INDEX

SPECIFICATIONS

Cab

Item	Specifications
Type	Cab-over type (forward control type)
Mass kg {lb}	410 {905}

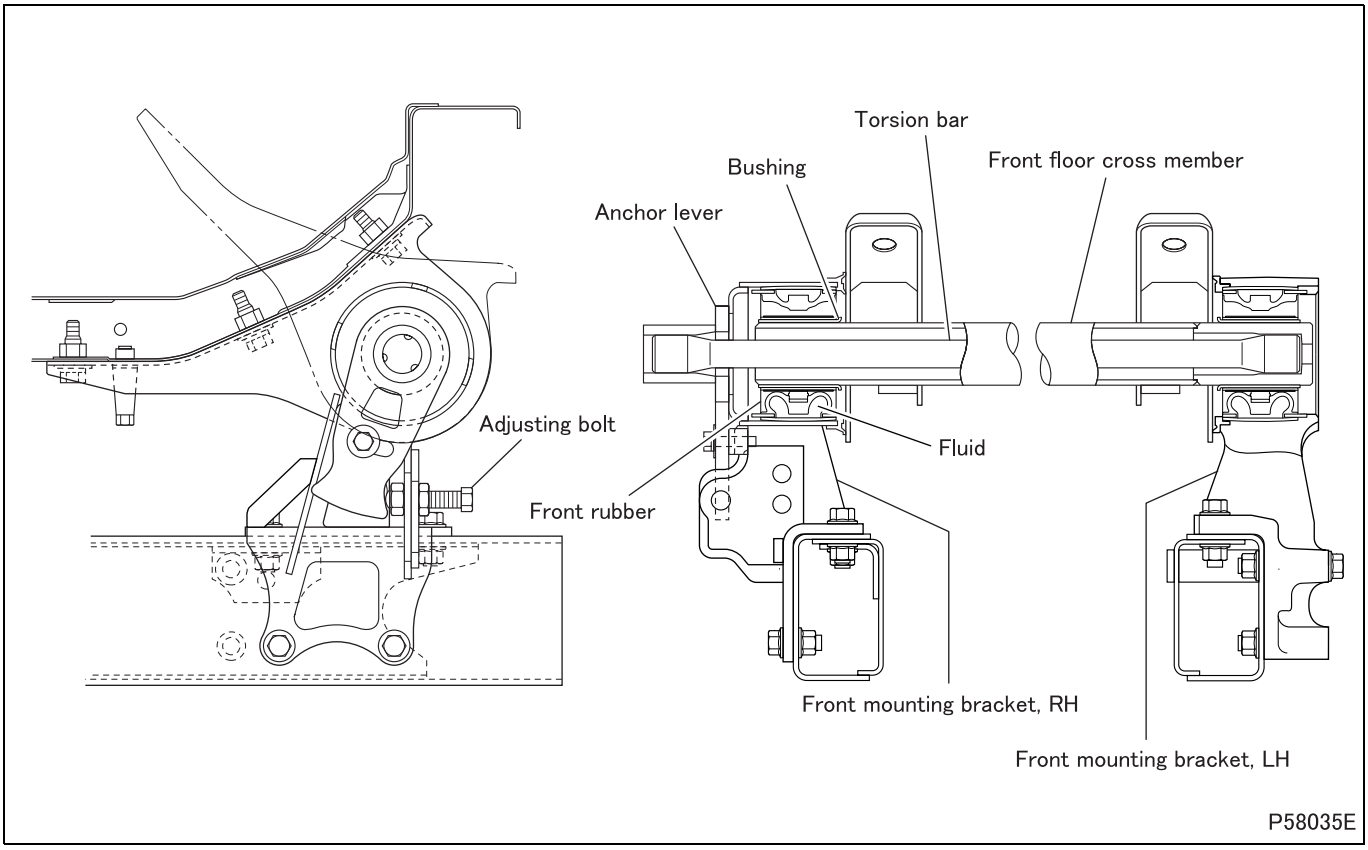
Cab Mounting

Item	Specifications
Type	Semi-floating type
Kind	Liquid-filled rubber cushioned mounting

Cab Tilt System

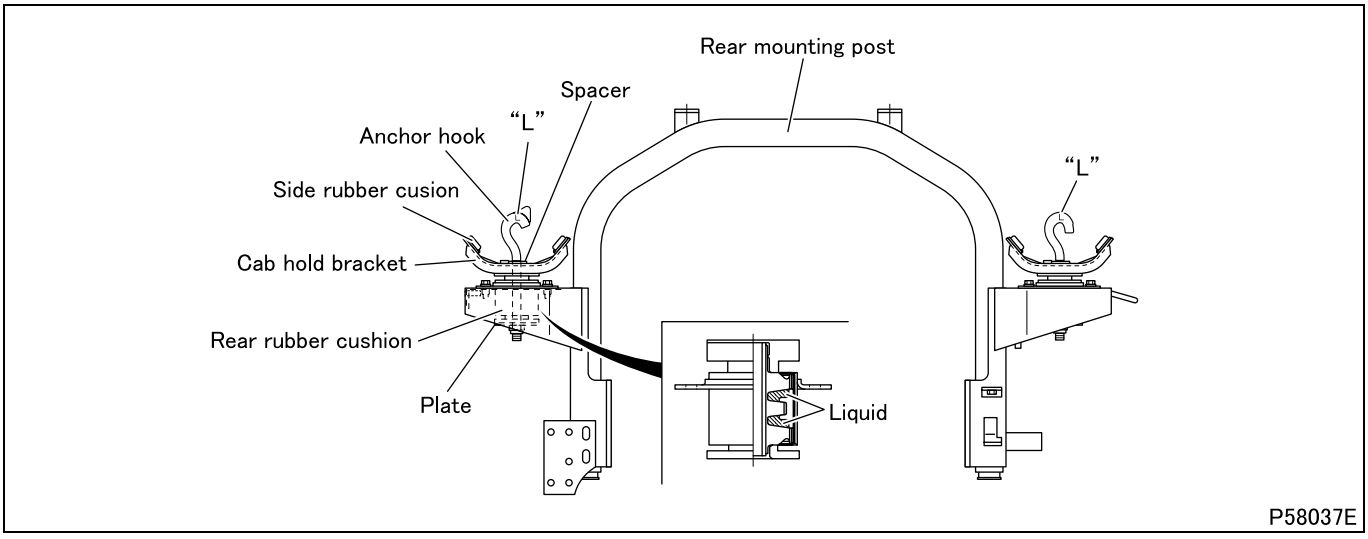
Item	Specifications
Type	Torsion bar type
Tilt angle	45°
Cab tilt lock	Manually operated hook type

