

ORIGINAL INSTRUCTIONS - according to Directive 2006/42/EC, Annex I, 1.7.4.1

**CX37C**  
Mini Excavator

**OPERATOR'S MANUAL**

**Part number 51644467**  
1<sup>st</sup> edition English  
September 2019



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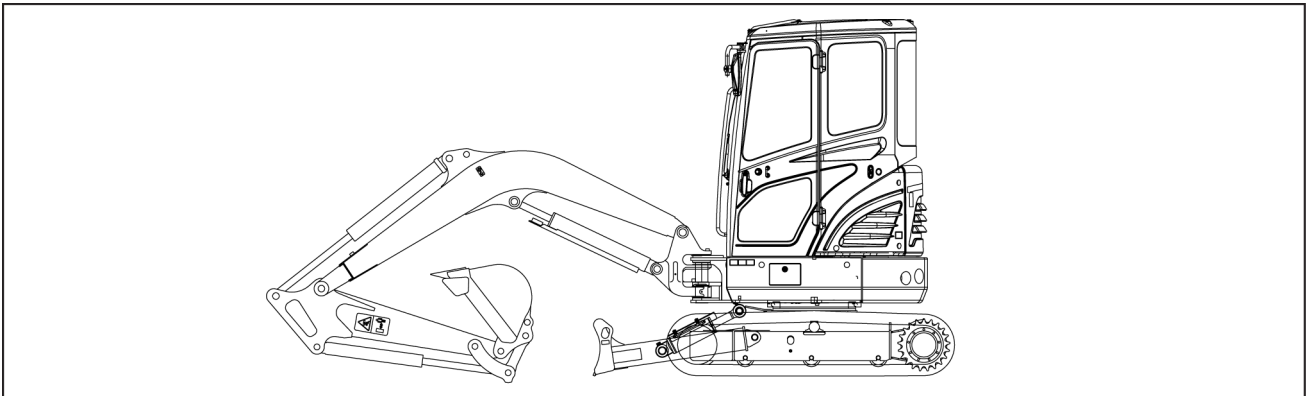


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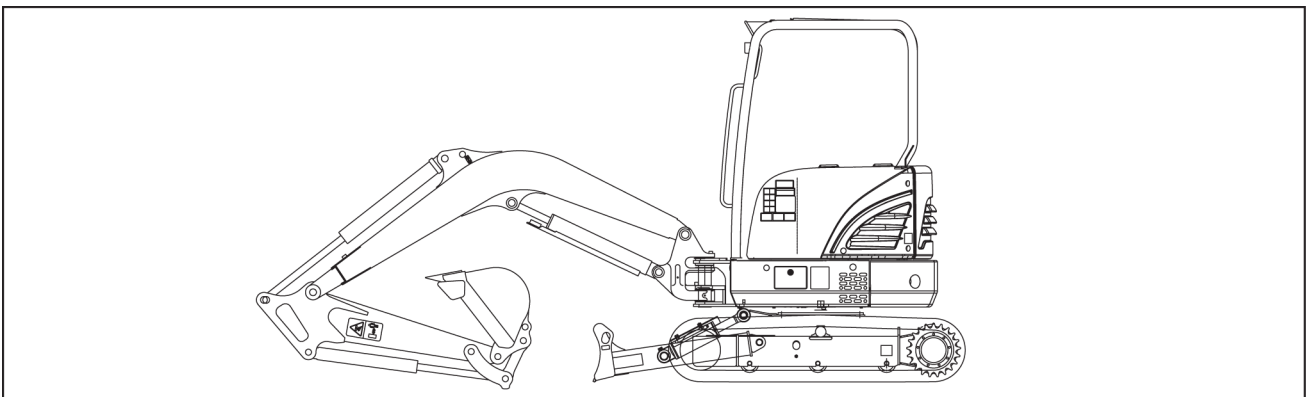
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## Product identification

Your machine is a hydraulic excavator. It consists of an undercarriage fitted with tracks and a swing bearing which supports the upper-structure frame. The upper-structure frame supports the attachment at the front end of the machine, plus the engine, hydraulics and the cab/canopy. When the operator works the controls, the engine-driven pump delivers hydraulic fluid to the control valves. The control valves distribute the hydraulic fluid to the various cylinders and hydraulic motors employed. A cooling system maintains the hydraulic fluid at normal operating temperature.



SML18MEX0107EA 1  
**Cab version**



SML18MEX0108EA 2  
**Canopy version**

When ordering parts, obtaining information, or seeking assistance, always supply your CASE CONSTRUCTION Dealer with the type and Product Identification Number (PIN) of your machine or accessories.

Write the following in the spaces below:

- Machine Type
- Machine PIN
- Machine year of manufacture
- Serial numbers of hydraulic and mechanical components

## EC Declaration of Conformity

**NOTE:** An original of this EC declaration is supplied with each machine and must be kept carefully by the owner.

**NOTE:** The official documents supplied with the machine must be kept by the owner so as to be able to present them to any inspecting authority which may request them.

On the following page is provided copy of the EC Declaration of Conformity (EC Declaration of Conformity). The EC Declaration of Conformity is the manufacturer's declaration about equipment compliance to relevant EU provisions. Please keep the original document in a safe place. Local authorities may require you to show this document in order to assure compliance of your equipment.

Translation of this declaration in your own country language is provided on the reverse page of the original document. For your better and easier understanding of the document hereafter you'll find some explanatory notes.

1. Under section 1.2 of this copy, are listed those options or variants which have safety related functions. Some of them are standard provided, like FOPS (Falling Objects Protective Structure) or ROPS (Roll Over Protective Structure). Others, like object handling kit required to lift loose objects, are available upon customer request.
2. Under point 2 of this copy, are listed all information required by EU "Outdoor Noise" Directive **2000/14/EC**. Please refer your own original EC Declaration of Conformity for specific equipment information. On the same page are indicated information about operators station noise level (LpA) which is not matter of above mentioned EU Directive and therefore not indicated on it.
3. Generic serial number for this equipment type. Sequence of letters and numbers may vary depending on equipment configuration.
4. EC Declaration of Conformity serial number. Please make reference to this number when requiring information or support to CASE CONSTRUCTION about EC Declaration of Conformity.
5. Signature of a person authorised to sign the document on behalf of the company.

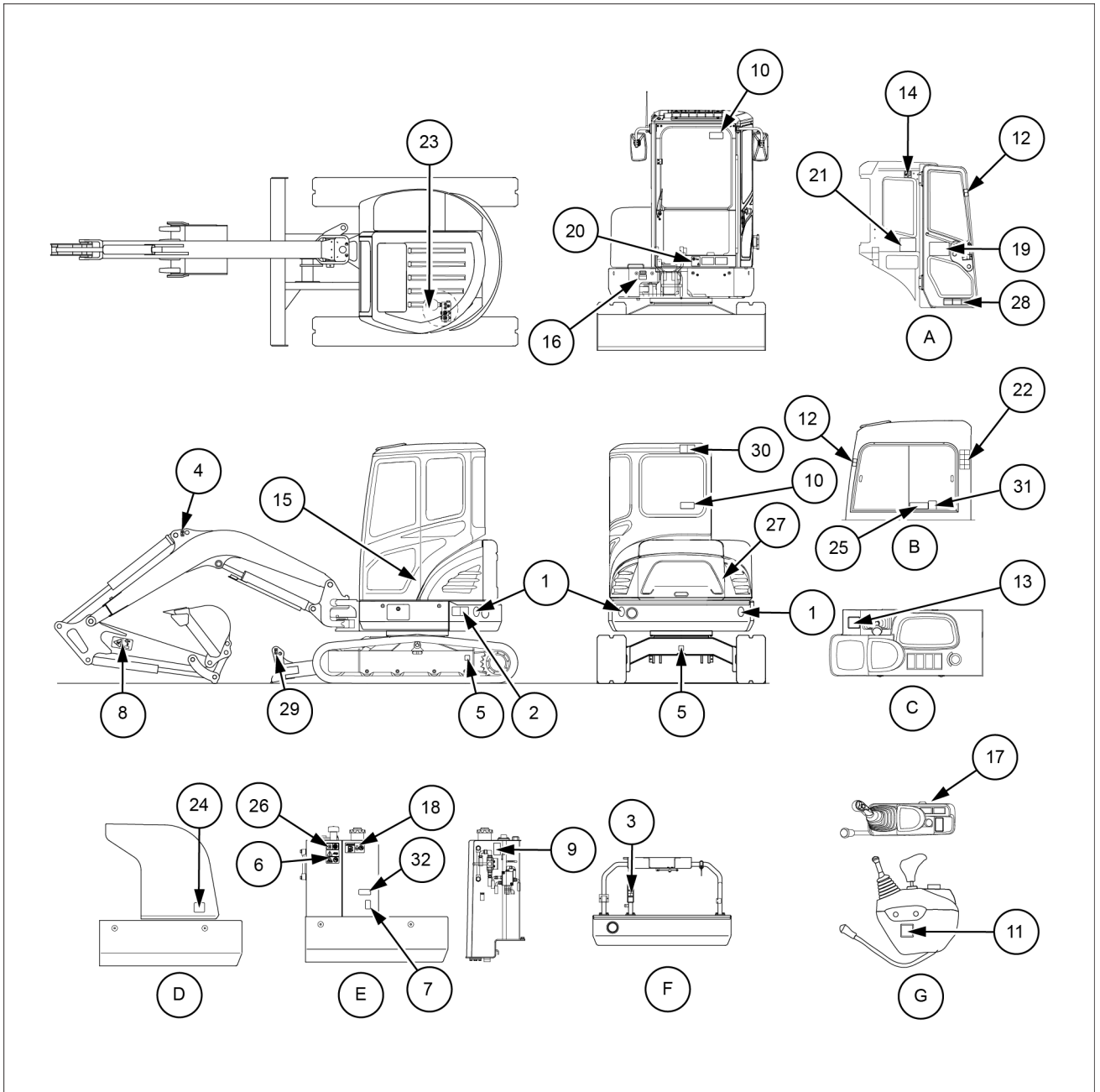
8. Check that no part of the machine is encroaching on the highway. If this cannot be avoided, install the necessary regulation signaling equipment.

