



## **3 Operation**

This chapter describes the controls, and contains information on the function and handling of the indicator lights and controls in the cab.



The pages stated in the table refer to the description of the controls.

A combination of digits, or a combination of digits and letters (e.g. 40/**18** or 40/**A**) used for identifying the control elements, means:

fig. no. 40/control element no. 18 or position A in fig. no. 40

Figures carry no numbers if they are placed to the left of the text.

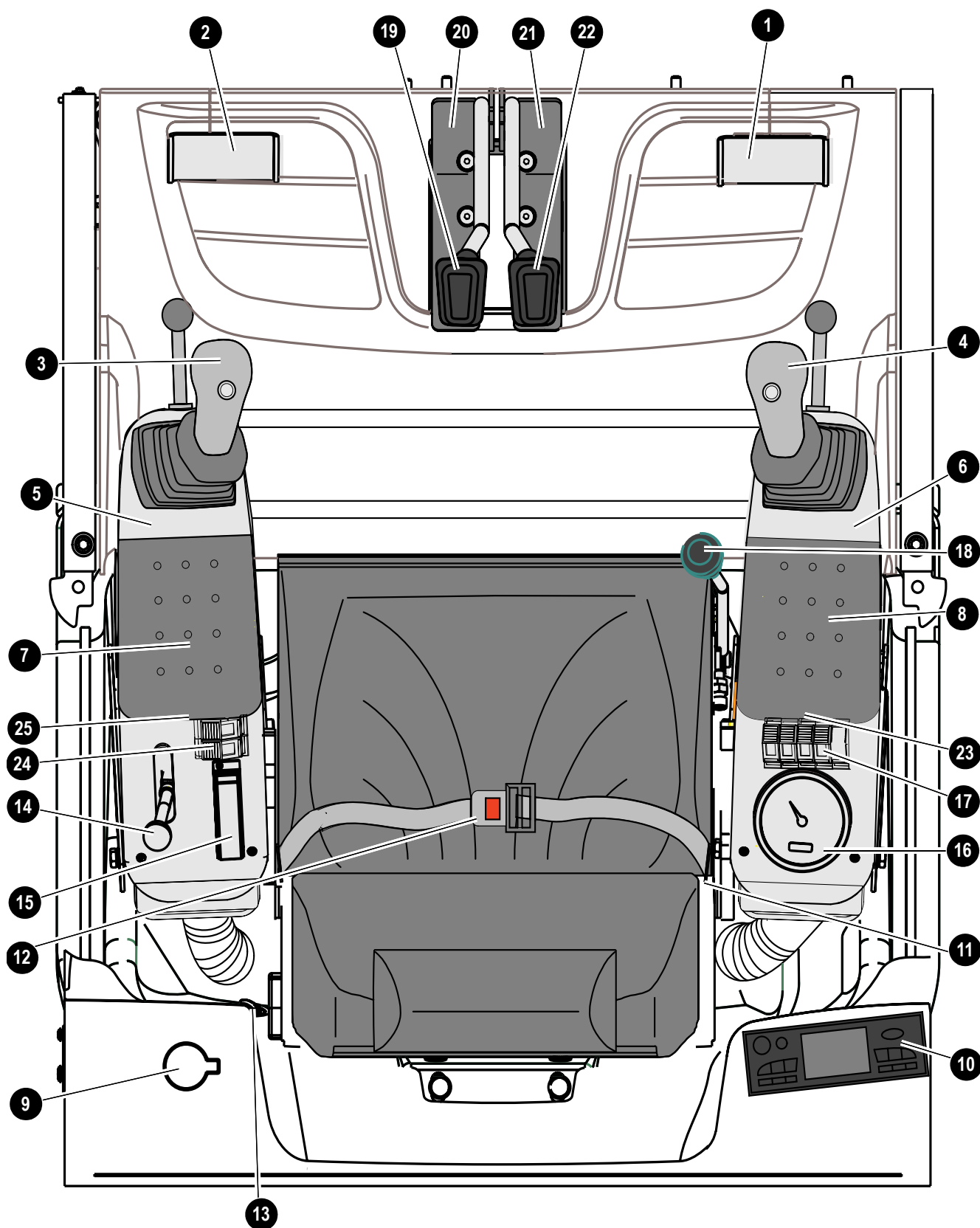
The symbols used in the description have the following meanings:

- This symbol stands for a list
  - Subdivision within lists or an activity. Follow the steps in the recommended sequence
-  *This symbol requires you to perform the activity described*
-  Description of the effects or results of an activity

n. s. = not shown

"Opt" = option; stated whenever controls or other components of the machine are installed as an option.

