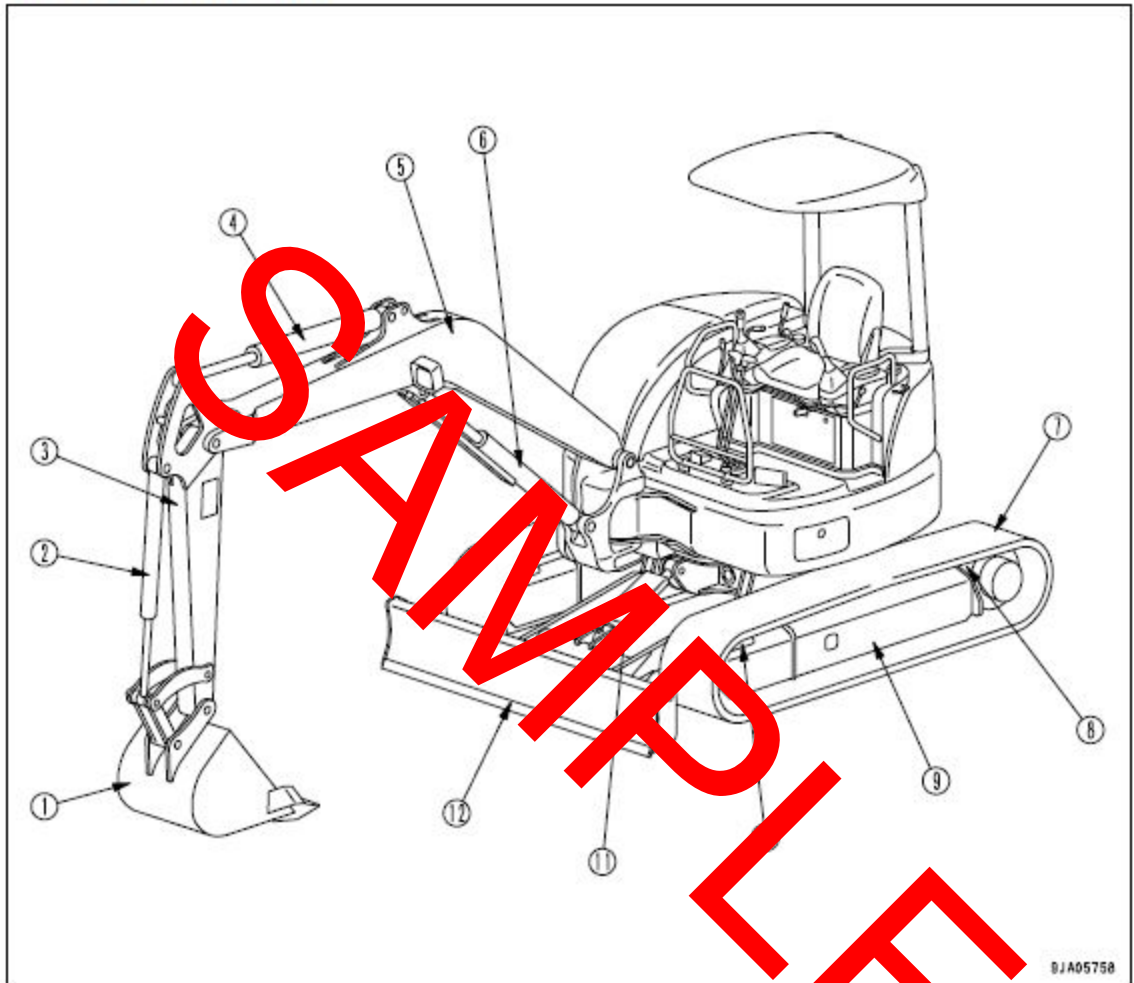


MACHINE VIEW ILLUSTRATIONS

OVERALL MACHINE VIEW



- (1) Bucket
- (2) Bucket cylinder
- (3) Arm
- (4) Arm cylinder
- (5) Boom
- (6) Boom cylinder

- (7) Track shoe
- (8) Sprocket
- (9) Track frame
- (10) Idler
- (11) Blade cylinder
- (12) Blade

DJA05758

NOTICE

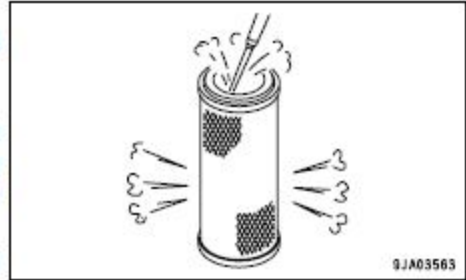
The inner element must not be used again even after cleaning. When replacing the outer element, replace the inner element at the same time.