1. Front Cab Mounting



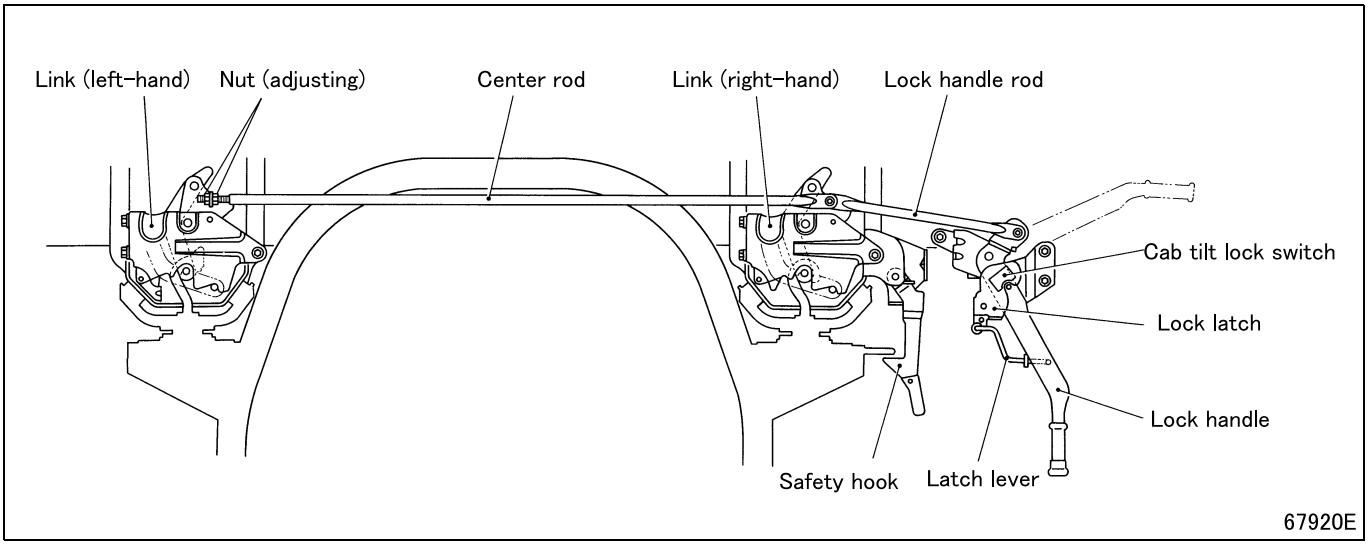
- The operating physical force for the cab tilt system can be adjusted using the adjusting bolt of the front mounting bracket. <Except crew cab>
- The front rubber cushion reduces the vibration and noise of the cab.

2. Rear Cab Mounting



- The operating physical force for the lock handle can be adjusted by increasing and decreasing the number of spacers provided between anchor hook and cab hold bracket.
- Rear mounting upper and lower rubber cushions reduce the vibration and noise of the cab.

3. Cab Tilt Link



- The length of center rod is adjustable with the adjusting nut.
- The cab tilt lock switch of the manual cab tilt system monitors the locking status of the lock handle.

M E M O

Cabs in general

Probable causes / Symptoms			Cab shimmy (vibration with pitching and rolling)	High-frequency vibration (above 20Hz) and noise in cab and steering wheel	Reference Gr
Cab-related problems	Front cab mounting	Front mounting bracket loose, play	O		
		Sagging of front rubber cushion		O	
	Center or rear cab mounting	Sagging of mounting rubber cushion		O	
	Cab improperly mounted			O	
Engine-related problems		Propeller shaft inclination angle excessive due to increased tilt angle caused by deteriorated engine mounting		O	Gr11
		Engine improperly mounted		O	
		Intake and exhaust system components improperly installed		O	Gr15
Transmission-related problem		Transmission improperly mounted		O	Gr22
Propeller shaft-related problems		Propeller shaft runout excessive		O	Gr25
		Universal joint excessively worn		O	
		Backlash excessive at slip yoke joint		O	
		Center bearing play excessive		O	
		Angle at propeller shaft joint excessive due to deteriorated center bearing rubber cushions or other causes		O	
		Angle at propeller shaft joint excessive due to increased tilt of drive axle caused by overloading		O	
Front axle-related problem		Sympathetic vibrations from axle seat	O		Gr26
Rear axle-related problems		Reduction gears in poor mesh		O	Gr27
		Differential gears in poor mesh		O	
Wheel and tire-related problems		Wheel and tire runout excessive	O		Gr31
		Wheels and tires out of balance	O		
		Use of tires different in size or type	O		
		Wheel mounting surface deformed	O		
Front suspension-related problem		Friction excessive between spring leaves	O		Gr33
Brake-related problems		Brake drum out of balance <Drum brake>	O		Gr35A
		Brake drum eccentric <Drum brake>	O		
		Disc brake rotor runout <Disc brake>	O		