### 3.1 Cab: overview

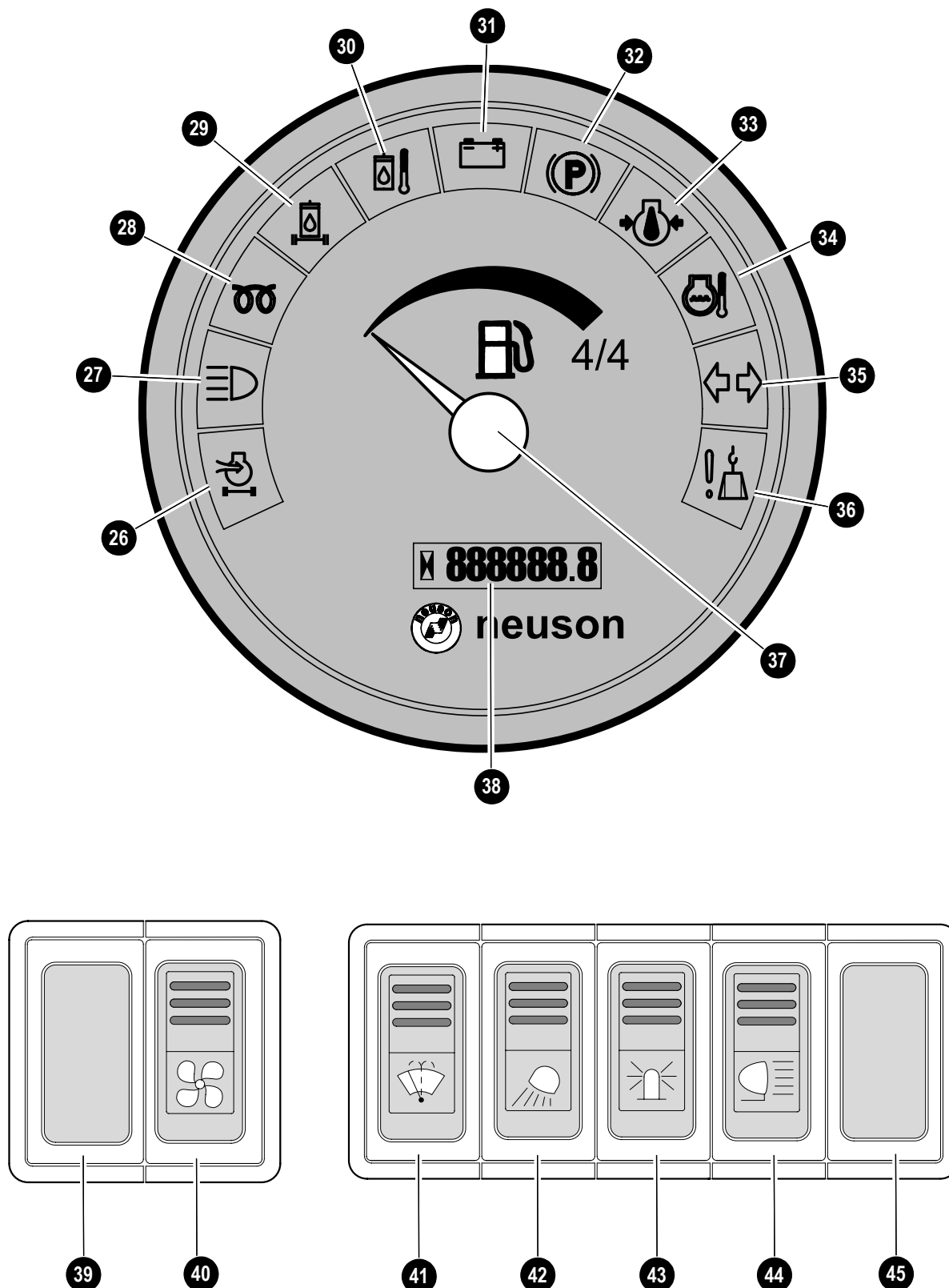




## 3.2 Cab overview: legend

Pos.	Description	For more information see page
1	Hammer pedal (auxiliary hydraulics) .....	3-38
2	Hammer pedal (boom swivel) .....	3-37
3	Control lever (left) .....	3-37
4	Control lever (right) .....	3-40
5	Control lever base (left) .....	3-37
6	Control lever base (right) .....	3-38
7	Armrest (left)	
8	Armrest (right)	
9	Tank for washer system .....	3-24
10	Radio (option)	
11	Seat (backrest adjustment) .....	3-25
12	Seat belt (lock) .....	3-26
13	Heating controller (option) .....	3-23
14	Throttle .....	3-9
15	Fuse box .....	6-3
16	Round display element .....	3-4
17	Switch panel (right-hand side console)	
18	Stabilizer blade/lever for telescopic undercarriage (option) .....	3-19
19	Drive lever (left) .....	3-16
20	Drive pedal (left) .....	3-16
21	Drive pedal (right) .....	3-16
22	Drive lever (right) .....	3-16
23	Preheating start switch .....	3-9
24	Switch panel (left-hand side console)	
25	12V power outlet	

### 3.3 Instrument panel overview





### 3.4 Instrument panel overview: legend

Pos.	Description	For more information see page
26	Indicator light (red) – air filter .....	3-10
27	Not assigned	
28	Indicator light (yellow) – cold starter .....	3-10
29	Indicator light (red) – hydraulic oil filter .....	3-10
30	Indicator light (red) – hydraulic oil temperature .....	3-10
31	Indicator light (red) – alternator charge function .....	3-10
32	Not assigned	
33	Indicator light (red) – engine oil pressure .....	3-10
34	Indicator light (red) – coolant temperature	
35	Not assigned	
36	Not assigned	
37	Fuel level indicator	
38	Hour meter .....	3-10
39	Not assigned	
40	Ventilation (option) .....	3-23
41	Washer system (option) .....	3-24
42	Working light .....	3-22
43	Rotating beacon (option) .....	3-23
44	Roof lights (option) .....	3-22
45	Not assigned	

## 3.5 Putting the machine into service

### Safety instructions



#### Caution!

Slipping or falling hazard when entering or leaving the operator station.

- ☞ *Inspect and confirm that the handhold and steps are undamaged and free of mud and debris.*
- ☞ *Always use a three point technique with both hands and one foot supporting entry and exit at all times.*
- ☞ *Face the operator station when using the handholds and steps to enter and exit the machine.*
- ☞ *Only use the steps and handles provided when entering and leaving the cab.*
- ☞ *Do not use the controls or movable lines and cables as handles.*
- ☞ *Do not get on or off a moving machine!*
- ☞ *Do not jump off the machine!*



#### Important!

Read the Operator's Manual stored in the compartment behind the seat before operating the machine for the first time.

### Putting the machine into service for the first time

#### Important information

- The machine may be put into service by a trained operator only! – [see chapter 1.5 Operator qualifications](#) on page 1-5 – [see chapter 2.5 Operator and Technician Qualifications and Basic Responsibilities](#) on page 2-3.
- The staff must have read and understood this Operator's Manual before putting the machine into service.
- The machine must only be used in serviceable condition in accordance with its designated use and the instructions set forth in this Operator's Manual, and only by safety-conscious persons who are fully aware of the risks involved in operating the machine.
- Go through the "Start-up" checklist in the following chapter.

### Running-in period

Handle the machine carefully during its first 50 operating hours.

The future performance and service life of the machine are heavily dependent on the observance of the following recommendations during the running-in period.

- Do not change engine speed abruptly.
- Avoid using the machine under heavy loads and/or at high speeds.
- Avoid abrupt acceleration, braking and changing travel direction.
- Do not run the engine at high speed for extended periods.
- Strictly observe the maintenance schedules – [see chapter 5.14 Maintenance plan \(overview\)](#) on page 5-35.

**Check lists**

The checklists below are intended to assist you in checking and monitoring the machine before, during and after operation.

These checklists cannot claim to be exhaustive; they are merely intended as an aid for you in fulfilling your duties as a conscientious operator.

The checking and monitoring jobs listed below are described in greater detail in the following chapters.

If the answer to one of the following questions is NO, first rectify the cause of the fault before starting or continuing work.

