



# Unimog

Operating Instructions



Mercedes-Benz

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## Operating safety and vehicle approval

### Information on vehicle operation

There is a risk of damage to the vehicle if:

- the vehicle makes contact with the ground, e.g. on a high kerb or a loose road surface
- you drive too quickly over an obstacle, e.g. a kerb or a pothole
- a heavy object hits the underbody or chassis component

In these or similar situations, the vehicle body/frame, the underbody, chassis components, wheels or tyres could be damaged even if this is not visible from the outside.

Components that have been damaged in this way can unexpectedly fail or no longer be able to assimilate the loads occurring in the event of an accident. If the underbody panelling is damaged, flammable material, such as leaves, grass or twigs, could collect between the underbody and underbody panelling.

These materials could ignite if they remain in contact with hot components of the exhaust system for an extended period.

#### **WARNING**

Flammable material such as leaves, grass or twigs may ignite if they come into contact with hot parts of the exhaust system. There is a risk of fire.

When driving off road or on unpaved roads, check the vehicle's underside regularly. In particular, remove parts of plants or other flammable materials which have become trapped. In the case of damage, contact a qualified specialist workshop.

Have the vehicle checked and repaired immediately at a qualified specialist workshop. If you become aware when continuing the journey that driving safety has been effected, stop as soon as possible in accordance with the traffic conditions. In such cases, consult a qualified specialist workshop.

## Declaration of conformity

### Radio-based vehicle components

The following note applies to all radio-based components of the vehicle and the information systems and communication devices integrated in the vehicle:

The components of the vehicle which receive and/or transmit radio waves are compliant with the basic requirements and all other relevant regulations stipulated by Directive 1999/5/EC.

You can obtain further information from any Mercedes-Benz Service Centre.

### Electromagnetic compatibility

The electromagnetic compatibility of the vehicle components has been checked and certified according to the currently valid version of Regulation ECE-R 10.

## Diagnostics connection

The diagnostics connection is only intended for the connection of diagnostic equipment at a qualified specialist workshop.

#### **WARNING**

If you connect equipment to a diagnostics connection in the vehicle, it can affect the operation of the vehicle systems. This may affect the operating safety of the vehicle. There is a risk of an accident.

Do not connect any equipment to a diagnostics connection in the vehicle.

**!** If the engine is switched off and equipment on the diagnostics connection is used, the starter battery may discharge.

Connecting equipment to the diagnostics connection can result in emissions monitoring information being reset, for example. As a result, it is possible that the vehicle will not fulfil the requirements of the next emissions inspection in the main inspection.

## Warning and indicator lamps



N54.32-2906-31

Example: instrument cluster

	Function	Page		Function	Page	
①	<b>Warning and indicator lamps in the speedometer</b>			Diesel particulate filter, automatic regeneration	213	
	Engine diagnostics	113		Diesel particulate filter malfunction	213	
	Cab tilt lock	314		⑤	<b>Warning and indicator lamps below the on-board computer</b>	
	Differential lock	190			Main-beam headlamps	75
	Instruction to brake at high engine speeds	110			Continuous brake	167
②	Turn signals	75	Parking brake	166		
③	<b>Warning and indicator lamps in the rev counter</b>		Side lamps/dipped-beam headlamps	74		
	ABS (Anti-lock Braking System)	164				
	Brake pressure	161				
④	<b>Warning and indicator lamps in the AdBlue® display</b>					

**⚠ WARNING**

Persons under 1.50 m tall cannot wear the seat belts correctly without a suitable, additional restraint system. The seat belt cannot perform its intended protective function if it is not fastened correctly. Also, an improperly fastened seat belt can cause additional injuries in the event of an accident, sudden braking or abrupt changes of direction. There is an increased risk of injury, possibly even fatal.

Secure persons less than 1.50 m tall in a suitable restraint system.

If a child younger than twelve years old and under 1.50 m in height is travelling in the vehicle:

- always secure the child in a child restraint system suitable for this Mercedes-Benz vehicle. The child restraint system must be appropriate to the age, weight and size of the child.
- be sure to observe the instructions and safety notes on "Children in the vehicle" in these Operating Instructions (▷ page 51) in addition to the child restraint system manufacturer's installation instructions

**⚠ WARNING**

Seat belts cannot provide protection as intended if:

- damaged, modified, extremely dirty, bleached or pigmented
- the belt buckle is damaged or extremely dirty
- the belt anchorage or inertia reel has been modified

Seat belts may sustain non-visible damage in an accident, e.g. due to glass splinters. Modifications or damage to the seat belts may lead to tearing or failing, for example, in an accident. There is an increased risk of injury, possibly even fatal.

Never modify seat belts, belt anchorages or inertia belt reels. Make sure that the seat belts are not damaged, do not show signs of wear and are clean. After an accident, have

the seat belts checked immediately at a qualified specialist workshop.

Mercedes-Benz recommends that you only use seat belts which have been approved specifically for your vehicle by Mercedes-Benz. The general operating permit may otherwise be invalidated.

**Correct seat belt use**

Observe the safety notes on the seat belt (▷ page 48).

All vehicle occupants must be wearing the seat belt correctly before beginning the journey. Also make sure that all vehicle occupants are always wearing the seat belt correctly while the vehicle is in motion.

When fastening the seat belt, always make sure that:

- the seat belt tongue is only inserted into the belt buckle belonging to that seat
- the seat belt is tight across your body  
Avoid wearing bulky clothing, e.g. a winter coat.
- the seat belt is not twisted  
Only then can forces which occur be distributed across the surface of the seat belt.
- the shoulder section of the belt is always routed across the centre of your shoulder  
The shoulder section of the seat belt should not touch your neck nor be routed under your arm. If possible, adjust the seat belt to the appropriate height.
- the lap belt passes across your lap as tightly and as low down as possible  
The lap belt must always be routed across your hip joints and never across your abdomen. This applies particularly to pregnant women. If necessary, press the lap belt down into your hip joints and pull tight with the shoulder section of the belt.
- the seat belt is not routed across sharp, pointed or fragile objects

Keep batteries out of the reach of children. If a battery is swallowed, seek medical attention immediately.

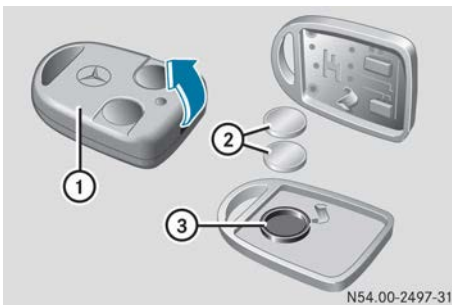
### Environmental note



Batteries and rechargeable batteries contain pollutants. It is illegal to dispose of them as household rubbish. They must be collected separately and recycled in an environmentally responsible manner.



Dispose of batteries and rechargeable batteries in an environmentally responsible manner. Take discharged batteries or faulty rechargeable batteries to a qualified specialist workshop or to a collection facility for used batteries.

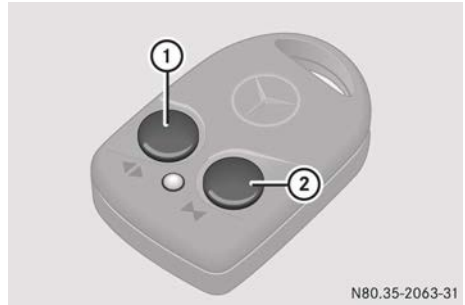


- ▶ Prise open remote control ①, e.g. by inserting a screwdriver in the direction of the arrow in the slot.
- ▶ Remove batteries ②.
- ▶ Use a lint-free cloth to clean new batteries ②.
- ▶ Push both batteries ② with the positive pole (+) facing downwards into battery carrier ③.
- ▶ Press both halves of the housing together until they engage.

Use two CR 1620 type batteries.

### Teaching-in the remote control

If central locking no longer works after replacing the batteries, you must teach in the remote control again.



- ▶ Press and hold button ① or ② for five seconds.
  - ▶ Briefly press button ① or ② again within three seconds..
- The remote control has been taught in and is ready for use.

### Electronic immobiliser

#### Notes about the immobiliser

The engine can only be started using the keys coded to the vehicle.

#### Deactivating the immobiliser

- ▶ Apply the parking brake.
  - ▶ Turn the key in the ignition lock to position 1 or 2.
- The immobiliser is deactivated after approximately one second and the engine can be started.

**i** If you do not wait for one second, the immobiliser is not deactivated. The engine cannot be started. At the same time, the status indicator lights up yellow.

## Double co-driver's seat

### Overview



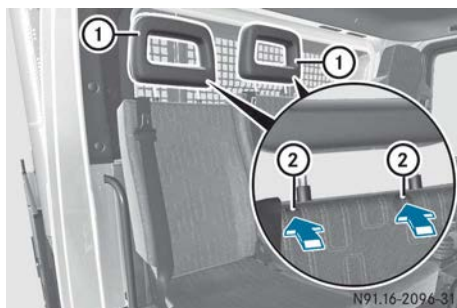
### Adjusting the head restraints

- ▶ Pull head restraint ① up or push it down to the desired height.