Manual cab tilt system

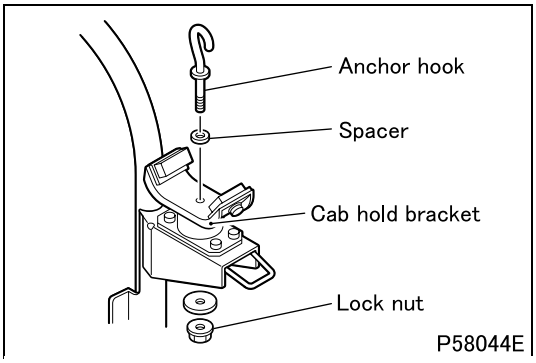
Symptoms / Probable causes	Cab fails to tilt up.	Cab cannot lock on rear mounting post.	Cab tilt warning lamp fails to come on.	Cab tilt warning lamp fails to go out.	Reference Gr
Main hook not released	O				
Safety hook not released	O				
Torsion bar damaged or fatigued	O				
Main hook does not engage with hook pin bracket		O			
Cab tilt lock switch poorly adjusted			O	O	
Cab tilt lock switch faulty			O	O	
Cab tilt warning lamp faulty			O		
Fuse or high current fuse blown			O		
Wiring open-circuited or improperly connected			O		

ON-VEHICLE INSPECTION AND ADJUSTMENT

1. Adjustment of Cab Tilt System

Tightening torque (Unit: N·m {ft.lbs, kgf·m})

Mark	Parts to be tightened	Tightening torque	Remarks
–	Lock nut (anchor hook fitting)	83 to 98 {61 to 72, 8.5 to 10}	–



(1) Adjustment of lock handle operating physical force

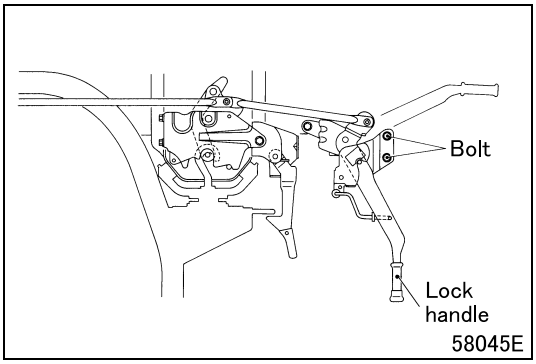
- Remove the lock nut, then remove the anchor hook.
- Adjust the operating physical force increasing or decreasing the number of spacers between anchor hook and cab hold bracket as follows.

	Number of spacers
If lock handle feels too heavy	Increase
If lock handle feels too light	Decrease

- After adjustment, tighten the lock nut to the specified torque.

CAUTION ⚠

- **If the lock handle feels too light, it is an indication that the handle could be easily unlocked by the vibration of the running vehicle. In such a case, there is a possibility that the cab tilt lock switch does not respond and the tilt warning lamp is lit.**

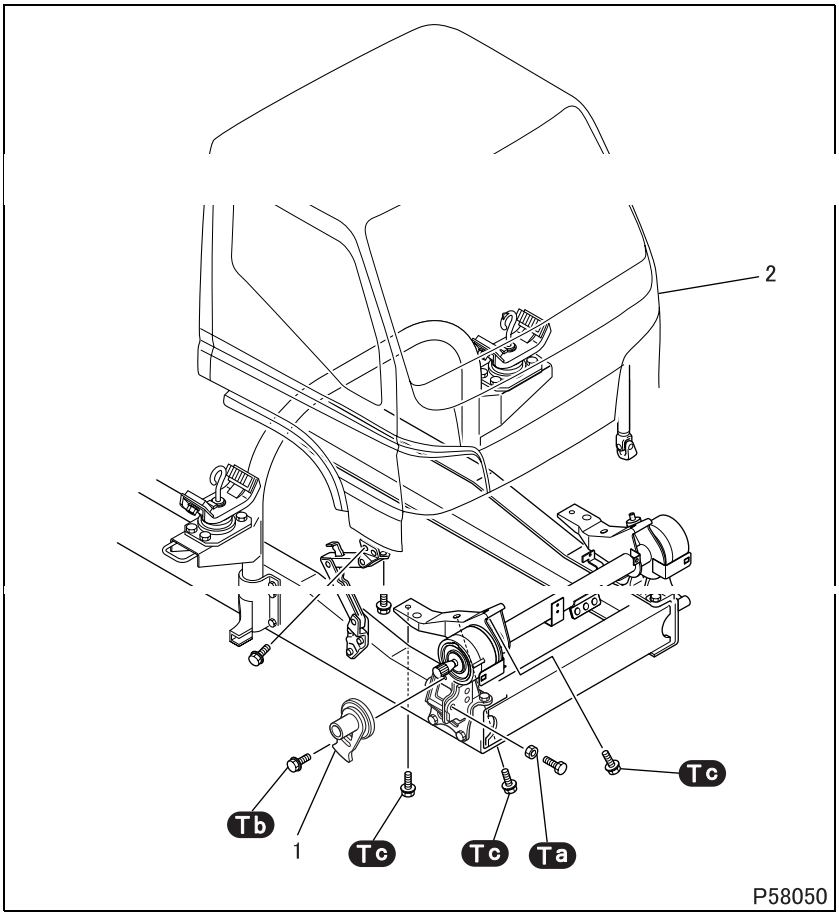


(2) Adjustment of latch

- If the latch resists, loosen bolts and adjust the installed position of the lock handle using bolt slot.
- After adjustment, retighten the bolts.