### Maintenance and adjustments

- Do not try to service this machine unless you have first read and understood the safety messages and instructions featuring in this manual.
  - When carrying out service work always wear suitable attire. Avoid loose-fitting clothing.
  - Release pressure completely in the hydraulic system before disconnecting the hydraulic lines. Hydraulic oil escaping under pressure can cause serious injury.
  - Before doing maintenance work on the machine, shut down the engine and allow it to cool down. Otherwise, you could be burned.
  - Before commencing any work on the machine, place a "Do not operate" tag on the right-hand control arm.
  - Always wear eye protection when using a tool that might project metal particles. Use a hammer with a soft face, such as copper, for installing pins.
  - Poorly carried out maintenance or adjustments can cause serious injuries. If you do not understand a servicing or adjustment procedure, consult your CASE CONSTRUCTION Dealer.
  - If the attachment is raised or if the machine moves without an operator, serious injury can result. Before carrying out maintenance on this machine, proceed as follows:  
Park the machine on flat, level ground.  
Lower the attachment until it is resting on the ground.  
Lower the dozer blade (if equipped) until it rests on the ground.  
Stop the engine and remove the ignition key.  
Lock the tracks to prevent any machine movement.
  - Any unauthorized modifications made to this machine can cause serious injury. Do not undertake any modifications without first consulting your CASE CONSTRUCTION Dealer. Any modifications made must be in conformity with the technical specifications of the machine and any current safety legislation requirements.
  - Certain components of the machine are subject to type approval. When replacing such components, it is mandatory to make sure that they conform to regulations. Use only genuine CASE CONSTRUCTION parts.
  - Pressurized hydraulic fluid or grease that penetrates the skin can cause serious injury. Take the necessary safety precautions (safety clothing and protection for face and hands) to avoid such risks. Also, before using these products, read the manufacturer's instructions concerning their use. If hydraulic fluid penetrates the skin, call a doctor immediately.
  - Coolant solution is toxic.
- Avoid contact with skin, eyes, and clothing.  
Antidote:  
External: rinse thoroughly with water and remove soiled clothes.  
Internal: do not induce vomiting. Rinse the mouth out with water. Seek medical advice.  
Eyes: rinse thoroughly with water and seek medical advice.
- The pressure in the track tension cylinders is high. Follow the procedure described in this manual carefully for increasing or reducing track tension.
  - When carrying out a welding operation on the undercarriage or upper-structure carriage as authorized by CASE CONSTRUCTION and in accordance with the instructions, disconnect the batteries, disconnect the alternator B+ and D+ terminal wires, and connect the welding apparatus ground cable to the component on which the welding operation is to be performed. Never connect the welding apparatus to the undercarriage when welding on the upper-structure (or vice-versa). Never connect the welding apparatus ground to a component of the hydraulic system.
  - When using compressed air, take the necessary precautions to protect your face.
  - Clean the machine regularly. Accumulations of grease, dirt, and debris can cause injuries or damage the machine.
  - Periodically inspect the fastening of the main components, as part of the machine maintenance program: counterweight, swing bearing, and operator's compartment. In the event of problems, consult your CASE CONSTRUCTION Dealer.
  - If the accumulator is not functioning correctly, consult your CASE CONSTRUCTION Dealer. Never try to carry out any servicing operation on the accumulator. If this instruction is not followed serious injury can result.
  - The accumulator is charged with nitrogen under high pressure. Do not weld or allow flames to come near to the accumulator.
  - There is high pressure fuel in the feed line when the engine is running and immediately after it has been shut down. Wait for two minutes after engine shut down before you do any maintenance or inspections to allow the pressure to drop in the line.
  - High-voltage is charged to the controller and/or to the injector while the engine is running and immediately after it has been shut down.  
Do not touch the controller or the injector.  
If it is necessary to touch them for maintenance purposes, consult your CASE CONSTRUCTION Dealer.

## Signs positions

When you replace a safety sign or other machine sign, make sure you position it as shown below.



SMIL18MEX0915GB 1

### Cab version

- |                             |                                      |
|-----------------------------|--------------------------------------|
| A. Cab door                 | E. Hydraulic tank and fuel tank      |
| B. Cab window - Right-hand  | F. Cowl support (engine compartment) |
| C. Console box - Right-hand | G. Console box - Left-hand           |
| D. Tool box cover           |                                      |

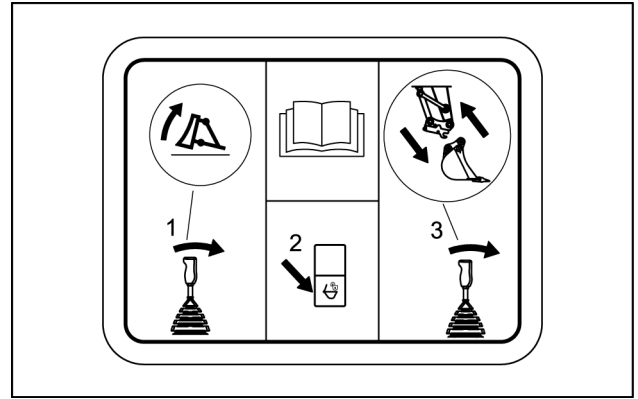
**(17) Hydraulic quick coupling system disengagement (optional)**

Location: this sign is located on the right-hand side of the left-hand console.

Quantity: 1

Part number: 48092400

This sign shows the procedure to disengage the hydraulic quick coupling system.



SMIL16MEX3221AA 21

**(18) Fuel tank**

**CAUTION**

Fuel vapors are explosive and flammable. Do not smoke while handling fuel. Keep fuel away from flames or sparks. Shut off engine and remove key before servicing. Always work in a well-ventilated area. Clean up spilled fuel immediately. Failure to comply could result in minor or moderate injury.

C0195A

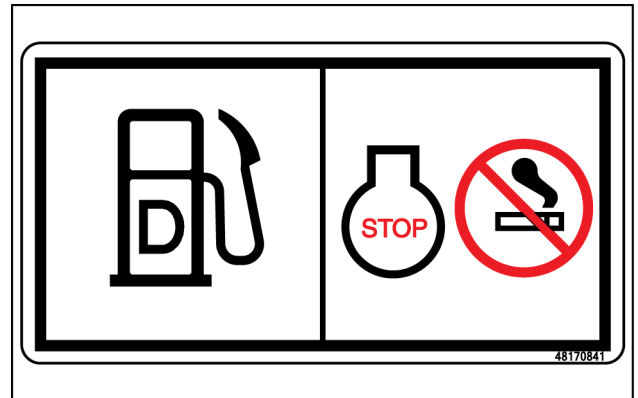
Location: this sign is located on the right-hand side of the fuel tank.

Quantity: 1

Part number: 48170841

This sign shows the position of the fuel tank and the fuel to use.

This sign warns you to stop the engine when refueling and to keep all lights or flames at a safe distance while refueling.



SMIL17MEX2653AA 22

**(19) Service instructions**

Location: this sign is located on the left-hand side in the cab.

Quantity: 1

Part number: 51636233

This sign describes the service locations and the service intervals.

NO.	DESCRIPTION	SERVICE INTERVALS (PER HOUR)						OIL	OIL	OIL	OIL	OIL
		10	20	50	100	200	500					
1	HYDRAULIC OIL	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
2	HYDRAULIC COOLANT											
3	WASHER FLUID											
4	FUEL FILTER SERVICE											
5	HYDRAULIC HOSE											
6	HYDRAULIC HOSE & FITTINGS											
7	HYDRAULIC HOSE & FITTINGS											
8	HYDRAULIC HOSE & FITTINGS											
9	HYDRAULIC HOSE & FITTINGS											
10	HYDRAULIC HOSE & FITTINGS											
11	FUEL TANK OVERFLOW											
12	FUEL TANK OVERFLOW											
13	FUEL TANK OVERFLOW											
14	ENGINE OIL											
15	ENGINE OIL											
16	ENGINE OIL											
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## Steps and access handles

### ⚠ WARNING

**Fall hazard!**  
Clean the steps and access handles to remove all traces of grease, oil, mud, and ice (in winter).  
Failure to comply could result in death or serious injury.

W0139A

### ⚠ WARNING

**Fall hazard!**  
Jumping on or off the machine could cause an injury. Always face the machine, use the handrails and steps, and get on or off slowly. Maintain a three-point contact to avoid falling: both hands on the handrails and one foot on the step, or one hand on the handrail and both feet on the steps.  
Failure to comply could result in death or serious injury.

W0141A

### ⚠ WARNING

**Fall hazard!**  
When entering or exiting the cab, never use the control levers as handholds. Always mount and dismount the machine in a safe way. Maintain a three-point contact with steps, ladders, and/or handholds.  
Failure to comply could result in death or serious injury.

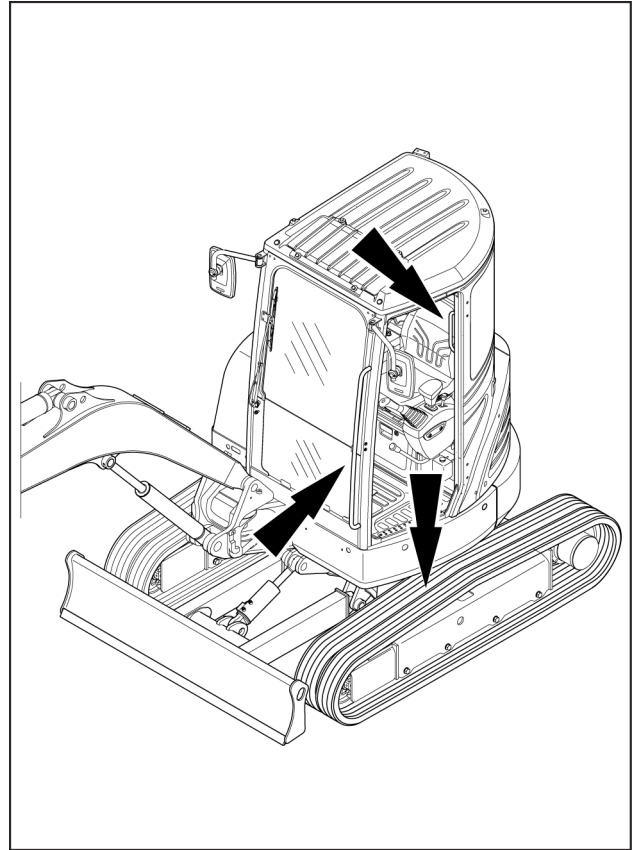
W1340B

To get in or out of the machine always face the machine and use the handrails and track shoes.

