GROUP 42 INDEX

SPECIFICATIONS

Cab

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

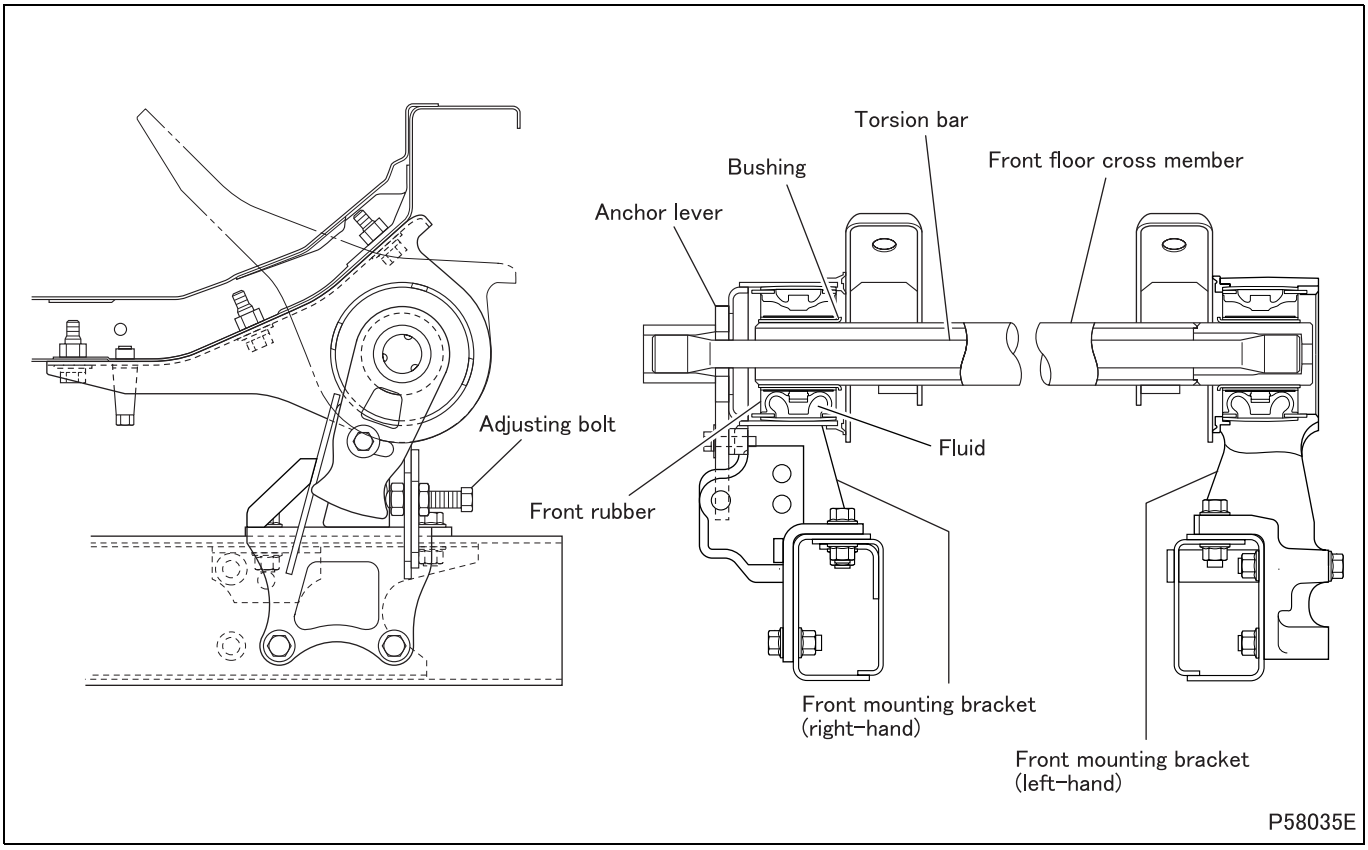
Cab Mounting

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

Cab Tilt System

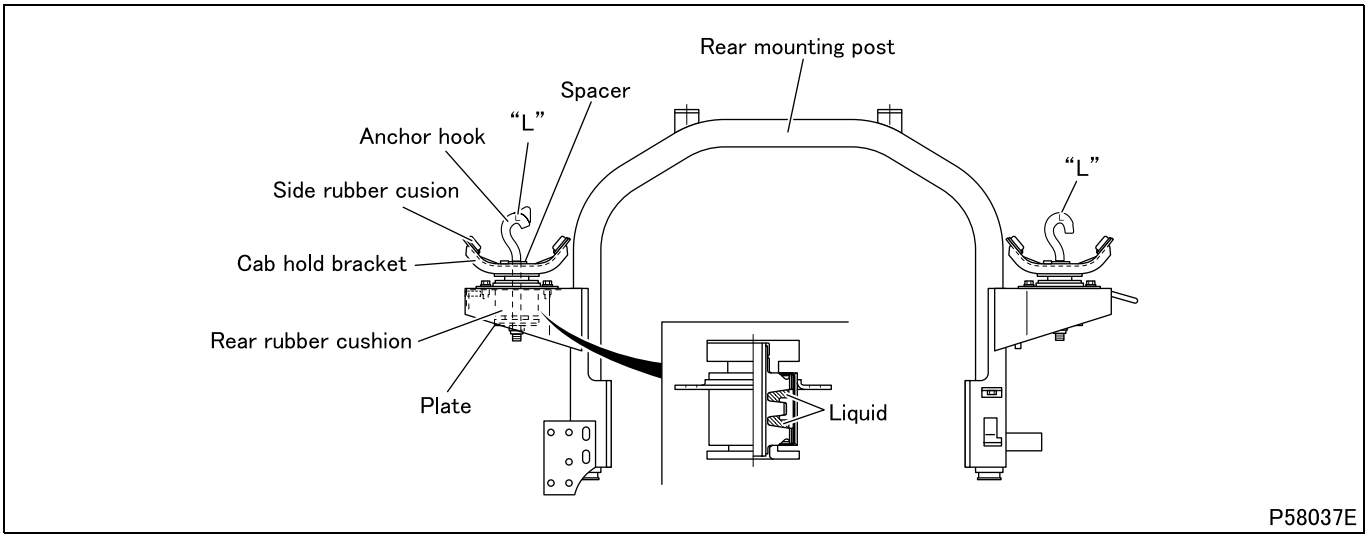
Item	Specifications
Type	Torsion bar type
Tilt angle	45°
Cab tilt lock	Manually operated hook type

1. Front Cab Mounting



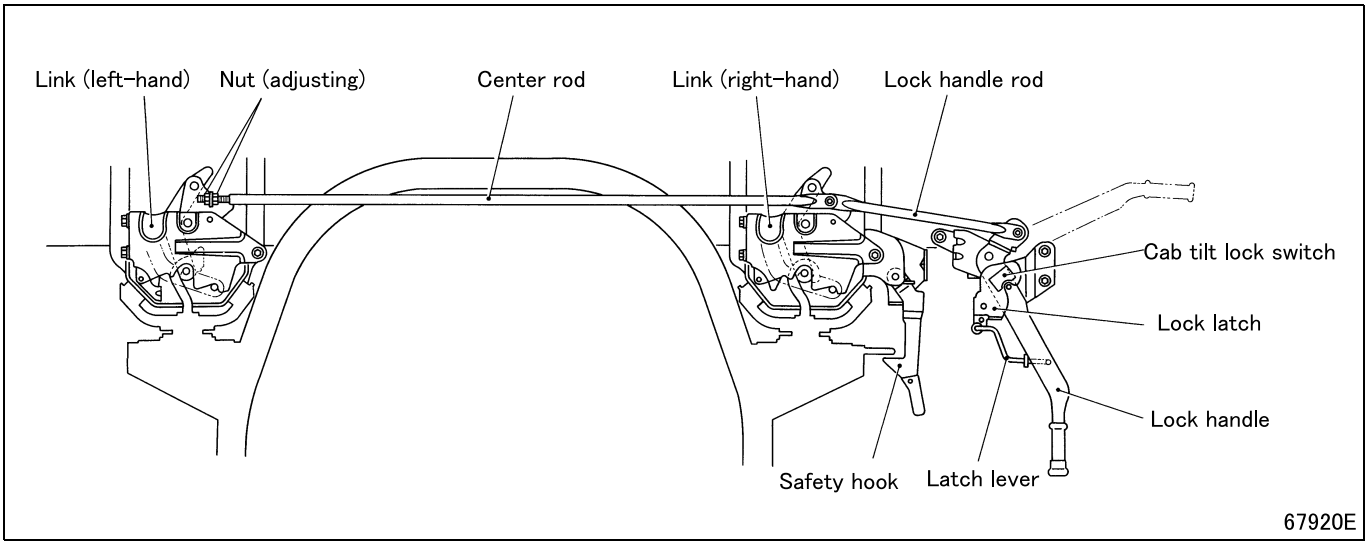
- The cab tilt system can be adjusted using the adjusting bolt on the front mounting bracket.
- The front rubber cushion reduces vibration and noise in the cab.

2. Rear Cab Mounting



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

3. Cab Tilt Link



- The length of the center rod can be changed using the adjusting nut.
- The cab tilt lock switch 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

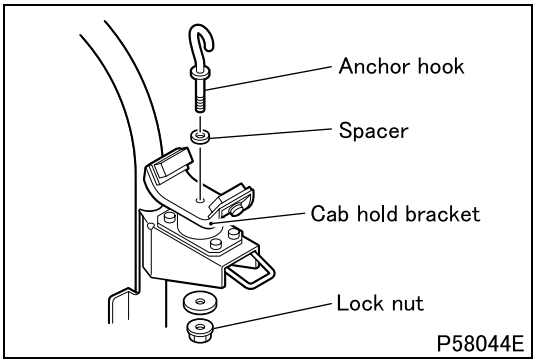
Symptoms / Probable causes	Cab fails to tilt up.	Cab cannot lock on rear mounting post.	Cab tilt warning lamp fails to come on.	Cab tilt warning lamp fails to go out.	Reference Gr
Main hook not released	O				
Safety hook not released	O				
Torsion bar damaged or fatigued	O				
Main hook does not engage 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 or improperly connected			O		