5. Direct dry compressed air (Max. 0.69 MPa (7 kg/cm², 99.4 PSI)) from the inside of the outer element along its folds. Then direct the compressed air from the outside along the folds, and again from the inside.

1) Replace the outer element which has been cleaned 5 times repeatedly or used throughout a year. Replace the inner element at the same time.

2) Even if the outer element has not been cleaned 5 times, if the dust indicator immediately displays red after cleaning, replace both the inner and outer elements.

6. If small holes or thin parts are found on the element when it is checked by shining light through it after cleaning, replace the element.

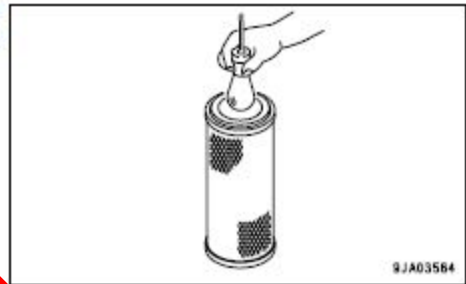


NOTICE

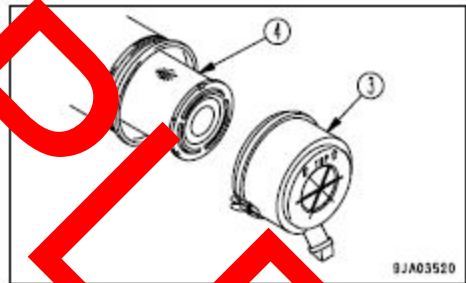
When cleaning the element, do not hit it or bend it against something.

Do not use an element whose folds or gasket or seal are damaged.

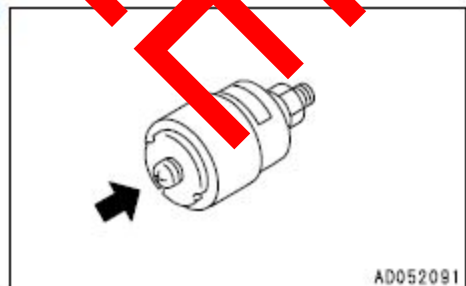
Wrap unused element and store them in a dry place.



7. Set the cleaned outer element (4) in position.
8. Set the arrow mark on cover (3) at the top, install it on the air cleaner body, then secure with clip (2).



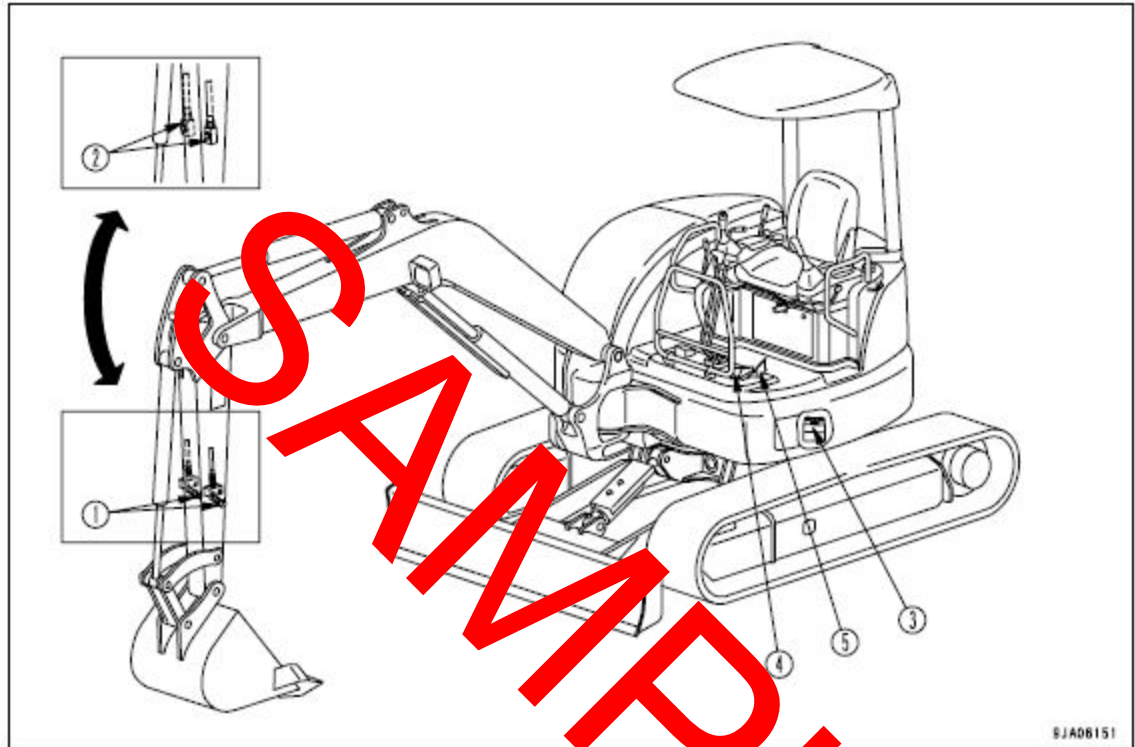
9. Press the button of dust indicator (1) to return the red piston to its original position.



