WACKER NEUSON
all it takes!

Operator's Manual

Wheel Loader

WL44

Vehicle Model	**RL50LP**
Material Number	**1000419742**
Version	**2.2**
Date	**04/2021**
Language	**[en]**

1000419742

1.2.2 Limitation of liability

In the event of the following infringements, the manufacturer disclaims any liability for personal injury and damage to property:

- Actions contrary to this operator's manual.
- Non-designated use
- Deployment of untrained personnel.
- Use non-approved spare parts and accessories.
- Improper handling.
- Structural changes of any kind.
- Non-observance of the General Terms and Conditions (GTC).

3.4.8 Vehicle travel on public roads and sites

- The specific national driving license is required.
- When driving on public roads or sites, observe the national regulations (e.g. road traffic regulations).
- Ensure that the vehicle is in compliance with the national regulations.
- In order not to blind other motorists, using the existing work lights during vehicle travel on public roads or sites is prohibited.
- When crossing underpasses, bridges, tunnels, e.g. ensure that the clearance height and width is sufficient.
- The mounted attachment must be approved for driving on public roads or sites (see the registration papers).
- When transferring the vehicle on public roads, the attachment must be brought into transport position and emptied if necessary.
- The attachment fitted onto the vehicle must be equipped with the mandatory lights and protective equipment.
- Take measures against unintentional operation of the working hydraulics.
- If the vehicle has different steering modes, ensure that the mandatory steering mode is selected.

3.4.9 Parking the vehicle

Stopping the engine of the vehicle

- Stop the engine only according to the operator's manual.
- Before stopping the engine, lower the attachment to the ground.

3.4.10 Securing the vehicle

- Unbuckle the seat belt only after stopping the engine.
- Unbuckle the seat belt only after stopping the drive.
- Secure the vehicle from rolling away before leaving the vehicle (e.g. parking brake, suitable chocks).
- Remove the starting key and secure the vehicle against unauthorized operation.

3.5 Lifting gear applications

3.5.1 Requirements

- Have loads fastened and the operator guided by a qualified person who has specific knowledge of lifting gear applications and the usual hand signals.
- The person giving instructions to the operator must stay in visual contact with the operator when fastening, guiding or removing the load (maintain visual contact).
- If this not be possible, ask one more person with the same qualifications to guide.
- The operator may not leave his seat as long as the load is raised.

3.10.5 Safety instructions regarding internal combustion engines

- Internal combustion engines present special hazards during operation and fueling.
- Failure to follow the warnings and safety instructions can cause serious injury or death.
- Keep the area around the exhaust system free of flammable materials.
- Check the engine and fuel system for leaks (e.g. loose fuel lines). Don't start or let the engine run in case of leaks.
- Breathing the exhaust fumes causes death very quickly.
- Engine exhaust fumes contain invisible and odorless gases (e.g. carbon monoxide and carbon dioxide).
  - Operate the vehicle only on appropriately ventilated areas.
- The respective safety instructions must be observed when using the vehicle in areas where there may be explosion hazards.
- Do not touch the engine, exhaust system and cooling system as long as the engine is still running or has not cooled down yet.
- Do not remove the filler cap of the radiator when the engine is running or hot.
- The coolant is hot, under pressure and can cause serious burns.

3.10.6 Bleeding the fuel system and refueling

- Do not bleed the fuel system or refuel near open flames.
- Bleed the fuel system and refuel only in well-ventilated areas (e.g. due to vapors harmful to health, explosion hazard).
- Wipe away fuel spills immediately (e.g. due to fire hazard, slipping hazard).
- Firmly close the fuel tank cap; replace a malfunctioning fuel tank cap.

3.10.7 Handling oil, grease and other substances

- Observe the safety data sheet when handling oils, greases and other chemical substances (e.g. battery acid, coolant, urea solution).
- Wear appropriate protective equipment (e.g. protective gloves, safety glasses).
- Be careful when handling hot vehicle fluids and consumables – there is a risk of burning and scalding.
- Only work with corresponding personal protective equipment, e.g. respiratory protection in exposed areas (e.g. dust, steam, smoke, asbestos).
- Do not operate the vehicle in radioactively, biologically or chemically contaminated areas.

1 Cab heating
2 Ignition lock
3 Accelerator pedal
4 Dashboard switch panel
5 Joystick
6 Switch panel 1 in the side console
7 Switch panel 2 in the side console
8 Switch panel 3 in the side console
9 Control lever for the standard hydraulic connections
10 Control lever for manual throttle
11 Radio
12 Arm rest
13 Switch panel 4 in the side console
14 Cup holder
15 Seat
16 Control lever for the parking brake
17 Steering wheel
18 Steering column switch
19 Brake/inching pedal
20 Footrest

Not shown in overview:

21 Switch panel in roof

Fig. 24: Label articulation area

Safety label: Standing in the articulation area!

CAUTION! Injury hazard in the articulation area of the vehicle.

- During operation, no persons may be in the danger zone of the vehicle.

Fig. 25: Safety label Rotating parts

Safety label: Rotating parts

CAUTION! Injury hazard - Shear hazard due to rotating parts.

- Do not touch any moving or turning parts.
- Perform inspections and maintenance work only when the engine is at standstill.

Fig. 26: Label Seat belt

Safety label: Fastening the seat belt

CAUTION! Fasten seat belt; ensure the vehicle's stability.