Ensure safety by always maintaining at least three-point contact of hands and feet with the handrails, and track shoes.

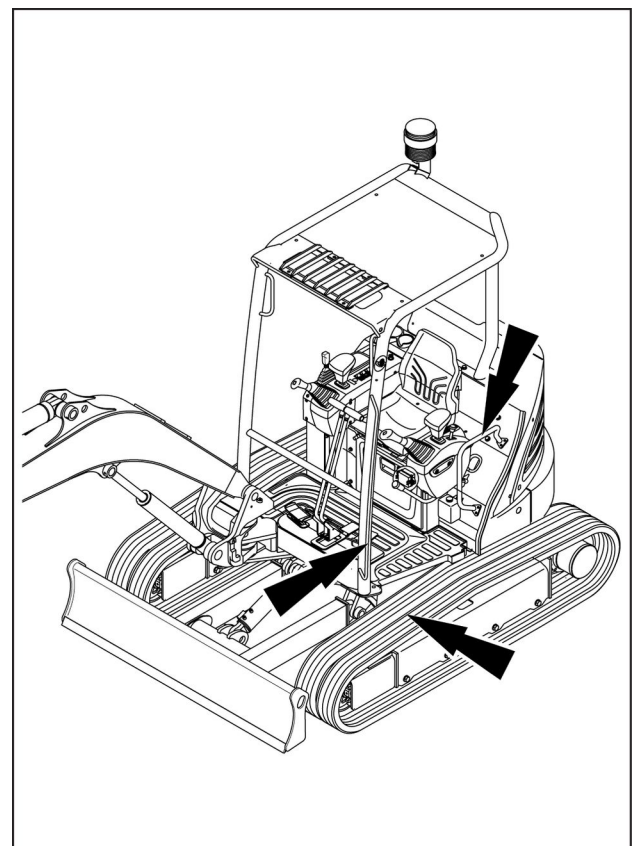
If grasping the door handrail when mounting or dismounting or moving on the track, open and lock the door securely in the open position. Otherwise, the door may move suddenly, causing you to lose balance and fall.

## Cab version



SMIL18MEX0119BA 4

## Canopy version



SMIL18MEX0120BA 5

### Hydraulic quick coupling system switch (optional)

The hydraulic quick coupling system switch **(6)** is used to disengage the hydraulic quick coupling system.

This switch has a sliding mechanism **(A)** for preventing erroneous switch operation. Slide the sliding mechanism **(A)** in the direction of the arrow to unlock the device.

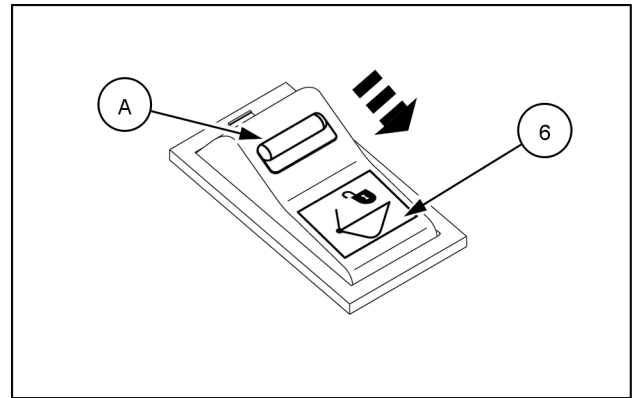
The buzzer sounds when the hydraulic quick coupling system switch is pressed to disengage the moving hook. The buzzer stops when the switch is released to engage the moving hook.

To connect or disconnect an attachment, proceed as follows:

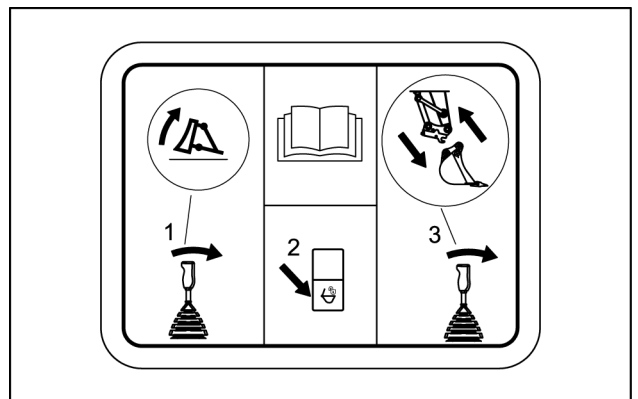
1. Place the attachment in the safety position for disconnecting.
2. Place the dozer blade completely up pulling back the dozer lever.
3. Pull lightly dozer blade down to release the eventual high pressure inside dozer up line.
4. Slide the switch mechanism, then press and hold the hydraulic quick coupling system switch **(6)**.

**NOTE:** the lever of dozer pulled back activates the pins of the quick coupler.

5. Pull backward the dozer lever for disconnecting the attachment.
6. Release the switch.



SMIL16MEX3181AA 2



SMIL16MEX3221AA 3

### 1. Engine coolant temperature gauge

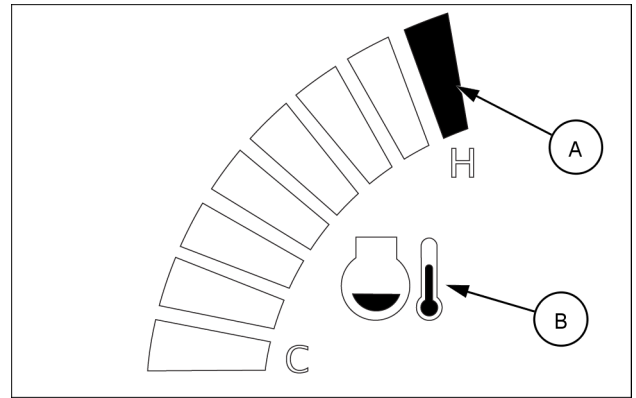
The engine coolant temperature gauge indicates the temperature of the coolant.

The red range (A) lights on when the temperature is above 115 °C (239 °F)

The warning light (B) appears and a buzzer sounds when the temperature is above 115 °C (239 °F).

When the red range (A) and the warning light (B) are ON, do not stop abruptly the engine, but run the engine at medium speed to allow it to cool gradually, then stop the engine.

**NOTICE:** if the engine is stopped without cooled down running, the temperature of engine parts will rise suddenly, and this can cause severe engine trouble.



SMIL16MEX0379AA 2

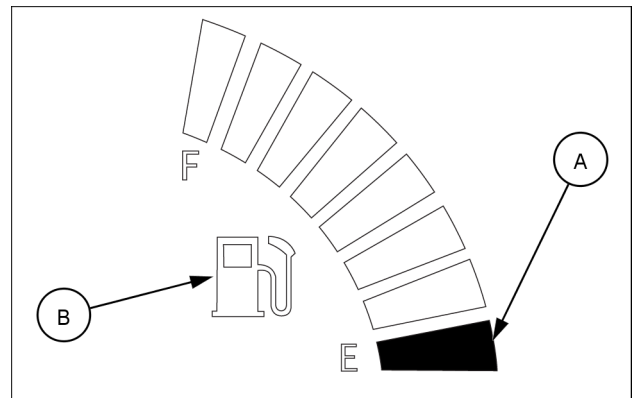
### 2. Fuel gauge

The fuel gauge indicates the amount of fuel in the fuel tank.

The red range (A) and the warning light (B) turn ON and a buzzer sounds when the level of fuel is below 5.5 L (1.5 US gal).

Fill the fuel when the red range (A) shows and the warning light (B) is ON.

**NOTICE:** if the fuel gauge lights up the red range or the warning light is ON even though the machine is on the normal condition, check the electric device as that can be caused by the poor connection of electricity or sensor.



SMIL16MEX0380AA 3

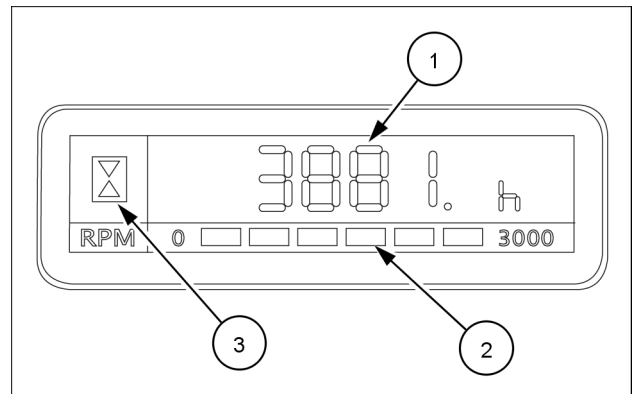
### 3. Main display

The service meter (1) shows the total operation hours of the machine.

**NOTE:** always ensure the operating condition of the service meter during the machine operation.

The engine RPM (2) displays the engine speed.

The engine run status (3) displays the engine run status.



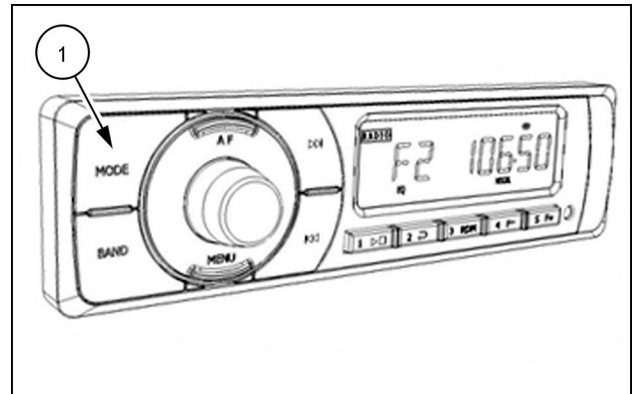
SMIL16MEX0381AA 4

## Radio

### Powering on

Depress the power button (1) briefly to power on the radio. To power off the radio, depress and hold this button down for **1 s**. In a similar manner, many of the buttons on the front panel have two modes of activation: “Short press” and “long press”.