MACHINE READY FOR ATTACHMENT

There are two types for the hydraulic pressure takeoff: quick coupler and stop valve.

LOCATIONS



- | | |
|---|------------------------------|
| (1) Quick Coupler
(North America specified) | (3) Selector Valve |
| (2) Stop Valve
(Austria and New Zealand specified) | (4) Attachment Control Pedal |
| | (5) Attachment Lock Cover |

Quick Coupler

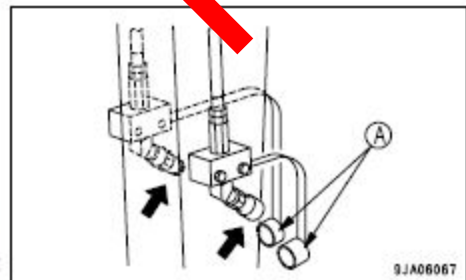
- North America specified

This quick coupler (1) is used to connect the piping equipped with quick coupler at the attachment end.

The following products are used for the quick coupler.

- Arm left side (hole end): STUCCHI (F FIRG12A BSP)
- Arm right side (shaft end): STUCCHI (APM15 3/4 BSP)

When removing the attachment, install this coupler (1) to cap (A).
When installing the attachment, remove cap (A), clean all the dirt from coupler (1), then connect the piping.

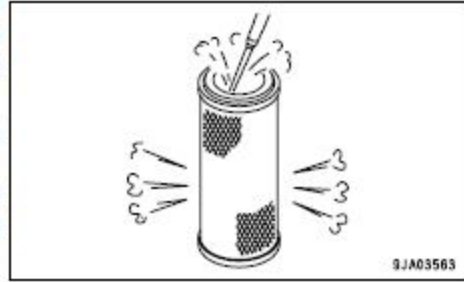


The following products are used for quick coupler cap (A).

- Arm left side (hole end): STUCCHI (8151..004)
- Arm right side (shaft end): STUCCHI (8151..009)

5. Direct dry compressed air (Max. 0.69 MPa (7 kg/cm², 99.4 PSI)) from the inside of the outer element along its folds. Then direct the compressed air from the outside along the folds, and again from the inside.

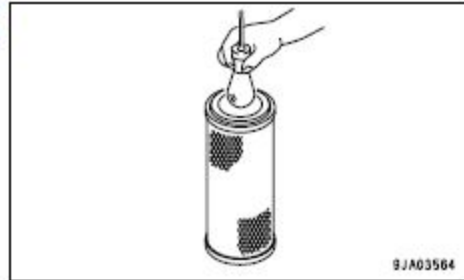
- 1) Replace the element which has been cleaned 5 times repeatedly or used throughout a year.
- 2) Replace element when the dust indicator red piston appears soon after installing the cleaned element even though it has not been cleaned 6 times.



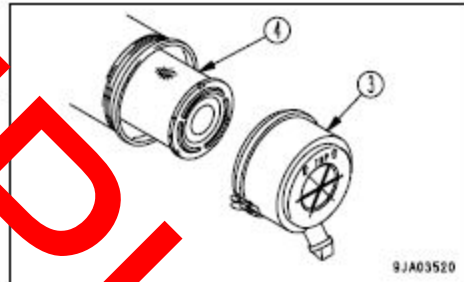
6. If small holes or thinner parts are found on the element when it is checked by shining light through it after cleaning, replace the element.

