 ton}		 245 kN {25 ton}		 245 kN {25 ton} (98 kN {10 ton})			
Number of workers	2							

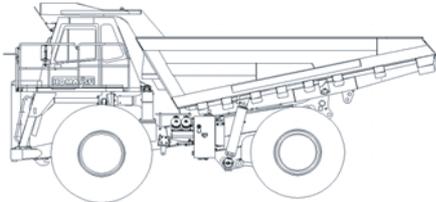
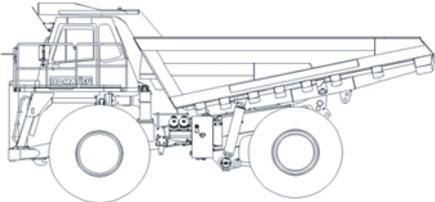
Day	1st day							
	Hour	1	2	3	4	5	6	7
Condition of body								
Contents of welding work	Unloading Removing stands, fixing material, etc.				Positioning and fixing split body Welding back side			
Crane	 245 kN {25 ton}		 245 kN {25 ton}					
Number of workers	3							

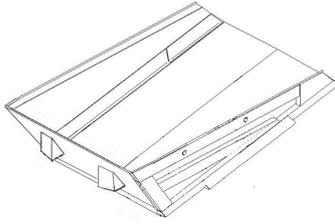
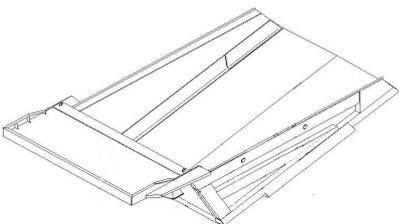
## 4-2. Rough schedule of assembly and welding

Day	2nd day							
	Hour	1	2	3	4	5	6	7
Condition of chassis								
Rough contents of assembly work	Installing platform Installing various exterior parts				Mounting body Adjusting shims Welding by actually positioning parts on machine			
Crane	 490 kN {50 ton} (98 kN {10 ton})				 490 kN {50 ton}			
Number of workers	2 							

Day	2nd day							
	Hour	1	2	3	4	5	6	7
Condition of body								
Contents of welding work	Positioning and fixing split body Welding back side				Turning over			
Crane	 245 kN {25 ton} 							
Number of workers	3 							

### 4-3. Rough schedule of assembly and welding

Day	3rd day							
	Hour	1	2	3	4	5	6	7
Condition of chassis								
Rough contents of assembly work	Installing exterior parts Painting				Maintenance, adjustment Inspection			
Crane								
Number of workers	2							

Day	3rd day							
	Hour	1	2	3	4	5	6	7
Condition of body								
Contents of welding work	Welding inside of body				Welding protector			
Crane								
Number of workers	3							

## 5. List of equipments, tools, and consumables (Made on May 10 2003)

No.	Item	Specification	Q'ty	Location
1	Track crane	245 kN {25 ton}	1	See field assembly manual
2	Track crane	490 kN {50 ton}	1	See field assembly manual
3	Forklift	24.5 kN {2.5 ton}	1	
4	Gas cutting machine		1	
5	Nozzle	No. 1220N2	1	
6	Acetylene gas		1	For gas cutting machine
7	Oxygen gas	14.7 MPa {150 kg/cm <sup>2</sup> }	1	For gas cutting machine
8	Grinder (Round)	FG50L-1	1	
9	Abrasive wheel	SCW50 × 19 • 10	1	
10	Grinder	LISG-7S	1	For finishing
11	Abrasive wheel	180 ø × 6 × 22	3	
12	Diamond ber	CB7C105	1	
13	Diamond ber edge	6GH	1	
14	Semi-automatic welding machine	500A	3	
15	Hand shield	GP-1S	3	
16	Wire for semi-automatic welding machine	1.2 mm	80 kg	
17	Chipper scaling hammer	FCM-20F	2	
18	Port-Power	300 mm for 98 kN {10 ton}	1	For correcting position of body
19	Hydraulic jack	98 kN {10 ton}	1	For body
20	Hydraulic jack	49 kN {5 ton}	1	For body
21	Body hinge through pin	WJ-H46-74001-022	1	
22	Flame-resistant cloth	1 m × 10 m	1	Protection from welding by actually positioning parts on machine
23	Spacer	ATH-465-027	3	For welding exhaust flange by actually positioning it on machine
24	Nitrogen gas filler	7826-10-1000	1	
25	Nitrogen gas cylinder	14.7 MPa {150 kg/cm <sup>2</sup> }	1	Filling suspension with nitrogen gas
26	Tire inflation pressure gauge	No. 2252	1	
27	Grease pump gun	For 20kg can	1	
28	Grease	GL-2	5 kg	
29	Stepladder	3-step	1	
30	Stepladder	6-step	1	
31	Vinyl sheet	5 m × 10 m	5	Protection of machinery and material
32	Wood block	300 mm square, 1 m long	12	
33	Oil can	5L	1	For supplying oil
34	Oil	ENGINE OIL SAE10W	–	See field assembly manual
35	Oil container, washing can		2	
36	Waste oil can	Drum	1	
37	Cloth		5 kg	
38	Fuel oil	No. 2 for summer, Special No. 3 for winter		For machine
39	Antifreeze		51	For filling sub-tank (Change concentration, depending on district.)
40	Air hose	6 ø × 1 m	1	For bleeding air
41	Sanding machine for painting	914B	1	
42	Sandpaper for painting	#80	100	
43	Sandpaper for painting	#180	10	
44	Cup gun set	W87-20R2S	1	For painting
45	Brush		1	For touching up painted surface
46	Air compressor	3.5 m <sup>3</sup> /min, Min. 686 kPa {7 kg/cm <sup>2</sup> }	1	
47	Air hose	With 12 ø adapter	5	For impact grinder

No.	Item	Specification	Q'ty	Location
48	Impact wrench	UW-13SK	2	
49	Impact wrench	KW-3800P	1	
50	Impact wrench	UW-9SK	2	
51	For extension impact 38S	150 mm long	1	
52	Socket	1 inch x 46 mm	1	For tightening tire
54	Socket	1 inch x 30 mm	1	For tightening support
55	Torque wrench	2800QL	1	For drive shaft and body pin
56	Torque wrench	21000QLE	1	For tightening tire
59	Steel measure tape	5 m	1	
60	LOCTITE	LT-2	1	
61	Vinyl tape		1	For binding wiring harness
62	Standard tools (For ISO)	700SX	2	
63	Bar	1 m	1	
64	Pointed steel bar		1	For matching holes
65	Sledgehammer	101b	1	
66	Shackle	BD10 for 4.9 kN {500 kg}	4	
67	Shackle	BC40 for 98 kN {10 ton}	4	For installing body
68	Chain	ATH-465-042	1	Multi-purpose type
70	Nylon sling	Width of 250 mm * 5 m	1	For installing right platform
71	Nylon sling	Width of 60 mm * 3 m	2	For installing support and small parts
72	Nylon sling	Width of 100 mm * 12 m	1	For installing front tire
73	Nylon sling	Width of 30 mm * 2 m	3	For installing front axle
74	Nylon sling	Width of 100 mm * 3 m	1	For installing front axle
75	Pin	60 ø * 250 mm	2	For slinging chassis on rear side (Safety pin can substitute)
76	Jig for slinging body	AHT-785-006	4	For installing body
77	Lever block	3/4 ton LB008	3	For installing front axle
78	Lever block	19.6 kN {2 ton} LB020	1	For installing front axle
79	Wire	7 m 28 ø	2	For slinging chassis
80	Wire	4 m 28 ø	2	For installing body
81	Wire	5 m 28 ø	2	For installing body
	The following 4 items can substitute for Nos. 79 – 81.			
		ATH-465-039	1	For installing body
		ATH-465-040	2	For slinging chassis
		ATH-465-041	1	For sling split body

List of touch-up paints for export machine with body (Delivered from factory for Japanese market)

No.	Part name	Unit	Q'ty
1	RETAN GP Primer	4 kg	1
2	RETAN GP Hardener	0.8 kg	1
3	RETAN GP Thinner	4 ℓ	1
4	SR3000 Natural yellow	16 kg	2
5	SR3000 Hardener	15 kg	2
6	Urethane thinner 205	17 ℓ	1
7	Black gray	Spray can	1
8	Heat-resistant silver	Spray can	1

Assembly process No.	<b>Oil, grease, and coolant</b>
<b>0010</b>	

Method of using fuel, lubricant, and coolant according to ambient temperature

- Fuel, oil
  - Use the correct type for the ambient temperature as shown in the table below.
  - ★ Specified capacity: Total amount of oil including oil for components and oil in piping
  - Refill capacity: Amount of oil needed to refill system during normal inspection and maintenance.
  - ★ When starting the engine in an ambient temperature of less than 0°C, always use SAE10W-30, or SAE15W-40, even though the temperature goes up to 10°C during the daytime.
- Coolant
  - Komatsu genuine super coolant (AF-ACL) is added to the cooling water, so there is no need to change it for temperatures down to -10°C.
  - If the temperature goes below -10°C, adjust the density. For details, see CLEANING INSIDE OF COOLING SYSTEM in the WHEN REQUIRED Section of the Operation and Maintenance Manual.