- Operate the vehicle only from the operator seat.
- Fasten your seat belt during vehicle operation.
- Observe the stability and tipping resistance of the vehicle.

Close door from outside

To prevent third parties from using the vehicle, always lock both doors after getting out and lock them with the starting key.

1. Push the door against the spring.
2. Door locks into the door lock.
   ⇨ Door is closed.
3. Lock the door with the starting key.

5.1.1.3 Locking doors into place and opening doors

Fig. 53: Locking door into place

Locking the doors into place

The doors can be opened together with the side window and locked in this position.

1. Open the door.
2. Fold the door back.
3. Lock the door by snapping it into place.

⇨ Door is locked into place.

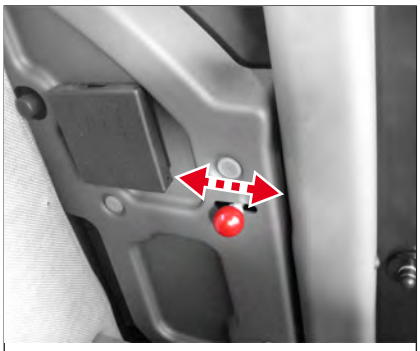


Fig. 54: Unlocking

Release door lock

1. Move the release lever from the inside.
   ⇨ Locking is released.
2. Fold the door forward.
3. Engage the door in the door lock.

⇨ Door is closed.

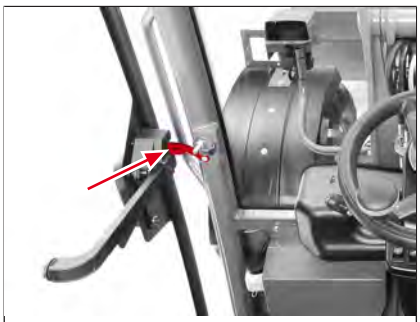


Fig. 55: Position door slightly in open position

Positioning door

The doors can be opened to a gap.

1. Fold down the lever.
2. Engage the lever in the lock and lock into place.

⇨ Door is locked open into place.

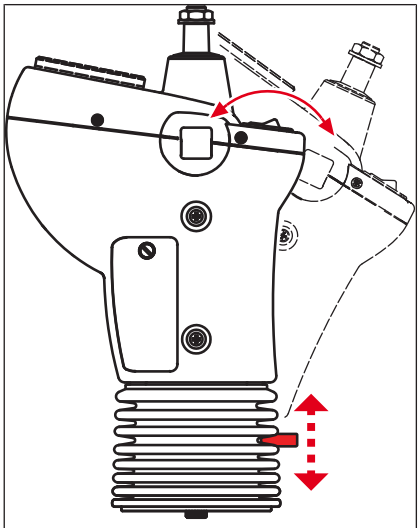


Fig. 66: Steering wheel adjustment lever

1. Push the lever down and hold it.
   ⇨ The steering wheel is unlocked.
2. Adjust the steering wheel.
3. Release the lever.

⇨ The steering wheel is adjusted and locked.

5.2.4 Adjusting the mirrors

The field of vision describes the visible area that the operator can see from the seat. Mirrors or camera systems can be installed on the vehicle to support the operator.

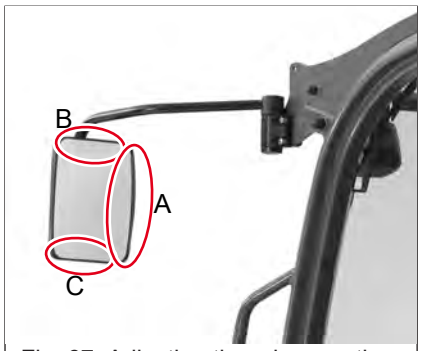


Fig. 67: Adjusting the mirror on the vehicle

Adjusting the rearview mirrors

1. Adjust the rearview mirrors as shown.
   ⇨ In order to prevent the mirror from touching the door, turn the mirror bracket sufficiently forward (about 90°).
2. Adjust the rearview mirrors.

- The outer edge of the vehicle must be visible on the inside **A**.
- The horizon must be visible at the upper edge **B**.
- At the lower edge **C**, the visible area must be as close as possible to the vehicle.

5.4.4 Engine preheating and hydraulic oil preheating

⚠ WARNING

Risk of injury due to electric shock!

The engine and hydraulic oil preheating is operated with 230 volts. Defective cables can lead to electric shocks which can result in death or serious injury.

- ► Run the engine and hydraulic oil preheating only in a dry place.
- ► Immediately replace malfunctioning cables.

NOTICE

Inadequate coolant and hydraulic oil levels can damage the heating cartridge of the preheating unit!

- ► Use preheating only for cold starts for operating times described in the table (overheating protection).
- ► Ensure the correct coolant and hydraulic oil level before each heating, otherwise the heating cartridges may burn out.
- ► Check for leaks, even when the vehicle is warm.
- ► The coolant must always have a sufficient amount of antifreeze compound.
- ► Check cables regularly for damage or aging. Immediately replace a damaged cable.

The vehicle can be fitted with an engine and hydraulic oil preheating. It preheats the coolant and hydraulic oil. The following operating times are recommended depending on outside temperatures.