NOTICE

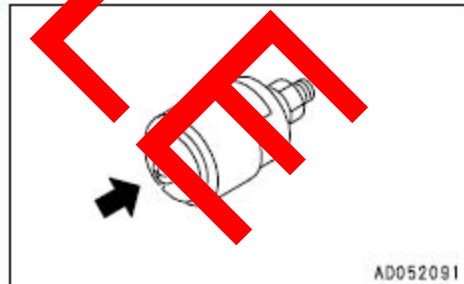
When cleaning the element, do not hit it or beat it against something. Do not use an element if the folds or gas seal are damaged. Wrap unused element and store them in a dry place.



7. Remove the cloth or adhesive tape used to cover the air connector inside the air cleaner body.
8. Install cleaned element (4) or a new element.
9. Set dust cup (3) with the arrow pointing up, then snap to the air cleaner body and secure it with clip (2).

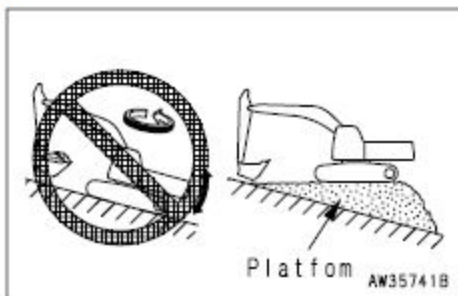


10. Press the button of dust indicator (1) to return the red piston to its original position.



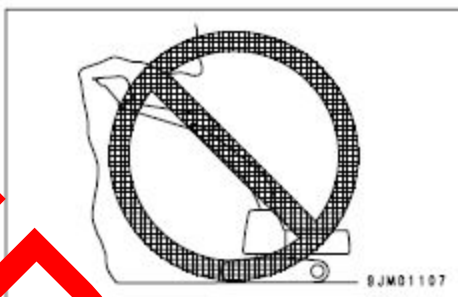
OPERATIONS ON SLOPES

- When working on slopes, there is a hazard that the machine may lose its balance and turn over when the swing or work equipment are operated. This may lead to serious injury or property damage, so always provide a stable place when carrying out these operations, and operate carefully.
- Do not swing the work equipment from the uphill side to the downhill side when the bucket is loaded. This operation is dangerous, and may cause the machine to tip over.
- If the machine has to be used on a slope, pile the soil to make a platform that will keep the machine as horizontal as possible.

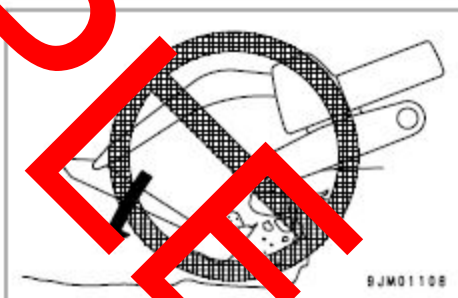


PROHIBITED OPERATIONS

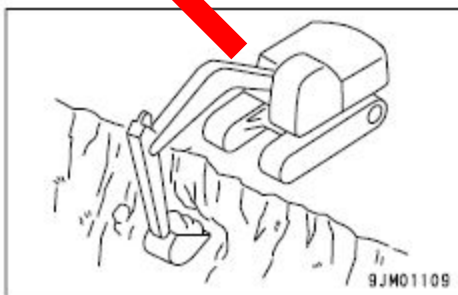
- Never dig the work area under an overhang. There is a hazard that rocks may fall or that the overhang may collapse and fall on top of the machine.