ON-VEHICLE INSPECTION AND ADJUSTMENT

1. Adjustment of Cab Tilt System

Torque: N·m {lbf·ft}

Mark	Fastener	Torque value	Remarks
–	Lock nut (anchor hook fitting)	83 to 98 {61 to 72}	–



(1) Adjustment of lock handle

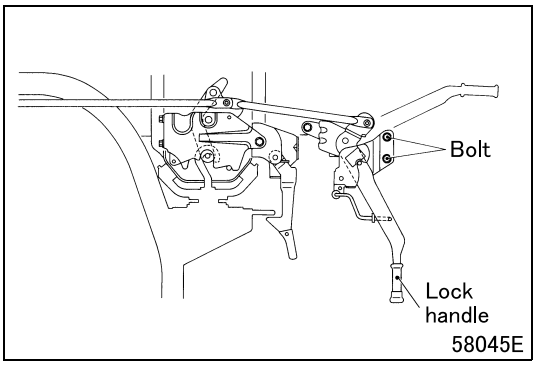
- Remove the lock nut, then remove the anchor hook.
- To adjust the lock handle, increase or decrease the number of spacers between the anchor hook and the cab hold bracket as follows.

	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.
- Turn ON the ignition switch and make sure the cab tilt warning does not illuminate. If the cab tilt warning illuminates, the cab is not properly locked down.

WARNING ⚠

- **If the lock handle feels too light, it could easily be unlocked by the vibration of the running vehicle, possibly causing an injury accident.**

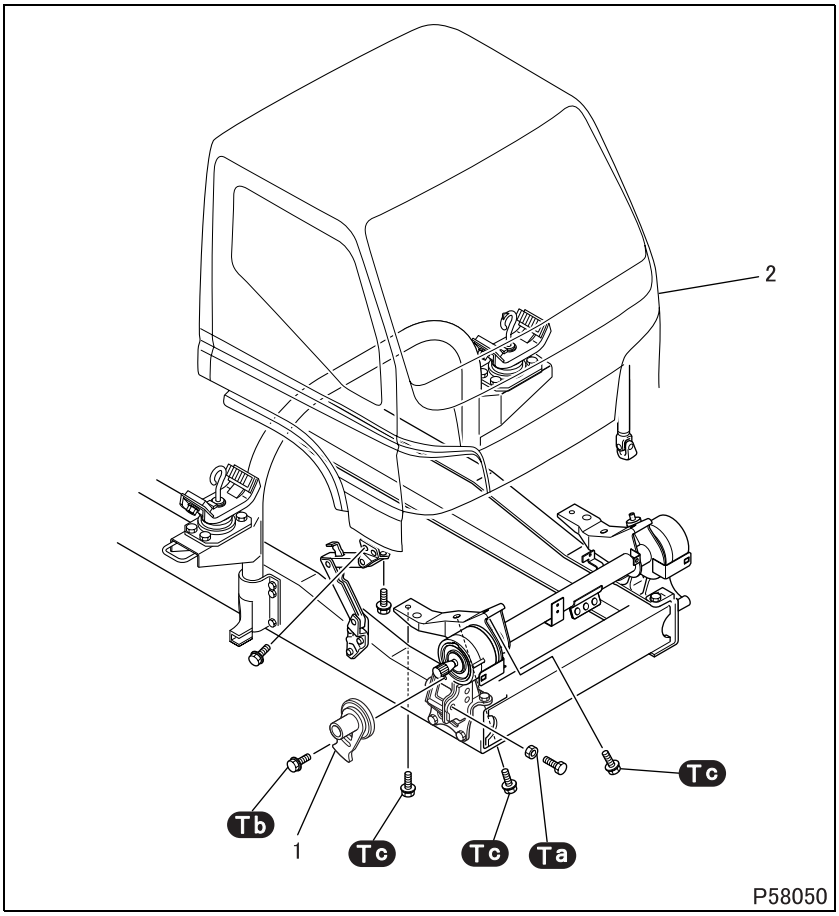


(2) Adjustment of latch

- If the latch sticks, loosen the bolts and use the bolt slot to adjust the lock handle.
- After adjustment, retighten the bolts.

M E M O

REMOVAL AND INSTALLATION OF CAB



● Removal sequence

1 Anchor lever
2 Cab

CAUTION ⚠

- **To prevent possible personal injury, chock all the tires, fore and aft, to ensure that the vehicle does not move. Leave the chocks in place until the cab installation is completed and the parking brake is set.**
- **To prevent damage, ensure that all cables, hoses, wires, etc. have been all disconnected before lifting the cab.**

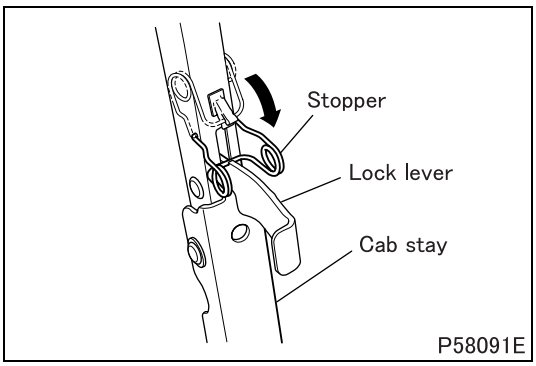
● Installation sequence

Follow the removal sequence in reverse.