Temperature °C	Operating time in hours (h)
-20°	3
-10°	2
-5°	1.5
0°	1
+10°	1

Requirements for connecting the engine and hydraulic oil preheating

- ✓ 230 volt mains supply
- ✓ Maximum 16 ampere fuse protection
- ✓ Fault current protective switch
- ✓ Plug receptacle with grounding contact
- ✓ The vehicle body and the grounding conductor of the plug receptacle must be conductively connected together under all circumstances.

▪ Connect engine preheating and hydraulic oil preheating.

6 Operation

6.1 Brakes

6.1.1 Operating the service brake

⚠ WARNING

Accident hazard due to malfunctioning brakes!

Malfunctioning brakes can cause serious and fatal accidents. All repair work on the braking system must be performed by the trained personnel of a qualified service center.

- ► Check the brake function once a day.
- ► There is a malfunction if the brake fluid level drops from check to check.
- ► Do not operate the vehicle with malfunctioning brakes.
- ► Have the braking system regularly checked by experienced technically trained personnel on the occasion of the inspections.

⚠ WARNING

Accident hazard due to blocked or dirty pedals!

Loose objects in the cab or dirty pedals can impair the function of the pedal and lead to accidents with serious injuries or death.

- ► Keep pedals clean.
- ► Do not place any objects in the area of the pedals.

6.3.9 Securing the vehicle

Stop the vehicle without jolting by releasing the accelerator pedal or by actuating the brake/inching pedal and secure as described in the following section.

The following activities apply to parking the vehicle after daily use. In addition, the activities for the transport of the vehicle, as well as all maintenance and inspection work apply, provided that they are described in these operating instructions.

- Park the vehicle on a stable, level and dry surface.
- Lower the loader unit completely to the ground.
- Move all switches and levers to zero position.
- Apply the parking brake.
- Turn off the engine.
- Depressurize the hydraulic system.
- Secure the vehicle with a wheel chock.
- Clean the vehicle.
- Perform visual check of the following assemblies for leaks.
  - Hydraulic system
  - Cooling system
  - Fuel system
- Perform a visual check for damage to the vehicle, especially to the tires, the attachment and the lock for the attachment.
- Fill up with fuel.
- Check all liquid levels and top up if necessary.
- Secure the vehicle against unauthorized use.
  - Remove the starting key.
  - Close the windows.
  - Lock the doors, filler caps of the tanks and engine cover.

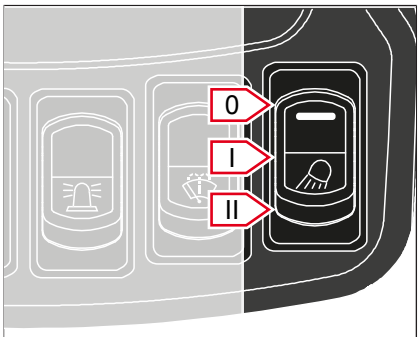


Fig. 100: Operating the front and rear work lights

Operating the work lights

- Move rocker switch to position **I**.

⇨ The front work lights are switched on.

- Move rocker switch to position **II**.

⇨ The front and rear work lights are switched on.

- Move rocker switch to position **0**.

⇨ Work lights are switched off.

6.5.7 Operating the cab interior light

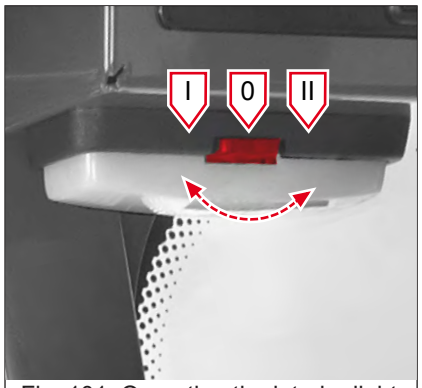


Fig. 101: Operating the interior light

The interior light of the cab is operated with switch on the interior light.

- Move the switch to position **I** or **II**.

⇨ Interior light is switched on.

- Move the switch to position **0**.

⇨ The interior light goes out.

6.6 Washer system

6.6.1 Operating the window wiper and washer system at the front

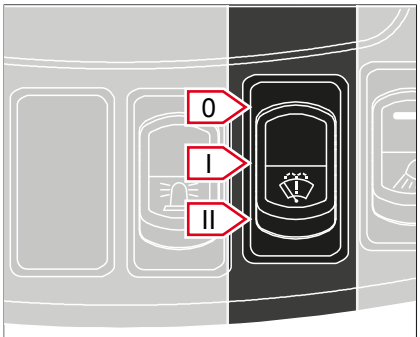


Fig. 102: Front window wiper switch

The vehicle is equipped with a window wiper and washer system for the front window. They are operated with the rocker switch in the instrument panel.

- Move the switch to position **I**.

⇨ Front window wiper is switched on.

- Move the switch to position **II**.

⇨ The front washer system is switched on.

- Move the switch to position **0**.

⇨ The window wiper and washer system are switched off.

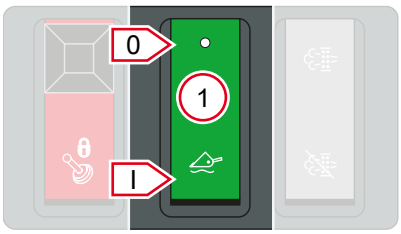


Fig. 118: Emergency lowering with lowering brake valves

Vehicle with lowering brake valves

If the vehicle is equipped with lowering brake valves, the switch must first be set to position **I**.