### Seat fore-and-aft adjustment

- ▶ Pull lever ② up and hold it.
- ▶ Push the double co-driver's seat forwards or backwards into the desired position.
- ▶ Release lever ② and engage the double co-driver's seat audibly.

### Removing the head restraints



- ▶ Press and hold release catches ② under the upholstery.
- ▶ Pull head restraint ① up and out with a single movement.

## Seat heating

### General notes

- ❗ Observe the following instructions; you could otherwise damage the seat heating:
  - do not leave any objects on the seat.
  - do not cover the seat, e.g. with a towel or cushion.
  - if the co-driver's seat is not occupied, switch the seat heating off on the co-driver's side.
  - if the engine is not running, switch the seat heating off on the driver's and the co-driver's side.



- ① Seat heating (left seat)
- ② Seat heating (right seat)

The seat heating does not switch off automatically in the event of overheating.

- ▶ Make sure that the key is in position 2 in the ignition lock.

### Normal heating mode

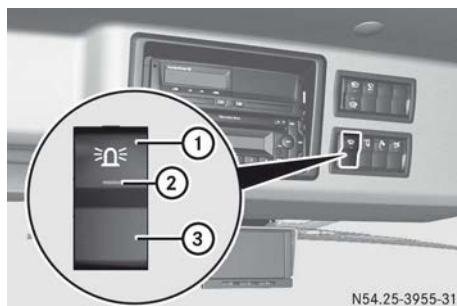
- ▶ **To switch on:** press switch ③. Indicator lamp ④ lights up.
- ▶ **To switch off:** press switch ⑥ until switch ③ is in the centre position. Indicator lamp ④ goes out.



### Rapid heating mode

- ❗ When the engine is switched off, do not switch on the rapid heating function for any longer than necessary.

## Rotating beacons or strobe lights

### Switching the rotating beacons or strobe lights on/off

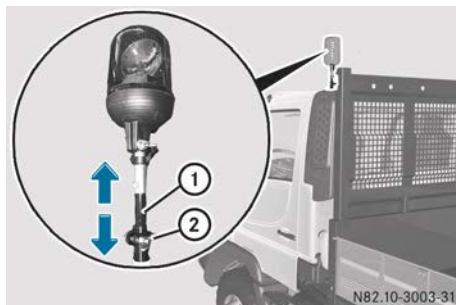


- ▶ **To switch on:** press button ①.  
Indicator lamp ② in the switch lights up.  
The  indicator lamp in the status area of the on-board computer lights up.
- ▶ **To switch off:** press switch ③.  
Indicator lamp ② in the switch goes out.  
The  indicator lamp in the status area of the on-board computer goes out.

When operating the vehicle with the rotating beacons or strobe lights, observe the applicable national regulations for the relevant country. If the required field of vision is obscured by trailers, special bodies or other attachments, make the vehicle safe by using additional lights.

### Adjusting the stand height

- ❗ If you extend the stand, always observe the change in vehicle height, e.g. if you drive through an underpass or in a multi-storey car park. The vehicle or building may be damaged. Lower the stand in good time.



Example: rotating beacon

- ▶ Hold stand ①.
- ▶ Loosen wing nut ②.
- ▶ Move stand ① to the desired height.
- ▶ Tighten wing nut ②.

### Notes on replacing bulbs

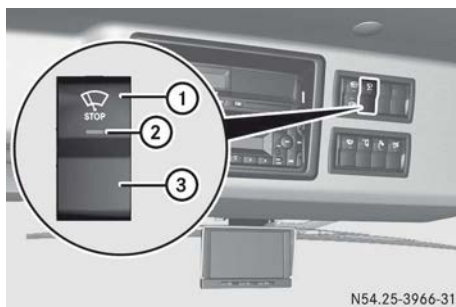
#### WARNING

Bulbs, lamps and plug connectors can become very hot during use. When replacing a bulb, you could burn yourself on these components. There is a risk of injury. Allow these components to cool down before replacing the bulb.

#### DANGER

Xenon bulbs are under high voltage. You can get an electric shock if you remove the cover of the xenon bulb and touch the electrical contacts. There is a risk of fatal injury. Never touch the parts or the electrical contacts of the xenon bulb. Always have work on the xenon bulbs carried out at a qualified specialist workshop.

- ❗ Make sure bulbs are positioned securely. If your vehicle is equipped with bi-xenon headlamps, the inscription "bi-xenon" is featured on the headlamp glass. Bulbs and lamps are an important aspect of vehicle safety. You must therefore ensure that all bulbs are functioning at all times. The



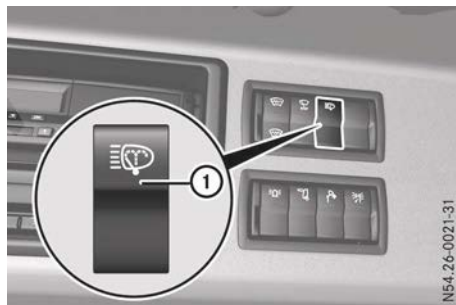
- ▶ Make sure that the key in the ignition lock is in position 1.
- ▶ Press switch ①.  
Indicator lamp ② in the switch lights up.  
The windscreen wipers move to the lateral end position.
- ▶ Press switch ③.  
Indicator lamp ② in the switch goes out.  
The windscreen wipers move to the upper end position.

### Windscreen washer system



- ▶ Make sure that the key in the ignition lock is in position 1.
- ▶ **Single wipe:** press switch ① briefly.
- ▶ **To wipe the windscreen using washer fluid:** press and hold down switch ①.

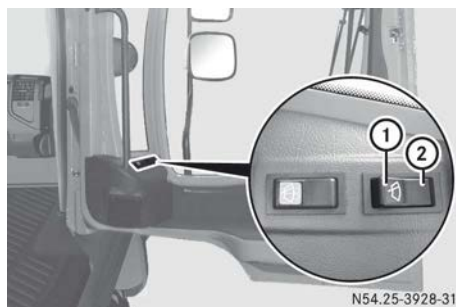
### Headlamp cleaning system



- ▶ **To switch on:** press and hold button ①.  
The headlamp cleaning system cleans the relevant light projecting areas of the headlamp.
- ❗ If you wash the windscreen with washer fluid for the first time with the dipped-beam headlamps switched on (▶ page 89), the headlamps are also cleaned. If you wash the windscreen with washer fluid ten times with the dipped-beam headlamps switched on, the headlamps are also cleaned once.

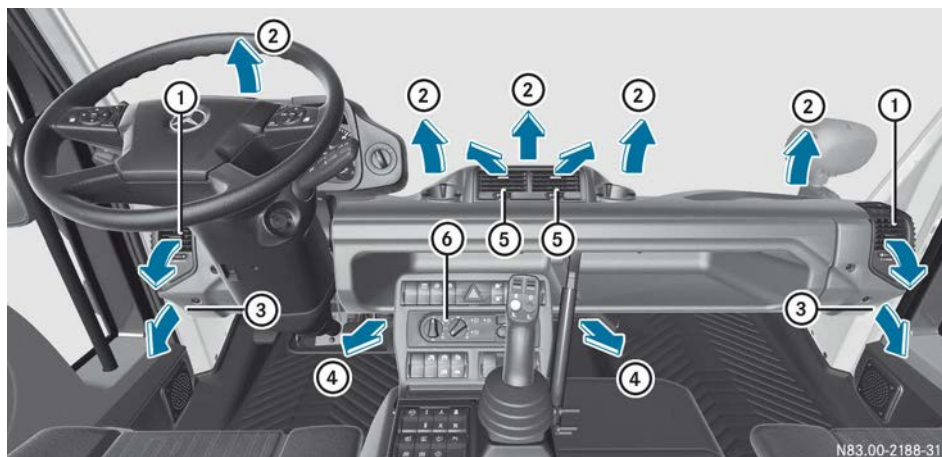
### Moving door windscreen wiper and washer system

#### Windscreen wipers

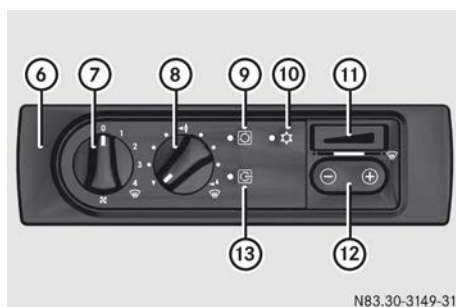


## Heating/air conditioning and ventilation

## Overview and control panel



N83.00-2188-31



N83.30-3149-31

## Functions

- ① Side air vents: ventilation and heating vents for the vehicle interior
- ② Front windscreen vents: ventilation/demister vent
- ③ Side window vents: ventilation/demister vent
- ④ Footwell vents: ventilation/heating vent
- ⑤ Centre air vents: ventilation-/heating vent for the vehicle interior

## ⑥ Control panel

- ⑦ Sets the airflow:
  - ① to ③ Heating/ventilating/cooling
  - ④ Demisting/ventilating/cooling
  - ⑤ Air supply switched off

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- ▶ **To reset the trip meter:** press . The input window shows **Reset trip meter? No/Yes**.
- ▶ Using the button, select the **Yes** menu bar and press or to confirm.