Torque: N·m {lbf·ft}

Mark	Fastener	Torque value	Remarks
Ta	Lock nut (anchor lever adjusting bolt locking)	59 to 83 {43 to 61}	–
Tb	Bolt (anchor lever attaching)	34 to 54 {25 to 40}	–
Tc	Bolt (cab mounting)	100 to 120 {74 to 89}	–

◆Removal procedure◆

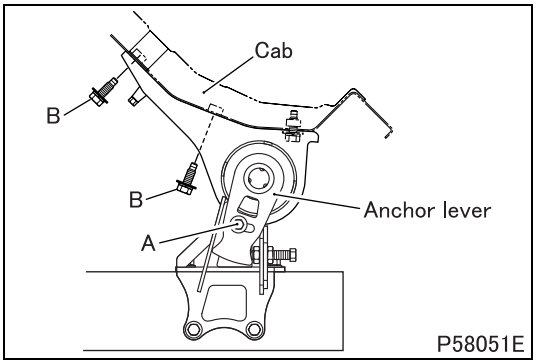


■ Removal: Cab

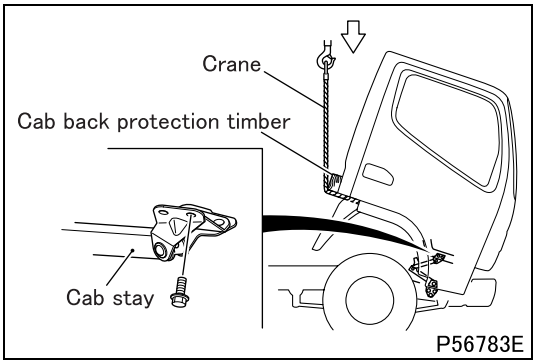
- Tilt the cab and securely lock the cab stay.

WARNING ⚠

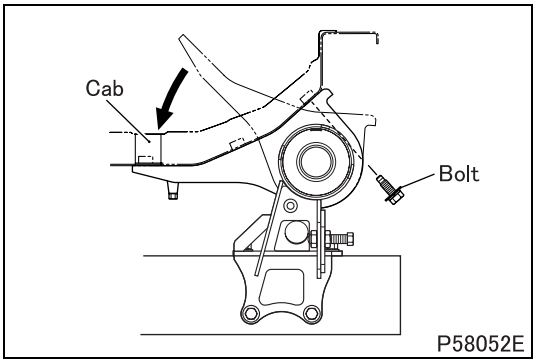
- **Be sure to fit the stopper (hold-down) into the notch in the lock lever to prevent the cab from dropping, which could cause a personal injury.**



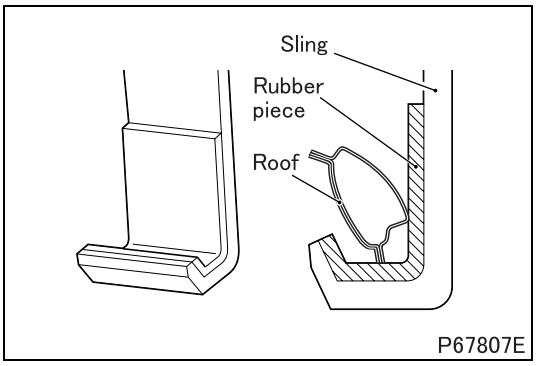
- Remove bolt **A**, then detach the anchor lever.
- Remove bolts **B** that hold the cab in place.



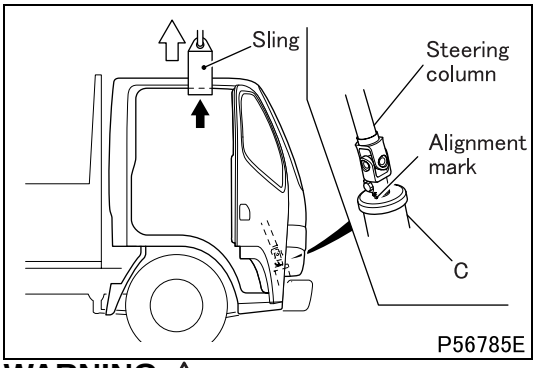
- Supporting the tilted cab with the crane, remove the cab stay.



- Lower the cab all the way, then remove the 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 onto the cab roof as shown. Hoist the cab a little to see if it remains level (balanced on its center of gravity).
- Provide alignment marks on the power steering gear at location **C** and on the steering column.
- Disconnect the steering column and tie it securely to the cab using a rigid cord.
- Lift off the cab straight.