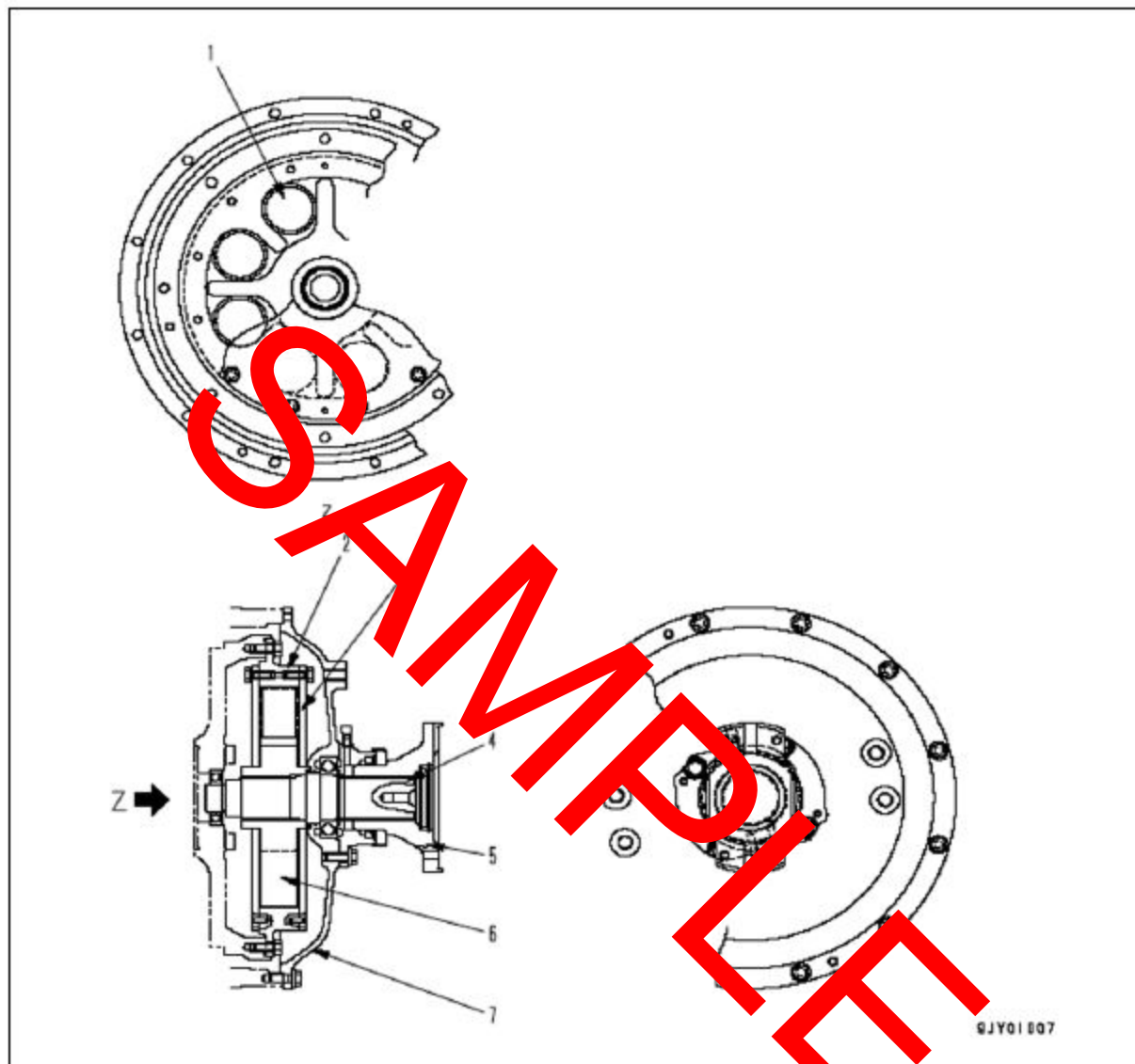
- Do not excavate too deeply under the front of the machine. The ground under the machine may collapse and cause the machine to fall.



- To make it easier to escape if there is any problem, set the tracks at right angles to the road shoulder or cliff with the sprocket at the rear when carrying out operations.