### Tachograph menu window

The **Tachograph** menu window is available on vehicles with a digital tachograph.

- ▶ Using the or button, scroll to trip data.
- ▶ **To display the driving and rest times:** use the or button to scroll to the **Tachograph** menu window. The menu window shows:
  - the driver's name
  - the driving time
  - the rest time

### From start all/From reset all/From reset drive menu window

The **Since start - all** trip data contains performance data from the start of the journey. If you leave the vehicle parked for more than four hours, the values are reset automatically.

The **Since reset - all** or **Since reset - drive** trip data contains performance data from the last time the menu window was reset.

- ▶ Using the or button, scroll to trip data.
- ▶ **To display the trip data:** use the or button to scroll to the **Since start - all**, **Since reset - all** or **Since reset - drive** menu window. The menu window shows:
  - the distance covered
  - the journey time
  - the average vehicle speed
  - the average fuel consumption

- ▶ **To reset the trip data:** press . The input window shows, for example, **Reset values for: Since start - all No/Yes**.
- ▶ Using the button, select the **Yes** menu bar and press or to confirm.

### Range menu window

The on-board computer calculates the approximate ranges of the vehicle based on current fuel levels and AdBlue®. The ranges depend largely on your driving style.

- ▶ Using the or button, scroll to the trip data.
- ▶ **To display the range:** use the or button to scroll to the **Range** menu window.

The menu window displays the approximate ranges of the fuel level and the AdBlue® level. In addition, the menu window also shows the current fuel consumption level as a bar display underneath the ranges. When the vehicle is stationary, the bar display changes and shows the stationary fuel consumption level (l/h). The mark above the bar display corresponds to the **Since start - all** average consumption.

The menu window displays the range up to **50 km**. For lower values, the on-board computer displays **<50 km**.

### Driving mode menu

### Speed menu window

- ▶ **To display vehicle speed:** using the or buttons, scroll through to driving mode.



## Grey event window

### Note




#### Important safety notes

If you ignore warning and indicator lamps and the event window, you will not be able to recognise failures and malfunctions in components or systems. Driving/braking characteristics may be affected and the operating and road safety of your vehicle may be limited. Have the affected system checked and repaired at a qualified specialist workshop. Always observe the warning lamps and event window and follow the corresponding measures.




#### Grey event window

With a malfunction/notification of low priority, the on-board computer displays a grey event window. If further information about the malfunction/notification is available, the event window displays the  symbol. You can display the information using the  button on the multifunction steering wheel. Observe the information and instructions in the event window. You can drive on.









#### BlueTec® exhaust gas aftertreatment

Display messages	Possible causes/consequences and ► Solutions
 Regeneration disabled	Regeneration of the diesel particle filter is disabled and the fill level of the diesel particle filter is raised. <ul style="list-style-type: none"> <li>► In order to enable automatic regeneration of the diesel particle filter, deactivate the regeneration block as soon as possible (► page 214).</li> </ul>
 Manual regeneration not possible	Supplementary text  : Requirements for manual regeneration have not been fulfilled. Please observe Operating Instructions. <p>Regeneration of the diesel particle filter is not possible. One or more requirements have not been fulfilled.</p> <ul style="list-style-type: none"> <li>► Observe the activation conditions and requirements for manual regeneration of the diesel particle filter (► page 214).</li> </ul>

## BlueTec® exhaust gas aftertreatment

Display messages	Possible causes/consequences and ► Solutions
 <p data-bbox="115 272 309 331">Diesel particle filter full</p>	<p data-bbox="370 220 1016 279">Supplementary text : Stop vehicle. Consult service centre. Regeneration is no longer possible.</p> <p data-bbox="370 284 1034 400">The  indicator lamp also lights up red in the instrument cluster. The diesel particle filter has reached its soot saturation limit. Engine performance is reduced and manual regeneration is no longer possible.</p> <p data-bbox="370 411 1005 470">► Clean the diesel particle filter as soon as possible or have it replaced at a qualified specialist workshop.</p>

## Compressed-air system

Display messages	Possible causes/consequences and ► Solutions
 <p data-bbox="115 671 337 756">Example: Brake supply pressure in circuit 1 too low</p>	<p data-bbox="370 616 1034 675">In addition, the  warning lamp lights up red in the instrument cluster.</p> <p data-bbox="370 679 1034 807">The reservoir pressure in brake circuit 1  or 2  is too low. If the reservoir pressure in the spring actuator and the trailer's brake circuit is too low, the event window shows the  symbol. Possible causes:</p> <ul data-bbox="370 818 874 882" style="list-style-type: none"> <li>• too much compressed air has been consumed.</li> <li>• there is a leak in the compressed-air system.</li> </ul> <p data-bbox="381 898 535 930"><b>⚠ WARNING</b></p> <p data-bbox="370 943 994 1002">The operating and road safety of the vehicle are jeopardised. There is a risk of an accident.</p> <p data-bbox="370 1015 1034 1074">► Stop the vehicle as quickly as possible, paying attention to traffic conditions.</p> <p data-bbox="370 1078 647 1110">► Apply the parking brake.</p> <p data-bbox="370 1115 796 1174">► Start the engine. The compressed-air system is charged.</p> <p data-bbox="370 1185 988 1217">If the  warning lamp in the instrument cluster goes out:</p> <p data-bbox="370 1222 617 1254">► Continue the journey.</p> <p data-bbox="370 1265 1034 1297">If the  warning lamp in the instrument cluster does not go out:</p> <p data-bbox="370 1310 904 1369">► Check the compressed-air brake system for leaks (► page 163).</p> <p data-bbox="370 1374 1034 1460">► If the compressed-air brake system is not leaking, but the  warning lamp does not go out: have the compressed-air brake system checked at a qualified specialist workshop.</p>

active. The display of the switched on CD radio shows **BLOCKED**.

- ▶ Switch on the ignition.  
You can now use the CD radio.

ment in all countries concerned. Supplement your emergency equipment accordingly.

### Checking the fuel/AdBlue® supply

- ▶ Check the fuel level/AdBlue® level shown on the fuel gauge (▷ page 111) and on the AdBlue® gauge (▷ page 111).
- ▶ If necessary, refuel (▷ page 216) and top up the AdBlue® (▷ page 218).

### Checking the engine oil level

- ▶ Check the engine oil level before every journey and top up the engine oil if necessary (▷ page 297).

The engine oil level is not displayed while the engine is running.



- 0 To insert/remove the vehicle key
- 1 Steering wheel unlocked/radio position
- 2 Drive position; ignition is switched on
- 3 Start position

### Before driving off

### Important safety notes

#### WARNING

If you attach heavy or large objects to the key, the key could be unintentionally turned in the ignition lock. This could cause the engine to be switched off. There is a risk of an accident. Do not attach any heavy or large objects to the key. Remove any bulky keyrings before inserting the key into the ignition lock.

#### WARNING

If you switch off the ignition while driving, safety-relevant functions are only available with limitations, or not at all. This could affect, for example, the power steering and the brake boosting effect. You will require considerably more effort to steer and brake. There is a risk of an accident.

Do not switch off the ignition while driving.

#### WARNING

If objects, luggage or loads are not secured or not secured sufficiently, they could slip, tip over or be flung around and thereby hit vehicle occupants. There is a risk of injury, especially when braking or abruptly changing directions. Always store objects so that they cannot be flung around. Secure objects, luggage or loads against slipping or tipping before the journey.

#### WARNING

Objects in the driver's footwell can impede pedal travel or block a pedal which is depressed. This jeopardises safe operation of the vehicle. There is a risk of an accident. Stow all objects in the vehicle safely, so that they cannot reach the driver's footwell. Make sure the floor mats and carpets are properly secured so that they cannot slip and obstruct the pedals. Do not lay several floor mats or carpets on top of one another.

- changing gear
- stopping the vehicle

If the Telligent® gearshift malfunctions, it is possible to continue driving in backup drive mode (▷ page 120).

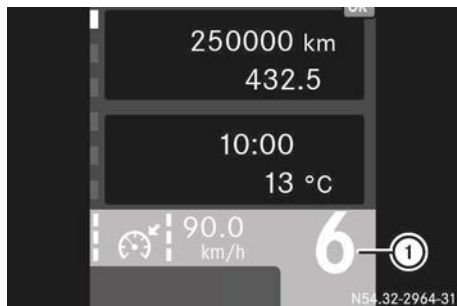
Do not let the engine speed drop below the minimum engine speed of 720 rpm.