RESERVOIR	KIND OF FLUID	AMBIENT TEMPERATURE										
		-22	-4	14	32	50	68	86	104	122°F		
		-30	-20	-10	0	10	20	30	40	50°C		
Engine oil pan	Engine oil						SAE 30					
					SAE 10W							
				SAE 15W-40								
			SAE 10W-30									
								SAE 30				
Transmission case	Engine oil						SAE 30					
				SAE 10W								
Steering, hoist oil tank Front suspension Rear suspension		SAE 10W										
Differential case Final drive case		SAE 30										
Fuel tank	Diesel fuel			ASTM D975 No.2								
			※									
Cooling system	Coolant	Add antifreeze										

※ ASTM D975 No.1

Assembly process No.

**Levels of oil, grease, and coolant**

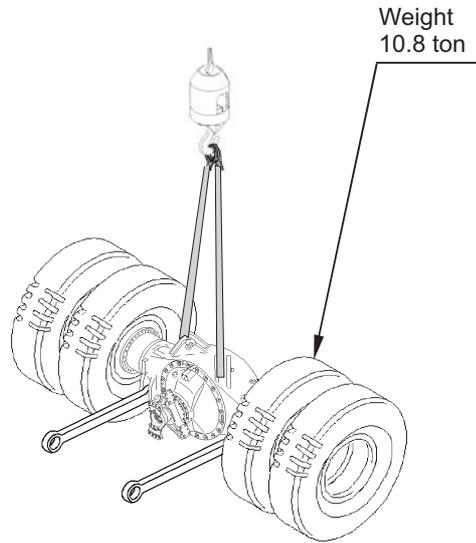
**0020**

Lubrication point	Type of oil	Specified q'ty (ℓ)	Refill capacity (ℓ)
Engine oil pan	Engine oil	67	57
Transmission case		285	190
Steering and hoist oil tank		180	122
Front suspension		17 each on right and left sides	—
Rear suspension		11.3 each on right and left sides	—
Differential case		95	95
Final drive case		32 each on right and left sides	21 each on right and left sides
Fuel tank		Diesel fuel	780
Cooling system	Coolant	154	—

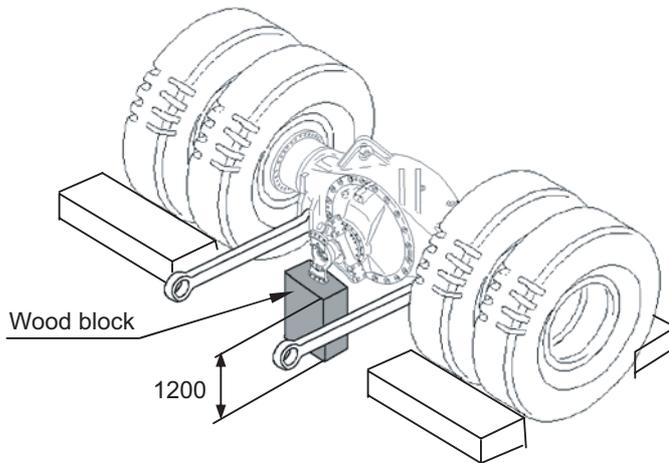
Caution) Before starting the engine, be sure to check each oil/coolant level.

Do not steer the machine largely before adjusting the suspension  
(If it is steered largely, the piping may be damaged).

Assembly process No.	<b>Positioning rear axle assembly</b>
<b>0030</b>	



1. Sling the rear axle and tire assembly with 1 245 kN {25 ton} crane.  
Hanging points: Rod mounting parts on differential.



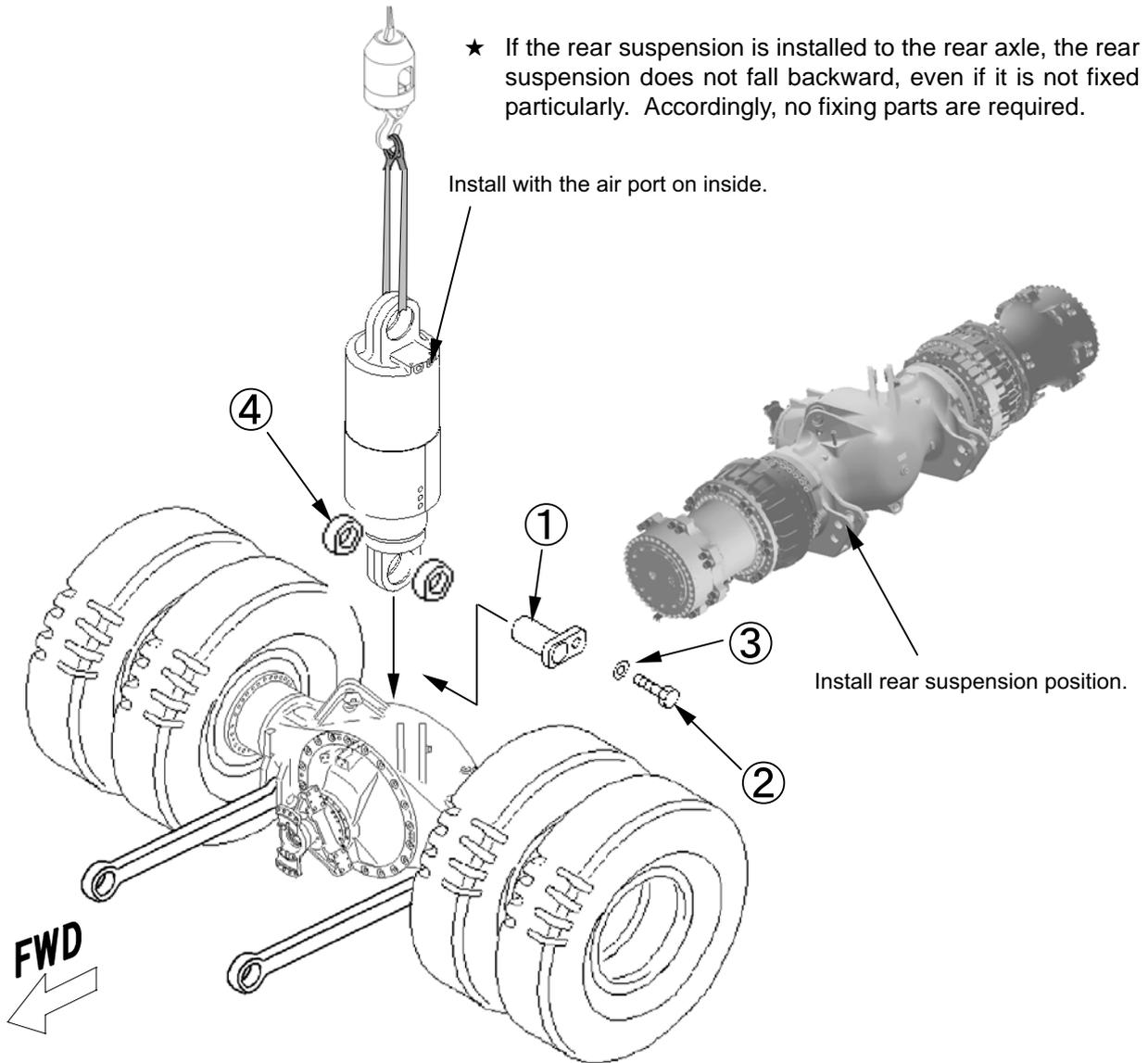
2. Position the rear axle as shown above.  
(Secure the clearance between the ground and coupling as shown above so that the rear axle assembly will be horizontal.)  
When positioning the assembly on the ground, take proper measures so that the assembly will not sink and lean.
3. Secure the rear axle with chocks.

Precautions	Necessary tools		Necessary equipment	
Secure the rear axle with chocks.	Name	Q'ty	Name	Q'ty
Other remarks				

Assembly process No.

## Installing rear suspension

**0040**

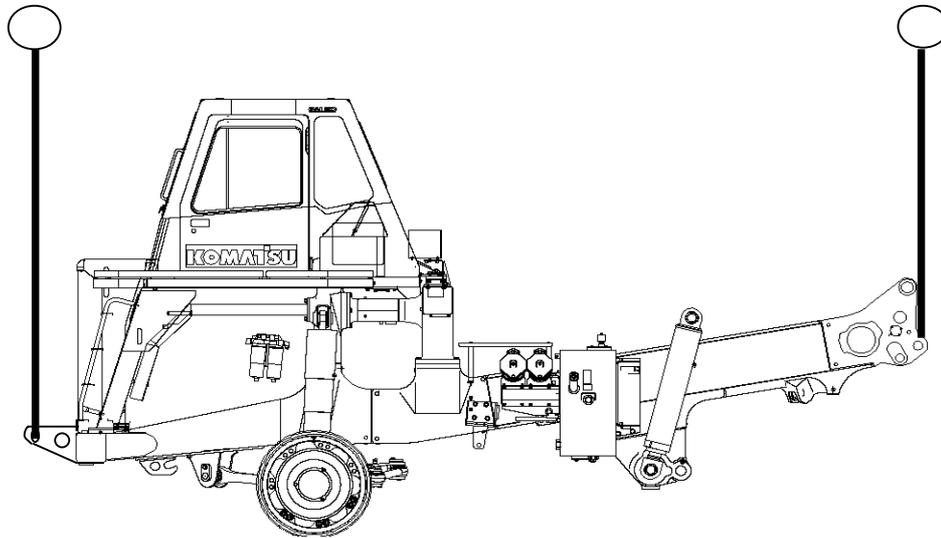


	Part No.	Part name	Q'ty	State of parts
(1)	569-40-81550	Pin	2	Temporarily installed to rear axle
(2)	01010-81425	Bolt	2	Temporarily installed to rear axle
(3)	569-40-61710	Washer	2	Temporarily installed to rear axle
(4)	569-52-41950	Spacer	4	Temporarily installed to rear axle