**NOTE:** to power on the radio, the starter key shall be in ON position.

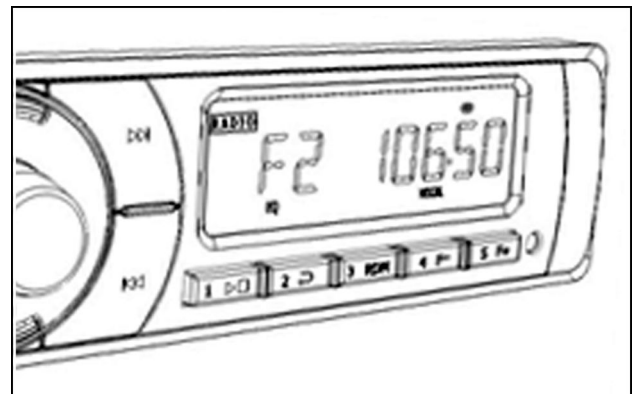


SMIL15CEX5771AA 1

### Multi-mode buttons

Depending on whether the user is listening to radio or playing back media files, buttons on the front panel can assume different functions.

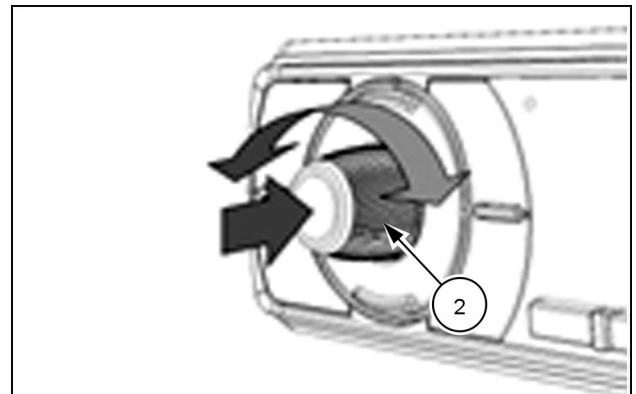
The function of some controls depends on context. For example, the 1 button is used to operate the number 1 radio station preset. When playing a media file, depressing this button will play / stop a track.



SMIL15CEX5772AA 2

### Volume knob

Audio volume is adjusted when the rotary knob (2) is turned. In the special case where MENU or AUDIO is operated, volume adjust is temporarily disabled, and the rotation of the knob scrolls through items available on the menu list being displayed. Short press (push in and let go) the volume knob to access AUDIO items: balance, fader, bass and treble. Volume has 41 levels, range is 0 to 40.



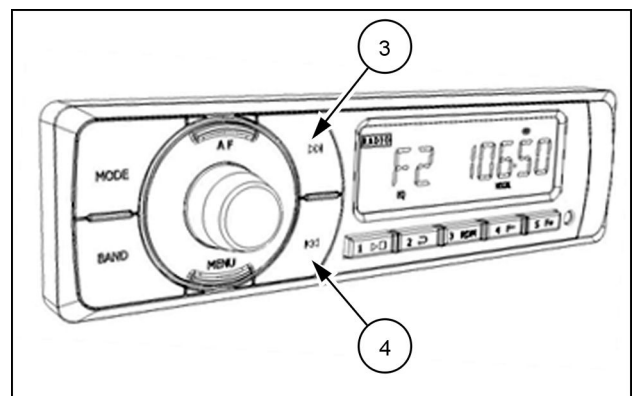
SMIL15CEX5773AA 3

### Searching radio stations

Use the button >>| (3) or the button |<< (4) to search radio station: short press to automatically seek the next available frequency (jump to the next seek stop).

### Manual tuning

Press and hold to change to manual seek mode: in this mode short pressing one of these seek buttons changes frequency by step whereas long pressing will step speedily until the button is released. The radio will revert to auto seek mode if either button is not operated for **3 s**.



SMIL15CEX5771AA 4

## Fuel tank

### ⚠ WARNING

**Fire hazard!**

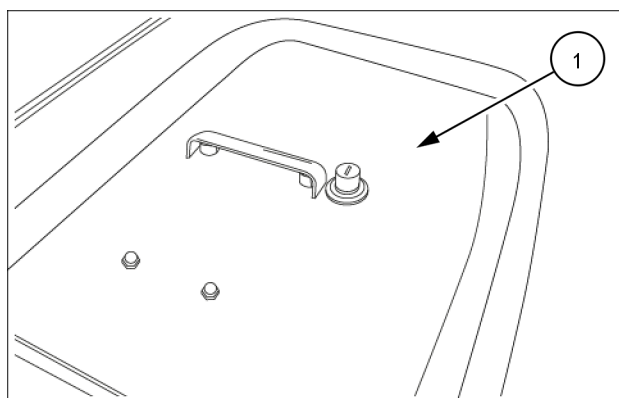
**When handling diesel fuel, observe the following precautions:**

1. Do not smoke.
2. Never fill the tank when the engine is running.
3. Wipe up spilled fuel immediately.

**Failure to comply could result in death or serious injury.**

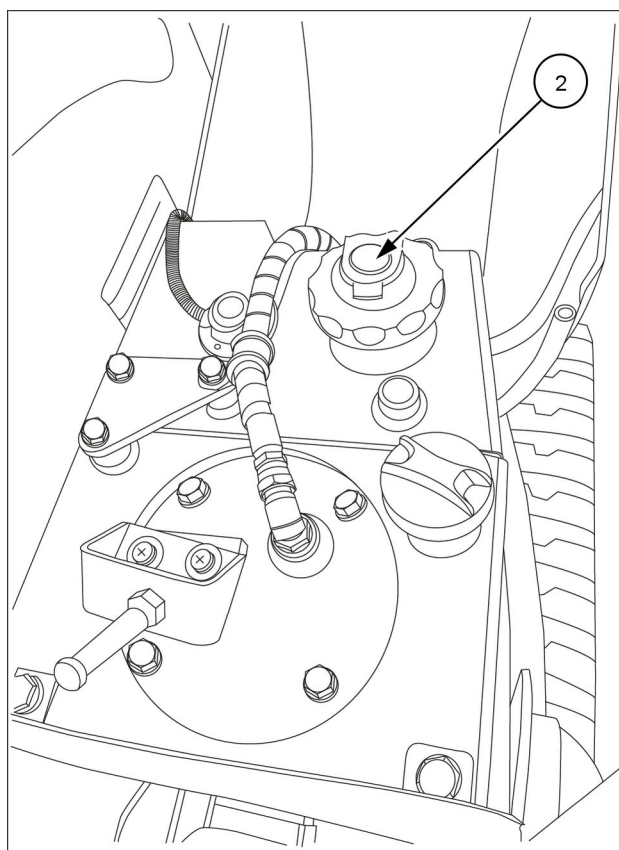
W0099A

Use the starter key to unlock the door (1) located in the upper part of the side hood.



SMIL16MEX1435AA 1

Open the door to access to the filling cap (2) of the fuel tank.



SMIL16MEX1471BA 2

## Operating the machine on sloping ground

### ⚠ WARNING

#### Driving hazard!

Hillside operations can be dangerous. Rain, snow, ice, loose gravel, or soft ground, etc. can change the ground conditions. You must make a judgment if it is safe to operate your machine on any hillside or ramp.

Failure to comply could result in death or serious injury.

W0144A

### ⚠ WARNING

#### Overturning hazard!

Before parking the machine, make sure the ground is stable. Plan the worksite so that the ground is flat, hard, and level.

Failure to comply could result in death or serious injury.

W0258A

When working on a sloping ground, the machine becomes unstable, unbalanced, and difficult to control. Therefore, the following operating prescriptions shall be strictly respected.

If the intended job site is located on a sloping ground, a hard horizontal area shall be prepared as operating base for the machine. Never work on slopes steeper than  $10^\circ$ .

Travel along slopes up to  $20^\circ$  is allowed only to reach a specific work area. Refer to "Machine travel - Precautions for travelling on slopes" in order to understand proper operating practices and precautions for traveling along slopes.

**NOTICE:** The machine grade ability is  $30^\circ$  (58%). Never operate the engine when the incline of the machine is  $30^\circ$  or more. The engine or the hydraulic system may be damaged.

Work with the undercarriage oriented along the slope, never across. Always keep the travel reduction gears pointing down towards the bottom of the slope. Lower and indent the blade into the ground.

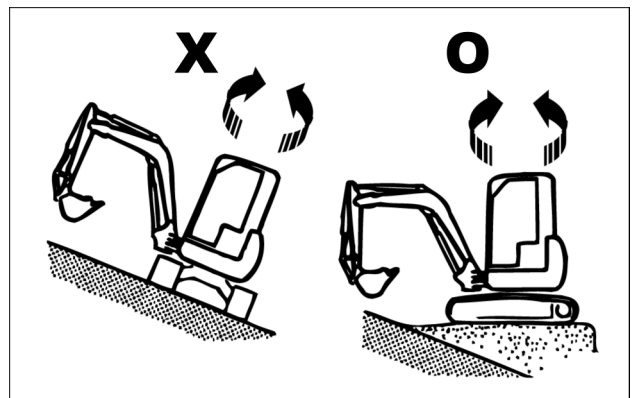
Make sure to define a safe working area around the machine, which shall be equal to the maximum reach of the front equipment plus **2 m (6.6 ft)**. It is recommended to have a supplementary guiding operator on the ground out of the safe working area, in order to provide proper indications and prompt warnings to the machine operator.

Maintain the maximum engine speed.

Make sure that the low speed travel mode is selected.

Operate the control levers smoothly in order to prevent sudden movements that may cause the machine to slip or tip over.