## Multifunction lever



- To select the direction of travel:
  - D** Drive for driving forward (▷ page 171)
  - N** Neutral (▷ page 173)
  - R** Reverse (▷ page 173)
- +** Gear preselection upshifting (▷ page 171)
- Gear preselection downshifting (▷ page 171)

## Gear indicator



- Direction of travel and/or selected gear

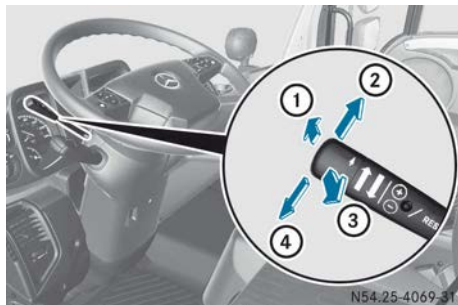
Possible displays:

- 1 - 8** 1st to 8th gear
- N** Neutral position
- R1 - R6** 1st to 6th reverse gear

## Cruise control lever

### Overview

The cruise control lever has equal status with the multifunction lever and can be used alternately. This enables simplified equipment operation using the control lever, for example, since the right hand is not needed for drive functions.



- Gear preselection downshift
- Direction of travel preselection forward
- Gear preselection upshift
- Direction of travel preselection reverse

## Gear preselection

- ▶ Pull away with gear preselection (▷ page 171).
- ▶ **To downshift:** briefly push the cruise control lever away ① from the steering wheel. The transmission control shifts down one gear. The preselected gear flashes in the on-board computer display. The gear pre-

## Selecting a gear manually



You can also select a different gear manually. The automatic control functions are not changed by doing this.

Changing gear while driving is only possible at suitable engine speeds or at suitable driving speeds. A warning tone will sound if the engine speed has not been achieved or if the driving speed is too high. The gear is not selected. The transmission control only selects permissible gears.

- ▶ Pull the multifunction lever up briefly (to shift up) ① or push it down briefly (to shift down) ②.

The transmission control shifts up or down one gear. The gear change is complete when the on-board computer display shows the selected gear.

or

- ▶ Depending on the number of gears to be shifted, briefly pull up the multifunction lever (to shift up) ① or briefly push it down (to shift down) ② a corresponding number of times.

The transmission control shifts several gears up or down. The gear change is complete when the on-board computer display shows the selected gear.

or

- ▶ Pull and hold the multifunction lever up (to shift up) ① or push and hold it down (to shift down) ②.

The transmission control determines the most suitable gear (target gear) for the desired gearshift direction, depending on

the vehicle load. The transmission control shifts up or down at least one gear to a suitable gear. The gear change is complete when the on-board computer display shows the selected gear.

## Driving using the manual drive program

### General notes

In the manual drive program, the driver is responsible for selecting gears.

In particularly difficult driving conditions, switch to the manual driving program. This will enable you to avoid any undesired interruptions to the tractive power that may occur with automatic gearshifting.

Changing gear while driving is only possible at suitable engine speeds or at suitable driving speeds. A warning tone will sound if the engine speed has not been achieved or if the driving speed is too high. The gear is not selected. The transmission control only selects permissible gears.

### Shifting gears



- ▶ Pull the multifunction lever up briefly (to shift up) ① or push it down briefly (to shift down) ②.

The transmission control shifts up or down one gear. The gear change is complete when the on-board computer display shows the selected gear.

or

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: [www.heydownloads.com](http://www.heydownloads.com) by clicking the link below

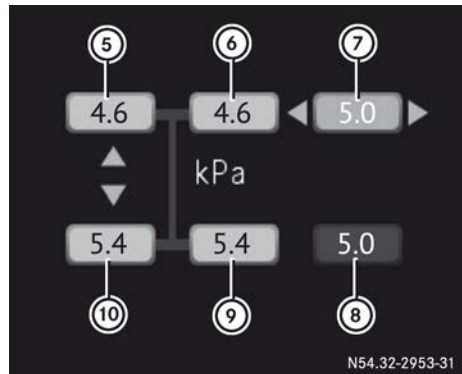
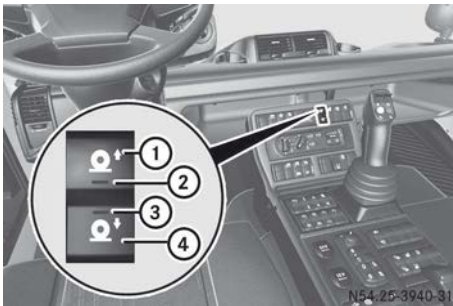


- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- ▶ Using the or button on the multifunction steering wheel, scroll to the **Tyres** menu window.
  - ▶ Press the button on the multifunction steering wheel.
- Press. selection** appears in the menu window.
- ▶ **To adjust the tyre pressure:** use the or button on the multifunction steering wheel to select the front or rear axle tyres .
  - ▶ Determine the tyre pressure to be set (▷ page 341).
  - ▶ Using the buttons on the multifunction steering wheel, increase or decrease the tyre pressure.
  - ▶ Press the button on the multifunction steering wheel.  
After about ten seconds, the tyre pressures are adjusted.
  - ▶ **To cancel the procedure:** switch on the automatic tyre pressure control mode (▷ page 186).

### Adjusting with the button



- Current tyre pressure, left front wheel
  - Current tyre pressure, right front wheel
  - Preset target tyre pressure, front axle tyres
  - Preset target tyre pressure, rear axle tyres
  - Current tyre pressure, right rear wheel
  - Current tyre pressure, left rear wheel
- ▶ Make sure that the automatic tyre pressure control mode is deactivated (▷ page 186).
  - ▶ Press "increase tyre pressure" button or "reduce tyre pressure" button .
- Press. selection** appears in the menu window.
- ▶ **To adjust the tyre pressure:** use the or button on the multifunction steering wheel to select front or rear axle tyres .
  - ▶ Determine the tyre pressure to be set (▷ page 341).
  - ▶ Press "increase tyre pressure" or "reduce tyre pressure" button repeatedly until the current tyre pressure is displayed.
  - ▶ Press the button on the multifunction steering wheel.  
While the tyre pressure is being set, indicator lamp or remains on.
  - ▶ **To cancel the procedure:** switch on the automatic tyre pressure control mode (▷ page 186).

N54.32-2953-31

N54.25-3940-31

Telligent gearshift, there is also no need to depress the clutch pedal when engaging a gear.

Using the hydrostatic drive system, you can drive on uphill or downhill slopes with a gradient of less than 25%.

### **WARNING**

If a malfunction occurs when in hydrostatic drive mode, the power transmission to the driven wheels is interrupted and the vehicle coasts to a stop. On an uphill or downhill gradient, the vehicle could roll away. People in the vehicle's area of danger could be run over or could collide with equipment mounted on the vehicle. There is a risk of serious or even fatal injuries.

Before starting work, make sure that no persons are in the area of danger.

Depress the brake pedal immediately in the event of a malfunction and secure the vehicle with the parking brake. On an uphill or downhill gradient, a wheel chock may additionally be required. If fuel leaks out, set the vehicle in motion. Consult a qualified specialist workshop immediately.

### **Environmental note**

The hydrostatic drive system is particularly suitable for slow work trips. Avoid using the hydrostatic drive system at high speeds. This reduces fuel consumption and therefore actively contributes to protection of the environment.

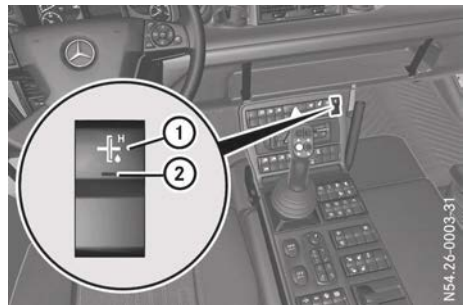
### **Working speeds**

During operation, the maximum speed is 50 km/h. Working mode cruise control can be used up to a speed of 25 km/h.

Operation	Working speed of 0.1 km/h
Snow clearing machine for roads	up to 15 km/h
Rotating brushes, e.g. for washing roadside posts	up to 15 km/h
Street-sweeping machine	up to 15 km/h
Side-delivery snow blower, snow cutter	up to 10 km/h
Mower	up to 10 km/h
Ditch-cleaning machine	up to 5 km/h
Verge cutter	up to 5 km/h

### **Switching the hydrostatic drive system on/off**

#### **Activating**



N54.26-0003-31

## Driving with a high body centre of gravity

To prevent an accident, observe the following points:

- the vehicle load has a negative effect on all of the vehicle's handling characteristics. Critical conditions are reached sooner.
- box-type bodies and high loads increase the vehicle's susceptibility to crosswinds.
- good traction conditions, e.g. dry roads, could result in the vehicle tipping when it reaches the cornering speed limit before the rear axle slips away.
- the vehicle's braking distance increases.
- fluid tanks, e.g. fire extinguishers or fertiliser tanks, that are not empty or not completely full could have a negative effect on the vehicle's handling characteristics.
- the risk of tipping is increased if the vehicle is towed with the front axle raised.
- avoid periodic vehicle movements at high speeds, e.g. a sequence of several steering manoeuvres to the right and left.
- bear in mind that there is an increased danger of tipping when driving off-road.
- adapt the vehicle speed to the topographic conditions. Driving off-road in less demanding terrain increases your vehicle's likelihood of rolling.
- reduce speed in difficult off-road terrain, especially if your vehicle is turned in alternating directions.

Mercedes-Benz does not take responsibility for accidents resulting from driving that is not appropriate for the conditions.

## Driving mode

### Important safety notes

#### WARNING

If you load the vehicle unevenly, driving characteristics such as steering and braking

behaviour may be severely impaired. There is a risk of an accident.