1. Sling the rear suspension and lower it to the fixing position of the rear axle.
2. Align the fixing hole of the rear suspension with those of the rear axle, insert the pin, and secure it with the bolt.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. Do not install the spacer forcibly. If it is installed so, it will be deformed. 2. When holding the spacer, take care not to catch your fingers in it.				
Other remarks				

Assembly process No.	<b>Slinging bare machine</b>
<b>0050</b>	



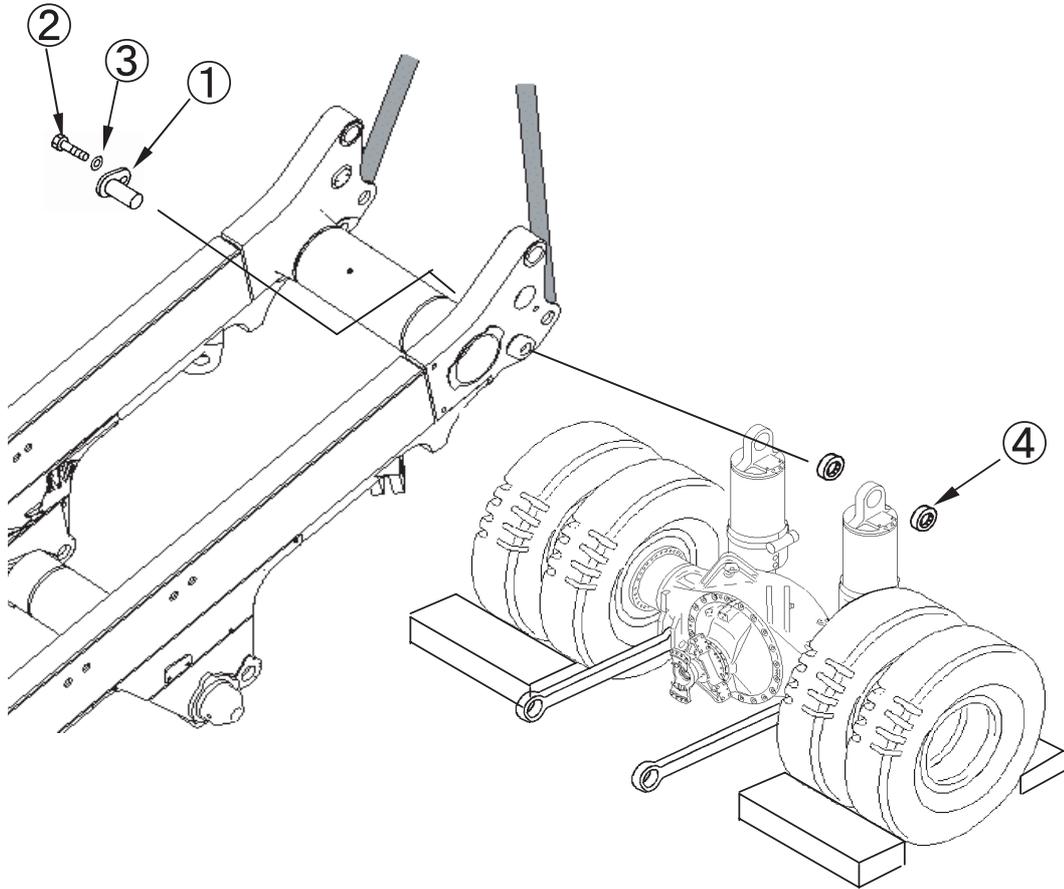
1. When slinging the chassis, apply cloths to protect it.
2. Sling the bare machine with 2 245 kN {25 ton} cranes.
  - Sling : Chain sling (ATH-465-040) or wires 28 mm in diameter
  - Front hanging point: Hanging bracket of bumper
  - Rear hanging point: Mounting part of body lock pin (Use pin 6 mm in diameter x 250 or body lock pin)

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
			ATH-465-040	2
Other remarks				

Assembly process No.

## Installing rear axle assembly (Connecting suspension)

**0060**

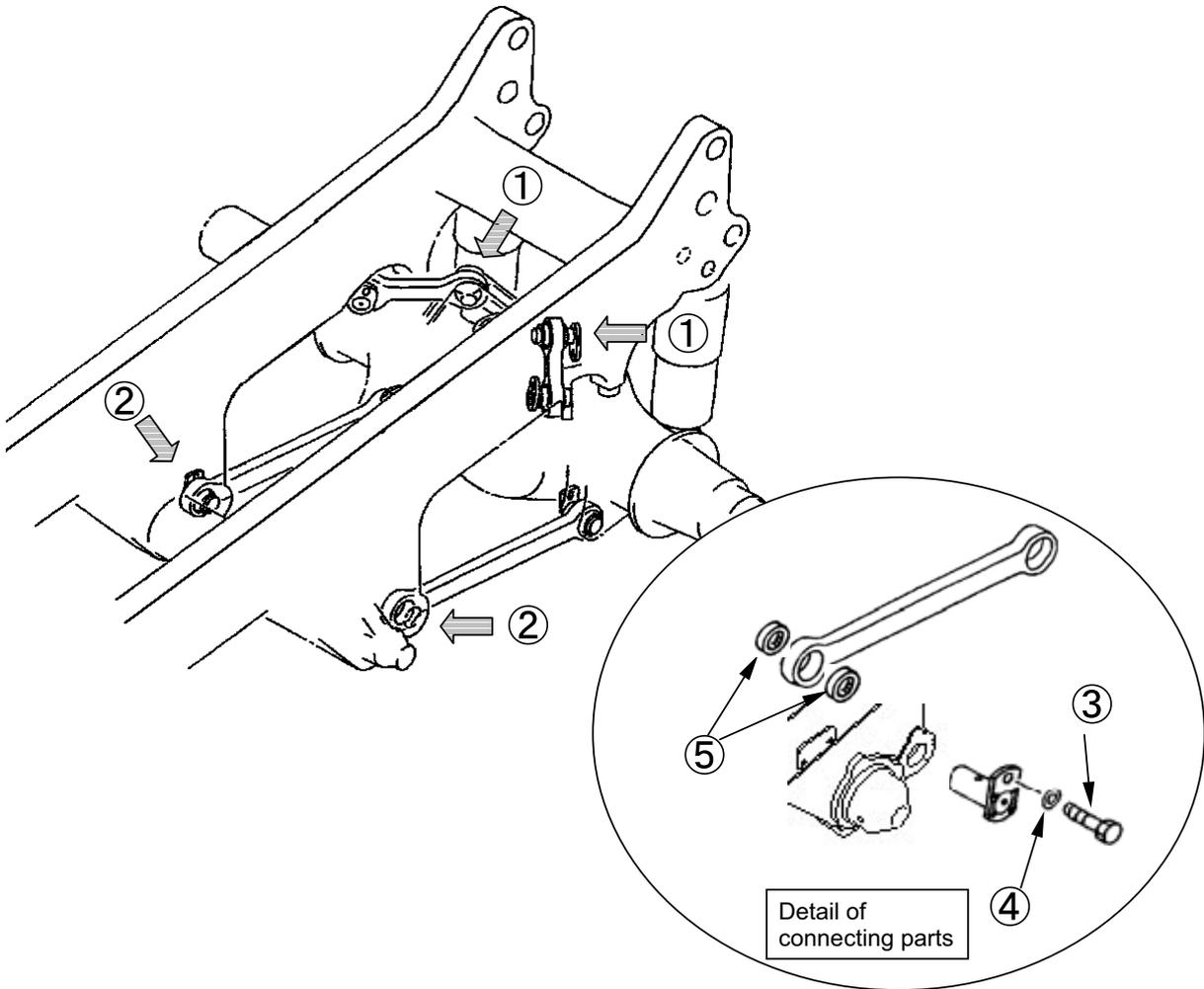


	Part No.	Part name	Q'ty	State of parts
(1)	569-40-61552	Pin	2	Temporarily installed to chassis
(2)	01010-81425	Bolt	2	Temporarily installed to chassis
(3)	569-40-61710	Washer	2	Temporarily installed to chassis
(4)	569-52-41950	Spacer	4	Temporarily installed to chassis

1. Guide the slung bare machine to above the rear axle.
2. Remove pins ((1) – (4) in the figure) on the chassis side.
3. Guide the bare machine to the pin holes at the top of the suspension and connect it by the pins.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. Do not install the spacer forcibly. If it is installed so, it will be deformed. 2. When holding the spacer, take care not to catch your fingers in it.				
Other remarks				

Assembly process No.	<b>Installing rear axle assembly (Connecting axle rods)</b>
<b>0070</b>	



	Part No.	Part name	Q'ty	State of parts
(1)	569-40-81550	Pin	2	Temporarily installed to rear axle
(2)	569-52-81150	Pin	2	Temporarily installed to chassis
(3)	01010-81425	Bolt	4	Temporarily installed to rear axle and chassis
(4)	569-40-61710	Washer	4	Temporarily installed to rear axle and chassis
(5)	561-52-41950	Spacer	8	Temporarily installed to rear axle and chassis