**Start-up checklist**

Check the following points before putting the machine into service or starting the engine:

No.	Question	✓
1	Enough fuel in the tank? (→ 5-2)	
2	Coolant level OK? (→ 5-9)	
3	Water drained from the fuel prefilter? (→ 5-5)	
4	Engine oil level OK? (→ 5-6)	
5	Oil level in hydraulic tank OK? (→ 5-19)	
6	Water level in washer tank OK? (→ 3-24)	
7	V-belt condition and tension checked? (→ 5-15/5-16)	
8	Lubrication points greased? (→ 5-26)	
9	Tracks checked for cracks, cuts etc. ? (→ 5-24)	
10	Lights, signals, indicators, warning lights and indicator lights OK? (→ 3-22)	
11	Windows, mirrors, lights and steps clean?	
12	Control lever base folded down? (→ 3-27)	
13	Attachment safely locked? (→ 3-42)	
14	Engine cover safely locked? (→ 3-30)	
15	Especially after cleaning, maintenance or repair work: → Rags, tools and other loose objects removed?	
16	Correct seat position? (→ 3-25)	
17	Seat belt fastened? (→ 3-26)	

## Operation checklist

After starting the engine and during operation, check and observe the following points:

No.	Question	4
1	Is anyone dangerously close to the machine?	
2	Have the indicator lights for engine oil pressure and alternator charge function gone out? ( <a href="#">3-10</a> )	
3	Drive pedals working correctly? ( <a href="#">3-16</a> )	

## Parking checklist

Check and observe the following points when parking the machine:

No.	Question	✓
1	Attachments lowered to the ground? ( <a href="#">3-42</a> )	
2	Control lever base folded up? ( <a href="#">3-27</a> )	
3	Cab locked, especially if the machine cannot be supervised? ( <a href="#">3-29</a> )	
<b>When parking on public roads:</b>		
4	Machine adequately secured?	
<b>When parking on slopes:</b>		
5	Machine also secured with chocks under the tracks to prevent it from rolling away?	



### 3.6 Operating the excavator

#### NOTICE

Possible engine damage from water intake.

☞ When crossing water fords or similar, make sure that the engine air intake slits are always above water level.

☞ See chapter "Air intake" on page 5-12.

#### Preheating / start switch: overview

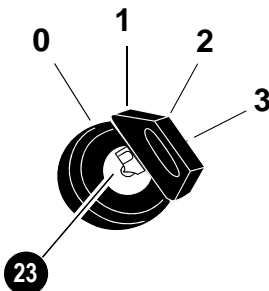


Fig. 29: Preheating start switch



#### Important!

The engine can only be started if the left-hand side control lever base is folded down.

Position	Function	Power consumer
0	Insert or remove the starter key	None
1	ON/drive position	All functions are operational ☞ Indicator lights come on ☞ Shriill sound
2	Preheats the engine (10 – 15 seconds)	
3	Starts the engine	☞ Starter is actuated ☞ Indicator lights must go out

#### Throttle lever: overview

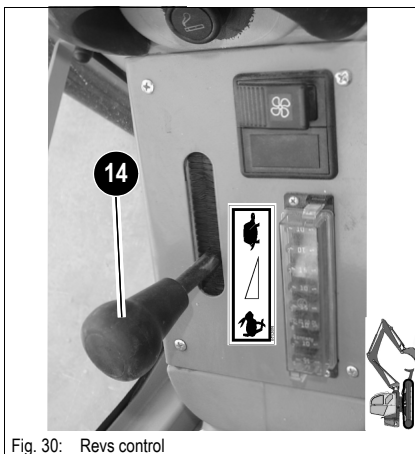


Fig. 30: Revs control

The throttle lever controls the engine speed as follows:

☞ Moving the lever up („turtle“) reduces engine speed.

☞ Moving the lever down („rabbit“) increases the engine speed.

## Indicator lights and warning lights: overview



### Indicator light (red) – hydraulic oil filter

Indicates inadmissibly high pressure in the hydraulic return line to the tank. In this case:

- ☞ Have the hydraulic oil return filter checked and, if necessary, replaced by an authorized workshop
- ☞ The indicator light can come on briefly if the hydraulic oil is cold, but goes out again once operating temperature is reached



### Indicator light (red) – air filter

Comes on if air filter is contaminated

- ☞ Stop the machine
- ☞ Switch off the engine immediately and check the outside and inside filters



### Indicator light (red) – alternator charge function

#### NOTICE

Possible engine damage. The coolant pump no longer runs if the V-belt is faulty. Engine may overheat or break down.

If the indicator light comes on with the engine running:

- ☞ Stop the engine immediately.
- ☞ Have the cause repaired by an authorized service facility.

The V-belt for the alternator, or the charging circuit of the alternator is faulty if the indicator light comes on with the engine running. The battery is no longer charged.



### Indicator light (red) – engine oil pressure

Comes on if the engine oil pressure is too low. In this case:

- ☞ Stop the machine.
- ☞ Switch off the engine immediately and check the oil level.

The indicator light comes on when the engine is turned on and goes out as soon as the engine runs.

**Indicator light (red) – coolant temperature**

**Warning!**

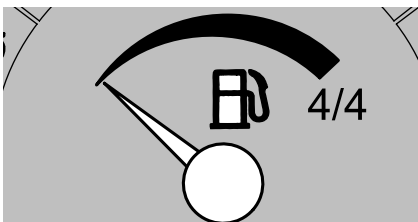
Burn hazard. The engine coolant is under pressure at high temperature. Failure to observe specific instructions to check the coolant level in the radiator of the cooling system can cause serious injury from burns or pressure spray of the coolant.

- ☞ *Do not attempt to remove the radiator filler cap or drain the radiator coolant until the coolant temperature is less than 43°C (110°F).*
- ☞ *Stop the engine and wait at least 10 minutes or until the cap is comfortable to the touch before attempting removal.*
- ☞ *Wear protective gloves and eye protection.*
- ☞ *After determining the temperature is low enough to avoid burns, slowly turn the cap counterclockwise to the first notch stopping cap rotation. Wait to confirm that any pressure has been relieved. Depress the cap and continue to rotate the cap in a counterclockwise motion until the cap is free and can be removed.*

**Indicator light (yellow) – cold starter**


Comes on if the key in the preheating / start switch is in position **2**.

A glow plug preheats the air in the combustion chamber of the engine when the key is in this position.

**Fuel level indicator**


Refuel immediately if the fuel level indicator reaches minimum. Otherwise the fuel system must be bled if it is run dry.

**Hour meter**


Records the engine service hours with the engine running.

## Before starting the engine

☞ Adjust seat position and rearview mirror – see [Seat adjustment on page 3-25](#)



### Important!

Adjust the seat so that the operator controls are comfortable to use and can be moved throughout the full range of motion without restriction.