Load the vehicle evenly. Secure the load so that it cannot slip.

- !** Do not exceed the permissible axle loads, wheel loads (half of the axle load) and the maximum permissible gross vehicle weight.

The following parts of the vehicle may otherwise be damaged:

- wheels and tyres
- chassis
- suspension
- axles
- steering

The vehicle's driving, braking and steering characteristics vary with the type, weight and centre of gravity of the load.

During the journey, check the warning and indicator lamps on the instrument cluster.

### Additional equipment

Sufficient steerability of the vehicle must be guaranteed. The front axle load, with corresponding attached equipment and bodies for all vehicle loads, must be at least 33% of the actual gross vehicle weight.

The rear axle load must always be at least 33% of the actual gross vehicle weight.

Pay attention to the minimum rear axle load:

- U 216 / U 218: 1,950 kg
- U 318: 2,200 kg
- U 423 / U 427 / U 430 / U 527 / U 530: 2,350 kg

This ensures sufficient braking performance and that directional stability is guaranteed during a full brake application.

For reasons of safety, only equipment and bodies that meet the currently valid body/equipment mounting directive may be used. It can be found on the Internet in the Mercedes-

Avoid inhaling ammonia vapours. Only fill the AdBlue® tank in well-ventilated areas.

AdBlue® should not come into contact with skin, eyes or clothing, and should not be swallowed. Keep AdBlue® out of the reach of children.

If you come into contact with AdBlue®, observe the following:

- immediately wash AdBlue® from your skin with water and soap.
- if AdBlue® comes into contact with your eyes, rinse your eyes with clean water immediately. Consult a doctor without delay.
- if you have swallowed AdBlue®, immediately rinse your mouth with water and drink plenty of water. Consult a doctor without delay.
- change clothing that is soiled with AdBlue® immediately.

AdBlue® is not refilled as part of the maintenance work. Top up the tank regularly during vehicle operation or at the latest when the first event message is displayed on the on-board computer.

Additional information on AdBlue® is included in the "Service products" section (▷ page 365).

### Before filling the tank



Example: AdBlue® U 318 tank



Example: AdBlue® U 218 tank

If AdBlue® tank ③ still contains sufficient AdBlue®, pressure compensation may result when unscrewing cap ①. AdBlue® may spill out. For this reason, take care when unscrewing cap ① from AdBlue® tank ③. If AdBlue® spills out, immediately wash the affected area with plenty of water.

A special tank filler neck prevents AdBlue® tank ③ from mistakenly being filled with diesel fuel.

- ▶ Switch off the engine.
- ▶ Remove the key from the ignition lock.
- ▶ Apply the parking brake.
- ▶ Switch off the auxiliary heating (▷ page 102).
- ▶ **Lockable cap:** lift up lock cover ② on blue cap ①.
- ▶ Unlock blue cap ① with the separate key.
- ▶ **All vehicles:** slowly turn blue cap ① to the left and remove.

### Trailer

#### Trailer tow hitch

The trailer coupling is one of the vehicle components with particular significance for road safety. Please comply precisely with the manufacturer's operating, care and maintenance instructions.

Only tow vehicles that do not have technical problems. The permitted weight and load values that must not be exceeded are to be

- ⑨ **To move the control system to the left:**  
Green hydraulic connection 3 or, if simultaneously pressing white button ⑪, blue hydraulic connection 7
- ⑩ Blue button, can be assigned specific functions (▷ page 241)
- ⑪ White button, activates operation of yellow hydraulic connections 5, 6 or blue hydraulic connections 7, 8

### Buttons, vehicles with gear pump



- ⑫ Switches off the entire hydraulics system
- ⑬ Activates/deactivates working hydraulics circuit I
- ⑭ Activates/deactivates working hydraulics system circuit II
- ⑮ Cumulation of flow rates to circuit I or circuit II
- ⑯ Switches the flow rate between circuit I and circuit II
- ⑰ Activates/deactivates power hydraulics circuit III/IV
- ⑱ Activates/deactivates power hydraulics circuit IV
- ⑲ Activates/deactivates snow plough load relief, red hydraulic connections 1 and 2
- ⑳ Activates/deactivates continuous consumers, green hydraulic connection 3

- ㉑ Activates/deactivates continuous consumers, red hydraulic connection 1
- ㉒ Activates/deactivates float setting, blue hydraulic connections 7 and 8
- ㉓ Activates/deactivates float setting, yellow hydraulic connections 5 and 6
- ㉔ Activates/deactivates float setting, green hydraulic connections 3 and 4
- ㉕ Activates/deactivates float setting, red hydraulic connections 1 and 2

### Buttons, vehicles with positioning pump







- ⑫ Switches off the entire hydraulics system
- ⑬ Activates/deactivates working hydraulics circuit I
- ⑰ Activates/deactivates power hydraulics circuit III/IV
- ⑱ Activates/deactivates power hydraulics circuit IV
- ⑲ Activates/deactivates snow plough load relief, red hydraulic connections 1 and 2
- ㉑ Activates/deactivates continuous consumers, green hydraulic connection 3
- ㉒ Activates/deactivates continuous consumers, red hydraulic connection 1
- ㉓ Activates/deactivates float setting, blue hydraulic connections 7 and 8


## Changing the value

- ▶ If necessary, switch the desired hydraulics circuit to standby mode:
  - Snow plough load relief (▷ page 248)
  - Continuous consumers (▷ page 252)
  - Working hydraulics circuit (▷ page 244)
  - Power hydraulics circuit (▷ page 258)


The corresponding symbol is marked with a coloured border. The indicator lamp in the corresponding button flashes.

- ▶ Press the  or  button to select the desired hydraulic circuit.
- ▶ **Attached equipment with constant flow rate:** change the value. To do so, press the  or  button.




or

- ▶ **Equipment with load sensing:** press and hold the  button until **LS** is shown in the input window.

## Activating a hydraulics circuit

- ▶ Press the  button on the steering wheel or the black button on the control lever until the indicator lamp in the corresponding button lights up. The corresponding symbol is coloured.

## Switching the hydraulics circuit back to standby mode

- ▶ Press the  or  button to select an activated hydraulics circuit.
- ▶ Press the  button on the steering wheel or the black button on the control lever until the indicator lamp in the corresponding button flashes. The symbol has a coloured border.


## Deactivating a hydraulics circuit




- ▶ Deactivate the desired hydraulics circuit using the corresponding button:
  - Snow plough load relief (▷ page 248)
  - Continuous consumers (▷ page 252)

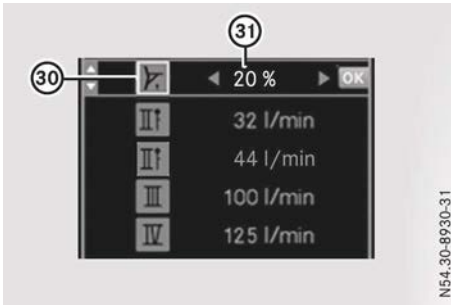
- Working hydraulics circuit (▷ page 244)
  - Power hydraulics circuit (▷ page 258)
- The indicator lamp in the corresponding button goes out. The symbol is grey.

## "Load profile 1" or "Load profile 2" function

If you have saved a profile for equipment fitted (▷ page 242), you can call up the saved settings again from this profile. The attached equipment is then immediately ready for use.

Structural sequence in the on-board computer	Selection
Operation and maintenance 	
Hydraulics	
Working functions	
Load profile 1 or Load profile 2	

- ▶ Call up the **Working functions** menu window (▷ page 236).
- ▶ Press the  or  button to select the **Load profile 1** or **Load profile 2** entry.
- ▶ Press the  button. The saved profile is loaded and the setting values applied. The on-board computer briefly shows the **Profile 1 loaded** or **Profile 2 loaded** message in the display.



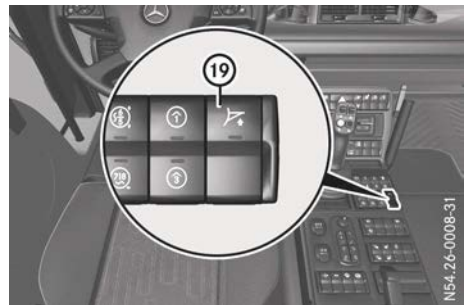
N54-30-8930-31

- ▶ Activate working hydraulics circuit I (▷ page 244).
- ▶ Press button (19).  
The indicator lamp in button (19) flashes. The **Hydraulics** input window opens in the on-board computer. The line for load relief function value (30) is selected. The symbol for the snow plough load relief has a coloured border. Snow plough load relief is in standby mode.
- ▶ **To change the load relief function value:** using the  or  button on the steering wheel, increase or decrease load relief function value (31).
- ▶ Press the  or  button on the steering wheel to select the **Back** entry.
- ▶ Press the (OK) button.  
The **Hydraulics** input window closes. It is now no longer possible to switch the value accidentally.