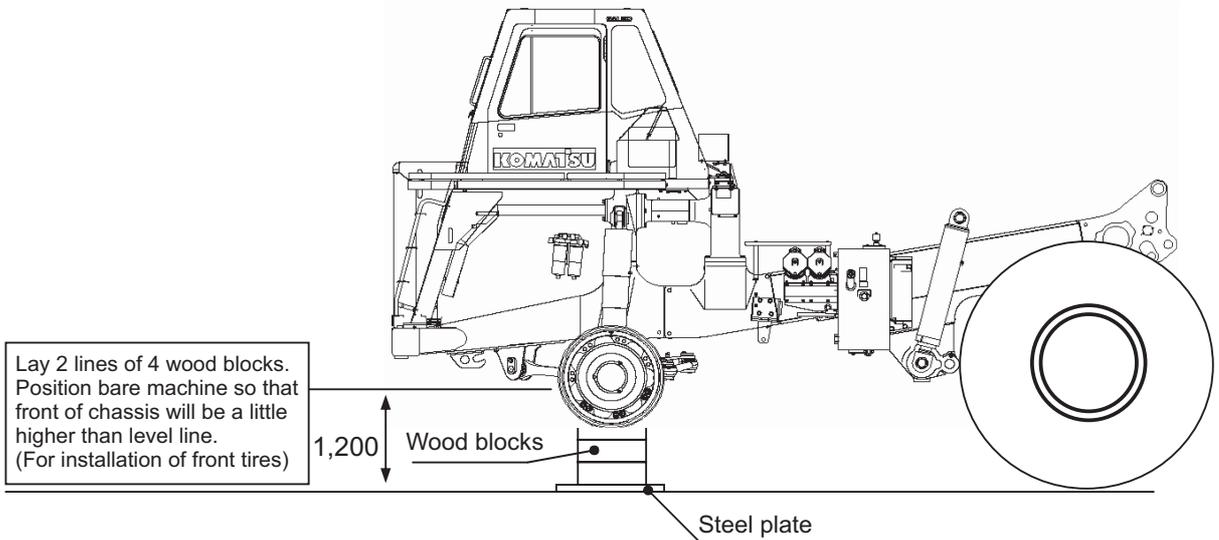
1. Remove the pins from the upper rod connecting part on the axle side and the pins from the lower rod connecting part on the chassis side. ((1) – (5) in the figure)
2. Move the crane to match the pin holes and connect the axle rods.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. Do not install the spacer forcibly. If it is installed so, it will be deformed. 2. When holding the spacer, take care not to catch your fingers in it.				
Other remarks				

Assembly process No.

**Positioning bare machine**

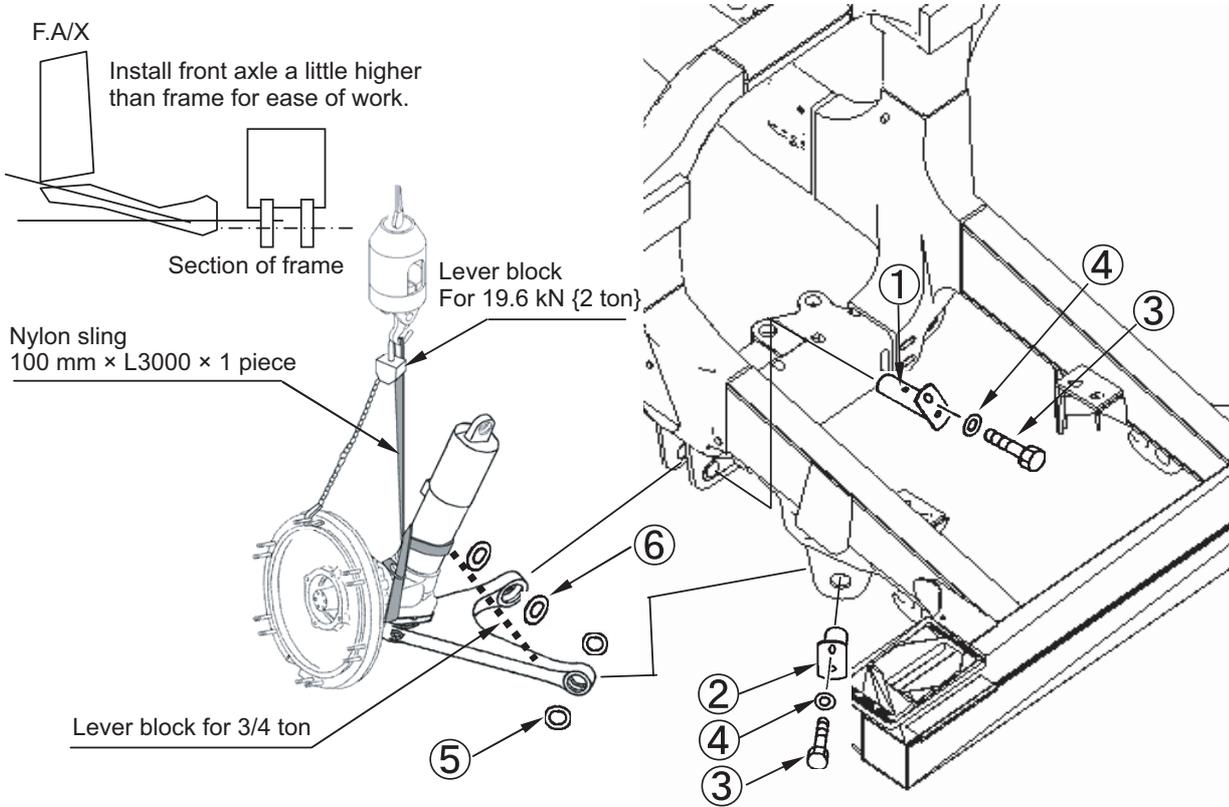
**0080**



1. Position the frame vertical of the bare machine on wood blocks as shown above.  
 (Secure the clearance above the ground as shown above so that you can install the front tires.)  
 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.
2. Remove the sling.

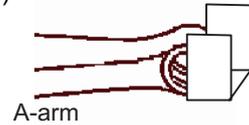
Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Take care that the chassis will not move.  Set the bare machine to proper height so that you can install the front tires.				
Other remarks				

Assembly process No.	<b>Installing right front axle (Connecting A-arm)</b>
<b>0090</b>	



	Part No.	Part name	Q'ty	State of parts
(1)	569-40-81230	Pin	1	Temporarily installed to chassis
(2)	569-40-81550	Pin	1	Temporarily installed to chassis
(3)	01010-81425	Bolt	2	Temporarily installed to chassis
(4)	569-40-61710	Washer	2	Temporarily installed to chassis
(5)	569-52-41950	Spacer	2	Temporarily installed to chassis
(6)	569-40-61130	Spacer	2	Temporarily installed to chassis

1. Remove the pins and spacers installed to the chassis temporarily.
2. Match the mounting holes of the chassis and A-arm. (Adjust them with lever blocks, etc.)
3. Install the spacers and pins and secure them with set bolts.  
(You can work easily by bending a thin sheet and using it to hold each spacer.)

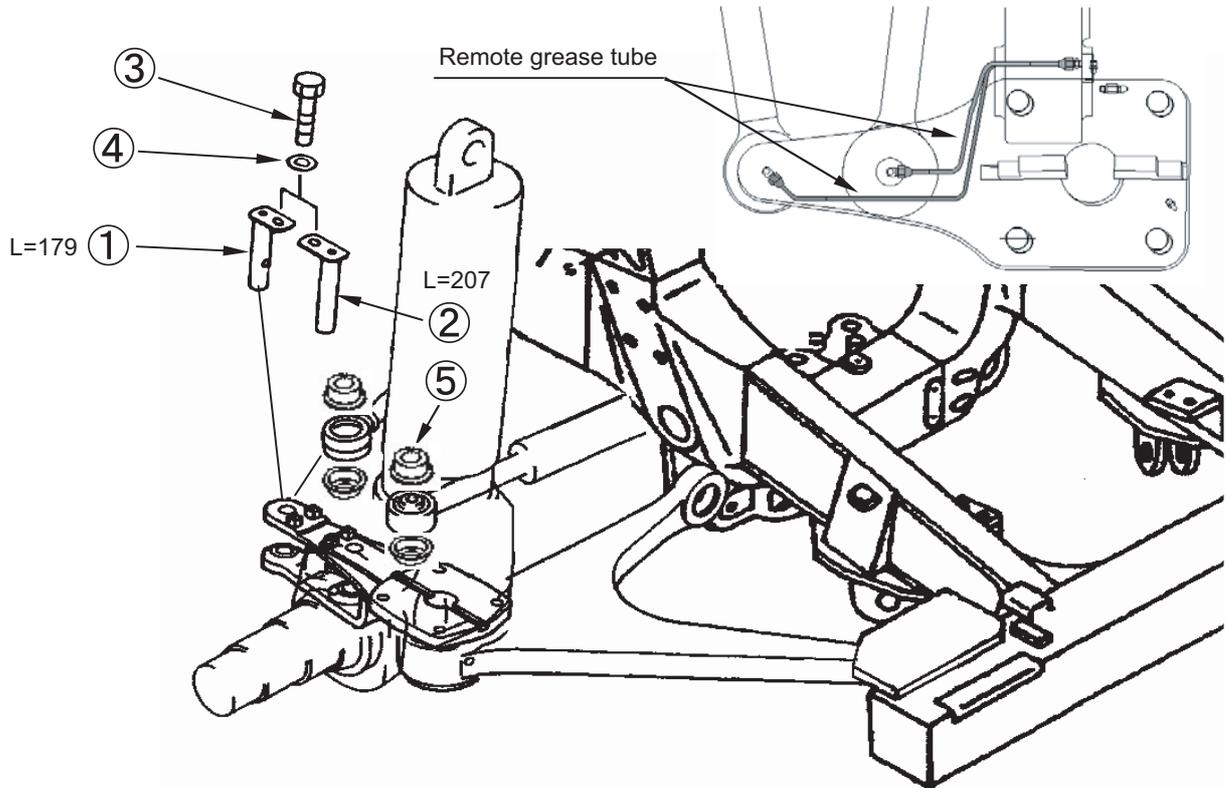


Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. Do not install the spacer forcibly. If it is installed so, it will be deformed. 2. When holding the spacer, take care not to catch your fingers in it.				
Other remarks				

Assembly process No.