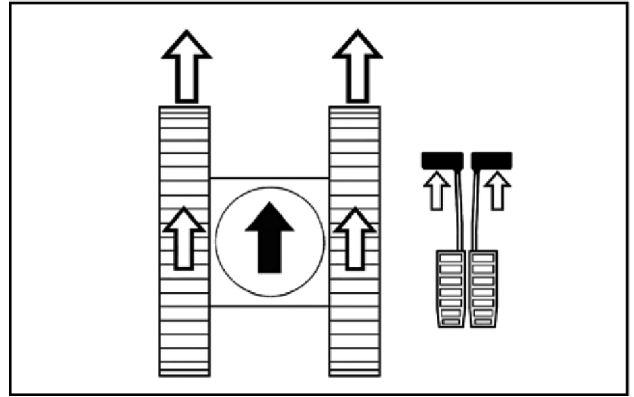
Avoid full boom raising, as well as swing operation towards the bottom of the slope with the bucket loaded, or swing operation with any heavy attachment installed, in order not to affect the balance of the machine.



SMIL16MEX3166AB 2

**Straight line travel (forward travel)**

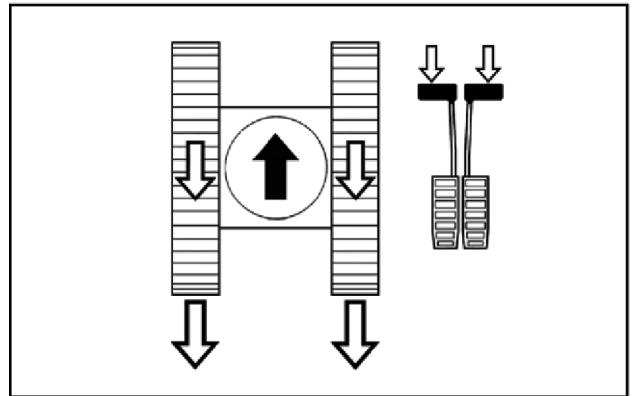
Press the two pedals (or push the two levers) forward at the same time.



SMIL13CEX2679AB 3

**Straight line travel (reverse travel)**

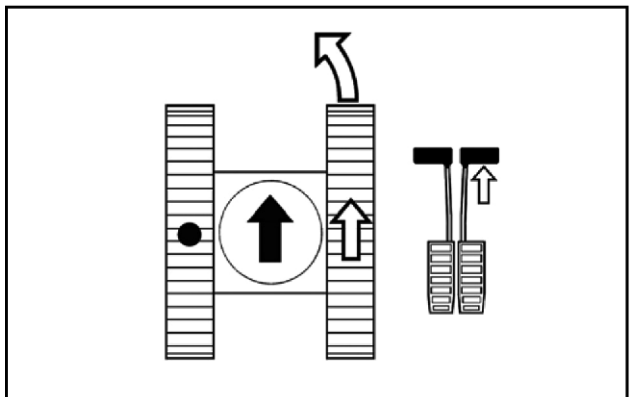
Press the two pedals (or pull the two levers) rearwards at the same time.



SMIL13CEX2680AB 4

**Turning to the left (forward travel)**

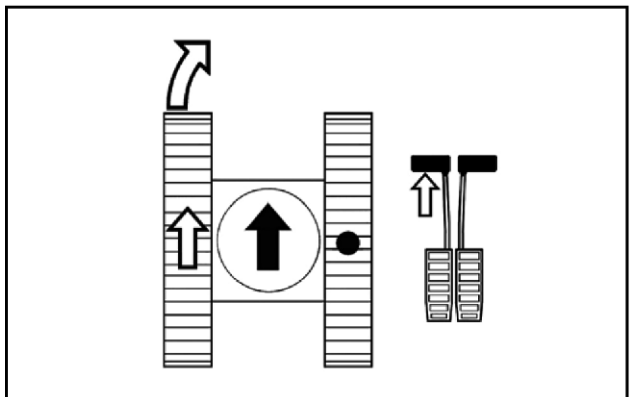
Press the right-hand pedal or push the right-hand lever forwards.



SMIL13CEX2681AB 5

**Turning to the right (forward travel)**

Press the left-hand pedal or push the left-hand lever forwards.



SMIL13CEX2682AB 6

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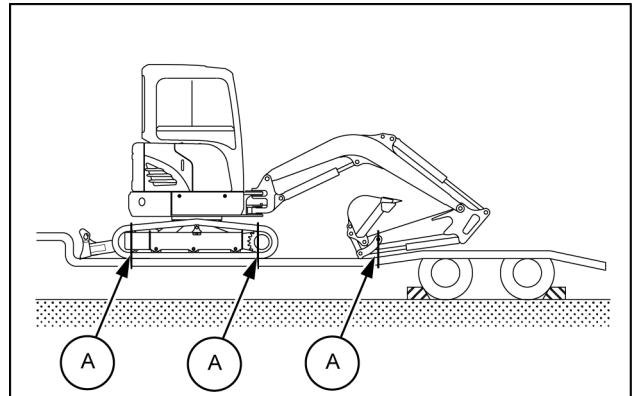
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## Preparing for road transport

### Tie downs for shipping

1. Set the machine in the position for transport: fully retract the arm and curl the bucket slowly.
2. Lower the dozer blade.
3. Check the overall height between the ground and the highest point of the machine and check the overall width of the machine. Make sure to be within the size limits defined on the documents and permissions of the local traffic regulations.
4. Set the safety lever to rearward position (LOCK position)
5. Turn off the engine and remove the starter key.
6. Get off the machine.
7. Use the starter key to close and secure the cab door, the engine access door, the tool box, and the service door.
8. Check the condition of the tie-down points on the trailer.
9. Secure the machine onto the trailer using wire ropes **(A)** to prevent the machine from swaying (oscillation) during transport.
10. Carry out a final check of the tie-down condition.
11. If a rear loading type trailer is used for road transport, lift or remove the loading ramps.
12. Remove blocks from the tires of the trailer.



SMIL18MEX0142AB 1

**NOTICE:** Any problem in the engine fuel injection equipment associated with non-compliance to the following conditions for biodiesel fuel handling and maintenance will not be covered for Warranty by CASE CONSTRUCTION.

Purchase biodiesel fuel from a trusted supplier who understands the product and maintains acceptable fuel quality.

The use of biodiesel blends up to B20 will not void the CASE CONSTRUCTION warranty as long as the following conditions for biodiesel fuel handling and maintenance are stringently followed:

Biodiesel fuel must be pre-blended by the supplier. Mixing biodiesel fuels on-site can result in an incorrect mixture that could damage the engine and/or fuel system.

**NOTICE:** CASE CONSTRUCTION may void your warranty if the problem is associated with poor fuel quality

due to improper blending. It is the responsibility of the fuel supplier and/or yourself to ensure the right type of fuel and blend is delivered and used.

### **Storage**

The machine should not be stored for long periods without changing the diesel fuel in the fuel system.

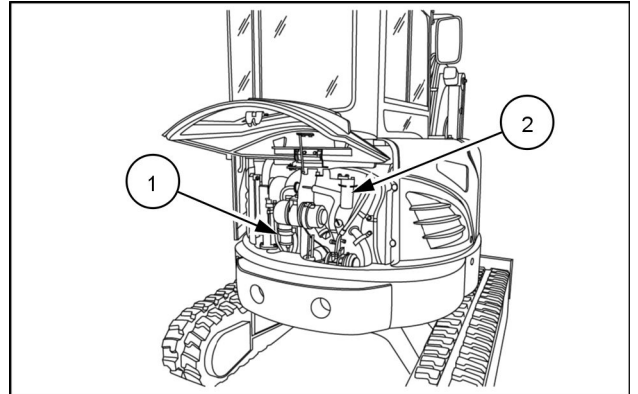
**NOTICE:** Biodiesel is highly hygroscopic and tends to collect water more than diesel fuel. This increases the risk of algae and bacteria growth which can cause severe damage to the fuel injection system. Keep the machine fuel tanks and on-site storage tanks as full as possible to limit the amount of air and water vapors inside the tank. Drain water from the tanks at least once a week.

If the machine should be stored for long periods, make sure to replace the diesel fuel every three months at most.

## Fuel system bleeding

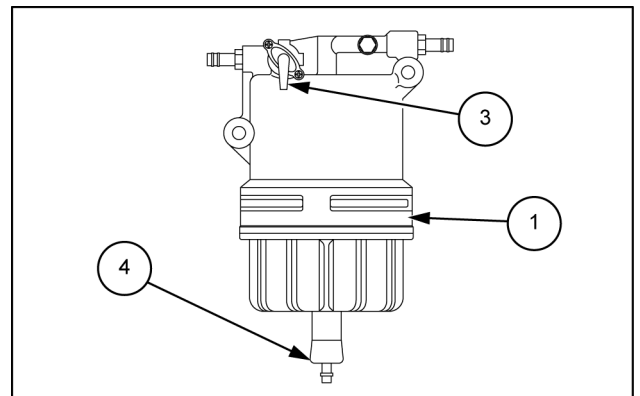
In the following cases, drainage from the fuel system is required:

- The tank has become empty completely.
  - The fuel filter is replaced.
  - The components of the fuel system are removed for service or repair.
  - The machine has been stored for longer than one month.
1. Locate the water separator (1) and the fuel filter (2) inside the engine compartment.
  2. Fill the fuel tank with suitable fuel.



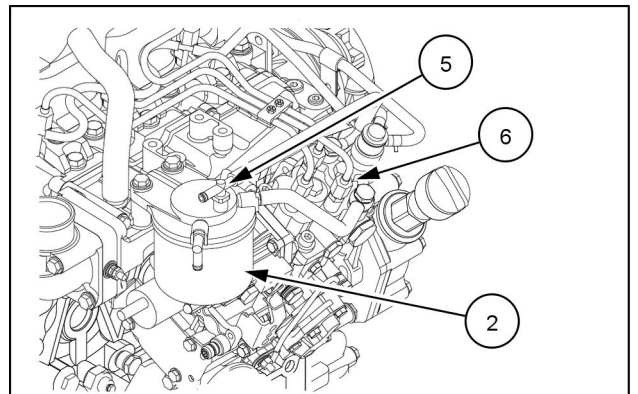
SMIL16MEX1437AA 1

3. Open the valve (3) located on the water separator (1).
4. Loosen the air vent plug (4) located on the water separator (1).