### Switching on snow plough load relief



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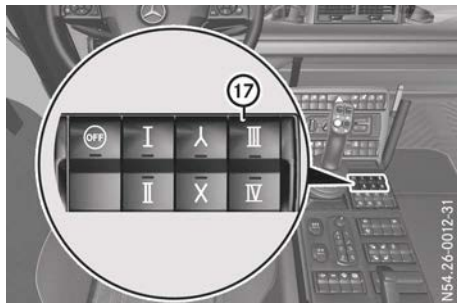


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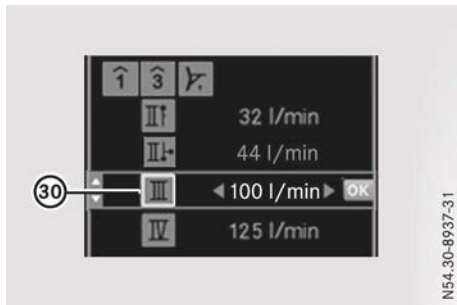
- ▶ **To switch on using the control lever:** press and hold red button (5).
- ▶ Move the control lever in direction (6).  
Red hydraulic connections 1 and 2 are in the float setting as long as red button (5) is pressed. The snow plough is applying full weight to the road.
- ▶ Release red button (5).  
The snow plough is raised until the load relief function value has been attained. The indicator lamp in button (19) lights up and the  indicator lamp in the status area of the on-board computer goes on. Snow plough load relief is switched on.
- ▶ **To switch on using the buttons on the steering wheel:** ensure that the **Hydraulics** input window is shown in the on-board computer and the line for the load relief

The cumulative flow rate of the power hydraulics is, however, limited to 180 l/min. The stated flow rates apply to a rated engine speed of 2200 rpm.

### Activating/deactivating power hydraulics circuit III/IV



Vehicles with gear pump (example)



Vehicles with positioning pump (example)

### Switching power hydraulics circuit III into standby mode

- ▶ Connect equipment to the power hydraulics (see the manufacturer's separate operating instructions) (▷ page 230).
  - ▶ Engage the engine-driven power take-off (▷ page 265).
  - ▶ Start the engine.
  - ▶ Make sure that the hydraulic system is switched on (▷ page 230).
  - ▶ Press button ⑰.
- The indicator lamp in button ⑰ flashes. The **Hydraulics** input window opens in the on-board computer. The line for power hydraulics circuit III ⑳ is selected. The

power hydraulics for circuit III are in standby mode.

### Changing the flow rate

- ▶ Using the ◀ or ▶ button, increase or decrease the flow rate.

### Activating power hydraulics circuit III/IV

- ▶ Press the OK button on the steering wheel or the black button on the control lever until the indicator lamp in button ⑰ lights up. Power hydraulics circuit III is activated. The symbol for power hydraulics circuit III ⑳ is coloured.

### Switching power hydraulics circuit III back into standby mode

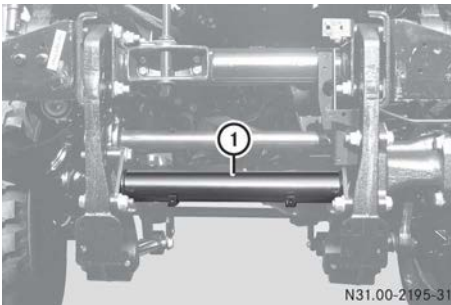
- ▶ Call up the **Hydraulics** menu window (▷ page 237).
- ▶ Press the ▼ or ▲ button to select power hydraulics circuit III.
- ▶ Press the OK button on the steering wheel or the black button on the control lever until the indicator lamp in button ⑰ flashes. The symbol for power hydraulics circuit III ⑳ has a coloured border. Power hydraulics circuit III is in standby mode.

### Deactivating power hydraulics circuit III/IV

- ▶ Press button ⑰.
- The indicator lamp in button ⑰ goes out.
- or
- ▶ Switch off the hydraulic system (▷ page 230).
- or
- ▶ Turn the key to position **1** in the ignition lock.



① Front mounting plate



① Example: tubular cross member, vehicles without a front-mounted plate

### Fitting additional equipment

#### Important safety notes

Observe the following notes:

- Instructions for fitting equipment can be found in the body/equipment mounting directives in the Mercedes-Benz body manufacturer portal: <http://bb-portal.mercedes-benz.com>
- Familiarise yourself with the applicable accident prevention regulations.
- Only use attached equipment for the intended applications as determined by the relevant manufacturer.
- Undergo training before using the equipment for the first time.
- Read the operating, maintenance and care instructions delivered with the vehicle carefully. Please consult the equipment manu-

facturer or a Mercedes-Benz Service Centre if you have any questions.

Note the following before installing equipment:

- park the vehicle on a firm and level surface
- switch off the engine
- apply the parking brake
- make sure that nobody is in the vehicle
- make sure that nobody is between the vehicle and the equipment

#### Notes on connecting/disconnecting equipment

- ⚠ Dirt entering the hydraulic system could cause damage and malfunctions in the system.
- ▶ Activate the float setting (▷ page 246).
- ▶ Switch off the engine.
- ▶ Only connect and disconnect equipment when the engine is switched off. This prevents unintended movements.
- ▶ Make sure that the equipment is clean when connecting and disconnecting.
- ▶ Do not go between the vehicle and the equipment.

Only use hydraulic lines designed to withstand the hydraulic system's maximum pressure.



### Transporting equipment

#### Important safety notes

- ⚠ Observe the permissible axle and wheel loads. Do not exceed the maximum gross vehicle weight. During transportation, the difference between the left and right wheel loads should not exceed 10%.

The following parts of the vehicle may otherwise be damaged:

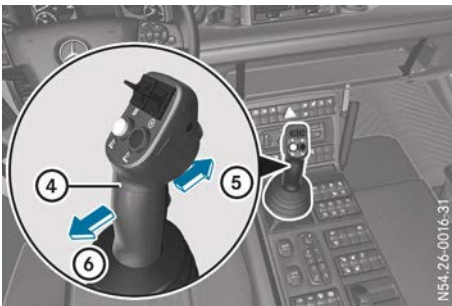
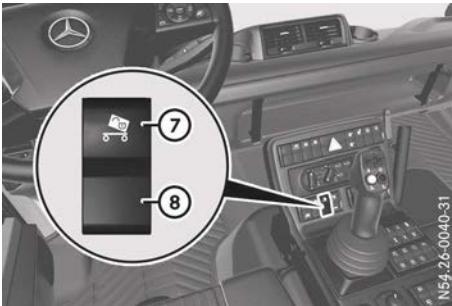
- tyres
- chassis
- axles

- ▶ **To enable the tipping function:** press switch ①. Indicator lamp ② in the switch lights up. The  **Joystick aktiv (Joystick active)** message appears in the on-board computer display. The  indicator lamp in the status area of the on-board computer lights up.

The raise/lower tipper platform control lever function is enabled.


- ▶ **To disable the tipping function:** press switch ③. Indicator lamp ② in the switch goes out. The raise/lower tipper platform control lever function is disabled.


**Raising/lowering the tipper platform vehicle**



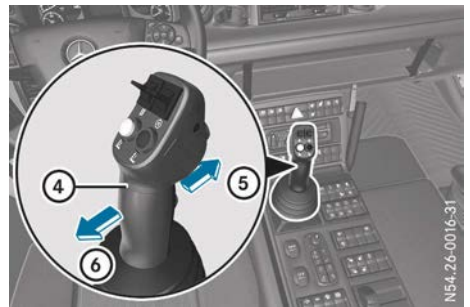
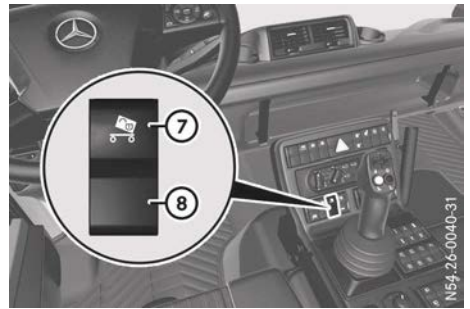
- ▶ Start the engine.
- ▶ Enable the tipping function (▷ page 278).
- ▶ Ensure that in vehicles with a tipper platform trailer, switch ⑧ is pressed.
- ▶ **To raise the tipper platform:** press control lever ④ in direction ⑥ and hold it in

place until the tipper platform has reached the desired position.

The  indicator lamp in the status area of the on-board computer lights up.

- ▶ **To lower the tipper platform:** make sure that the key is in position 2 in the ignition lock.
- ▶ Press control lever ④ in direction ⑤ and hold it in place until the tipper platform has reached the desired position. When the tipper platform is fully lowered, the  indicator lamp in the status area of the on-board computer goes out.
- ▶ Disable the tipper function (▷ page 278).

**Raising/lowering the tipper platform trailer**



- ▶ Start the engine.
- ▶ Enable the tipping function (▷ page 278).
- ▶ Press switch ⑦. The tipper platform trailer can be raised or lowered.
- ▶ **To raise the tipper platform:** press control lever ④ in direction ⑥ and hold it in

- electrical connectors
- seals

**!** Vehicles with Mercedes-Benz protective chassis sealing:

- do not use high-pressure cleaners with round-spray jets for cleaning
- only clean with the water pressure up to a maximum of 30 bar
- clean the vehicle with a water temperature up to a maximum of 40 °C
- keep a distance of at least 30 cm between the nozzle and the vehicle

You could otherwise damage the Mercedes-Benz protective chassis sealing.