## Starting the engine: general

- ☞ Fasten your seat belt – see [Seat belt on page 3-26](#).
- ☞ Check whether all levers and pedals are in neutral position.
- ☞ Move the throttle to the center position (between minimum and maximum) if the engine is cold.

- The starter cannot be actuated if the engine is already running (start repeat interlock).
- Do not run the starter for more than 10 seconds.
- Wait for about 1 minute to let the battery recover before trying again.

## Procedure

### NOTICE

Possible preheater damage. Actuating the preheating system too long can damage the preheater.

☞ Never preheat the engine more than 20 seconds.

After you have completed the starting preparations:

- ☞ Insert the starter key in preheating start switch.
- ☞ Turn the starter key to position "1"
- ☞ Check whether all indicator lights come on:
- ☞ Replace defective indicator lights immediately.
- ☞ Turn the starter key to position "2" and hold it in this position for about 5 seconds.
  - ➔ The intake air is preheated.
- ☞ Turn the starter key to position "3" and hold it in this position until the engine starts.
  - ➔ If the engine does not start after 10 seconds.
  - ☞ Interrupt the start procedure and try again after about 1 minute.
  - ➔ If the engine still does not start after trying to start the second time.
  - ☞ Contact a Wacker Neuson service center for troubleshooting.
- ➔ As soon as the engine runs:
- ☞ Release the starter key.

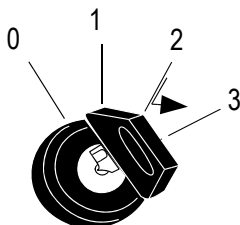


Fig. 31: Preheating / start switch

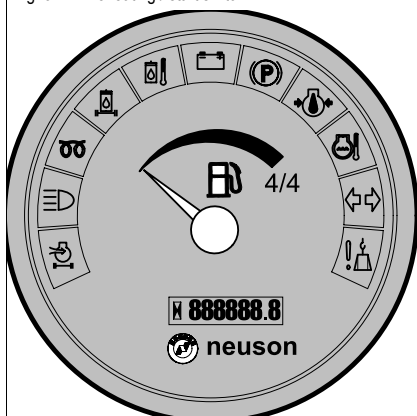


Fig. 32: Indicator

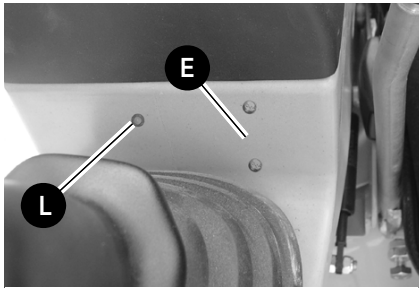
**Starting with the drive interlock (option)**


Fig. 33: Drive interlock

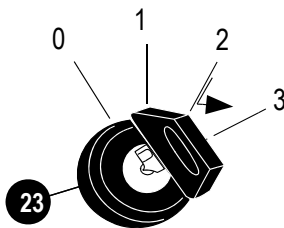


Fig. 33: Preheating / start switch

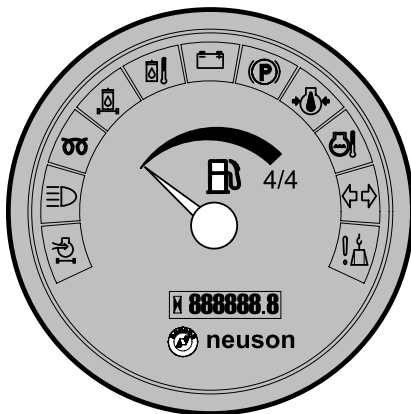


Fig. 33: Indicator

After you have completed the starting preparations:

- Approach the transponder key to about 2 cm (0.78 in.) of the emitter/receiver unit **E**.
- The machine can be started as soon as the red indicator light **L** goes out.
- Insert the starter key in the preheating / start switch **23** within 30 seconds and turn the starter key at least to position **"1"**.
- Check whether all indicator lights come on:
- Replace defective indicator lights immediately.
- Turn the starter key to position **"2"** and hold it in this position for about 5 seconds
  - The intake air is preheated.
- Turn the starter key to position **"3"** and hold it in this position until the engine starts
  - If the engine does not start after 10 seconds.
  - Interrupt the start procedure and try again after about 1 minute.
  - If the starter still does not start after trying to start the second time.
  - Contact a Wacker Neuson workshop for troubleshooting.
- As soon as the engine runs:
- Release the starter key.

### Starting at low temperatures

- ☞ Turn the starter key to position "2" and hold it in this position for about 15 seconds.
  - ➔ Engine is preheated.
- ☞ Turn the starter key to position "3" and hold it in this position until the engine starts.
  - ➔ If the engine does not start after 10 seconds.
  - ☞ Interrupt the start procedure and try again after about 1 minute.
  - ➔ If the engine still does not start after trying to start the second time.
- ☞ Contact a Wacker Neuson service center for troubleshooting.
- ☞ Release the starter key.

When the engine runs smoothly (increased engine speed):



#### **Important!**

In general, a battery delivers less energy in cold conditions. Therefore make sure the battery is always well charged.

### When the engine has started

- ☞ Check whether all indicator lights have gone out:
- ☞ Let the engine warm up.

#### **At cold temperatures:**

- ☞ Increase the engine speed slowly.
- ☞ Do not run the engine at full load until it has reached its operating temperature.

### Engine warm-up

After the engine has started, allow it to warm up at slightly increased idling speed until it reaches its operating temperature of 70 °C (158°F)(coolant). Run the engine with no load during the warm-up phase (fold left-hand side control lever base up). During the warm-up phase, check for unusual noise, exhaust color, leaks, malfunctions or damage.

In the case of malfunctions, damage or leaks, park and secure the machine, and find out the cause for the damage and have it repaired.

**Jump-starting the engine (supply battery)**
**Safety instructions**

**Warning!**

Explosion hazard. A frozen battery may explode during a jump-starting operation.

- ☞ Do not jump-start the engine if the battery is frozen.
- ☞ Dispose of the frozen battery in accordance with local environmental regulations.
- ☞ Replace the battery.


**Caution!**

Possibility of equipment damage or injury from improper jump-starting.