**0100**

**Installing right front axle  
(Connecting steering cylinder and tie rod)**

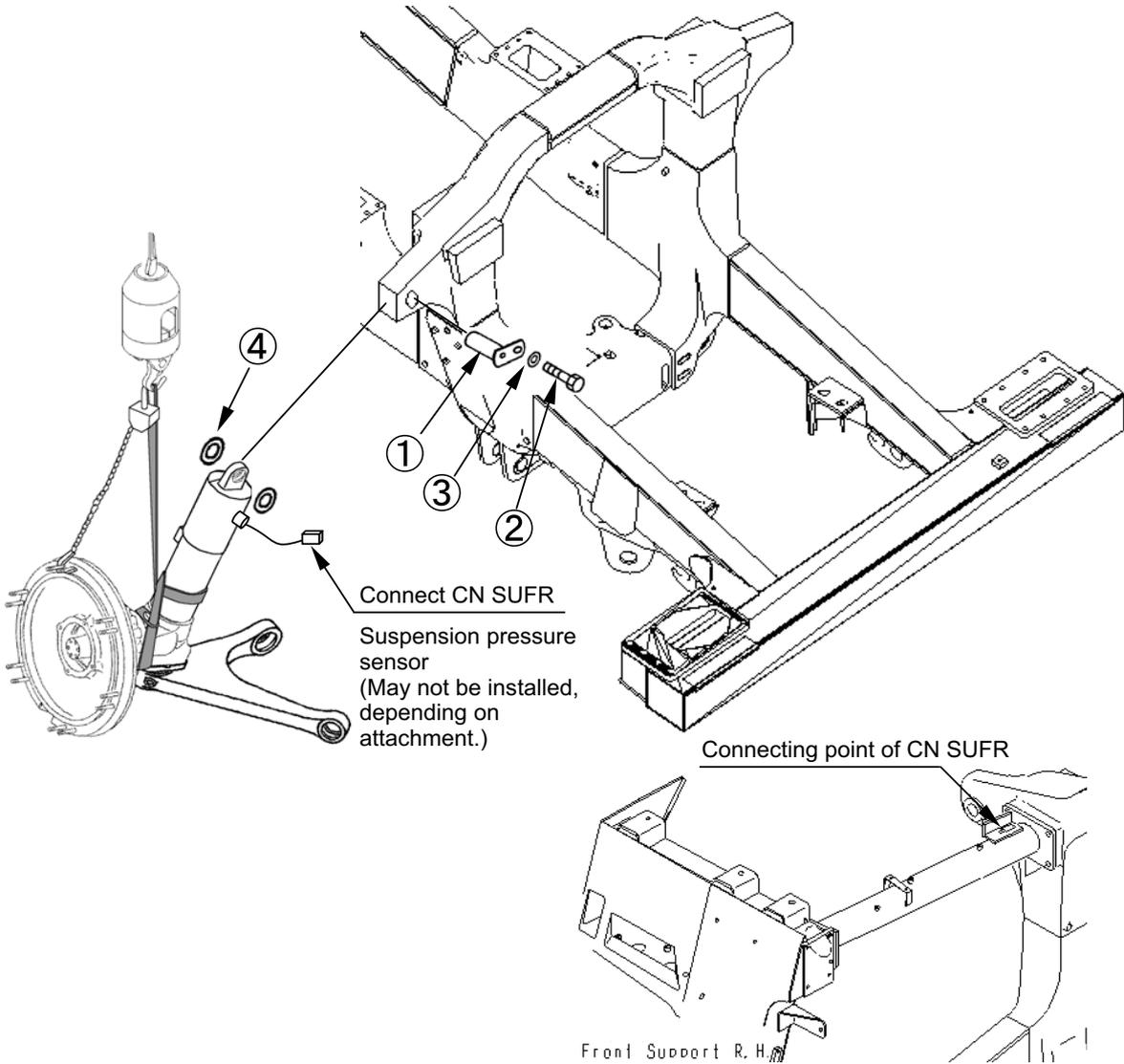


	Part No.	Part name	Q'ty	State of parts
(1)	569-40-81240	Pin	1	Temporarily installed to front axle
(2)	569-40-81530	Pin	1	Temporarily installed to front axle
(3)	01010-81425	Bolt	2	Temporarily installed to front axle
(4)	569-40-61710	Washer	2	Temporarily installed to front axle
(5)	569-40-61660	Boot	4	Temporarily installed to front axle

1. Remove the pin side of the remote grease tube, and then remove the pins.
2. Adjust the axle so that the steering cylinder and tie rod will be in parallel with the axle lever.
3. Put boot (5), adjust the pin holes, and install the pin.
4. Fix the pin with the set bolt.
5. Connect the remote grease tube again.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. Check that the O-rings are fitted to the steering cylinder and tie rod spherical bushing. 2. Note that the lengths of the pins are different from one another.				
Other remarks				

Assembly process No.	<b>Installing right front axle (Connecting suspension)</b>
<b>0110</b>	



	Part No.	Part name	Q'ty	State of parts
(1)	569-40-81540	Pin	1	Temporarily installed to chassis
(2)	01010-81425	Bolt	1	Temporarily installed to chassis
(3)	569-40-61710	Washer	1	Temporarily installed to chassis
(4)	569-52-11120	Spacer	2	Temporarily installed to chassis

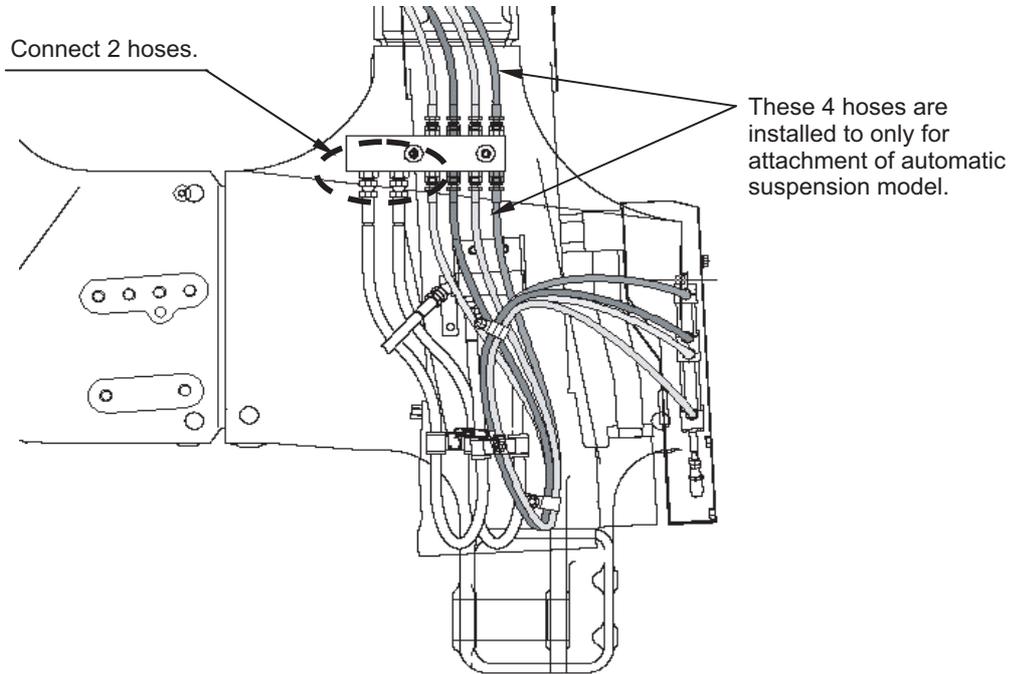
1. This figure shows the pins installed to the chassis.
2. When connecting each part, match the pin holes.
3. Install the spacers and pins and secure them with set bolts.
4. Connect the suspension pressure sensor (CN-SUFR) to the wiring harness on the chassis side (only when the attachment needs it).

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. Do not install the spacer forcibly. If it is installed so, it will be deformed. 2. When holding the spacer, take care not to catch your fingers in it.				
Other remarks				

Assembly process No.