M E M O

REMOVAL AND INSTALLATION OF CAB



● Removal sequence

1 Anchor lever
2 Cab

CAUTION ⚠

- **During removal and installation of the cab, the parking brake is not available for holding the vehicle at a standstill. Therefore, be sure to apply chocks to the tires to ensure that the vehicle does not move.**
- **Never remove the chocks until all the operations are completed.**
- **Disconnect all cables, hoses and wires before removal and installation of the cab.**

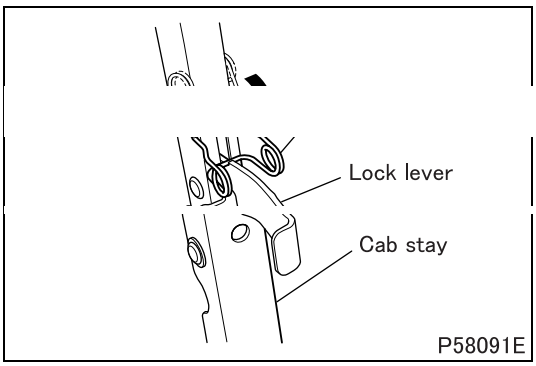
● Installation sequence

Follow the removal sequence in reverse.

Tightening torque (Unit: N·m {ft.lbs, kgf·m})

Mark	Parts to be tightened	Tightening torque	Remarks
Ta	Lock nut (anchor lever adjusting bolt locking)	59 to 83 {43 to 61, 6 to 8.5}	–
Tb	Bolt (anchor lever attaching)	34 to 54 {25 to 40, 3.5 to 5.5}	–
Tc	Bolt (cab mounting)	70 to 95 {51 to 70, 7.1 to 9.7}	–

◆Removal procedure◆

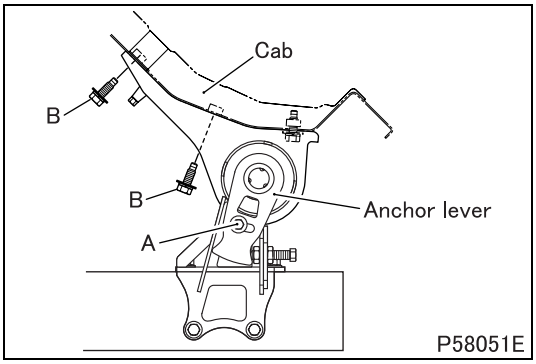


■ Removal: Cab

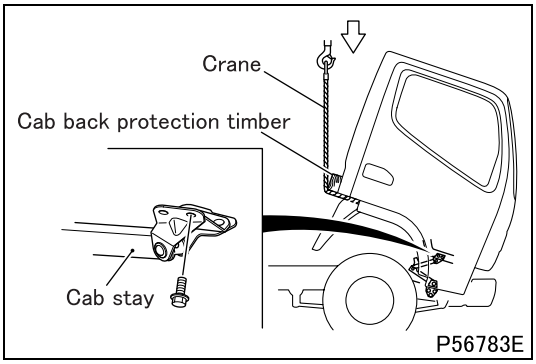
- Tilt the cab to securely lock the cab stay.

WARNING ⚠

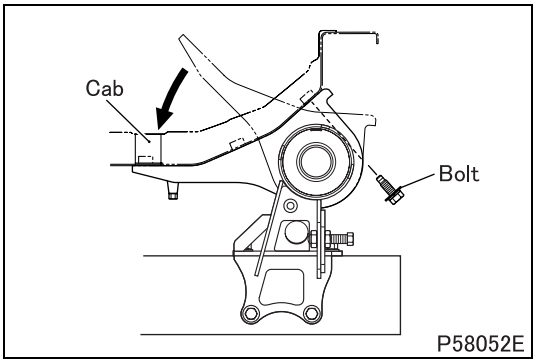
- **Be sure to fit the stopper onto the lock lever to lock the cab stay.**



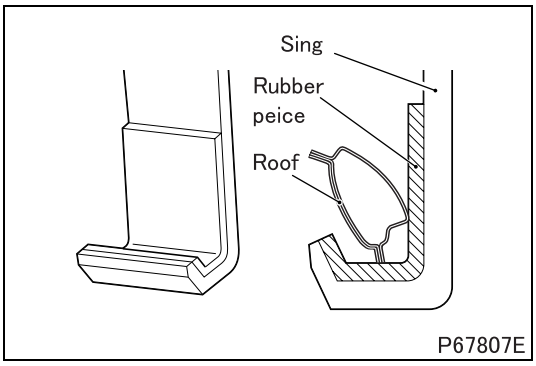
- Remove the bolt **A**, then detach the anchor lever.
- Remove the bolts **B** holding the cab in place.



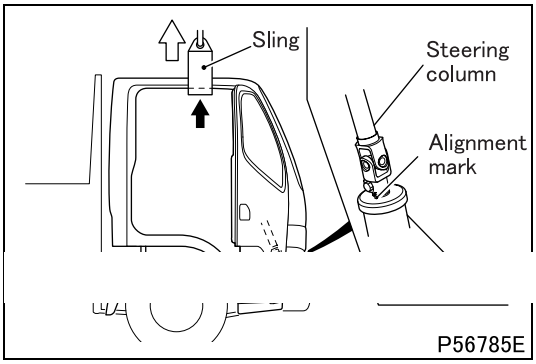
- Supporting the tilted cab with the crane, remove the cab stay.



- Lower the cab all the way, then remove bolt.



- Make available a sling rigid enough to carry the weight of the cab.
- The hook portion of the sling must be lined with a rubber piece as shown to prevent deformation of the roof of the cab.



- Hook the sling on the cab roof as shown, then hoist the cab a little to see if it maintains level (balanced at the center of gravity).
- Provide alignment marks on the power steering gear **C** and steering column, then separate the steering column.
- To prevent the steering column from falling off, tie it securely to the cab using a rigid cord.
- Lift off the cab straight.