#### Environmental note

Only wash your vehicle at a wash bay designed for this purpose. Dispose of empty containers and used cleaning products in an environmentally responsible manner.

Please also observe the information provided for cleaning the radiator (> page 301).

### Automatic car wash

#### WARNING

Braking efficiency is reduced after the vehicle has been washed. There is a risk of an accident.

After washing the vehicle, brake carefully while paying attention to the traffic conditions in order to restore full braking efficiency.

**!** Before washing the vehicle in an automatic car wash, fold in the exterior mirrors and switch off the windscreen wipers. Otherwise, the exterior mirrors and windscreen wipers could be damaged.

Make sure that the exterior mirrors are fully folded out again when you leave the automatic car wash.

Wash off excess dirt before cleaning the vehicle in an automatic car wash.

After the automatic car wash, remove the wax from the windscreen and the wiper blades. This prevents smearing and reduces wiper noise, which occur as a result of residue on the windscreen.

### Cleaning the engine

**!** Observe the following notes when cleaning the engine. This avoids malfunctions and damage to the engine.

- When using high-pressure or steam cleaners, do not point the spray directly at electrical components and electric cables.
- Make sure that no water enters the air intake and ventilation openings.
- Treat the engine with preservative agents after it has been cleaned. When doing so, protect the belt drive system from the preservative agent.
- Only use wax-based protective agents for engines that comply with Sheet No. 385.4 of the Mercedes-Benz Specifications for Service Products.

**!** When using high-pressure or steam cleaners, do not point the spray directly at radiator core fins, electrical components or electric cable ends.

In addition, observe the notes in the "High-pressure cleaning" section (> page 288).

### Cleaning light-alloy wheels

**!** When cleaning the light-alloy wheels, do not use any acidic or alkaline cleaning agent. They may corrode the wheel nuts or the locking springs of the wheel balance weight.

**!** Do not point the water jet of high pressure or steam cleaners directly at the balance weights of the light-alloy wheel. They may become detached and lead to imbalance and increased tyre wear.

## Oil level of power hydraulics

### Important safety notes

#### WARNING

The hydraulic system is under high pressure and the hydraulic fluid may be hot. If work on the hydraulic system is carried out incorrectly, high-pressure hydraulic fluid may spray out. There is a risk of injury.

Only have work on the hydraulic system carried out at a qualified specialist workshop.

### Checking the fluid level

Always check the oil level before starting operation of hydraulic equipment.

- ▶ Check the oil level using the on-board computer (▷ page 125).

### Topping up the oil

- !** If any of the hydraulic cylinders have not been fully retracted, do not top up the oil to the maximum.



N55.30-2106-31

- ▶ Open cap ①.
- ▶ Observe the information on hydraulic fluid (▷ page 363).
- ▶ Slowly add hydraulic fluid.
- ▶ Replace cap ① and screw it on.

- ▶ Check the oil level of the power hydraulics (▷ page 125).  
The oil level display of the power hydraulics must show approximately 52 l.
- ▶ Activate and then deactivate the power hydraulics (▷ page 258).

## Oil level, hydrostatic drive system

### Checking the fluid level



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- ▶ The oil level must be between MIN mark ④ and MAX mark ③.

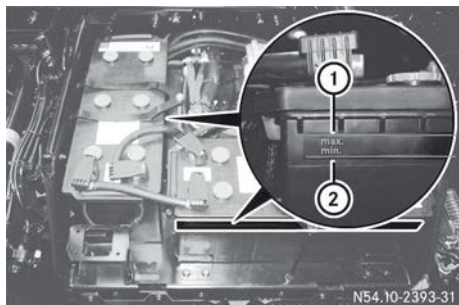
### Topping up the oil

- ▶ Open red cap ①.
- ▶ Observe the information on hydraulic fluid (▷ page 363).
- ▶ Add the hydraulic fluid slowly into reservoir ② up to maximum mark ③.
- ▶ Replace red cap ① and screw it on.

## Front PTO shaft



N55.10-2007-31



Battery fluid level

- ① Max. mark
- ② Min. mark

Observe the safety notes on handling batteries.

- ▶ Remove the battery cover (▷ page 307).
- ▶ Unscrew and remove the battery cell caps.
- ▶ Check the battery fluid level and correct it if necessary.

The fluid level in each battery cell must be approximately 15 mm above the top of the plate. Observe the min. and max. markings on the side of the battery compartment.

- ▶ Screw in the battery cell caps.
- ▶ Connect the battery cover (▷ page 307).

### Battery care

❗ Please observe the following points:

- Dirty battery terminals and battery surfaces cause leak currents, which lead to the batteries discharging. Always keep the battery terminals and battery surfaces clean and dry. Lightly grease the battery terminals, especially the undersides, with acid-resistant grease.
- Only clean batteries with the cell caps fitted. Otherwise, dirt can enter the battery cells.
- Cleaning agents containing fuel corrode the battery housing. Only clean the battery housing with commercially available cleaning agents.

- The vent holes of the cell caps must be open. Otherwise, gases cannot escape. Clean blocked vent holes with a suitable tool, e.g. a piece of wire. Unscrew the cell caps first. Otherwise, there is the risk of a short circuit.
- Recharge batteries that are not in use with a no-load voltage of less than 12.4 V.

### Charging the batteries

#### ⚠ WARNING

During charging and jump-starting, explosive gases can escape from the battery. There is a risk of an explosion.

Particularly avoid fire, naked flames, creating sparks and smoking. Ensure there is sufficient ventilation while charging and jump-starting. Do not lean over a battery.

#### ⚠ WARNING

A discharged battery can freeze at temperatures below freezing point. When jump-starting the vehicle or charging the battery, gases can escape from the battery. There is a risk of an explosion.

Allow the frozen battery to thaw out before charging it or jump-starting.

- ❗ Use a commercially-available battery charger to charge the batteries. Make sure that the charging voltage is correct. Do not charge new batteries with rapid charging. The charge current of used batteries should be maximum 75% of the battery capacity for rapid charging. Otherwise, you could damage the batteries.

The charging current must not exceed 10% (or a maximum of 75% when rapid-charging) of the battery capacity. Do not rapid-charge new batteries.

Observe the safety notes on handling batteries.

- ▶ Unscrew and remove the battery cell caps.
- ▶ Disconnect the battery terminals (▷ page 308).

### Stopping the engine

- ▶ Press external engine start/engine stop ① again.
- ▶ Tilt the cab back to the driving position (▷ page 314).

### Replacing the fuel prefilter

#### WARNING

Certain components in the engine compartment could be very hot, e.g. the engine, the radiator and parts of the exhaust system. There is a risk of injury when accessing the engine compartment.

As far as possible, allow the engine to cool down and only touch the components described in the following.

#### WARNING

There are moving components in the engine compartment. Certain components may continue to move or suddenly move again even after the ignition has been switched off, e.g. the radiator fan. There is a risk of injury. If you have to carry out work in the engine compartment:

- switch off the ignition
- never touch the dangerous areas surrounding moving components, e.g. the rotation area of the fan
- remove jewellery and watches
- keep items of clothing and hair, for example, away from moving parts.

#### WARNING

Fuel is highly flammable. Improper handling of fuel creates a risk of fire and explosion.

Avoid fire, naked flames, smoking and creating sparks under all circumstances. Switch off the ignition and auxiliary heating before carrying out work to the fuel system. Always wear protective gloves.

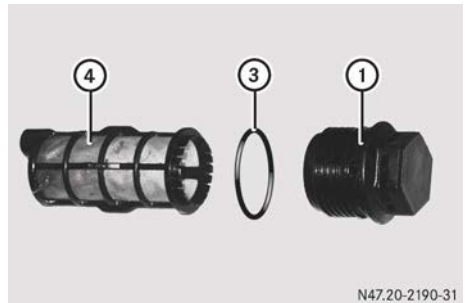
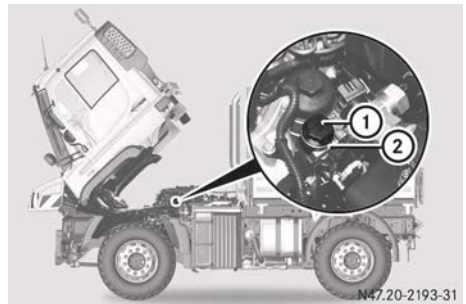
#### Environmental note

Dispose of the water-fuel mixture in an environmentally responsible manner.

#### Environmental note

Dispose of used filter elements, seals and fuel residue in accordance with relevant local regulations.

- ▶ Tilt the cab forwards (▷ page 314).