**0120**

## Installing right front axle (Connecting brake hose)

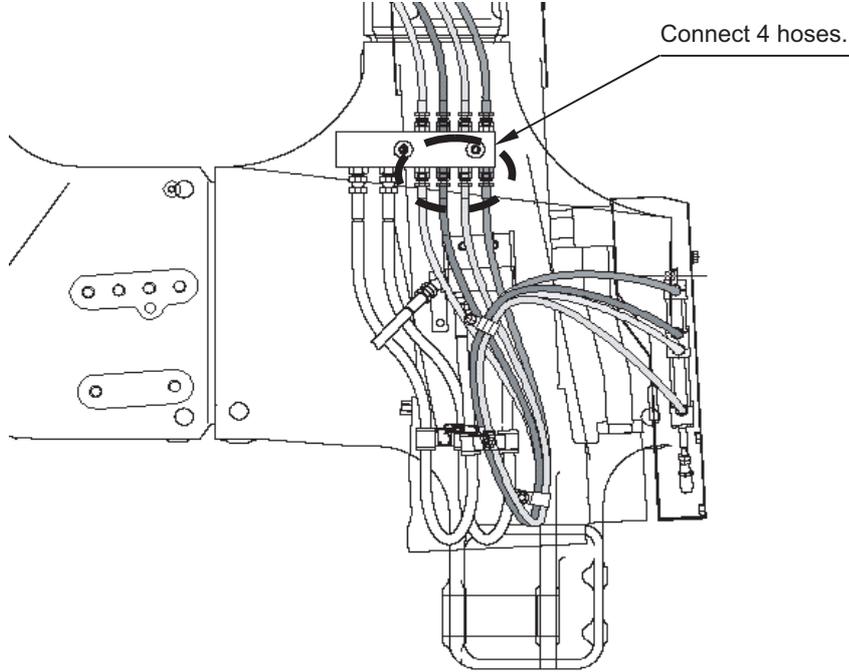


1. Remove the blind plug from the tip of the drain hose removed from the chassis.
2. Check the hose number and the block number, then assemble.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Check that there is no mistake in the hose number and the block number, then assemble.				
Other remarks				

Assembly process No.	<b>Installing right front axle (Connecting piping for automatic suspension)</b>
<b>0130</b>	

Perform the following work for only the attachment of automatic suspension model.



1. Remove the blind plug from the tip of the drain hose removed from the chassis.
2. Check the hose number and the block number, then assemble.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Check that there is no mistake in the hose number and the block number, then assemble.				
Other remarks				

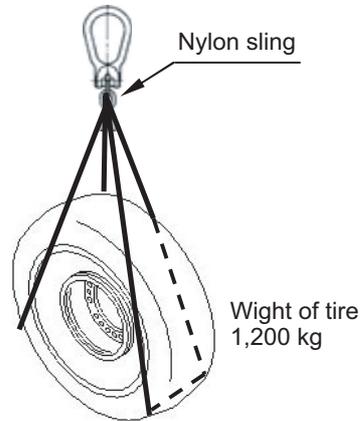
Assembly process No.

## Installing tire and wheel assembly

**0140**

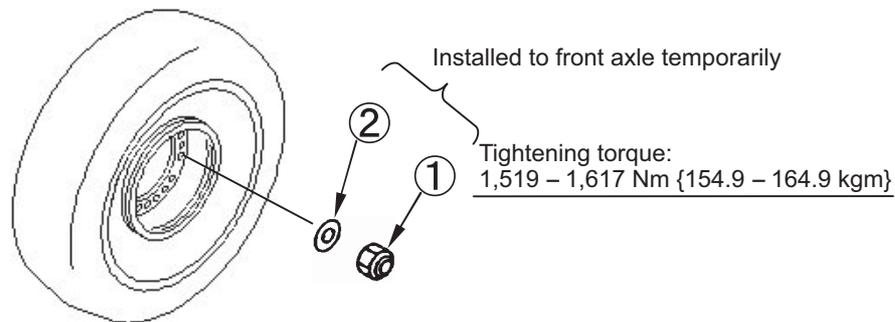
Installing 2 front tires to right and left

<How to sling tire and wheel assembly>



Hitch sling to tire tread.

<Image of mounting tire>



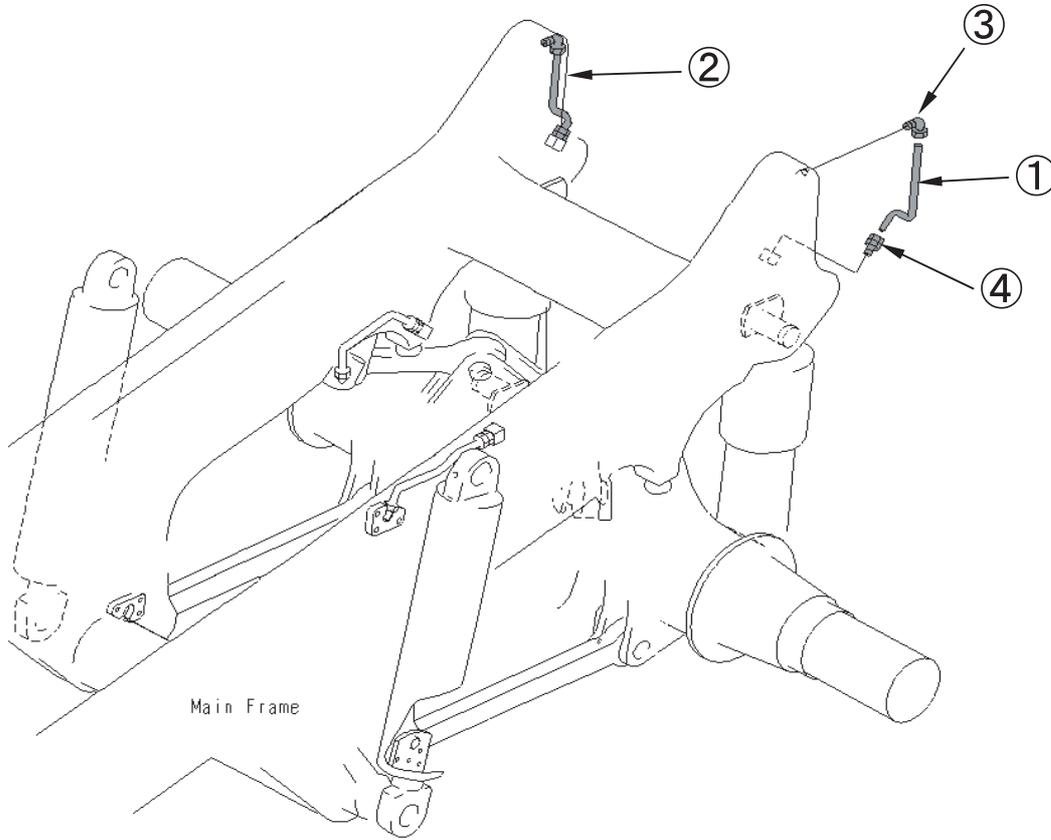
	Part No.	Part name	Q'ty	State of parts
(1)	569-22-72870	Nut	28	Temporarily installed to front axle
(2)	426-09-11520	Washer	28	Temporarily installed to front axle

1. Remove the nuts and washers installed to the front axle temporarily.
2. Install the tire with the forklift and then install the nuts and washers.  
 Note) Take care that the tire will not fall from the forklift.  
 When positioning the tire, take care not to damage the valve for inflating the tire.
3. Tighten the nuts with the impact wrench temporarily.
4. Lift up the front part of the chassis with the crane and remove the wood blocks.
5. Tighten the tire mounting nuts with the torque wrench.  
 (Tightening torque: 1,519 – 1,617 Nm {154.9 – 164.9 kgm})
6. Touch up the tightened parts (to prevent rusting).  
 (Use the yellow paint used for the body.)

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. When carrying the tire, take care that it will not fall. 2. When positioning the tire, take care not to damage the air valve.	Torque wrench	1		
	QLE21000 or equivalent			
Other remarks				

Assembly process No.	<b>Installing body hinge grease tube</b>
<b>0150</b>	

Install the connectors and elbows, and then install the lubrication tubes.



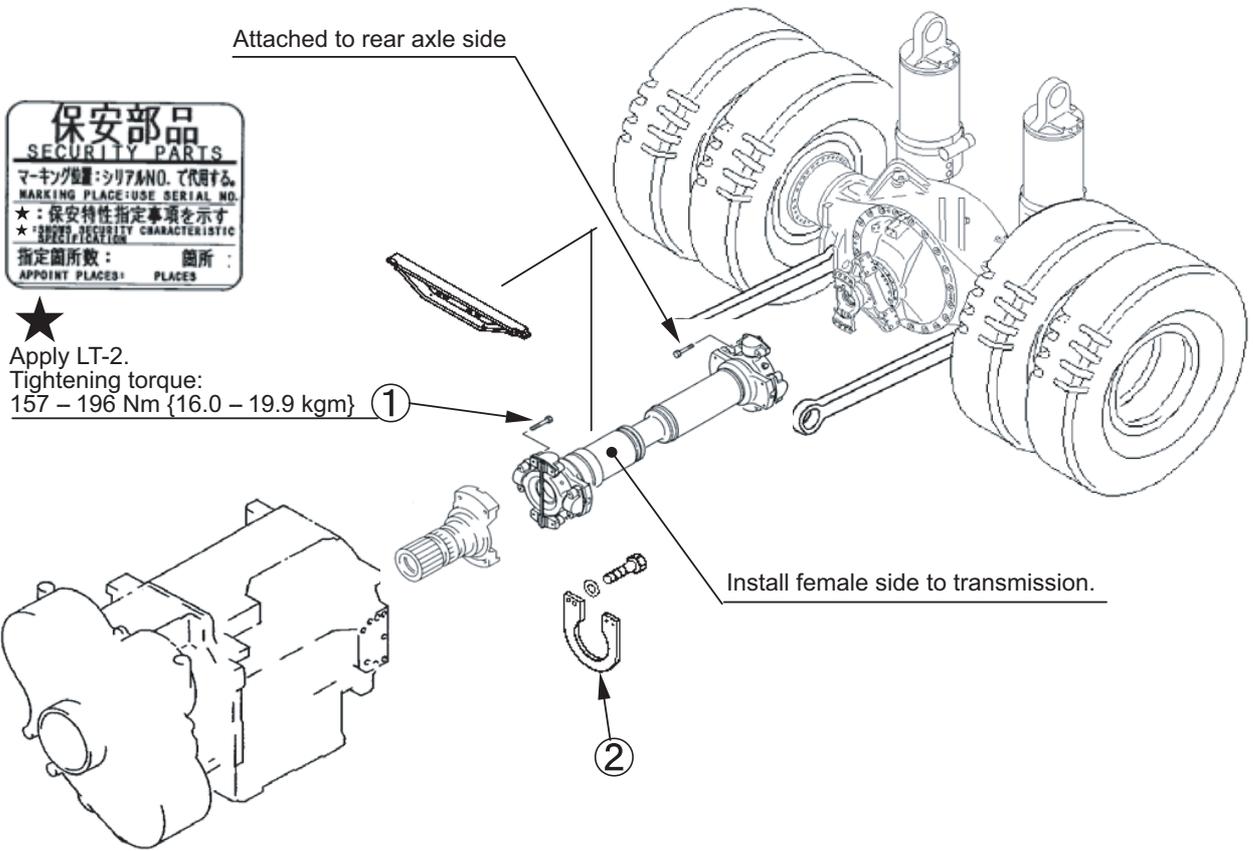
	Part No.	Part name	Q'ty	State of parts
(1)	569-52-62612	Tube	1	Loose-supply item (Packed separately)
(2)	569-52-62622	Tube	1	Loose-supply item (Packed separately)
(3)	421-09-12540	Elbow	2	Loose-supply item (Packed separately)
(4)	423-09-12110	Connector	2	Loose-supply item (Packed separately)