TORQUE DAMPER



- 1. Rubber cushion
- 2. Outer body
- 3. Flange

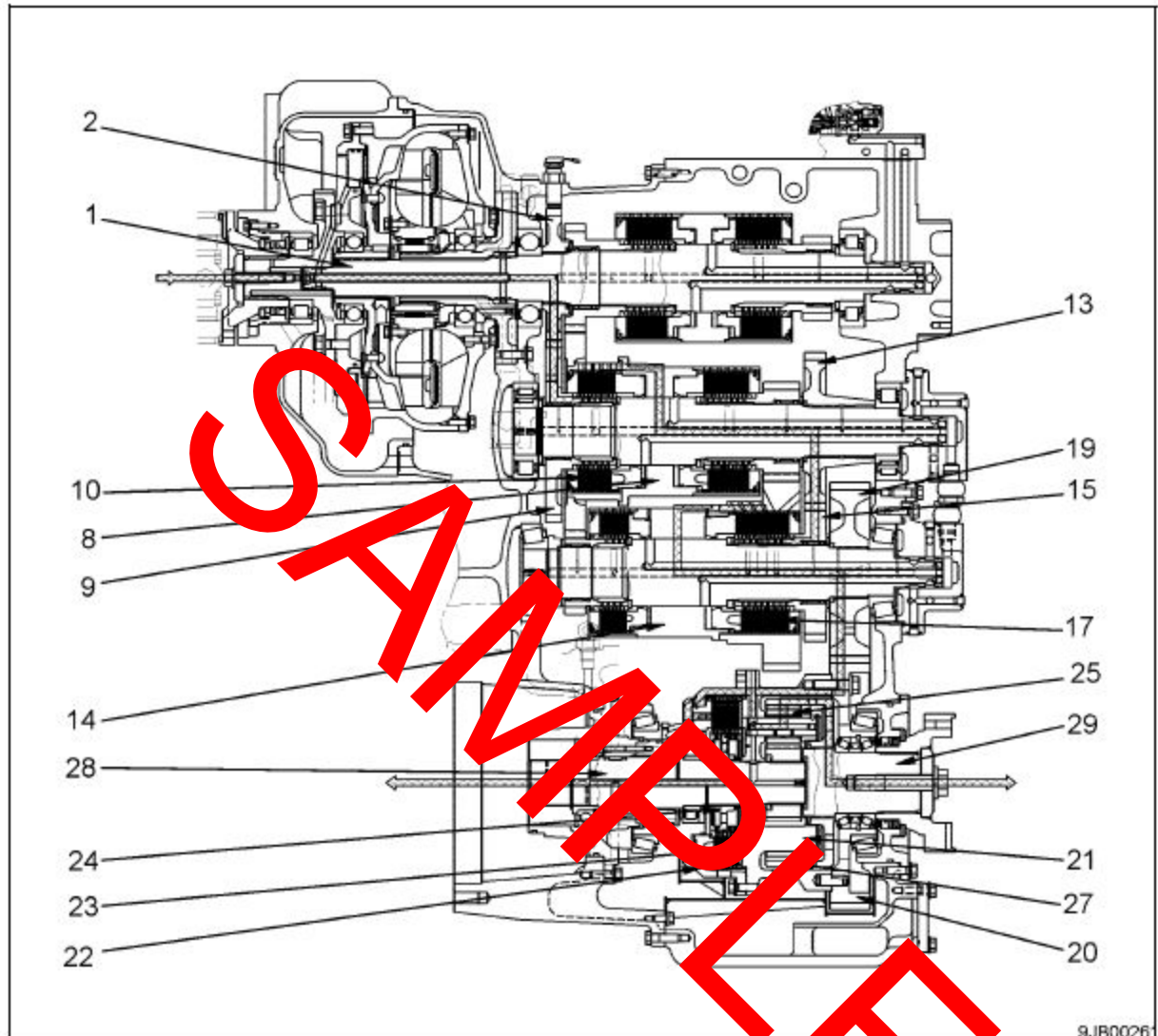
- 4. Shaft
- 5. Coupling
- 6. Inner body

- 7. Cover

FUNCTION

The torque dampener is installed to the engine flywheel and absorbs the twisting vibration caused by changes in the engine torque.

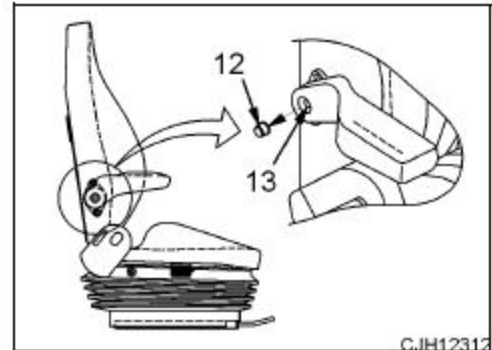
FORWARD 4TH.