- ☞ Make sure the jumper cables are rated for 12 V and the maximum CCA rating of the battery.
- ☞ The cable clamping ends shall be colored red for positive post connectors, and black for the negative post connectors.
- ☞ To avoid sparking, the excavator must not touch the jump-starting vehicle when connected with jumper cables.
- ☞ Use a 12 volt source, either in the form of another battery or a charger equipped for jump starting. Using higher or lower voltage sources can damage the electrical system and potentially cause injury.
- ☞ To avoid short circuits, the jumper cable connected to the positive + terminal of the starting battery must never be brought into connection with electrically conductive vehicle parts.
- ☞ Route the jumper cables so they do not become entangled in rotating components in the engine compartment.

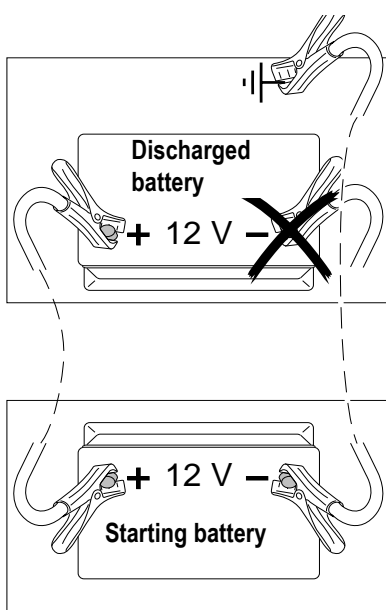


Fig. 34: Starting aid with jump leads

**Procedure**

- ☞ Drive the jump-starting vehicle close enough to the machine so that the jump leads can reach to connect the two batteries.
- ☞ Let the engine of the jump-starting vehicle run.
- ☞ First connect one end of the red jump lead (+) to the + terminal of the discharged battery, then connect the other end to the + terminal of the starting battery.
- ☞ Connect one end of the black jump lead (-) to the - terminal of the starting battery.
- ☞ Connect the other end of the black jump lead (-) onto a solid metal component firmly mounted on the engine block or onto the engine block itself. Do not connect it to the negative terminal of the flat battery, as otherwise explosive gas emerging from the battery may ignite if sparks are formed!
- ☞ Start the engine of the machine with the discharged battery.

**Once the engine has started:**

- ☞ With the engine running, disconnect both jump leads in exactly the reverse order (first remove the - terminal, then the + terminal) – this prevents sparking in the vicinity of the battery!

## Special instructions for traveling on public roads

The machine is subject to the:

- Applicable legal regulations of your country

Also observe the applicable regulations for accident prevention of your country.

## Traveling operation

After starting the engine:

- ☞ The alternator charge indicator light goes out.
- ☞ Slowly actuate the drive levers or the drive pedals.
- ➡ Machine moves off.

## Drive levers



### Important!

Possible loss of machine control. Rotating through 180° (stabilizer blade now at the rear) inverts the drive lever functions.

- ☞ Confirm the location of the stabilizer with respect to the operator station and compensate before attempting to move the machine.

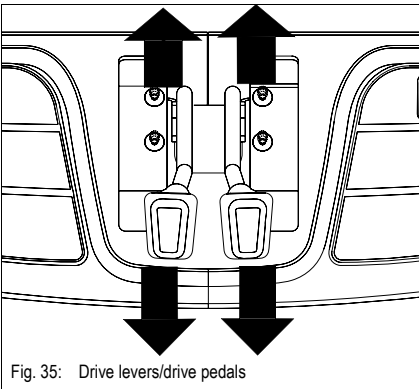


Fig. 35: Drive levers/drive pedals

The stabilizer blade side is the front side.

Raise the bucket and the stabilizer blade.

The machine can be moved either with the drive levers or with the drive pedals. Lock the upper carriage when travelling over longer distances.

Position	Function	
• 1	Push forwards	Track excavator moves forwards
• 2	Push forwards	
• 3	Pull backwards	Track excavator moves backwards
• 4	Pull backwards	
• 3	Pull backwards	Track excavator turns to the left
• 2	Push forwards	
• 1	Push forwards	Track excavator turns to the right
• 4	Pull backwards	

Forwards or reverse drive speed depends on the position of the drive levers or drive pedals.



### Important!

Make sure both tracks move as you change direction, otherwise the tracks are subject to increased abrasion.

## Hydraulic brake

The drive levers automatically return to their neutral positions as soon as they are released, which creates sufficient hydraulic braking effect.

When traveling downhill, the automatic hydraulic brake valves prevent the machine from “racing”. The machine does not run any faster than the admissible drive speed.

However, the automatic hydraulic brake valves in the undercarriage circuit no longer work properly if the diesel engine does not run at full speed.



**Important!**










Therefore, make sure you travel downhill at full engine speed under all circumstances. Use the drive levers or drive pedals to reduce the travel speed as required.

### 3.7 Operating on slopes

**Warning!**

Tip-over hazards. Follow these safety instructions carefully when operating on slopes.

**Specific safety instructions**


-  *Raise the bucket approximately 20–30 cm (8–12") off the ground as you move the machine. Avoid reversing downhill.*
-  *When operating through hollows or crossing obstacles, keep the attachment close to the ground and drive slowly.*
-  *Do not steer or operate across slopes.*
-  *Change your operating direction on level ground. This may take more time but is a safer operating technique.*
-  *When operating the machine, make sure you can stop safely if the machine starts to skid or if it becomes unstable.*
-  *Swivelling or operating the attachment on slopes may cause the machine to lose balance and to tilt. Avoid this under all circumstances.*
-  *Rotating the upper works when operating downhill with a full bucket is especially dangerous. Should this be nevertheless necessary, create a platform of level ground so that the machine can work on the flat level surface.*
-  *Do not operate on slopes over 15°, otherwise the machine can tip.*
-  *Do not continue to attempt traveling up a slope if the rubber tracks lose traction. Do not attempt to continue up the slope using the force capability of the boom, stick, and bucket to pull the excavator upward.*

**Operating on slopes**

Proceed as follows to prevent the machine from tipping over or slipping sideways.

**Warning!**

Tip-over hazard. A hose rupture on the telescopic cylinder might cause the undercarriage to retract (reducing track width) and cause the machine to lose stability and tip over.