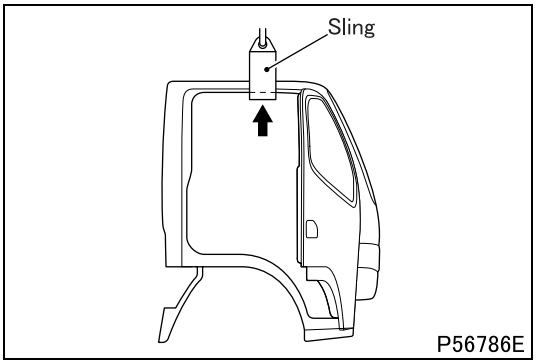
WARNING ⚠

- **Do not allow anyone to walk or stand underneath a cab suspended on a lifting device. If the cab were to drop, it could cause a severe personal injury.**

CAUTION ⚠

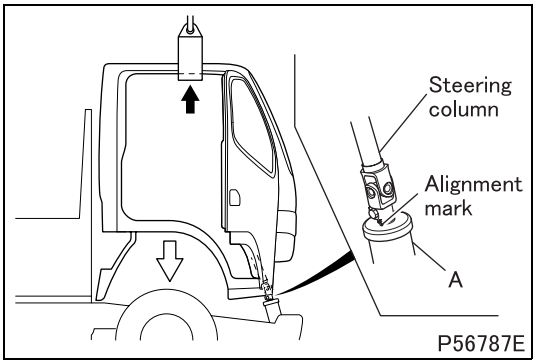
- **To prevent damage, ensure that all cables, hoses, wires, etc. have been all disconnected before lifting the cab.**

◆Installation procedure◆

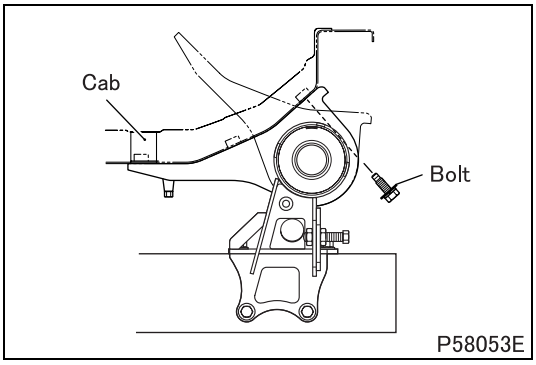


■ Installation: Cab

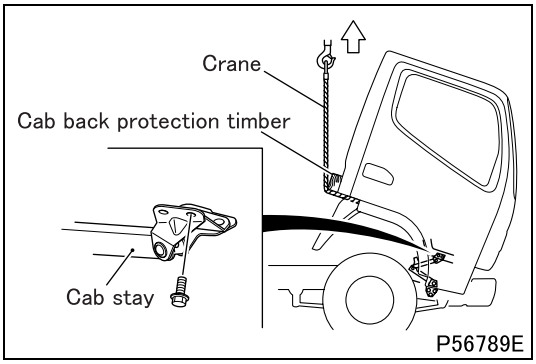
- Hook the sling at center-of-gravity points on both sides of the cab roof, and lift the cab.



- 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 the mounting bolts to specified torque.

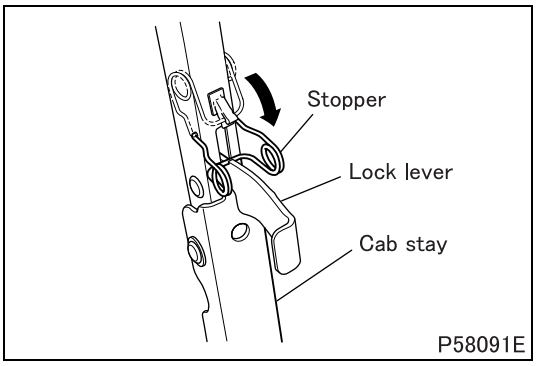


- Before tilting, support the cab using the crane.

Tilt the cab with the crane, and install the cab stay.

WARNING ⚠

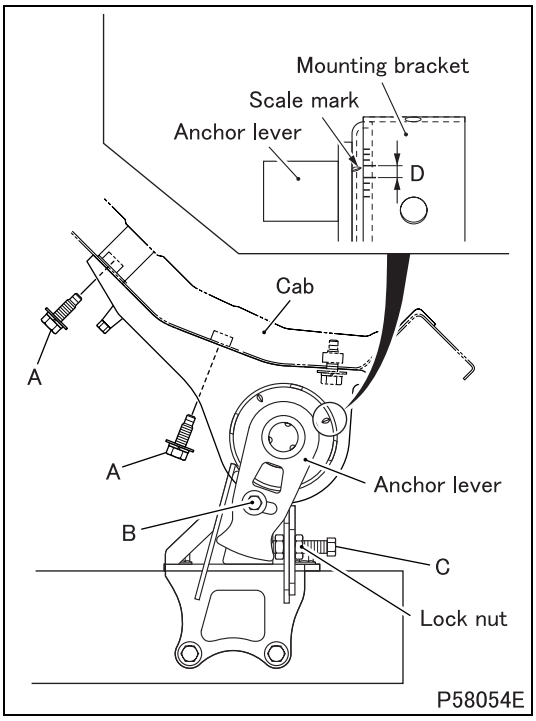
- **Be careful not to tilt the cab more than necessary. The cab can drop suddenly, causing a personal injury.**