SMIL16MEX3172AB 2

5. Loosen the air vent plug (5) located on the fuel filter (2).
6. Tighten the air vent plugs (4) and (5) when bubbles do not come up any more.
7. Open the air vent cock located on top of the fuel injection pump (6).
8. Turn the starter switch to ON position and hold it in the position for **10 – 15 s** to operate the fuel injection pump (6).
9. Turn the starter switch to OFF position.
10. Close the air vent cock located on top of the fuel injection pump (6).
11. Close the air vent cock (1) located on the water separator (2) after air bleeding.



SMIL16MEX1473BA 3

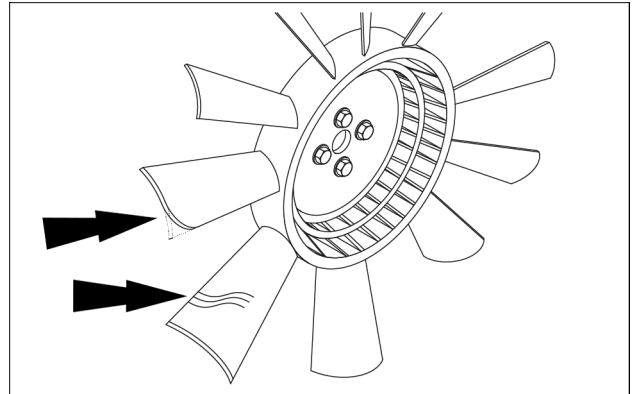
**NOTICE:** always keep the air vent cock located on the fuel injection pump (6) closed except during fuel system bleeding, or it may cause the engine stop.

## Fan and alternator drive belt

### Inspection of fan

Inspect the fan every **10 h** or every day.

Perform a visual inspection of the fan every **10 h** or every day. Check for cracks, loose rivets, and bent or loose blades.



SMIL16MEX0436AA 1

### Inspection of belt tension

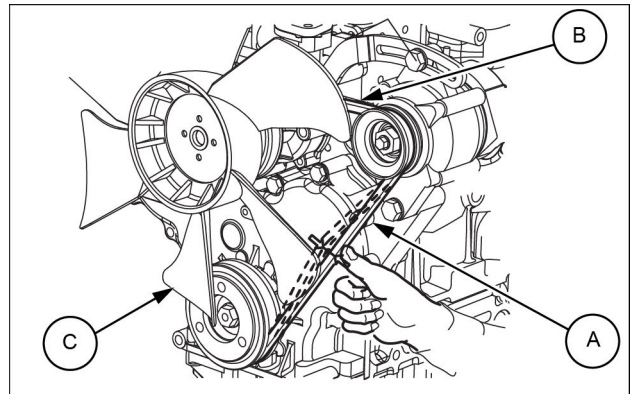
Check the belt tension every **10 h** or every day.

**NOTICE:** operating the engine with loosened belt may cause over heat of the engine or insufficient charging of the battery due to slipping belt in its housing.

1. Press the belt down with your thumb with a force of approximately **98 N·m (72 lb ft)** to check the deflection. There are three positions to check for belt tension (**A**), (**B**) and (**C**). You can check the tension at whichever position is the most accessible. The proper deflection of a used belt at each position is:

Used belt tension	
(A)	10 – 14 mm (0.4 – 0.6 in)
(B)	7 – 10 mm (0.3 – 0.4 in)
(C)	9 – 13 mm (0.4 – 0.5 in)

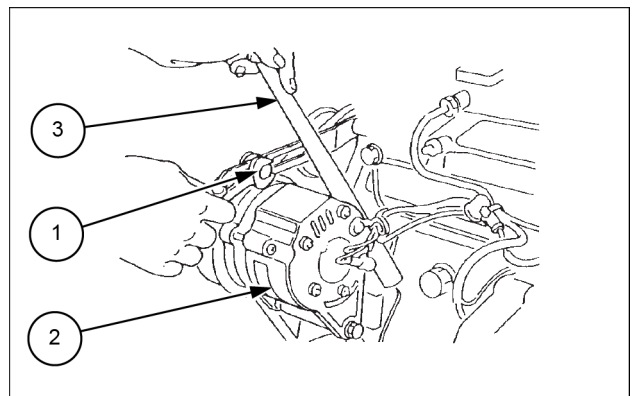
**NOTE:** check any indication of damage on the pulley or belt due to wear. Check thoroughly to make sure that the belt is correctly engaged to groove of the pulley. The belt must be replaced if it is elongated, it has cracks or it is worn out.



SMIL16MEX3356AB 2

### Adjustment of belt tension

1. Loosen the adjusting bolt (**1**) and the other related bolts and/or nuts, then move the alternator (**2**) with a pry bar (**3**) to tighten the belt to the desired tension. Then tighten the adjusting bolts and/or nuts.



SMIL16MEX3376AB 3

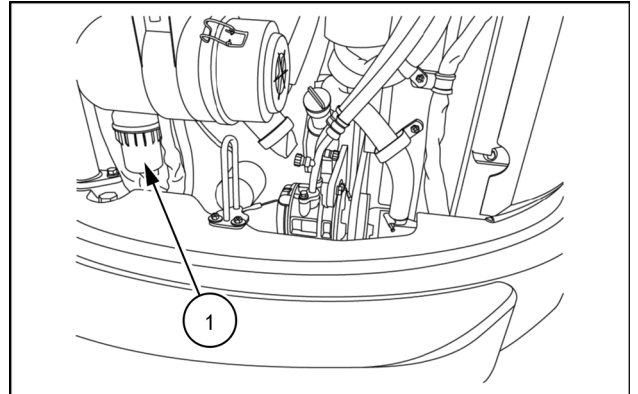
## Every 100 hours

### Fuel filter water separator

Drain water and sediment from the fuel filter water separator every **10 h** or every day.

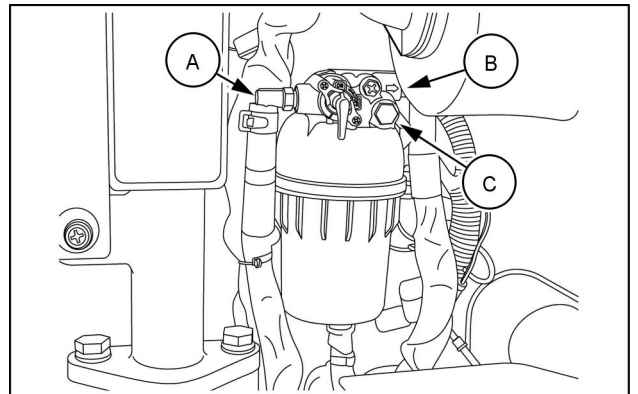
Clean the filter element of the fuel filter water separator every **200 h**.

1. Open the engine hood to access to the fuel filter water separator and place a container with an appropriate capacity under the fuel filter water separator **(1)**.



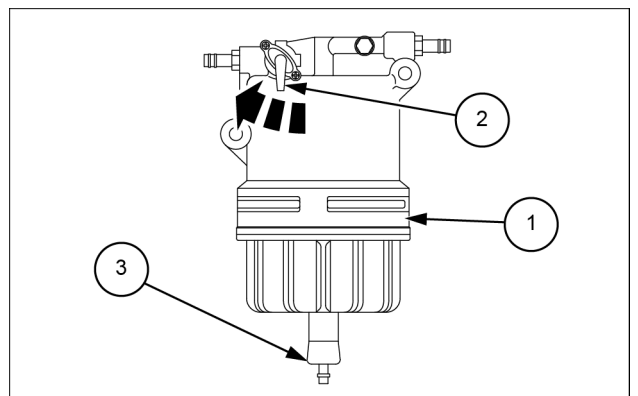
SMIL16MEX1445AA 1

- A. IN (to the fuel injector pump)
- B. OUT (from the fuel injector pump)
- C. Air vent out



SMIL18MEX0535AB 2

2. Rotate clockwise the fuel cock **(2)** located on the fuel filter water separator **(1)** to close the fuel flow.
3. Loosen the drain plug **(3)** located at the bottom of the fuel filter water separator.
4. Drain the water collected inside.
5. Tighten the drain plug **(3)** to **1 – 2 N·m (0.7 – 1.5 lb ft)**
6. Open the fuel cock **(2)**.
7. Prime the fuel system.
8. Check for leaks.



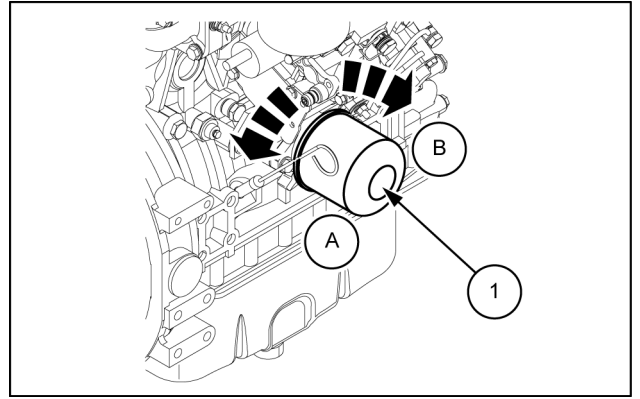
SMIL16MEX0600AB 3

7. Attach a new filter. Turn the filter until the seal touches the filter head, and then tighten it further a half turn by hand.

**NOTE:** do not use a filter wrench for tightening the filter. Overtightening can damage the filter and its seal.

- A. Open
- B. Close

8. Install the cover drain plug.



SMIL16MEX1443AB 4

9. Add new engine oil to the engine. Install the fill cap.
10. Run the engine for several minutes to check that there are no leaks at the filter and at the drain plug.
11. Stop the engine and check the oil level with the dipstick. Add oil if necessary.