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Other remarks				

Assembly process No.

## Installing drive shaft

**0160**

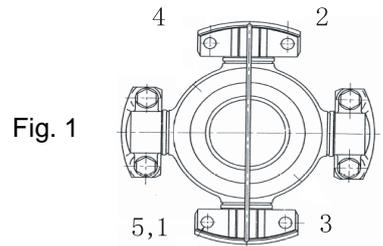


**保安部品**  
**SECURITY PARTS**  
 マーキング位置: シリアムNO. で代用する。  
 MARKING PLACE: USE SERIAL NO.  
 ★: 保安特性指定事項を示す  
 ★: SECURITY CHARACTERISTIC  
 指定箇所数: 箇所:  
 APPOINT PLACES: PLACES

★  
 Apply LT-2.  
 Tightening torque:  
 157 – 196 Nm {16.0 – 19.9 kgm}

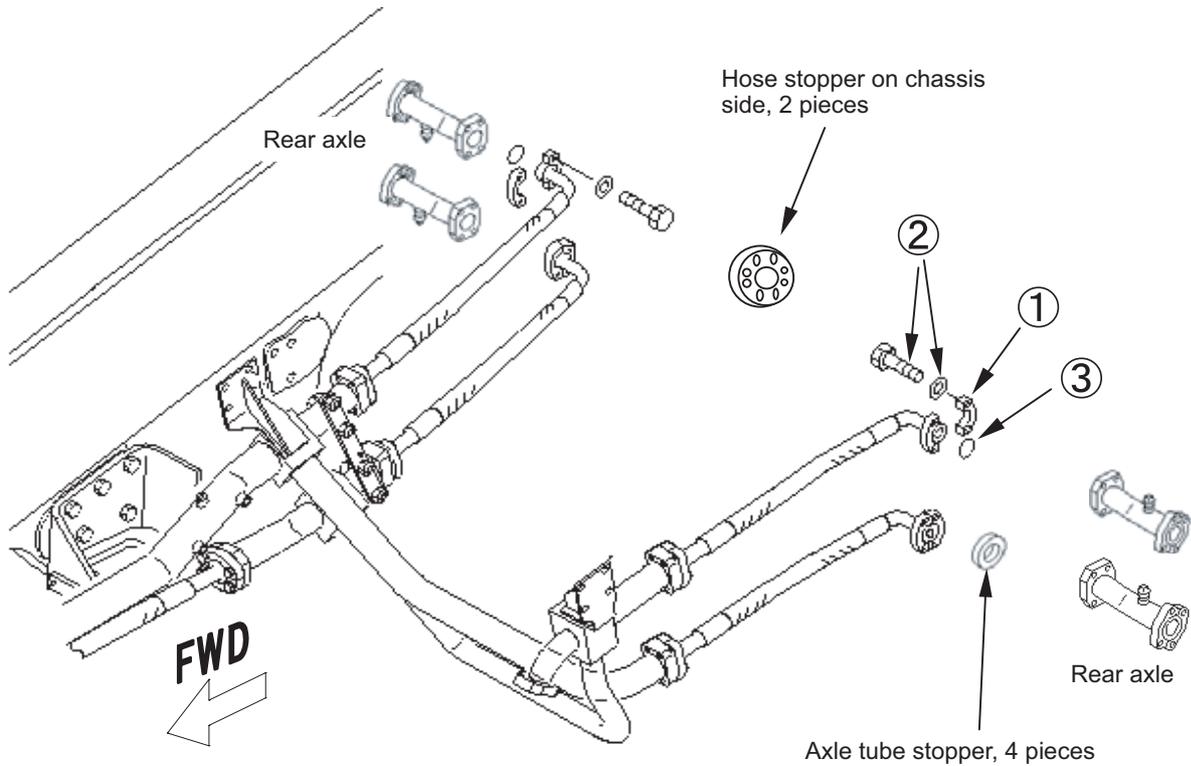
	Part No.	Part name	Q'ty	State of parts
(1)	01050-61470	Bolt	4	Loose-supply item (Packed separately)

1. Remove guard (2) from the chassis (only when the attachment of rear drive shaft guard is installed).
2. Sling the drive shaft with the crane and put it between the rear axle and transmission.
3. Hit the drive shaft spider lightly with a hammer to fit the socket and spigot.
4. Install the bolts and tighten them in the diagonal order (For the tightening order, see Fig. 1).
5. Tighten the bolts again with the torque wrench. (Tightening torque: 157 – 196 Nm {16.0 – 19.9 kgm})
6. Install the guard again.



Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Tighten the bolts in the order shown in the figure.	Torque wrench 1800QL or equivalent	1		
Other remarks				

Assembly process No.	<b>Connecting cooling hose</b>
<b>0170</b>	



	Part No.	Part name	Q'ty	State of parts
(1)	07371-21465	Flange	8	Installed parts
(2)	07375-21240	Bolt	16	Installed parts
(3)	07000-F3048	O-ring	4	Installed parts

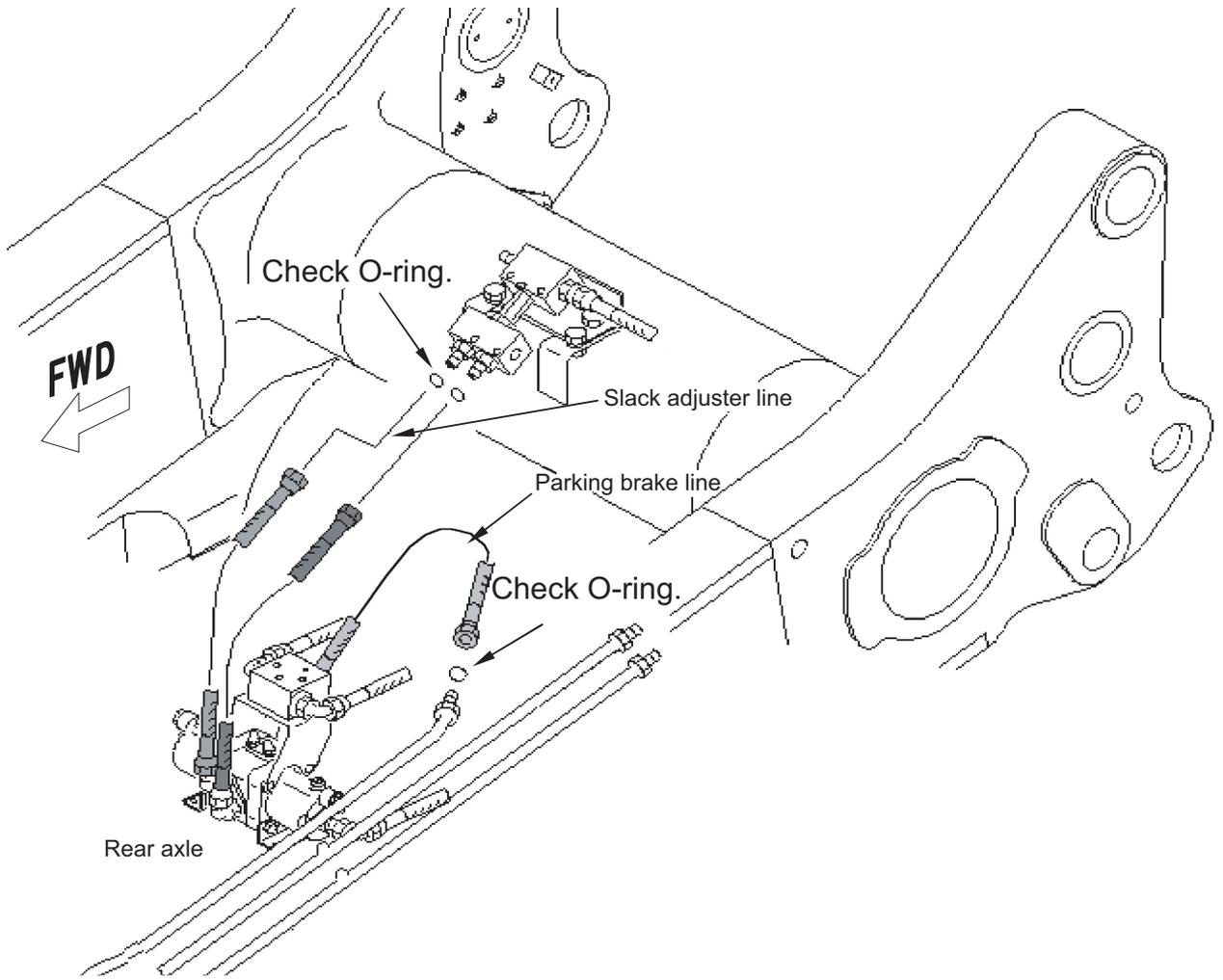
1. Remove hose stoppers on the chassis side (2 pieces) and tube stoppers on the rear axle (4 pieces).
2. Using the above parts, connect the cooling hose.  
(Use parts (1) – (3) attached on either axle side or chassis side. Discard the rest.)