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

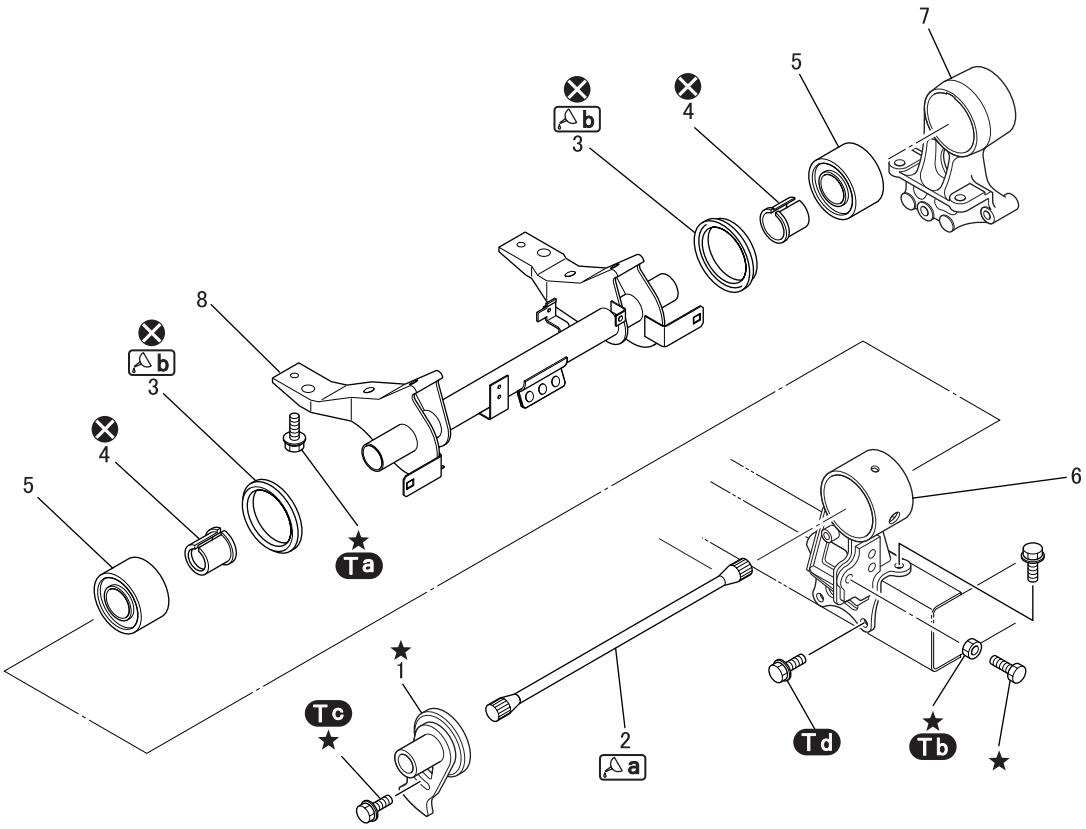
WARNING ⚠

- **Be sure to fit the stopper (hold-down) into the notch in the lock lever to prevent the cab from dropping, which could cause a personal injury.**



- Tighten bolt **A** to the specified torque.
- Align the mark on the anchor lever to the illustrated range of **D** (large division) of the scale graduated on the mounting bracket, then install bolt **B** finger-tight.
- After contacting Bolt C with the anchor lever, tighten bolt C by 10 mm {0.39 in.} (six and two-third turns).
- Tighten the lock nut to specified torque.
- Tighten bolt **B** to the 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 of cab.

P58055E

● 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.

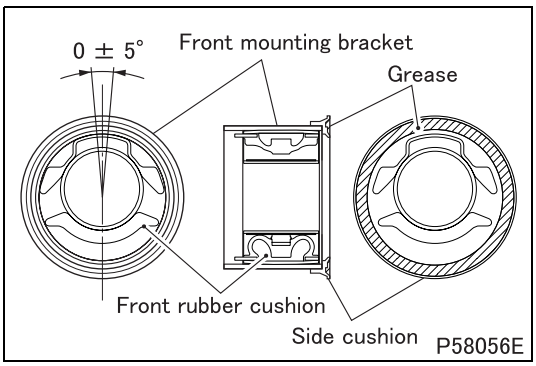
Torque: N·m {lbf·ft}

Mark	Fastener	Torque value	Remarks
Ta	Bolt (cab mounting)	100 to 120 {74 to 89}	–
Tb	Nut (anchor lever adjusting bolt tightening)	59 to 83 {43 to 61}	–
Tc	Bolt (anchor lever attaching)	34 to 54 {25 to 40}	–
Td	Bolt (front mounting bracket attaching)	200 to 270 {145 to 200}	–