-  *When operating across a slope with the telescopic undercarriage extended, position the boom facing down the slope and the bucket approximately 10–20 cm (4–8") above the ground.*

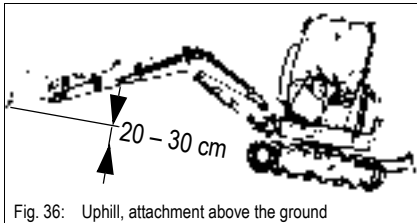


Fig. 36: Uphill, attachment above the ground

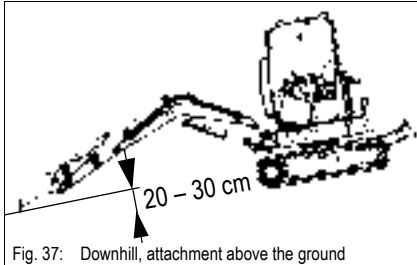


Fig. 37: Downhill, attachment above the ground

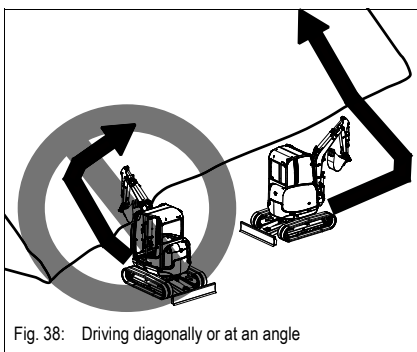


Fig. 38: Driving diagonally or at an angle


- ⚠ When traveling uphill, keep the attachment about 20 – 30 cm (8"–12") above the ground. In an emergency, lower the attachment immediately to the ground so you can stop the machine more easily.
- ⚠ Place the cab with the front side upward as you travel uphill, and downward as you travel downhill. Always check the ground's firmness underneath the front part of the machine as you drive.
- ⚠ When traveling downhill, extend the attachment to improve stability, and keep it about 20 – 30 cm (8"–12") above the ground. Drive slowly.
- ⚠ Reduce engine speed when traveling downhill. Keep the drive lever next to neutral position and travel slowly.
- ⚠ Always move straight ahead when traveling uphill or downhill. Traveling diagonally or at an angle to the slope is very dangerous.
- ⚠ Never change direction on slopes or travel across slopes. Always change position on level ground before continuing to travel on a slope.
- ⚠ Travel slowly in meadows, on leaves or wet steel plates. The machine can slip even if the ground is level. If the engine stops as you travel across a slope, immediately put the control levers to neutral position and start the engine again.

### 3.8 Stabilizer blade control / telescopic undercarriage (option)



#### **Important!**


Possible loss of machine control. Stabilizer blade lever is unprotected and can be moved unintentionally.

 *Avoid moving the stabilizer blade lever inadvertently.*




#### **Warning!**

Tip-over hazard. A hose rupture on the telescopic ram might cause the undercarriage to retract (reducing track width) and cause the machine to lose stability and tip over.

 *When operating across a slope with the telescopic undercarriage extended, position the boom facing down the slope and the bucket approximately 10–20 cm (4–8 in.) above the ground.*

#### **NOTICE**

Possibility of equipment damage. Lowering the stabilizer blade too deeply into the ground may create resistance.

 *Slightly raise the stabilizer blade.*

#### **NOTICE**

Possible track width shift mechanism damage.

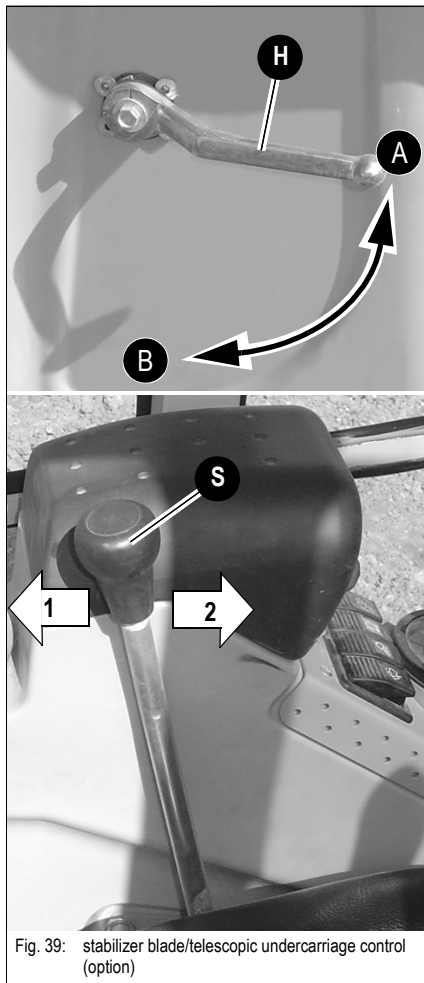
 *Do not run the machine in an intermediate telescopic position.*

 *Always move the undercarriage fully in or out.*



#### **Important!**

Be aware that the stabilizer blade lowers slowly if the telescopic undercarriage is retracted at the same time, and lowers more quickly once you have finished retracting or extending the undercarriage.



In order to improve stability during work, you can lower the stabilizer blade and extend the machine's track hydraulically (option).

Proceed as follows:

**i Important!**

Before retracting or extending the undercarriage telescopically, raise the machine with the stabilizer blade and the boom to avoid unnecessary strain and load on the telescopic mechanism.

 Select the required function with lever H:

Position	Function	
• A	<b>Lever H upwards</b>	The stabilizer blade is actuated with control lever S
• B	<b>Lever H downwards</b>	The telescopic undercarriage is actuated with control lever S

 The stabilizer blade/telescopic undercarriage (option) is actuated with control lever S:

Position	Function	
• 1	<b>Push forwards</b>	The stabilizer blade is lowered / the telescopic undercarriage is retracted (narrow track)
• 2	<b>Pull backwards</b>	The stabilizer blade is raised / the telescopic undercarriage is extended (wide track)

**i Important!**

Push or pull control lever S until the undercarriage has reached its final position.

**i Important!**

Check the position of the stabilizer blade before driving the machine.

### 3.9 Parking the machine



#### Important!

Possibility of inadvertent machine movement. To avoid unintentional movement of the machine once it has been parked:

- ☞ Park the machine on level, stable ground.
- ☞ Place stop chocks at the ends of the rubber track.

- ☞ Stop the machine.
- ☞ Lower the bucket and the stabilizer blade to the ground.
- ☞ Reduce engine speed to low idle setting.
- ☞ Stop the engine.
- ☞ Fold up the control lever base.

#### NOTICE

Possibility of engine damage due to overheating.

- ☞ Never stop the engine under full load.
- ☞ Except in the case of an emergency, always make sure the engine cools down before it is stopped.
- ☞ Let the engine run at idling speed with no load for at least 5 minutes before you switch it off.



#### Important!

Secure the machine against unauthorized operation.

- Fold up the control lever base
- Remove the starter key and carry it with you.
- Lock the cab (if equipped).