✓ Operator sits on the seat.

1. Move starting key to position **I**.
   ⇨ The control lights illuminate.
2. Move switch **1** to position **I**.
3. Lower the loader unit with the joystick using the lower function.

⇨ The loader unit lowers to the ground.

Releasing residual pressure in the hydraulic system

⚠ WARNING

Risk of injury due to pressure!

A fine jet of hydraulic oil under high pressure can penetrate through the skin. This can cause serious injury.

► Seek medical attention immediately if hydraulic oil penetrates the skin or eyes.

► Only open hydraulic systems after the pressure in them has been released.

► Wear protective gloves and safety glasses.

If a hydraulic system is to be opened immediately after stopping the vehicle, the hydraulic system must first be depressurized. The loader unit can be operated during a limited period of time in case of engine malfunction.

The loader unit must be lowered immediately after the power failure has been detected. Reduce residual pressure in the hydraulic system as follows.

1. Lower the loader unit completely to the ground.
2. Stop the engine.
3. Move the joystick several times in all directions. Move all hydraulic system switches to zero position.
4. Unload the tank for the hydraulic oil by opening the fill opening.

⇨ The pressure in all hydraulic systems is released.

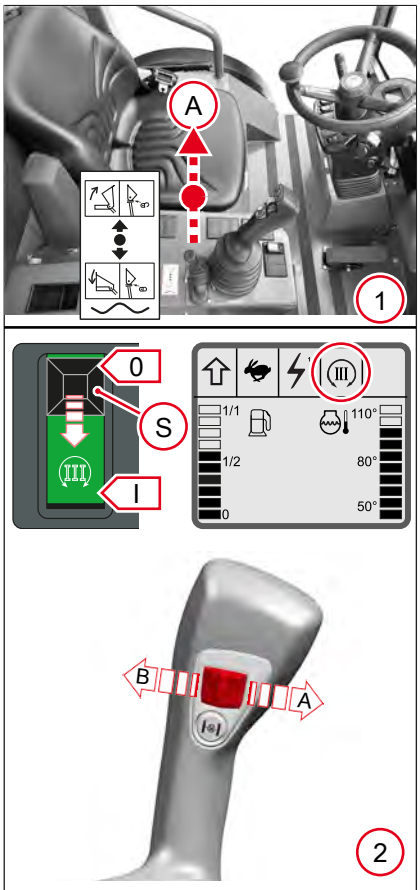


Fig. 128: Operation of continuous operation third control circuit

Continuous operation of the hydraulic connections by operating the scroll wheel

The function of the hydraulic connections is activated using the switch in the switch panel in the side console.

1. Press lock **S** in switch downwards and move switch to position **I**.
2. Move the scroll wheel in direction **A** and release it.
   ⇨ Symbol (III) illuminates in the display.

⇨ Continuous operation is switched on. Hydraulic connection **A** is pressure side, hydraulic connection **B** is return flow.

If necessary, the continuous operation of the hydraulic connections can also be switched to the right-hand hydraulic connection.

1. Press lock **S** in switch downwards and move switch to position **I**.
2. Move the scroll wheel in direction **B** and release it.
   ⇨ Symbol (III) illuminates in the display.

⇨ Continuous operation is switched on. Hydraulic connection **A** is return, hydraulic connection **B** is pressure side.

Switch off continuous operation of hydraulic connections

If continuous operation is to be interrupted only briefly, proceed as follows:

✓ Continuous operation is switched on.

1. Leave switch in position **I**.
2. Move the scroll wheel in direction **A** and release it.
   ⇨ Symbol (III) illuminates in the display again.

⇨ Continuous operation is disabled.

- Move the scroll wheel again in any direction.

⇨ Continuous operation is enabled again.

Switch off continuous operation of hydraulic connections

If continuous operation is no longer needed, proceed as follows:

- Move the switch to position **0**.
  ⇨ Symbol (III) disappears from the display.

⇨ Continuous operation function is disabled.

6.11.4 7-pole plug receptacle at the rear

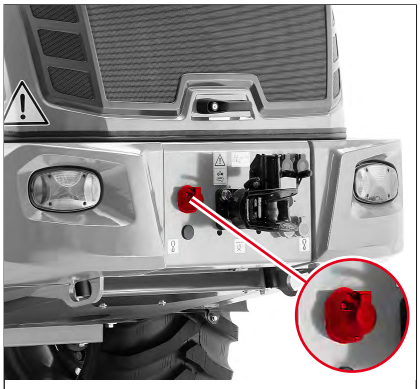


Fig. 145: 7-pole plug receptacle at the rear

This plug receptacle is used for connecting lights, turn signals and electrical devices on the trailer or attachment. Always install additional lights on an attachment if the rear lights and other lights are covered by the attachment.

6.12 Working with attachments

6.12.1 Warnings regarding work operation

⚠ WARNING

Crushing hazard due to tipping over of vehicle!

There is an increased risk of tipping when driving in curves. This may cause crushing which may result in serious injury or death.