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
When connecting the cooling hose, take care that dust will not enter it. Check that the O-rings are fitted securely.				
Other remarks				

Assembly process No.

**Connecting brake actuating hose**

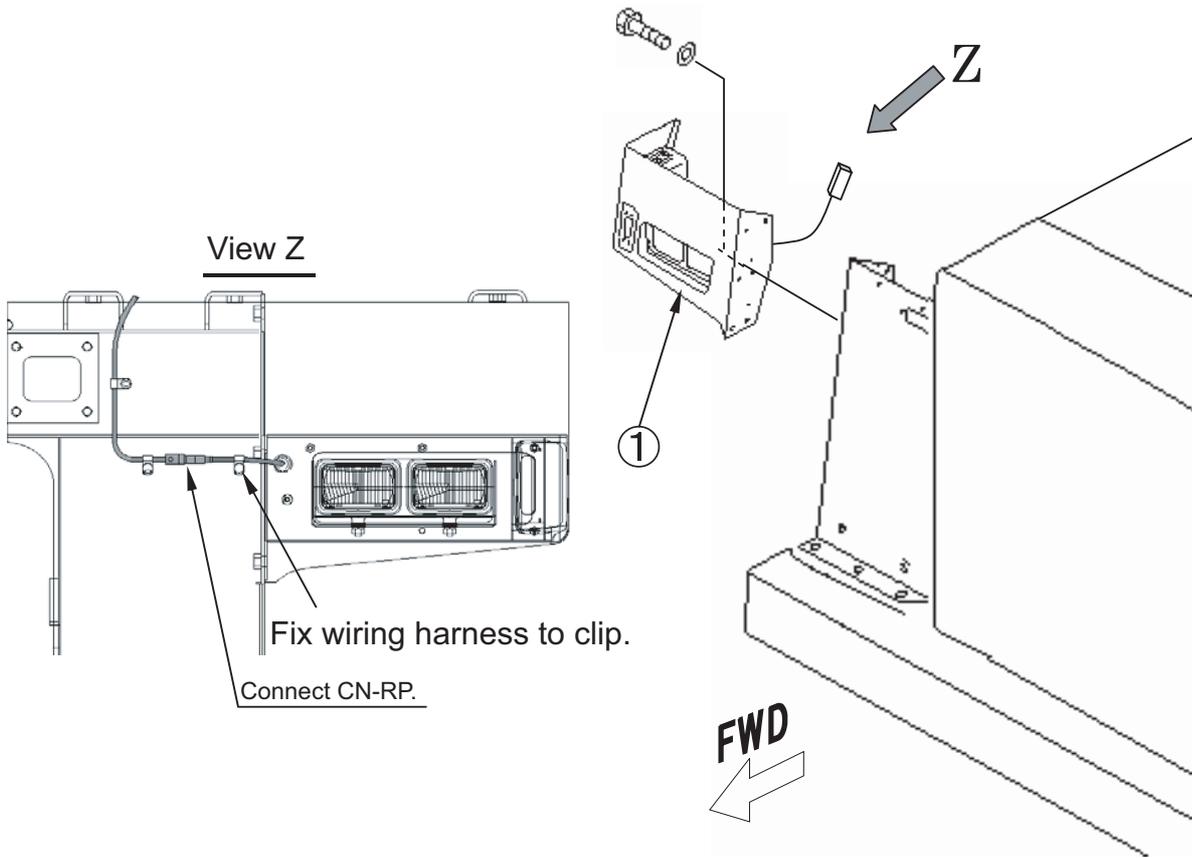
**0180**



1. Remove the stopper from each opening.
2. Connect the 3 hoses.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
1. Do not mistake the positions of hoses A and B for each other. 2. When remove a stopper from each opening, do not lose the O-ring.				
Other remarks				

Assembly process No.	<b>Installing right front support</b>
<b>0190</b>	



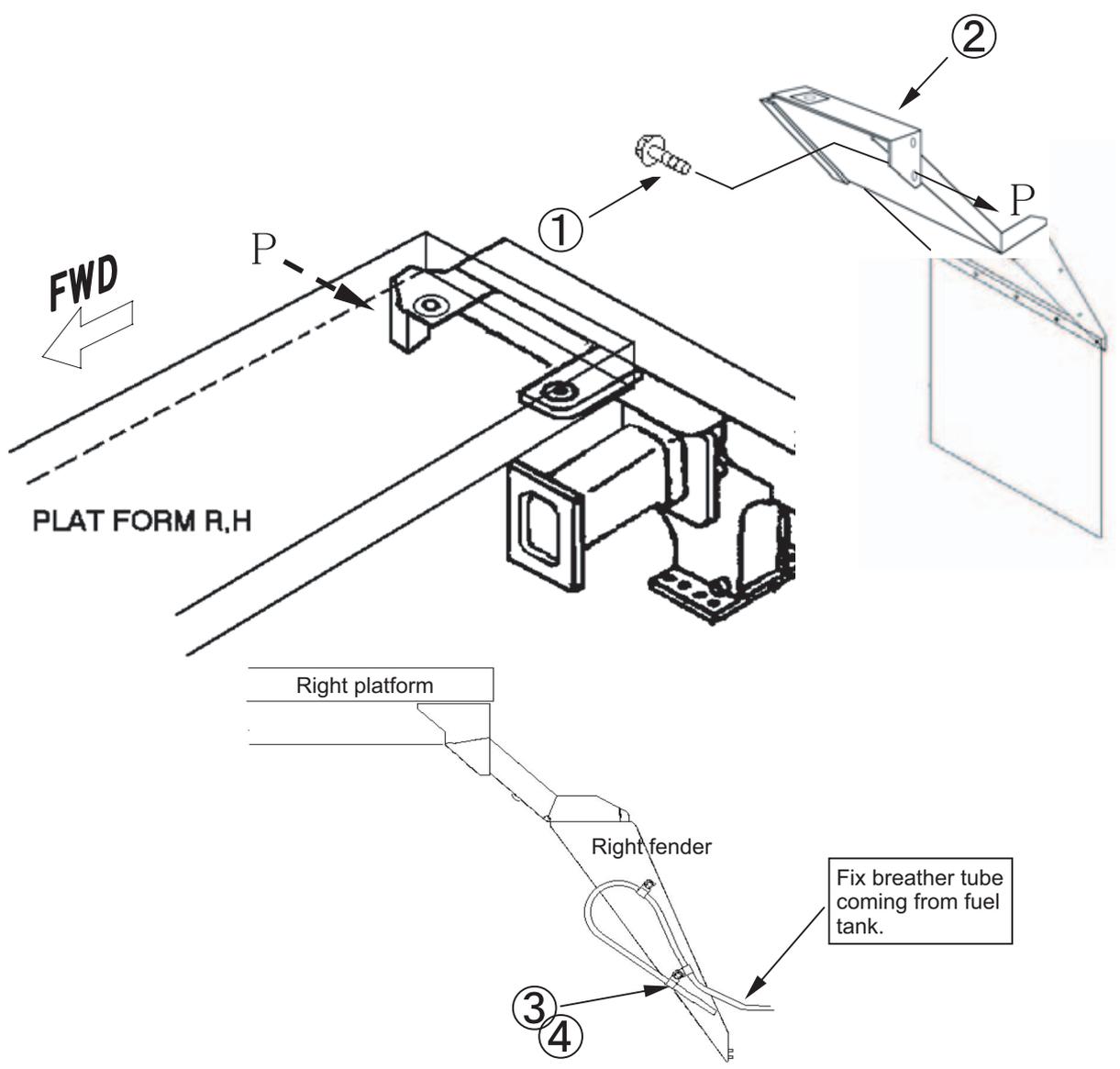
	Part No.	Part name	Q'ty	State of parts
(1)	569-54-81681	Front support assembly	1	Loose-supply item (Separately packed)

1. Remove the bolts and washers temporarily installed to the chassis.
2. Install front support assembly (1).
3. Fix the wiring harness to the clip and connect the connector (CN-RP).

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Other remarks				

Assembly process No  
**0200**

**Installing Right fender**



	Part No.	Part name	Q'ty	State of parts
(1)	01024-81230	Bolt	2	Temporarily installed to chassis
(2)	569-54-R0000	Fender A.	1	Loose-supply item (Separately packed)
(3)	08036-01214	Clip	3	Temporarily installed to fender
(4)	01435-01020	Bolt	2	Temporarily installed to fender

1. Remove (1) temporarily installed to the chassis.
2. Install the right fender.

Precautions	Necessary tools		Necessary equipment	
	Name	Q'ty	Name	Q'ty
Other remarks				