**NOTE:** always wait **15 min** to allow the oil to return to the sump before checking the oil level.

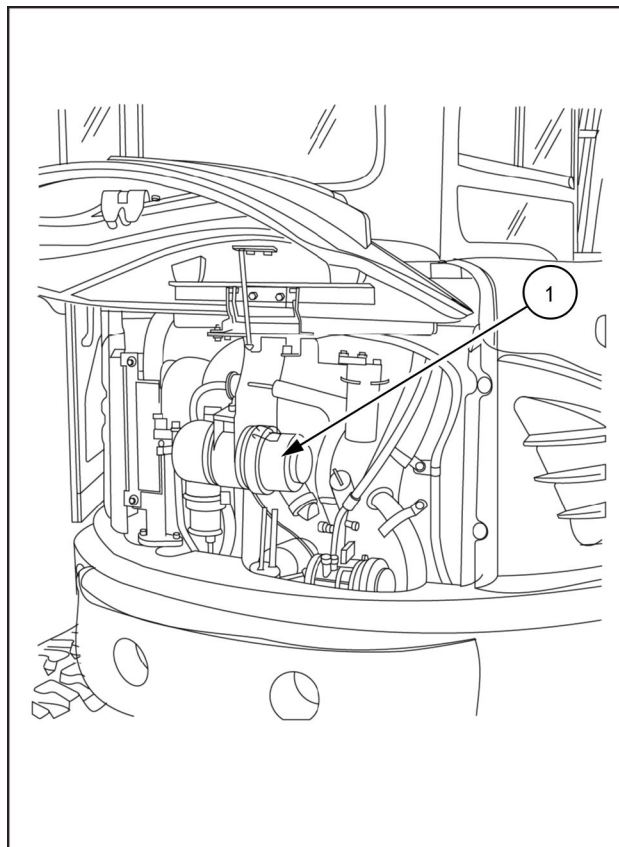
12. Install the cover of the drain plug.

## Every 2000 hours

### Air cleaner

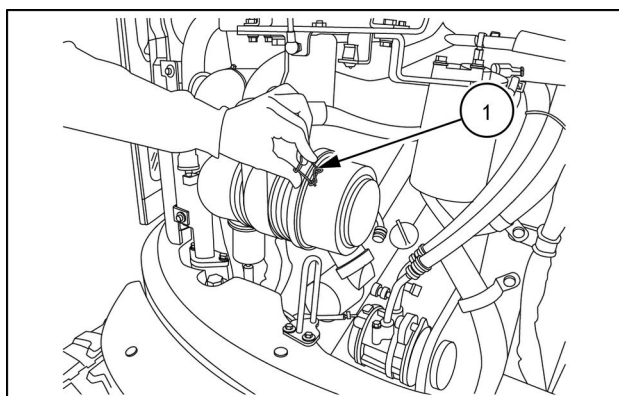
Replace the air cleaner every **2000 h**.

1. Open the engine access door to access to the air cleaner **(1)**.



SMIL16MEX1533BA 1

2. Unlock the two fasteners **(1)**.



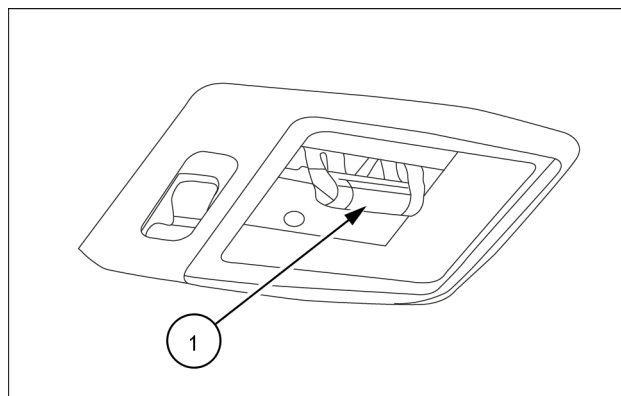
SMIL16MEX1529AA 2

**When necessary**

**Cab and working lights**

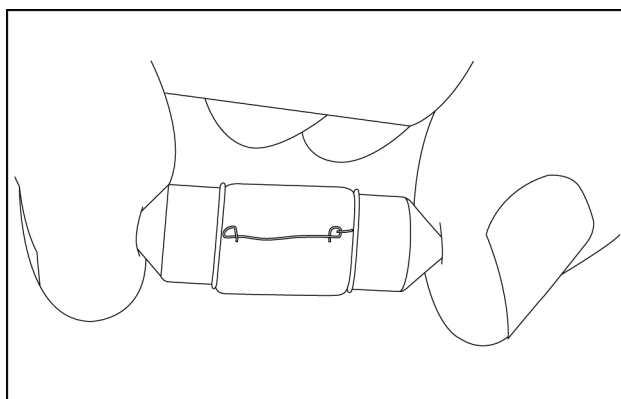
**Cab light**

1. Use a flat screwdriver to remove the protective glass of the ceiling light in order to access the bulb (**1**).



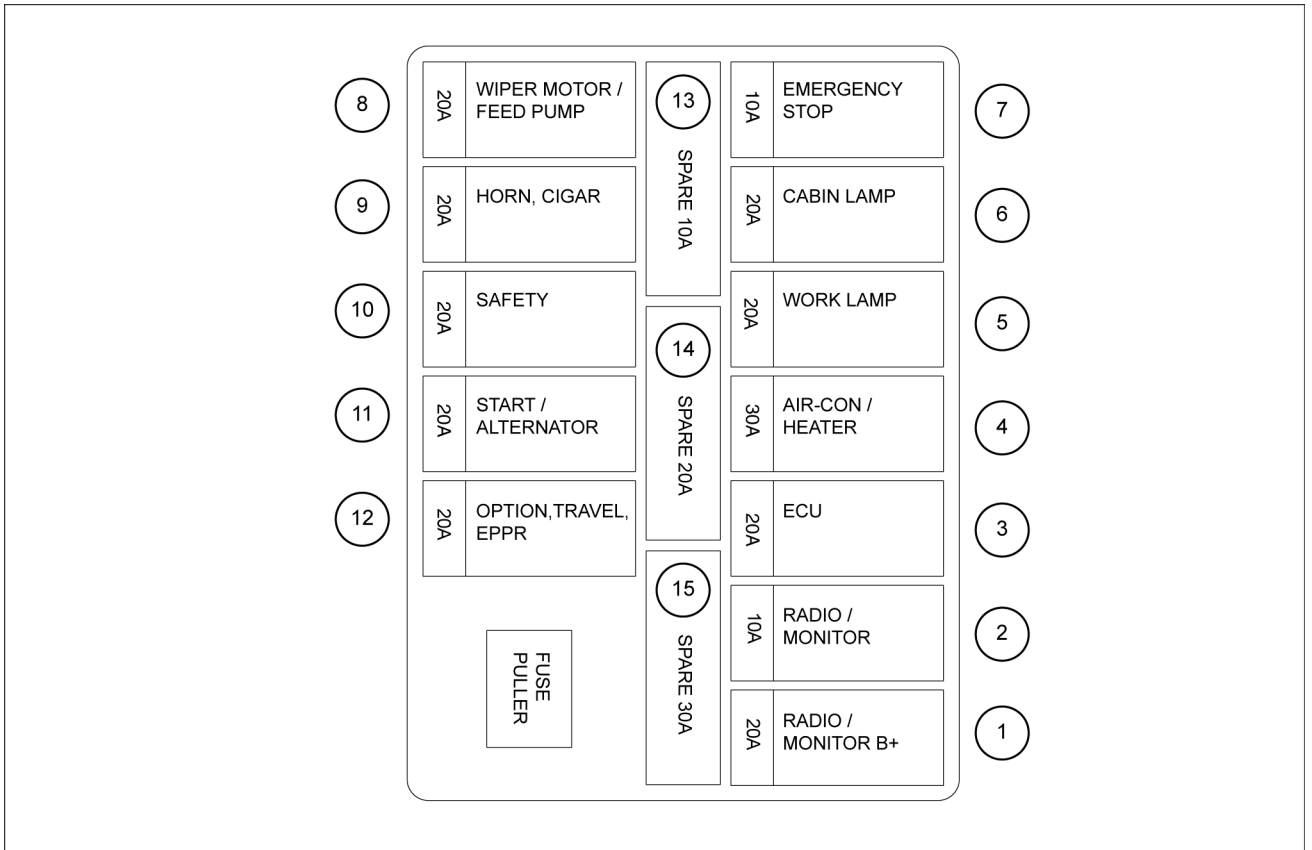
SMIL16MEX1117AA 1

2. Remove the bulb and install a new **5 W** bulb in the ceiling light.
3. Put the protective glass on the ceiling light and push it to lock.



SMIL16MEX0934AA 2

## 6 - MAINTENANCE



### Fuse functions

<b>(1) Radio/Monitor B+ 20 A</b>	<b>(9) Horn/Cigar 20 A</b>
<b>(2) Radio/Monitor 10 A</b>	<b>(10) Safety 20 A</b>
<b>(3) ECU 20 A</b>	<b>(11) Start/Alternator 20 A</b>
<b>(4) Air-conditioning/Heater 30 A</b>	<b>(12) Option/Travel/EPPR 20 A</b>
<b>(5) Work lamp 20 A</b>	<b>(13) Spare 10 A</b>
<b>(6) Cabin lamp 20 A</b>	<b>(14) Spare 20 A</b>
<b>(7) Emergency stop 10 A</b>	<b>(15) Spare 30 A</b>
<b>(8) Wiper motor/Feed pump 20 A</b>	

**Number of rollers and shoes on each side**

Upper roller	1
Lower roller	4
Track shoes	44

## Standard buckets with Hydraulic pin grabber coupler

**NOTICE:** all attachment shown on this manual are exclusive to the North American Market. To all other markets contact your authorized CASE CONSTRUCTION dealer, before purchasing an attachment.

**NOTE:** contact your authorized CASE CONSTRUCTION dealer, before purchasing an attachment.

The data shown below are referred to working operation with the dozer blade up and the **400 kg (882 lb)** counterweight.

For cab configuration:

- **1.30 m (51.18 in)** arm, minimum lift value: **370 kg (815.71 lb)**.
- **1.60 m (62.99 in)** arm, minimum lift value: **340 kg (749.57 lb)**.

For canopy configuration:

- **1.30 m (51.18 in)** arm, minimum lift value: **350 kg (771.62 lb)**.
- **1.60 m (62.99 in)** arm, minimum lift value: **320 kg (705.48 lb)**.