- ► Keep the loader unit lowered during vehicle travel.
- ► Adapt the driving speed to the ambient conditions.
- ► Adapt the driving speed to the material loaded.
- ► Pay attention to persons and obstacles.
- ► Observe tipping limit of the vehicle.
- ► Reduce speed before downhill travel.
- ► Always fasten your seat belt.
- ► Ensure that no parts of the body protrude outside the vehicle.
- ► Carefully steer the vehicle if the loader unit is raised.
- ► Do not exceed the permissible payload.

⚠ WARNING

Accident hazard due to persons in the risk zone!

Persons who are in the risk zone of the vehicle or suddenly enter it can be injured by working movement or the moving vehicle. This may result in accidents that could result in serious injury or death.

- ► Interrupt work immediately if persons enter the risk zone.
- ► Adjust the mirror correctly. Use visual aids such as, e.g. a camera.
- ► Observe extreme caution when reversing.

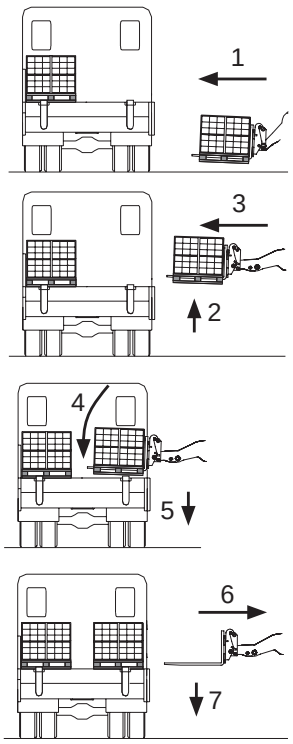


Fig. 161: Setting down a load

Setting down a load

1. Travel to the unloading position in a straight line (**1**).
2. Do not lift the load to the required height until immediately in front of the unloading position (**2**).
3. Drive forward until the load is above the unloading position (**3**).
4. Position the pallet fork horizontally (**4**), lower the loader unit and lower the load (**5**).
5. Retract until the pallet fork can be lowered freely (**6**).
   ⇨ Lower the pallet fork (**7**).
6. Reverse away from the unloading position.

6.12.8 Work platform

Optionally, the vehicle can be equipped with a working platform. To do this, the vehicle must be specifically equipped for operation with a working platform. The vehicle modification is done exclusively by Weidemann.

The equipping and operation as a working platform changes the proper use of the vehicle. For this purpose, a separate operator's manual is delivered with the vehicle. This operator's manual must be observed.

It is expressly prohibited to use this working platform without the safety equipment named above and in the separate operator's manual.

NOTICE

Damage to the engine cover from lifting gear!

The crane chains can damage the engine cover when raising at the rear.

► Remove the engine cover if necessary.

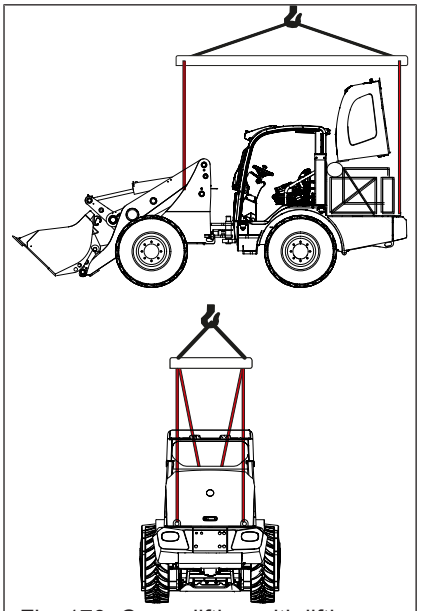


Fig. 170: Crane-lifting with lifting gear

Preparation for loading with crane

1. Install and safely lock the standard bucket.
2. Empty standard bucket, tilt in and lower to transport position (approx. 30 cm above the ground).
3. Move all switches and levers to zero position.
4. Switch off the ignition and remove the starting key.
5. Block the articulated pendulum joint *see Blocking articulated pendulum joint on page 158*
6. Apply the parking brake.
7. Exit the cab, close doors, windows and engine cover, lock and unlock.

Loading with crane

1. Fasten the vehicle at the crane eyelets with lifting gear. Fasten the vehicle at the crane eyelets with tested lifting gear of sufficient dimensions.
2. Raise the vehicle carefully with a crane, slowly position it over the unloading position and lower it carefully.

7.3 Transportation

7.3.1 Tying down the vehicle

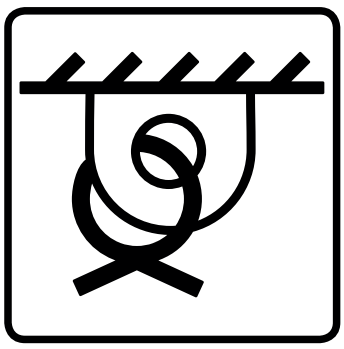


Fig. 171: Information label lashing lugs

Only use lashing eyelets marked with the labels to attach the lashing straps or chains.

8.4.2 Subsequent inspection intervals

NOTICE

Technical damage due to delayed or non-executed inspections.

Regular inspections and maintenance are a prerequisite for the technically flawless operation of the vehicle. If inspections and maintenance are not carried out, not carried out on time or not carried out properly, this can lead to technical damage to the vehicle.

- ► Observe the inspection plan in the inspection booklet.
- ► Plan inspections in good time and have them carried out by an authorized service center.

Certain inspection intervals apply to the vehicle. The inspections are necessary annually or every 500 operating hours, depending on which interval is reached first.