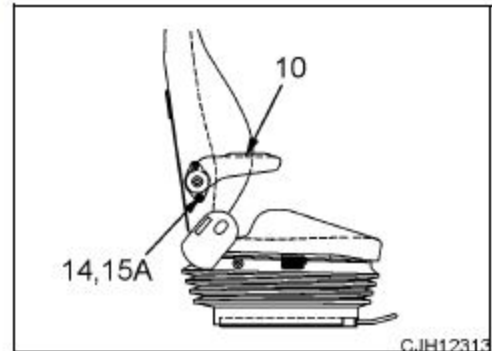
OPERATION

- When FORWARD 4th, FH clutch (10) and 2nd clutch (17) are engaged, the power from torque converter is transmitted to input shaft (1), and then transmitted to front and rear output shafts (28) and (29).
- FH clutch (10) and 2nd clutch (17) hold each clutch disc in position with the oil pressure applied to the piston.
- The power from the torque converter is transmitted from input shaft (1), goes to idler gear (2) and FH gear (9), passes through FH clutch (10), and is then transmitted through FH, 1st cylinder gear (8) and idler gear (13), and is transmitted to 2nd gear (15).
- 2nd clutch (17) is engaged, so the power transmitted to 2nd gear (15) passes through 2nd clutch (17), and goes to 2nd, 3rd cylinder gear (14). It then goes through idler gear (19) and output gear (20), and is transmitted to differential lock carrier (21).
- ★ The diagram above shows the situation when the differential lock is ON.
- ★ For details of the actuation when the differential lock is OFF, see FORWARD 1ST; for details of the actuation when the differential lock is ON, see FORWARD 2ND.

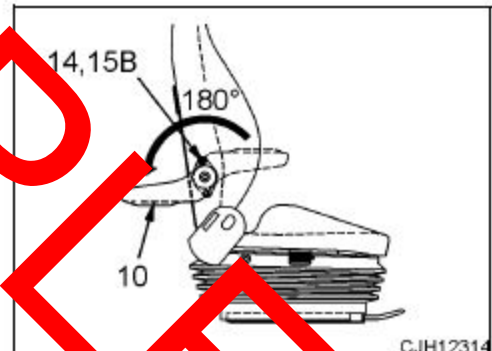
- A. Remove plastic cap (12) from the armrest hinge.
 ★ Use a flat-head screwdriver, etc. to remove the cap.
- B. Loosen armrest hinge mounting bolt (13).



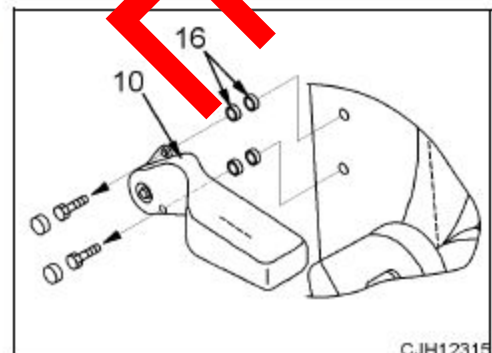
- C. Remove plastic cap (14), and then remove lower mounting bolt (15A) (M8 bolt) of the seat and armrest (10).



- D. Turn right-hand armrest (10) up by 180°.
 ★ If the armrest is not turned, you cannot access the tool to upper mounting bolt (15B).
- E. Remove plastic cap (14) and upper mounting bolt (15B).



- F. Remove right-hand armrest (10).
 ★ There are two position adjustment washers (16) installed to each bolt between the armrest and seatback. Take care not lose them.




ENGINE REMOVAL AND INSTALLATION PROCEDURES

REMOVAL



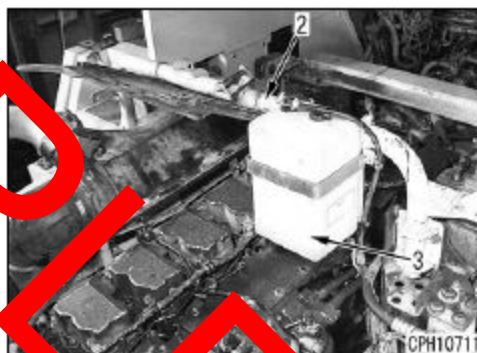
WARNING! Disconnect the cable from the negative (-) terminal of the battery first.

1. Bleed the air conditioner gas.  1
2. Drain the coolant.
3. Engine undercover
Remove the engine undercover.
4. Tilting up operator's cab
Bring the hood down forward (and fix it) and tilt up operator's cab (1) and support it with the safety bar.

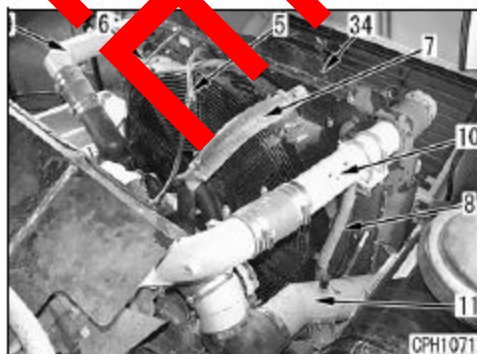


WARNING! Check that the operator's cab is supported securely with the safety bar.