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

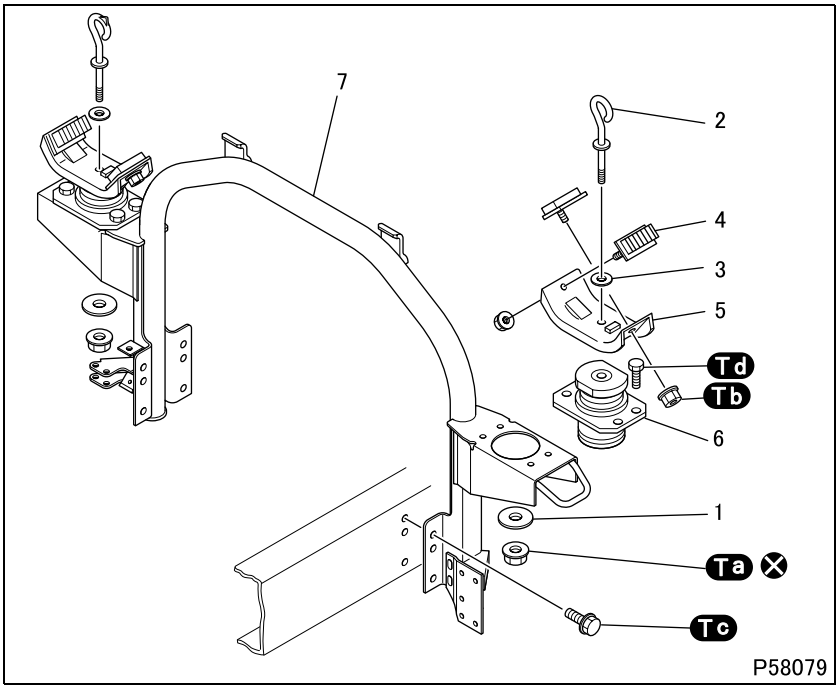
◆Installation procedure◆



■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 the side rubber cushion with grease 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

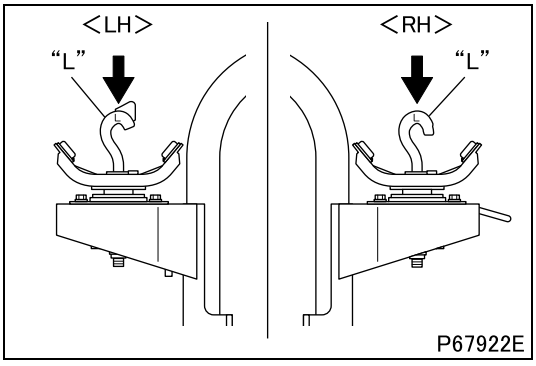
● Assembly sequence

Follow the disassembly sequence in reverse.

Torque: N·m {lbf·ft}

Mark	Fastener	Torque value	Remarks
Ta	Lock nut (anchor hook attaching)	83 to 98 {61 to 72}	–
Tb	Nut (side rubber cushion attaching)	10 to 15 {7.4 to 11}	–
Tc	Bolt (rear mounting post attaching)	78 to 108 {5.8 to 80}	–
Td	Bolt (rear rubber cushion attaching)	16 to 20 {12 to 14}	–