## Standard buckets with mechanical coupler application as function of the arm (for cab version)

General purpose buckets			Arm	
Capacity ISO 7451 (Heaped)	Width	Mass	1.30 m (51.18 in)	1.60 m (62.99 in)
0.060 m <sup>3</sup> (0.078 yd <sup>3</sup> )	305 mm (12 in)	73 kg (160.9 lb)	•	•
0.090 m <sup>3</sup> (0.118 yd <sup>3</sup> )	457 mm (18 in)	93 kg (205.0 lb)	•	•
0.120 m <sup>3</sup> (0.157 yd <sup>3</sup> )	610 mm (24 in)	112 kg (246.9 lb)	•	■ (*)

## Standard buckets with mechanical coupler application as function of the arm (for canopy version)

General purpose buckets			Arm	
Capacity ISO 7451 (Heaped)	Width	Mass	1.30 m (51.18 in)	1.60 m (62.99 in)
0.060 m <sup>3</sup> (0.078 yd <sup>3</sup> )	305 mm (12 in)	73 kg (160.9 lb)	•	•
0.090 m <sup>3</sup> (0.118 yd <sup>3</sup> )	457 mm (18 in)	93 kg (205.0 lb)	•	•
0.120 m <sup>3</sup> (0.157 yd <sup>3</sup> )	610 mm (24 in)	112 kg (246.9 lb)	▲ (*)	■ (*)

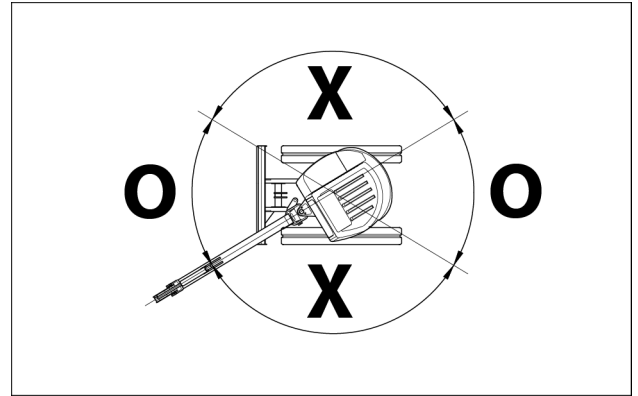
- Density of material up to 1.6 t/m<sup>3</sup>
- ▲ Density of material from 1.4 t/m<sup>3</sup> to 1.6 t/m<sup>3</sup>
- Density of material from 1.2 t/m<sup>3</sup> to 1.4 t/m<sup>3</sup>
- ◆ Density of material under 1.2 t/m<sup>3</sup>

(\*) With this bucket, to improve digging performance and stability it is recommended to use additional counterweight.

(\*\*) With this bucket, to improve digging performance and stability it is mandatory to use additional counterweight.

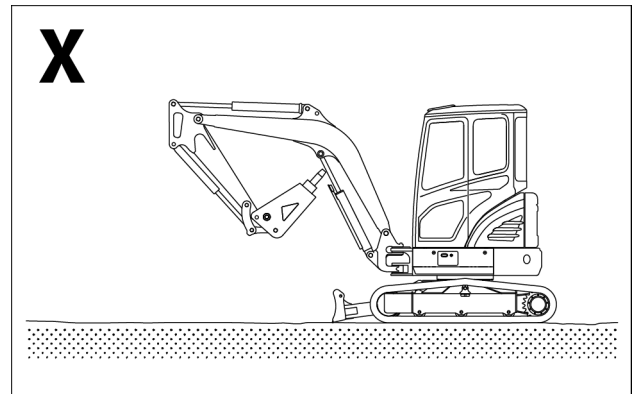
**NOTICE:** pay particular attention when swinging the boom to the left-hand side: the attachment may contact the cab/canopy.

Do not operate the breaker to the side of the machine. The machine may become unstable and undercarriage components life may be reduced.



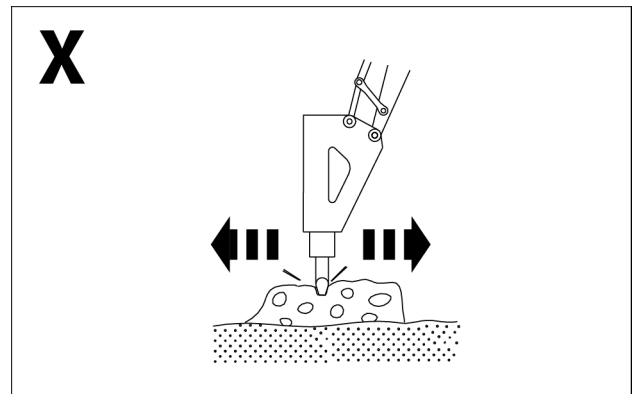
SMIL16MEX0465AA 14

Operate the excavator carefully to avoid hitting the boom with the hydraulic breaker.



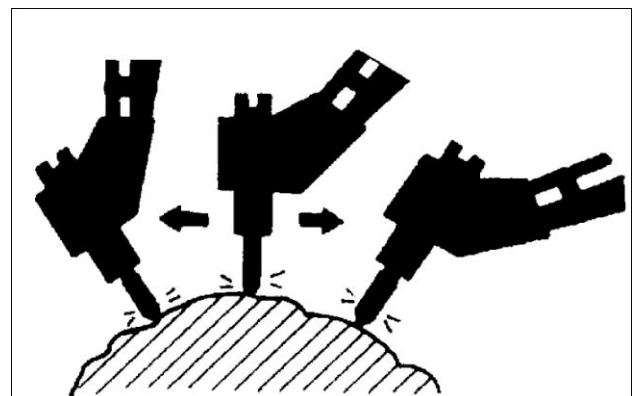
SMIL16MEX0466AA 15

Do not operate the breaker while striking. This can cause damage to the working device and to the swing system.



SMIL16MEX0467AA 16

Do not operate the hydraulic breaker continuously longer than **60 s**. Excessive chisel wear will result. If an object could not be broken within **60 s**, apply chisel to other locations, less than **60 s** for each location.



NH0205 17

## Securing the quick coupling system

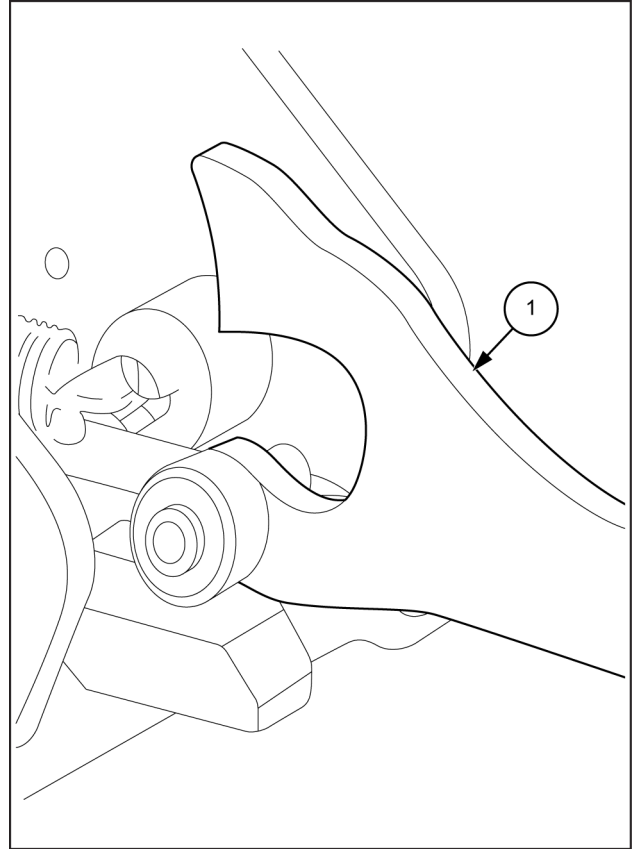
**NOTICE:** the quick coupling system must be secured unless using another attachment.  
Be sure to retract the mobile plate of the quick coupling system.

### ⚠ WARNING

**Cutting hazard!**  
This operation could be dangerous.  
Do not put your hands near the mobile plate.  
If the mobile plate is not properly locked in the engaged position, the mobile plate could suddenly disengage.  
Failure to comply could result in death or serious injury.

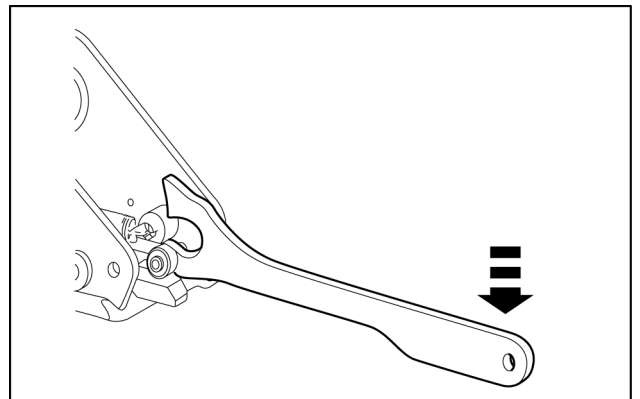
W1491A

1. Move the boom, arm, and bucket controls in order to position the quick coupling system **1 m (3.3 ft)** above the ground.
2. Position the release tool **(1)** on the locking plate as shown in the figure opposite.



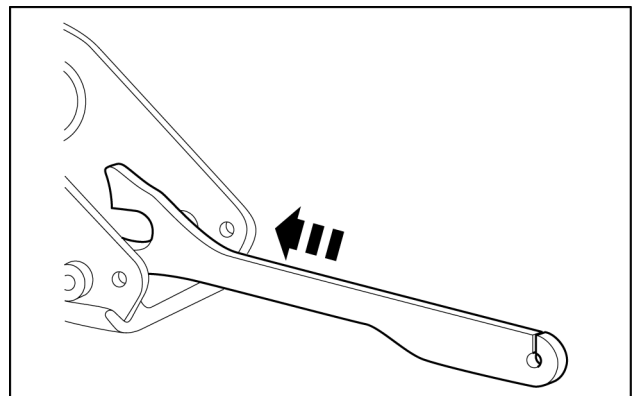
SMIL17MEX0062BB 14

3. Push the release tool down to disengage the locking plate from the stop tab.



SMIL17MEX0063AB 15

4. Move the locking plate toward the bucket latched position. The locking plate is secured when the springs are at rest.
5. Remove the release tool and put it in the machine compartment.



SMIL17MEX0064AB 16

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