The inspections must be carried out by a service center.

8.5 Vehicle fluids

8.5.1 Overview of vehicle fluids and filling quantities

Information

The oil level up to the markings on the measuring rods or check plugs is binding for the oil filling!

Position	Capacity	Fluid	Specification
Front axle	4.2 l	Transmission oil SAE 90 GL 5	API GL5 – MIL2105
Rear axle	4.9 l		
Axles with option 30km/h driving speed:			
Front axle	5.2 l	Transmission oil SAE 90 GL 5	API GL5 – MIL2105
Rear axle	6.1 l		
Complete hydraulic system	80 l	Hydraulic oil HLP	ISO VG 46
Hydraulic oil tank	66 l		
Grease lubrication points		Multi-purpose grease	Water-resistant
Braking system	1.0 l	ATF oil	
Air conditioning system	1.2 kg	Refrigerant	R134a

8.6.4.2 Adding hydraulic oil

If the level of hydraulic oil is below the MAX mark, the hydraulic oil must be refilled.

✓ Check the hydraulic oil level.

1. Unscrew the breather filter.
2. Add hydraulic oil.
3. Check fill level of hydraulic oil.
4. Screw in the breather filter.

8.6.4.3 Bleeding the hydraulic system

⚠ WARNING

Injury hazard due to uncontrolled movements of the loader unit!

Air inclusions in the hydraulic system can cause uncontrolled movements of the loader unit due to pressure loss. This may result in accidents that could result in serious injury or death.

- ► Bleed the hydraulic system in case of malfunctions of the hydraulic system or after longer downtimes.
- ► Bleed the hydraulic system only from the seat.
- ► Bleed the hydraulic system only when the vehicle is at a standstill.
- ► Ensure that there are no persons in the danger zone.

1. Check fill level of hydraulic system.
2. Add hydraulic oil if necessary.
3. Sit down on the operator seat.
4. Start the engine of the vehicle.
5. Let the vehicle run at idle speed a few minutes.
6. Completely retract and extend the piston rods of all hydraulic cylinders several times using the joystick.
7. Actuate the steering system in both directions as far as it will go. Repeat this procedure until the steering system works correctly and without noise.
8. Check fill level of hydraulic system.
9. Add hydraulic oil if necessary.

8.8.3.2 Check/replace cab breather filter

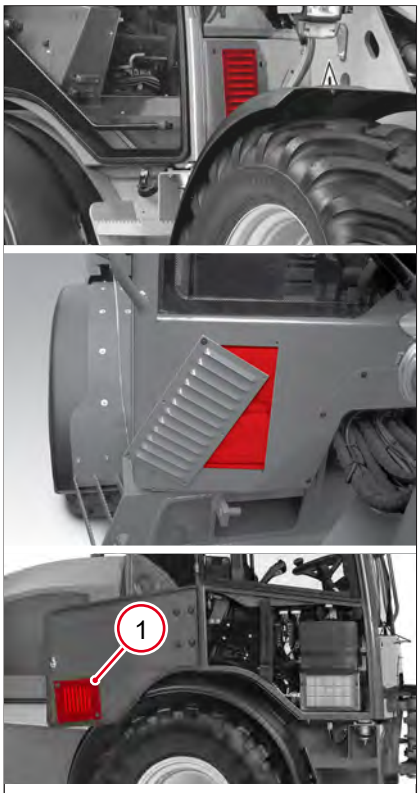


Fig. 198: Cab breather filter

The cab is equipped with a dry air filter to filter the intake air for ventilation. The breather filter is located at the front of the cab close to the vehicle's center joint.

In the Comfort cab, the breather filter **1** is located on the right side of the cab in the maintenance flap. To open the maintenance flap *see Openings in the cab on page 166*.

Check/clean breather filter weekly. For cleaning, lightly tap the filter or blow it out carefully with compressed air.

Change breather filter annually. Replace more frequently if the vehicle is used for dusty applications. Only use original breather filters from the vehicle manufacturer.

The cover of the filter housing is fastened with screws.

1. Unscrew the cover of the filter housing.
2. Pull out filter.
3. Clean the filter or insert a new filter.
4. Screw on the cover of the filter housing.

8.8.4 Clean engine and engine compartment

⚠ WARNING

Injury hazard due to hot and rotating parts!

When the engine is running and for a short time thereafter, parts in the engine compartment may still be hot or rotate. This may cause crushing which may result in serious injury or death.

- ► Do not open the engine cover if the engine is running.
- ► Let the engine cool down.
- ► Wear protective equipment.

NOTICE

<otor damage due to moisture in electronics after cleaning!

When cleaning the engine with a water or steam jet, the moisture penetrating the electronics causes it to fail and leads to engine damage!

- ► Do not clean electrical transducers such as temperature and oil pressure switches or control units with a high-pressure cleaner.
- ► Protect electrical parts, e.g. three-phase generators, cable connectors, relays, etc. from moisture.

Battery data

The battery has a nominal voltage of 12 volts.

The battery capacity is 95 Ah.

Preparation for maintenance In the engine compartment

1. Park the vehicle on a stable, level and dry surface.
2. Secure the vehicle with the parking brake.
3. Lower the loader unit to the ground.
4. Switch off the ignition and remove the starting key.
5. Let the engine cool down.
6. Open the engine hood.