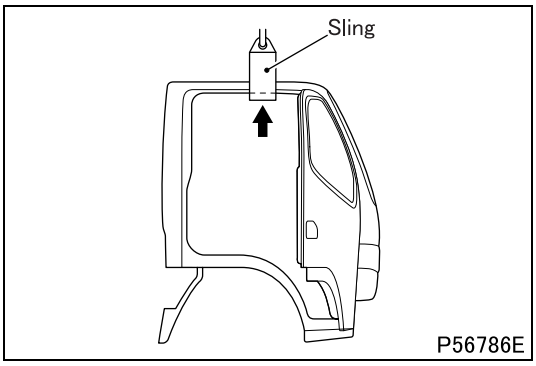
WARNING ⚠

- **While the cab is up in the air, be sure to stay out from under it.**

CAUTION ⚠

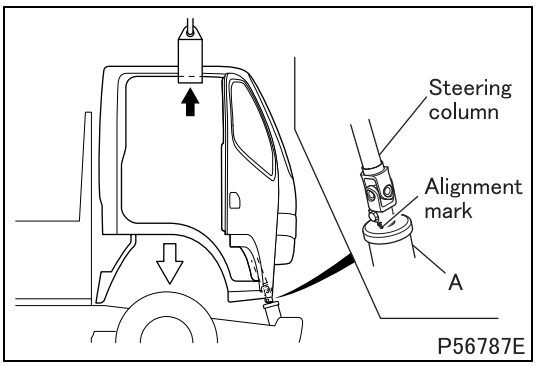
- **Before lifting the cab, check to ensure that cables, hoses, wires, etc. have been all disconnected.**

◆Installation procedure◆

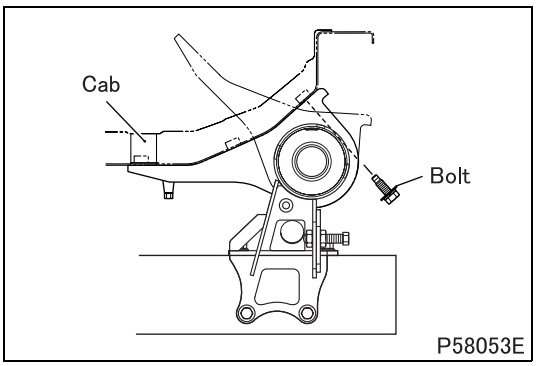


■ Installation: Cab

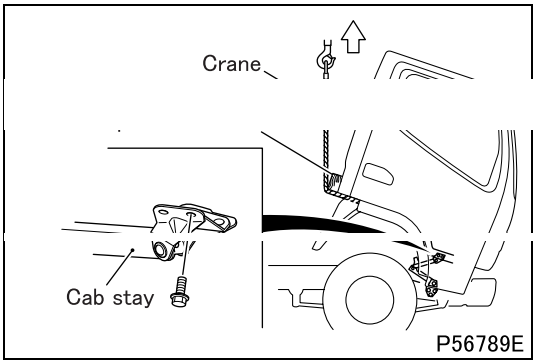
- Hook the sling at center-of-gravity points on both sides of the cab roof, and lift the cab.



- Slowly lower the cab halfway.
- Join the power steering gear **A** and steering column together in accordance with the alignment marks.



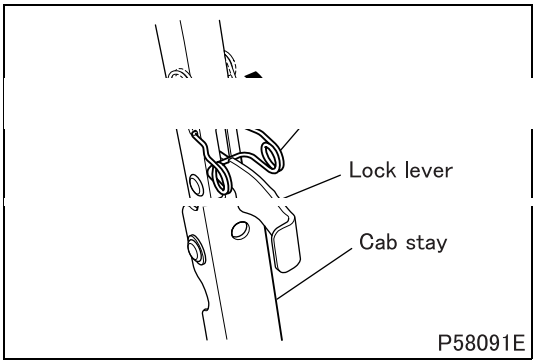
- Further lower the cab slowly to mount in position, then unhook the sling.
- Tighten mounting bolts to specified torque.



- Before tilting, support the cab using the crane.
- Tilt the cab with the crane, and install the cab stay.

WARNING ⚠

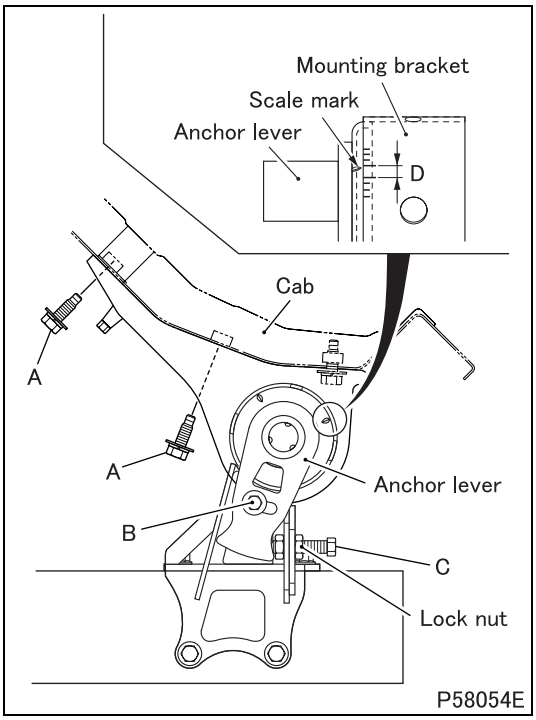
- **Be careful not to tilt the cab more than necessary. Doing so is extremely dangerous because it causes the cab to fall down forward.**



- After the cab stay is installed, tilt the cab to securely lock the cab stay. Then, remove the crane from the cab.