- ▶ Unscrew cap ① from filter housing ②.
- ▶ Remove cap ① with filter element ④.
- ▶ Unclip filter element ④ from cap ①.
- ▶ Clean filter housing ② and cap ①.
- ▶ Replace sealing ring ③.
- ▶ Clip new filter element ④ into cap ①.
- ▶ Insert cap ① with filter element ④ in filter housing ②.
- ▶ Tighten cap ①. Tightening torque approximately 25 Nm.
- ▶ Bleed the fuel system (▷ page 322).
- ▶ Tilt the cab back into the driving position (▷ page 314).

Fuse module FA1		
	Consumers	A
F13	12-V power sockets; behind driver's seat / centre console / voltage transformer for headlamp range controller (voltage transformer input) terminal 30	15
F14	12-V power sockets, behind driver's seat / centre console (voltage transformer output), 12-V terminal	15

Fuse module FA2		
	Consumers	A
F01	Instrument cluster (ICUC) / tachograph (DTCO) / reservoir pressure sensor K1 & K2 / Camera Monitor System (KMS) (terminal 15)	5
F02	Instrument cluster (ICUC) / central gateway (CGW) / modular switch field (MSF) (terminal 30)	5
F03	Power windows control panel / central locking terminal 15R	15
F04	Power windows control panel / radio / dual-mode steering starter inhibitor relay (WL) (terminal 15R)	15
F05	Interior lighting (terminal 30)	10
F06	ABS (terminal 30)	20
F07	Auxiliary heating (terminal 30)	20
F08	Heating (terminal 15R)	20
F09	Windscreen heating (terminal 30)	25

Fuse module FA2		
	Consumers	A
F10	Unimog transmission control module (TCMU) (terminal 30)	20
F11	Unimog transmission control module (TCMU) (terminal 30)	20
F12	Seat heating / mower seat (terminal 15)	10
F13	Water separator / rotation chains basic wiring (terminal 15)	15
F14	Windscreen washer system (terminal 15R)	25

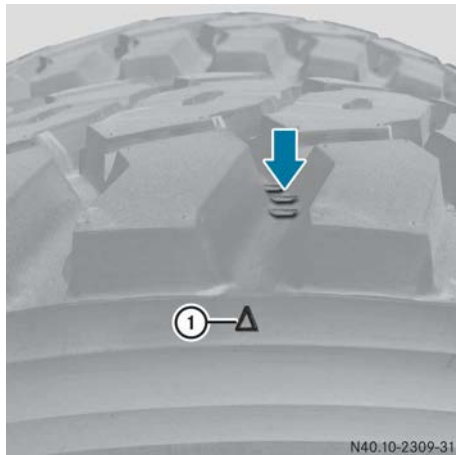
Fuse module FA3		
	Consumers	A
F01	Immobiliser (terminal 50)	5
F02	Mower seat windscreen washer system (terminal 15)	10
F03	Mowing door side window heating (terminal 30)	15
F04	Special Truck Control Unit (STCU) (terminal 15)	5
F05	Special Truck Control Unit (STCU) (terminal 30)	5
F06	Voltage supply (CAN) valve block (terminal 30)	20
F07	Hydrostatic transmission fan / torque converter clutch fan (terminal 30)	25
F08	Power hydraulics fan (terminal 30)	30
F09	Working hydraulics fan (terminal 30)	15
F10	Rotating beacon (RKL) (terminal 30)	10

the condition of the tread across the entire width of all tyres.

Minimum tyre tread depth for:

- summer tyres: 3 mm
- M+S tyres: 4 mm

For safety reasons, replace the tyres before the legally prescribed limit for the minimum tyre tread depth is reached.



#### ① Example: tread wear indicator

A specified minimum tread depth is a legal requirement for all tyres. Observe the relevant legal requirements for each country.

For safety reasons, have the tyres replaced before the legally specified minimum tread depth is reached.

A tyre has reached the minimum tread depth when the tread wear indicator (arrow) is flush with the tyre tread.

The less tyre tread depth remaining, the poorer the road grip and handling characteristics of the vehicle, especially if the road surface is wet or snow-covered.

### Tyre condition

#### WARNING

Damaged tyres can cause tyre inflation pressure loss. As a result, you could lose control of your vehicle. There is a risk of accident.

Check the tyres regularly for signs of damage and replace any damaged tyres immediately.

Check the condition of the tyres regularly, at least every two weeks and before long journeys, e.g. for:

- external damage
- foreign bodies in the tyre tread
- cracks, bulges, punctures
- uneven tread wear or excessive wear on one side

### Tyre age

Tyres age, even if they are used infrequently or not at all. Operating and road safety diminish with age. For this reason have tyres replaced which are more than six years old.

### Tyre damage

Tyre damage can be caused by:

- the operating conditions of the vehicle
- tyre ageing
- kerbs
- foreign bodies
- insufficient or excessive tyre pressure
- weather conditions and environmental factors
- contact with oil, grease, fuel, etc.

### Tyre load-bearing capacity, tyre speed rating and tyre types

#### WARNING

Exceeding the stated tyre load-bearing capacity and the approved maximum speed could lead to tyre damage or the tyre bursting. There is a risk of accident.

Therefore, only use tyre types and sizes approved for your vehicle model. Observe the tyre load rating and speed rating required for your vehicle.

In particular, observe the permissible tyre specifications in a country. These regulations

U 527 / U 530, gross vehicle weight 11,990 kg <sup>2</sup>			
Tyres	LI	Axle load in kg Tyre pressure in bar	
		Front Up to / max.	Rear
365/85 R 20 XZL	164G	5200 / 6800 <b>3.6 / 4.9</b>	7000 <b>5.6</b>
395/85 R 20 XZL XML	168G 161G	5200 / 6800 <b>3.6 / 4.9</b> <b>3.6 / 5.0</b>	7000 <b>5.6</b> <b>5.7</b>
375/75 R 22.5 MPT 23	165J	5200 / 6800 <b>3.4 / 4.8</b>	7000 <b>5.2</b>
385/65 R 22.5 HTC / HSW Scan HDC	160K 162K/ 164J	5200 / 6800 <b>4.6 / 6.4</b> <b>4.2 / 5.9</b>	7000 <b>7.0</b> <b>6.2</b>
445/65 R 22.5 AC70+ XZL	160G 168G	5200 / 6800 <b>2.8 / 4.1</b> <b>3.4 / 4.6</b>	7000 <b>4.8</b> <b>5.1</b>
445/70 R 24 XM47	151G	5300 / 5500 <b>3.0 / 3.2</b>	6900 <b>4.1</b>
455/70 R 24 SP T9	154G	5300 / 5500 <b>2.6 / 2.8</b>	6900 <b>3.7</b>
495/70 R 24 XM47	155G	5600 <b>2.8</b>	6500 <b>3.4</b>

U 527 / U 530, gross vehicle weight 12,700 kg <sup>2</sup>			
Tyres	LI	Axle load in kg Tyre pressure in bar	
		Front Up to / max.	Rear
445/70 R 24 XM47	151G	5800 <b>3.4</b>	6900 <b>4.1</b>

<sup>2</sup> Observe the gross vehicle weight on the vehicle identification plate.

<b>PTO shaft</b>	
Engine speed at a front PTO shaft rotational speed of 1000 rpm	2140 rpm
Direction of rotation	Clockwise
Continuous operation output	160 kW
Profile of front PTO shaft in accordance with SAE J499a standard	1 3/4 inch splined shaft The front PTO shaft stub can be twisted to enable equipment to be coupled up easily

<b>Tyre pressure</b>	
Tyre pressure	(▷ page 342)
Permissible difference between tyres on an axle	0.2 bar
Maximum permissible pressure in the vehicle compressed-air system to inflate a tyre	10.0 bar

<b>Wheel nut tightening torques (Nm)</b>			
Pressure plate nut	U 216 / U 218 / U 318	M 20 x 1.5	450 ± 36 Nm
	U 423 / U 427 / U 430 / U 527 / U 530	M 22 x 1.5	600 ± 50 Nm

<b>Spring-loaded parking brake cylinders</b>	
Release torque of the spring-loaded parking brake cylinder release screw	Max. 70 Nm
Tightening torque of the spring-loaded parking brake cylinder release screw	40–50 Nm
Release pressure (reservoir pressure in compressed-air system)	Min. 6.5 bar
Auxiliary consumers circuit	Approx. 8.5 bar

<b>Steering play</b>	
Maximum permissible steering play (measured at the rim of the steering wheel with the engine running, wheels in straight-ahead position)	30 mm

		Capacity approximately	Service product (Sheet Number)
	Battery cable terminals		Acid-proof grease (350.0)
Fuel tank	U 216 / U 218 / U 318 / U 423 K	145 l	Diesel fuel (131.0, 137.0) (▷ page 364)
	Optional equipment: U 318 / U 423	200 l	
	U 423 L / U 427 / U 430	200 l	
	Optional equipment: U 423 L / U 427 / U 430	250 l	
AdBlue® tank	U 216 / U 218	18.0 l	AdBlue® (352.1)
	U 318 / U 423 / U 427 / U 430	25.0 l	
Windscreen washer system		15.0 l	Windscreen washer concentrate (371.0)
Air-conditioning system	Refrigerant compressor	0.16 l	Compressor oil
	Refrigerant circuit	1400 g	Refrigerant R134a (361.0)

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