◆Installation procedure◆

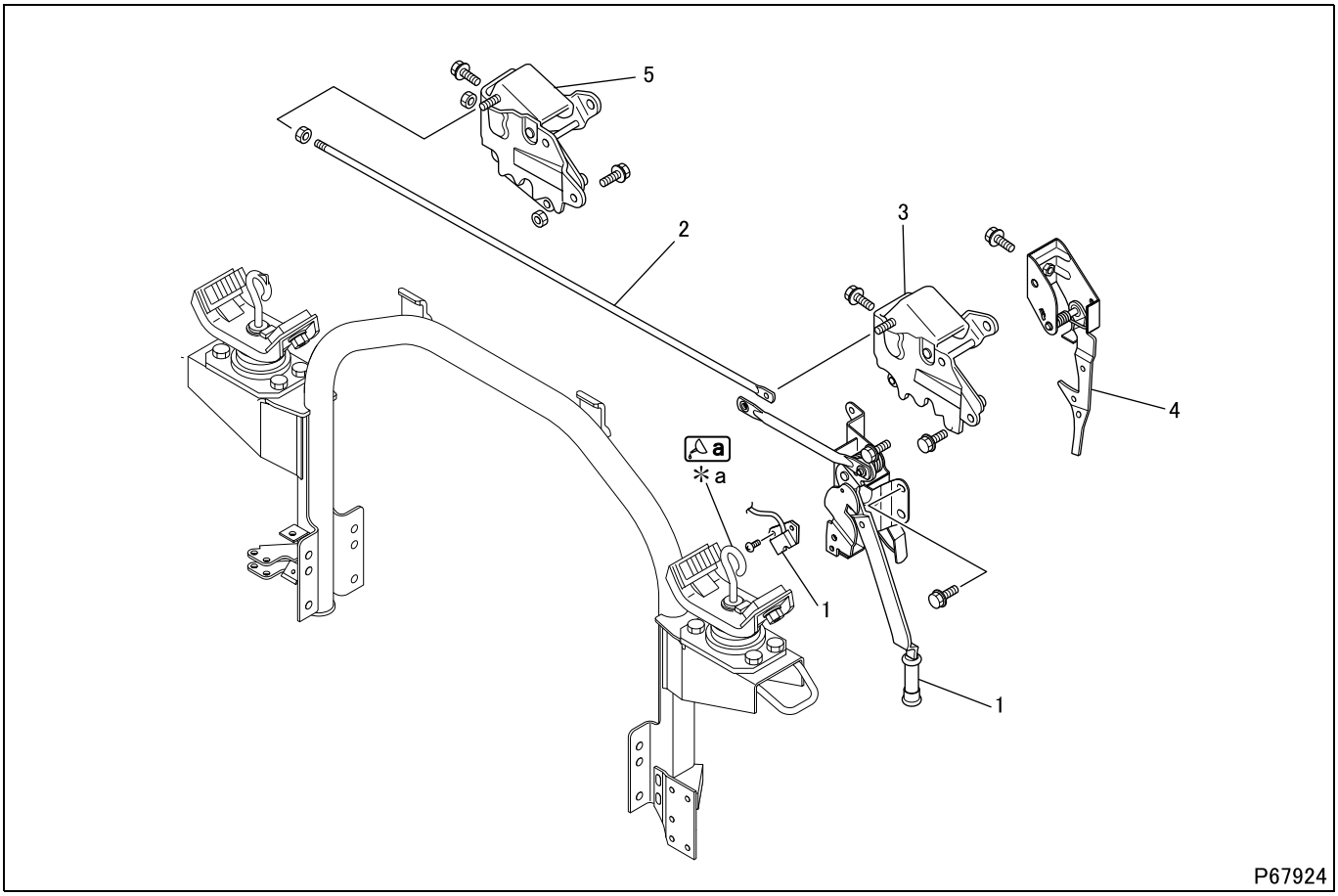


■ Installation: Anchor hook

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

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.

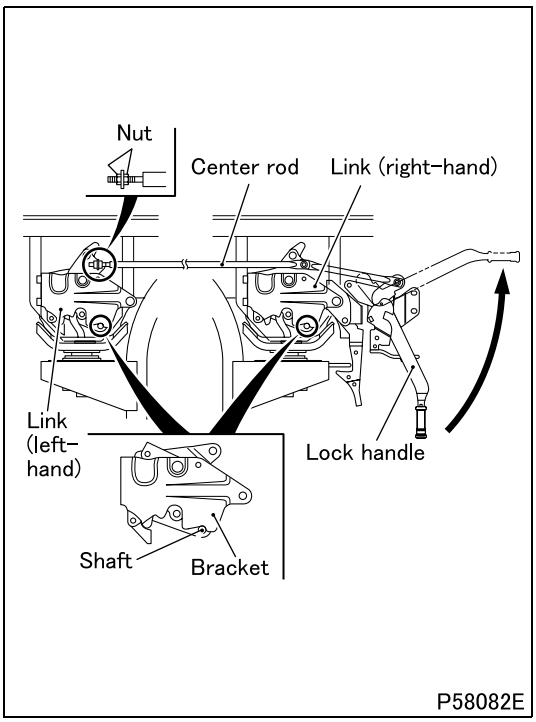
CAUTION ⚠

- **After assembly, adjust the lock handle. (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

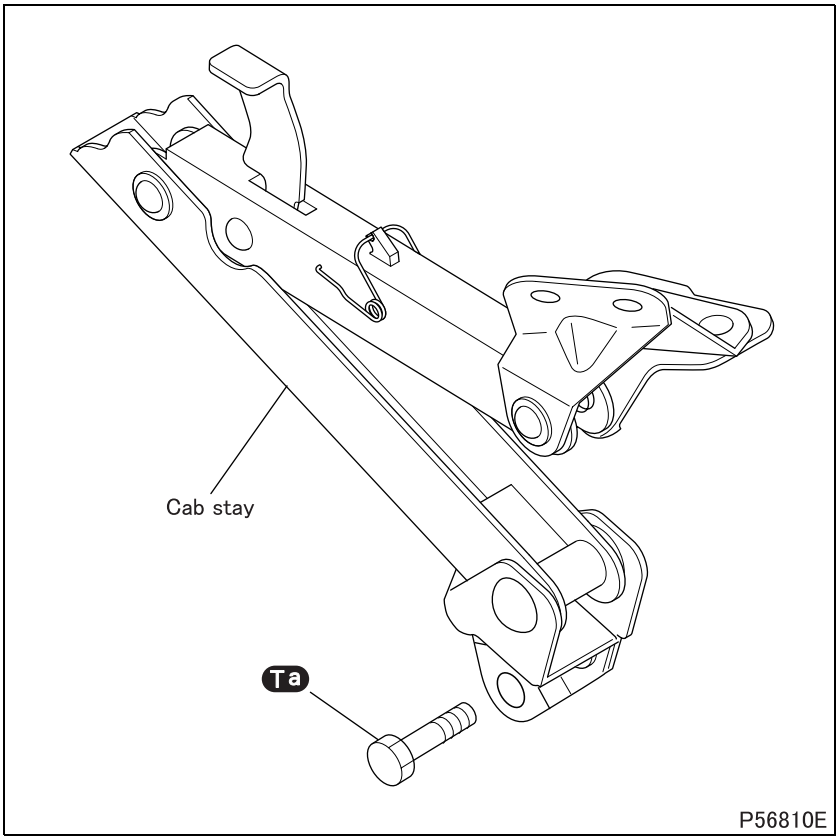
◆Installation procedure◆



■Installation: Center rod

- Operate the lock handle in the direction shown in the illustration 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 equivalent, to prevent the cab from dropping.**

Torque: N·m {lbf·ft}

Mark	Fastener	Torque value	Remarks
Ta	Bolt (cab stay mounting)	59 to 78 {43 to 58}	–