#### Parking the machine on slopes

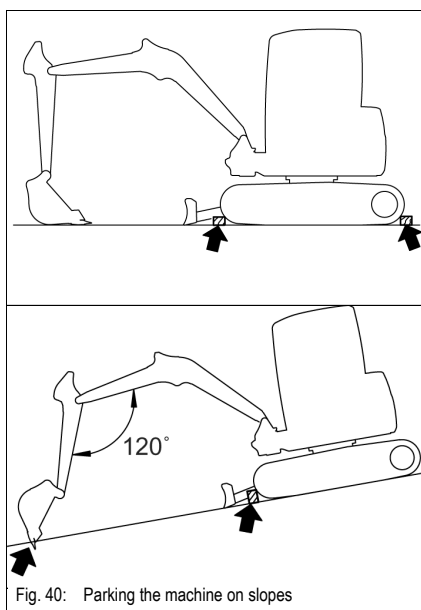


Fig. 40: Parking the machine on slopes

- ☞ Avoid stopping the machine abruptly. Always make sure there is enough space for stopping the machine.
- Park the machine on level ground with sufficient bearing capacity. Never park on slopes. If you cannot avoid parking the machine on a slope:
  - ☞ Place chocks under the track tracks and lower the attachment into the ground to prevent the machine from moving.
  - To prevent inadvertent machine or attachment movement, avoid moving the controls unintentionally.
  - ☞ Fold the control lever base up before leaving the seat.
  - ☞ Place the stabilizer blade downhill and lower it to the ground.

### 3.10 Light system

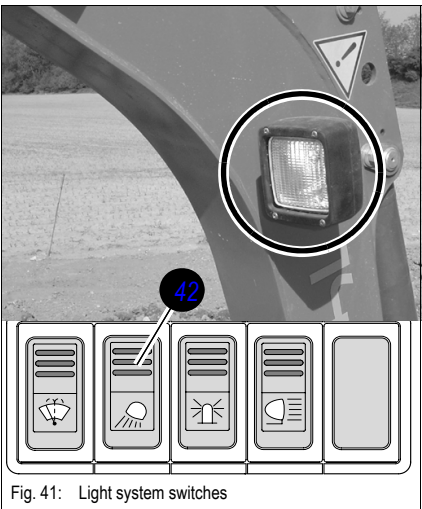


Fig. 41: Light system switches

The switch panel for the light system is located on the instrument panel.

Boom light		
ON	Press the light symbol on switch 42	Indicator light in switch 42 comes on
OFF	Press the ribbed end of switch 42	Indicator light in switch 42 goes out

#### Roof lights (option)

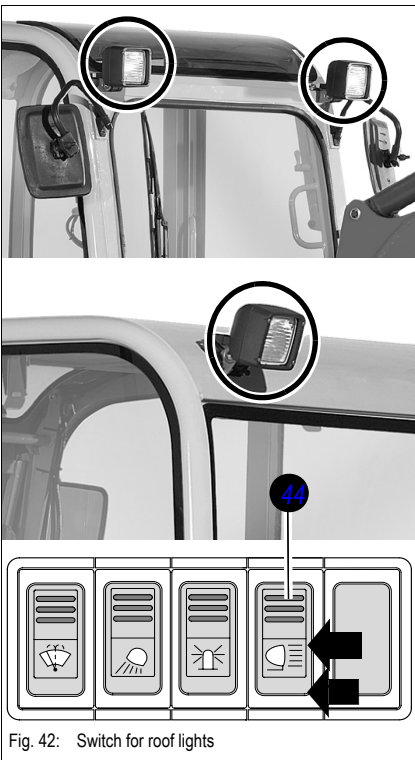


Fig. 42: Switch for roof lights



#### Warning!

Traffic accident hazard. Working lights can temporarily blind motorists on public roads.

- Do not switch on the working lights when traveling on public roads.
- When operating the machine near public roads, only switch the working lights on when there is no possibility of blinding passing motorists.

Roof lights		
ON	Press the light symbol on switch 44 to the 1st position Press the light symbol on switch 44 to the 2nd position	Indicator light in switch comes on
OFF	Press the ribbed end of switch 44	Indicator light in switch goes out

#### Interior light

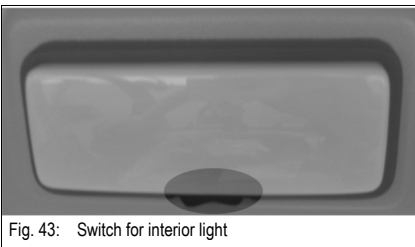


Fig. 43: Switch for interior light

Interior light	
ON	Press switch to the left or right
OFF	Return switch to the center position

### Rotating beacon (option)

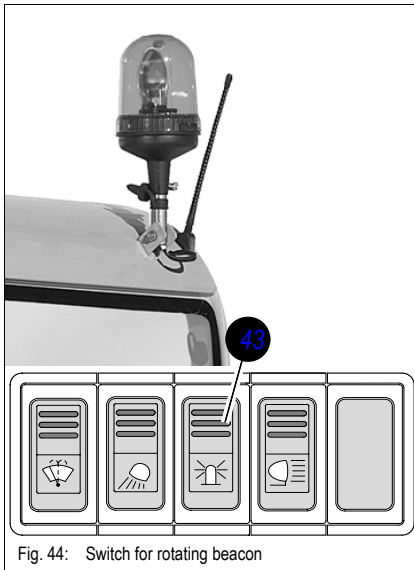


Fig. 44: Switch for rotating beacon

#### Rotating beacon (option)

ON	Press the beacon symbol on switch 43	Indicator light in switch comes on
OFF	Press the ribbed end of switch 43	Indicator light in switch goes out



#### Important!

Observe the legal regulations of your country for operating the rotating beacon.

## 3.11 Cab heating and ventilation

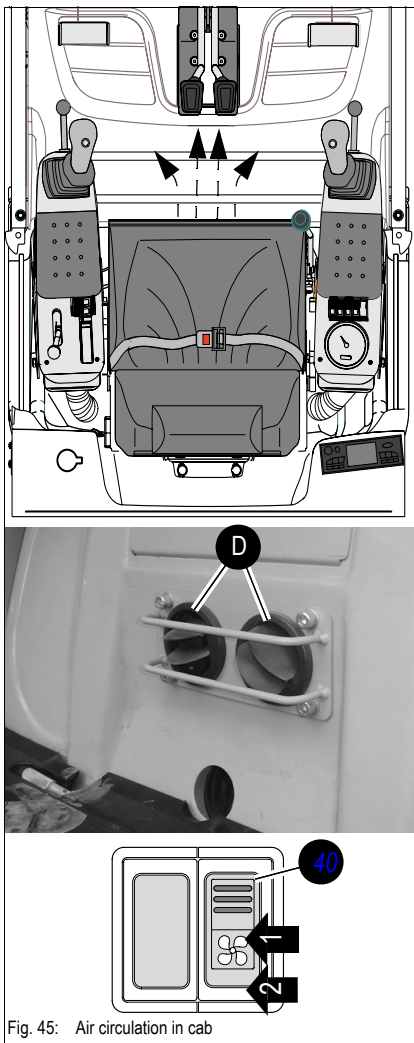


Fig. 45: Air circulation in cab



#### Important!

The cab is fitted with two air nozzles. Each nozzle can be closed and directed separately. Open both nozzles to defrost the front window effectively.