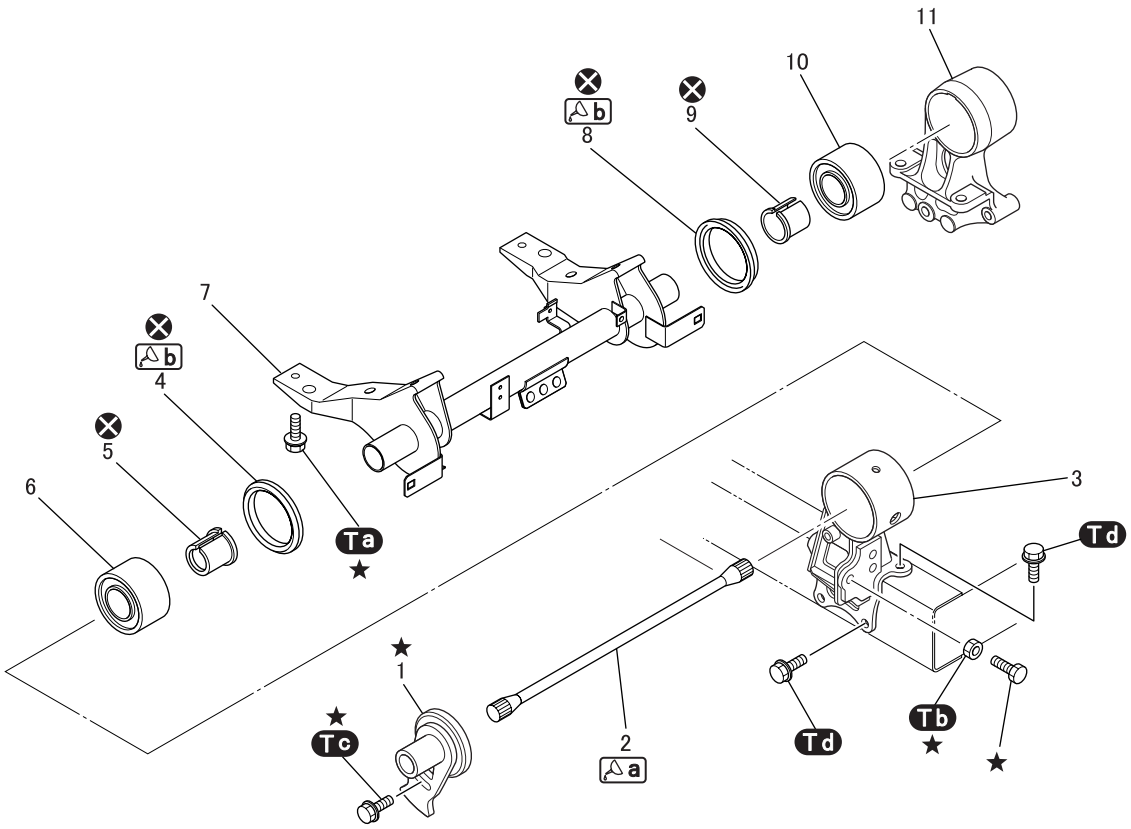
WARNING ⚠

- **Be sure to fit the stopper onto the lock lever to lock the cab stay.**



- Tighten the bolt **A** to specified torque.
- Align the graduated line of the anchor lever to the illustrated range of **D** (long division) of the scale graduated on the mounting bracket, then install the bolt **B** handtight.
- Tighten the bolt **C** to turn the anchor lever 5 degrees (one short division of the scale on the mounting bracket), then tighten the lock nut to specified torque.
- Tighten the handtight bolt **B** to specified torque.

FRONT CAB MOUNTING



Parts marked with ★ are to be installed while the cab assembly is mounted.
Assemble them by reference to the removal and installation procedures for cab assembly.

P103547E

● Disassembly sequence

1 Anchor lever
2 Torsion bar
3 Side cushion
4 Bushing
5 Front rubber cushion
6 Front mounting bracket, right-hand
7 Front mounting bracket, left-hand
8 Front floor cross member

⊗: Non-reusable parts

● Assembly sequence

Follow the disassembly sequence in reverse.

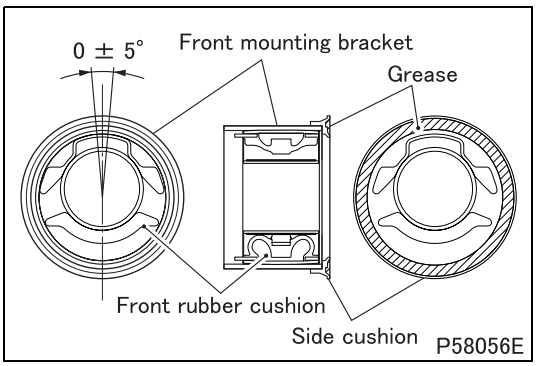
Tightening torque (Unit: N·m {ft.lbs, kgf·m})

Mark	Parts to be tightened	Tightening torque	Remarks
Ta	Bolt (cab mounting)	70 to 95 {51 to 70, 7.1 to 9.7}	–
Tb	Nut (anchor lever adjusting bolt tightening)	59 to 83 {43 to 61, 6 to 8.5}	–
Tc	Bolt (anchor lever attaching)	34 to 54 {25 to 40, 3.5 to 5.5}	–
Td	Bolt (front mounting bracket attaching)	200 to 270 {145 to 200, 20 to 28}	–

Lubricant and/or sealant

Mark	Points of application	Specified lubricant and/or sealant	Quantity
a	Both serrated end portions of torsion bar	Wheel bearing grease [NLGI No. 2 (Li soap)]	As required
b	Front floor cross member contact surface of side cushion	Rubber Grease	As required