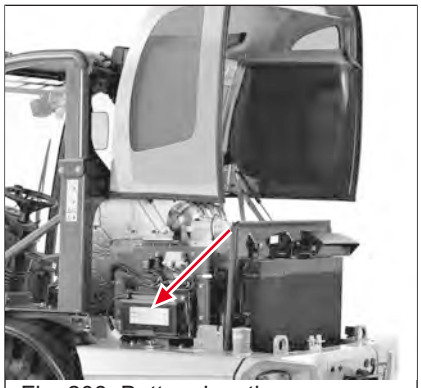


Fig. 208: Battery location

Removing the battery

Required tools: Wrench size 13 mm

✓ Preparations for maintenance in the engine compartment were carried out.

✓ Switch off the battery master switch: *see Battery master switch on page 80*.

1. Unscrew the line from the negative terminal (-).
2. Unscrew the line from the positive terminal (+).
3. Unscrew the battery holder with a wrench.
4. Remove the battery.

The installation of a new battery takes place in reverse order. Dispose of old batteries in an environmentally friendly manner and separately from other waste.

Fig. 209: Battery

Battery maintenance

Follow the operator's manual of the battery. The operator's manual of the battery is fastened on one side of the battery.

- Always keep the terminal heads of the battery and the terminals of the connecting cables clean and lubricate with anti-corrosion grease.
- Ensure that the cover of the positive terminal is always present and closed.

8.15 Cab

8.15.1 Checking the seat

A loose or defective seat can lead to accidents.

- Check the correct fastening of the seat, check the fastening screws.

⇨ The seat must not wobble or be able to be lifted.

- Check all seat positions and their locks.

⇨ When the locks are engaged, the seat may no longer move.

- Check seat suspension.

⇨ Suspension adjustment and suspension must function.

- Check seat upholstery.

⇨ The seat upholstery must not be too worn or damaged.

If damage or defects are found, they must be repaired by an authorized service center before the vehicle is put into operation.

8.15.2 Checking the seat belt for proper function

Defective belts can no longer fulfill their protective function and must be replaced.

- Check seat belt for dirt and damage.

⇨ If necessary, remove dirt.

⇨ The seat belt must not be damaged.

- Check the function of the roll stop.

⇨ If the seat belt is pulled with a jerking movement, the unrolling must stop.

- Check the retraction function of the seat belt.

⇨ The seat belt must retract automatically.

- Have the seat belt replaced by an authorized service center after an accident, even if there is no visible damage. Have the seat fastening and anchoring points checked for further load-bearing capacity.

If damage or defects are found, they must be repaired by an authorized service center before the vehicle is put into operation.

Coolant level too low

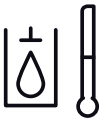
Symbol appears when the coolant level is too low.

1) Turn off the engine.
2) Let the engine and radiator cool down.
3) Check the engine, radiator and radiator hoses for leaks.
4) Add coolant.

Water in fuel

The symbol appears if too much water has accumulated in the water separator on the fuel filter.

Drain water in the water separator.



Temperature of hydraulic oil too high

The symbol appears when the maximum permissible temperature of the hydraulic oil has been reached.

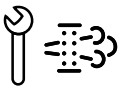
Switch off the engine and let the hydraulic oil cool down. Determine the cause of the fault and eliminate it, e.g. clean the radiator.

If the error still occurs, contact an authorized service center.

Return filter from hydraulic oil

The symbol appears when the resistance of the oil flow in the return filter becomes too high.

Switch off the engine and have the return filter changed by an authorized service center.



Replacing diesel particulate filter (DPF)

Symbol appears when the diesel particulate filter has to be replaced.

Switch off the engine and have the diesel particulate filter replaced by an authorized service center.

9

9.2.1.1 Error codes

NOTICE

Technical damage due to failure to observe the error code! Failure to observe the error codes can cause serious technical damage!

In case of a malfunction during vehicle operation, the operating hours and engine speed readout is replaced by an error code.

- ► Proceed as specified in the error code table.
- ► Get in touch with a service center if the error persists in spite of proceeding as specified.
- ► Make a note of error codes that are not listed and inform the service center of them.