- Direct the nozzles D to the front window.
- Open or close the nozzles as required to vent or heat the cab.
- Do not place flammable or explosive material or objects near the nozzles.
- Air the cab from time to time.

#### Ventilation (fresh air)

1st range	Press the fan symbol on switch 40 to the first position	Low fan speed
2nd range	Press the fan symbol on switch 40 to the second position	High fan speed
OFF	Press the ribbed end of switch 40	Fan OFF



Heating adjustment

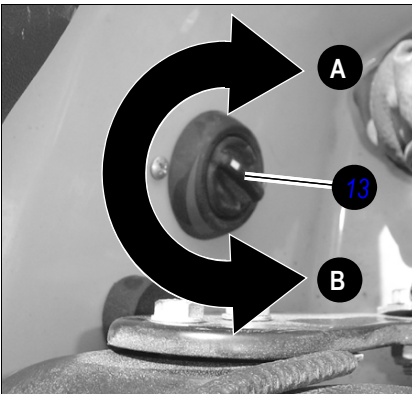


Fig. 46: Heating adjustment

Adjust cab temperature as follows:

- Cooling:  
➡ Turn heater valve 13 towards A until you reach the required temperature.
- Heating:  
➡ Turn heater valve 13 towards B until you reach the required temperature.

**i** Important!

To increase cab temperature to the desired level, make small adjustments for a quicker response.

3.12 Washer system

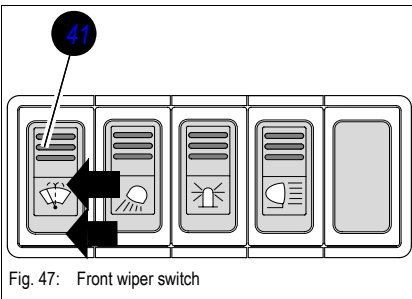



Fig. 47: Front wiper switch

Front window  wiper		
ON	➡ Press the wiper symbol on switch 41 down	➡ Front wiper is on
OFF	➡ Press the ribbed end of switch 41 up	➡ Front wiper returns to base position
1st range	➡ Press the wiper symbol on switch 41 to the first position	➡ Front wiper is on
2nd range	➡ Press the wiper symbol on switch 41 to the second position	➡ Pump sprays washer water on the window

**i** Important!

Do not actuate the washer system with the front window folded up. Do not actuate the washer system if the tank is empty, otherwise this may damage the electric pump.

Tank for washer system



Fig. 48: Tank for washer system

The tank filler inlet is located at the rear left in the cab.

**i** Important!

Use a blended mix of water and windshield washer fluid. A blended mix will minimize freeze damage, prolong wiper life, and reduce streaking. In winter: add antifreeze for washer systems to the water. Refer to the antifreeze instructions for further information on concentrations. The rubber diaphragm in the non-return valve in the housing sticks to itself if stored in a dry condition over a longer period of time. In order to restore this valve's function, moisten this non-return valve, dip it briefly in water and then blow air through it.



### 3.13 Seat adjustment

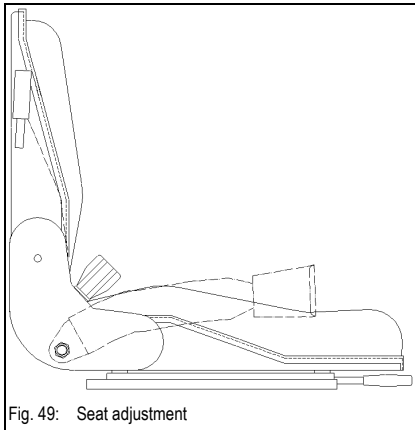


Fig. 49: Seat adjustment



#### Caution!

Possible loss of machine control while adjusting the seat.

- ✎ Do not adjust the seat position during machine operation or travel.
- ✎ Adjust the seat before operating the machine.
- ✎ See "Before starting the engine" on page 3-12.

#### NOTICE

Possible window damage from adjusting the backrest.

- ✎ Make sure the backrest does not touch the rear window or the removable part of the front window as you adjust backrest inclination.
- ✎ Select a seat position which will not damage the window panels when working with the machine.

### Weight adjustment



#### Important!

Adjust the seat suspension correctly to ensure a high level of ride comfort. Use the lever to adjust the seat suspension.

A label on the seat indicates the correct position for the respective weight.

Weight adjustment: 50 – 120 kg (110.2 lbs - 264.6 lbs)

- ✎ Adjusting the weight is easier if you avoid sitting on the seat during adjustment.

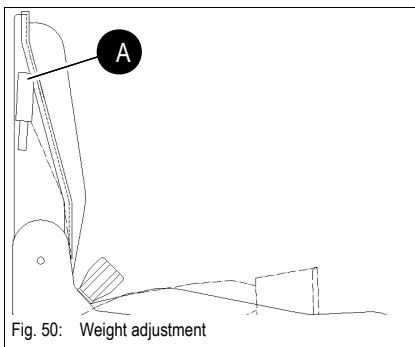


Fig. 50: Weight adjustment

#### To adjust to a higher weight:

- ✎ Push lever A upwards

#### To adjust to a lower weight:

- ✎ Push lever A downwards.

### Horizontal adjustment

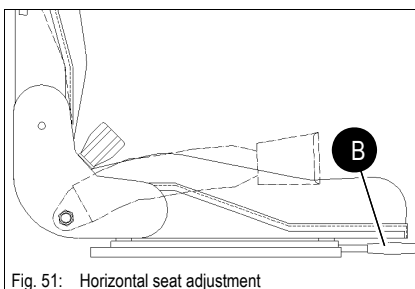


Fig. 51: Horizontal seat adjustment

- ✎ Sit down in the seat

- ✎ Pull lever B upwards and at the same time and move the seat forwards or backwards.