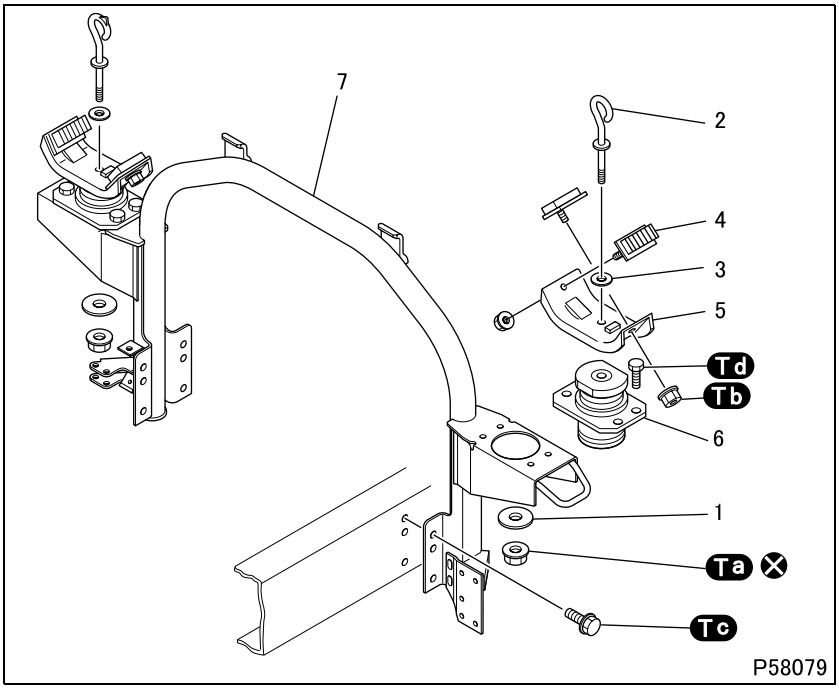
◆Installation procedure◆



■Installation: Side rubber cushion and front rubber cushion

- Fit the front rubber cushion to the front mounting bracket at an angle within the illustrated range.
- After installing the front rubber cushion, fit the side rubber cushion to it and fill grease in the side rubber cushion as shown.

REAR CAB MOUNTING



● Disassembly sequence

1 Plate
2 Anchor hook
3 Spacer
4 Side rubber cushion
5 Cab hold bracket
6 Rear lower rubber cushion
7 Rear mounting post

⊗: Non-reusable parts

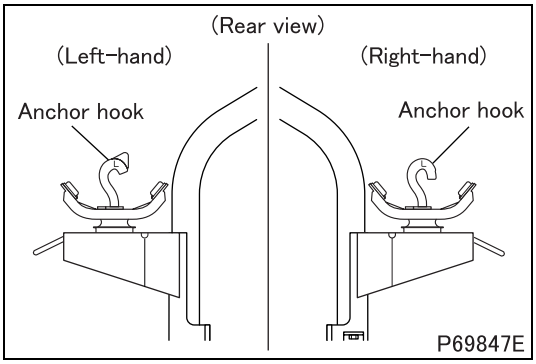
● Assembly sequence

Follow the disassembly sequence in reverse.

Tightening torque (Unit: N·m {ft.lbs, kgf·m})

Mark	Parts to be tightened	Tightening torque	Remarks
Ta	Lock nut (anchor hook attaching)	83 to 98 {61 to 72, 8.5 to 10}	–
Tb	Nut (side rubber cushion attaching)	10 to 15 {7.4 to 11, 1.0 to 1.5}	–
Tc	Bolt (rear mounting post attaching)	78 to 108 {5.8 to 80, 8 to 11}	–
Td	Bolt (rear rubber cushion attaching)	16 to 20 {12 to 14, 1.6 to 2}	–