12 Technical Data

12.1 Dimensions

12.1.1 Vehicle dimensions

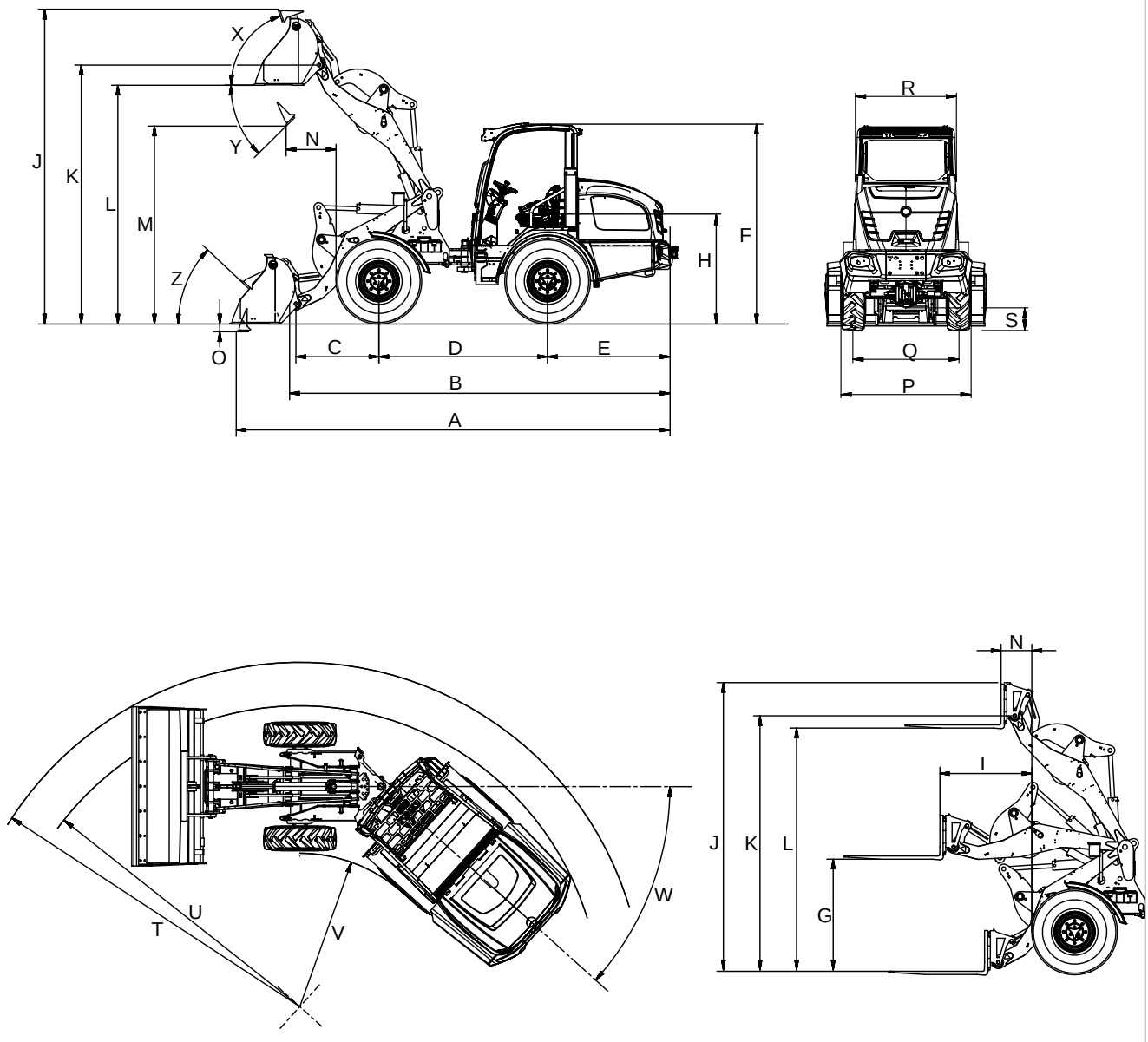


Fig. 228: Dimension sheet for the vehicle

Item	Designation	Value in mm
A	Overall length with standard bucket	5420
	Overall length with pallet forks	5970
B	Overall length without attachment	4660
C	Center of axle to bucket pin	1040
D	Wheelbase	2110
E	Rear overhang	1530

Overview of noise parameters	dB(A)	
	Cab	Overhead guard
Specified sound pressure level **LpA**	80	85
Vehicle with Deutz TD2.9 engine (45 kW)		
Average sound power level **LwA**	99,4	99,4
Guaranteed sound power level **LwA**	101	101
Specified sound pressure level **LpA**	82	84
Vehicle with Perkins engine		
Average sound power level **LwA**	99,6	99,6
Guaranteed sound power level **LwA**	101	101
Specified sound pressure level **LpA**	82	82

12.7.3 Vibration

Hand-arm vibrations

The hand-arm vibrations do not exceed 2.5 m/s².

Whole body vibrations

This vehicle is equipped with a driver's seat that meets the requirements of EN ISO 7096: 2000. When the vehicle is used as intended, the whole body vibrations vary from less than 0.5 m/s² to a short-term maximum value.

It is recommended to use the values given in the table when calculating the vibration values according to ISO/TR 25398: 2006. Actual conditions of use must be taken into account.

Telehandlers, like wheel loaders, are classified according to their operating weight.

Vehicle category	Typical operating condition	Average			Standard deviation(s)		
		1,4*aw,eqx	1,4*aw,eqy	aw,eqz	1,4*sx	1,4*sy	sz
Compact wheel loader operating weight <4,500 kg	Load & carry (loading and transport work)	0.94 m/s²	0.86 m/s²	0.65 m/s²	0.27 m/s²	0.29 m/s²	0.13 m/s²
Wheel loader operating weight >4,500 kg	Load & carry (loading and transport work)	0.84 m/s²	0.81 m/s²	0.52 m/s²	0.23 m/s²	0.20 m/s²	0.14 m/s²
	Use in extraction (rough operating conditions)	1.27 m/s²	0.97 m/s²	0.81 m/s²	0.47 m/s²	0.31 m/s²	0.47 m/s²
	Transfer trip	0.76 m/s²	0.91 m/s²	0.49 m/s²	0.33 m/s²	0.35 m/s²	0.17 m/s²
	V operation (loading work)	0.99 m/s²	0.84 m/s²	0.54 m/s²	0.29 m/s²	0.32 m/s²	0.14 m/s²