5. Engine top cover and cooling coolant reservoir tank
Remove engine top cover (2) and cooling coolant reservoir tank (3).
★ Disconnect the radiator (cooling) coolant level connector (CN-B01), too.



6. Pipes and hoses
 - A. Remove cover (34).
 - B. Disconnect coolant (engine overflow) hose (5), radiator overflow hose (6), radiator inlet hose (7), and make-up hose (8), then remove aftercooler tube and hose (9) and (10).
 - C. Loosen the clamp of air cleaner tube (11) and shift it to the right of the vehicle body.



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)

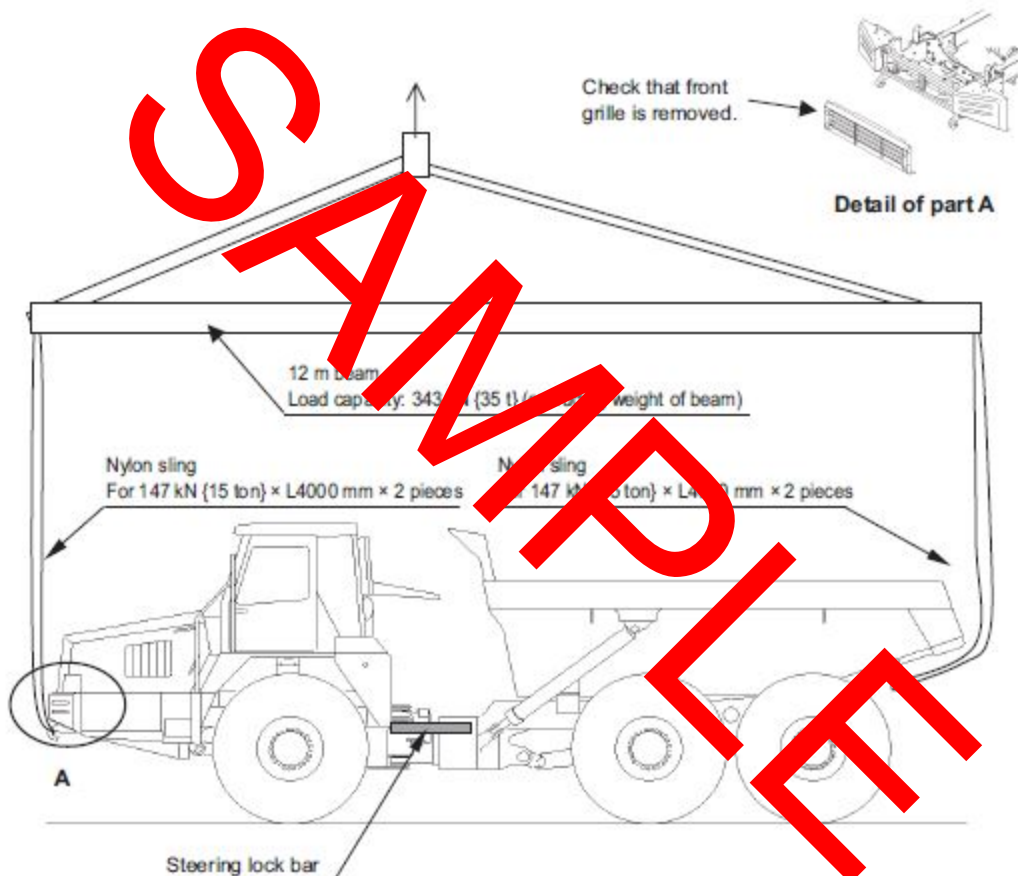
Crane Lifting capacity shall be total of 343 kN (35 ton) and weight of beam and sling. Lifting height shall be total of 7 m and necessary height of lifted chassis.

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

Before starting the work, set the steering lock bar securely.

Check that the front grille is removed.

Name

Q'ty

Name

Q'ty

Crane

1

Nylon sling

4

Beam (Min. 12 m long)

1

Others

CAB HARNESS TO OUTSIDE OF CAB AND ENGINE CONTROLLER



SAMPLE

TO HARNESS OF OUTSIDE CAB