◆Installation procedure◆

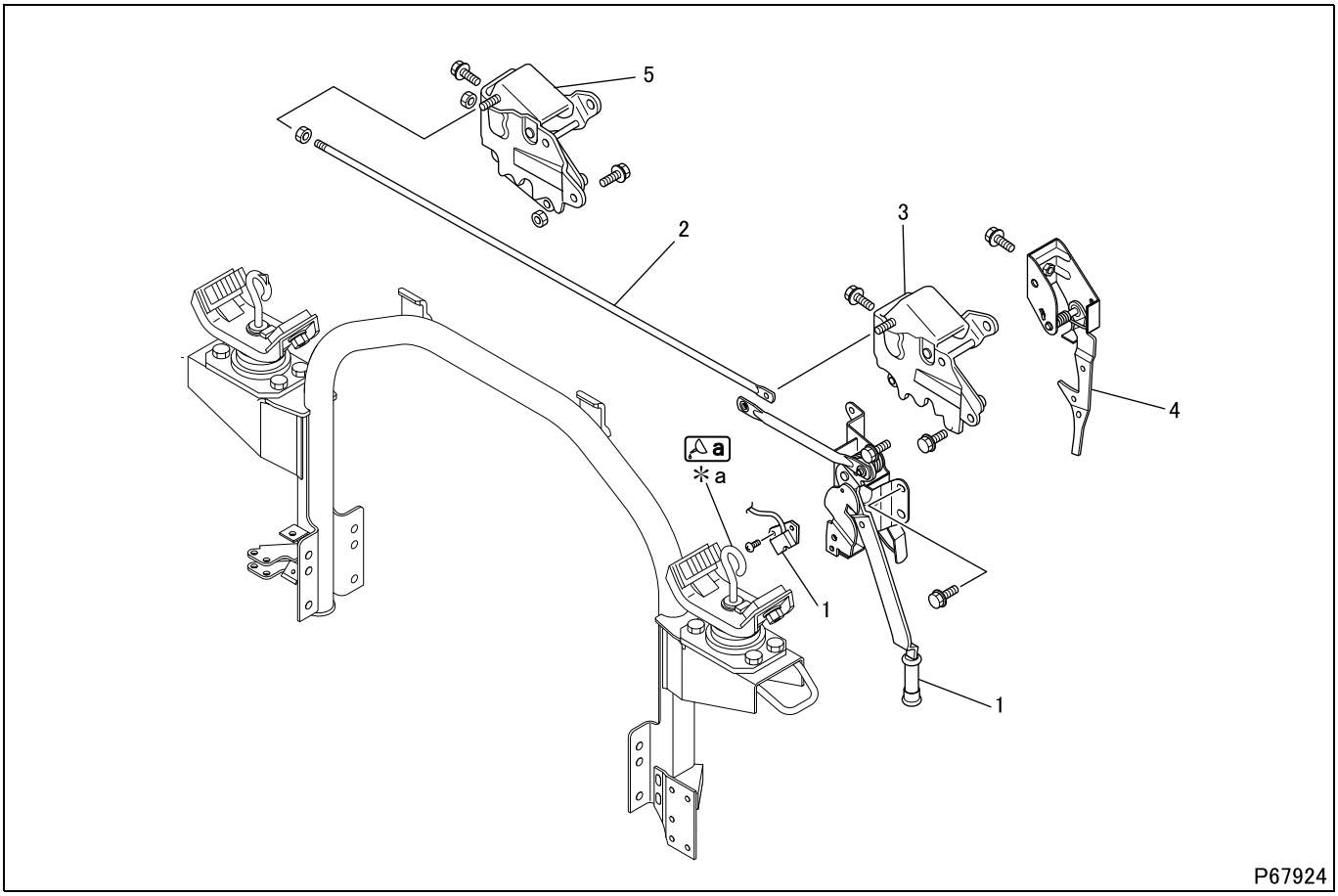


■ Installation: Anchor hook

- Fit the anchor hooks to the rear mounting post oriented as shown in the illustrations.

M E M O

CAB TILT LINK



● **Disassembly sequence**

1 Lock handle
2 Center rod
3 Link (right-hand)
4 Safety hook
5 Link (left-hand)

***a**: Anchor hook

● **Assembly sequence**

Follow the disassembly sequence in reverse.

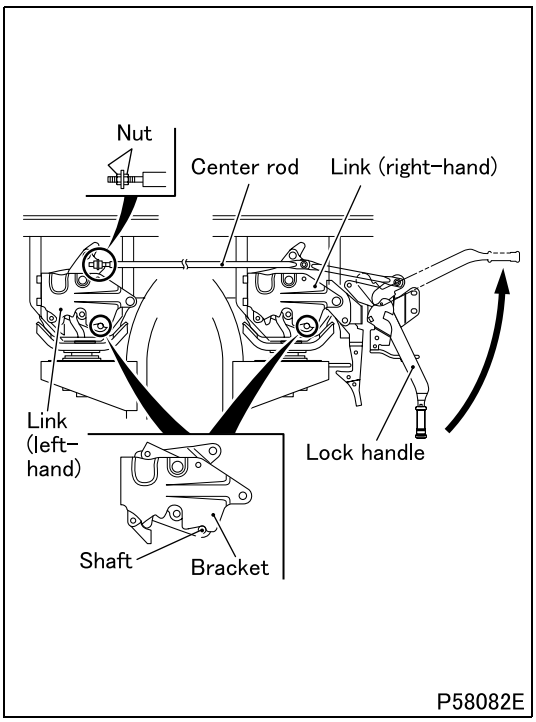
CAUTION ⚠

- **After assembly, adjust the lock handle operating physical force. (See ON-VEHICLE INSPECTION AND ADJUSTMENT.)**

Lubricant and/or sealant

Mark	Points of application	Specified lubricant and/or sealant	Quantity
a	Contact of link (right-hand) of anchor hook	Chassis grease [NLGI No. 1 (Li soap)]	As required

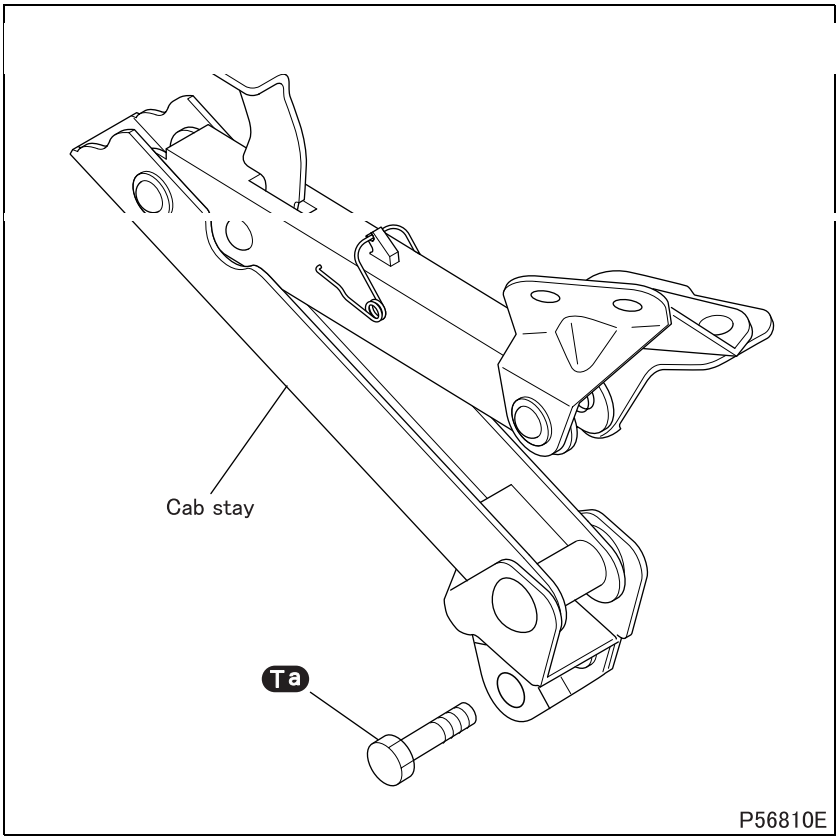
◆Installation procedure◆



■Installation: Center rod

- Operate the lock handle in the illustrated direction to unlock the left-hand and right-hand links.
- Adjust the center rod nut to bring the shafts of left-hand and right-hand links into contact with brackets.

CAB STAY



WARNING ⚠

- **Before removing the cab stay, be sure to support the cab with a crane or the like so that it does not fall during work.**

Tightening torque (Unit: N·m {ft. lbs, kgf·m})

Mark	Parts to be tightened	Tightening torque	Remarks
Ta	Bolt (cab stay mounting)	59 to 78 {43 to 58, 6 to 8}	–