



# Unimog U 4000 / U 5000

Tips on maintaining the value of your vehicle



Mercedes-Benz


## Symbols


### **WARNING**

Warning notes make you aware of dangers which could pose a threat to your health or life, or to the health and life of others.

### **Environmental note**

Environmental notes provide you with information on environmentally aware actions or disposal.

 Notes on material damage alert you to dangers that could lead to damage to your vehicle.

 Useful notes or further information that could be of assistance to you.

► This symbol notifies you of an instruction that you must follow.

► Several such symbols in a row indicate an instruction with a number of steps.

(▷ page) This symbol informs you of where you can find more information on a specific topic.

▷▷ This symbol indicates a warning or an instruction that is continued on the next page.

**Display** This text indicates a display message in the display.

## **Welcome to the world of Mercedes-Benz**

You will want to fully enjoy your Unimog for a long time. To be able to do so, safety and reliability are essential. Maintaining these requires regular servicing and vehicle care.

The maintenance program which we have developed fully encompasses all aspects of servicing. They are required to keep your vehicle in the best possible condition.

The Unimog is a special-purpose vehicle which has specific applications. There are certain care and maintenance procedures which need to be carried out at the regular maintenance intervals that we have specified.

The various care and maintenance procedures described in this booklet can in part be carried out by yourself.

You can find further information about cleaning and care in the "Cleaning and care" section of the Operating Instructions.

If, in the course of regular maintenance, you discover defects in the braking system, air-conditioning system or protective coating, have these rectified at a qualified specialist workshop. A qualified specialist workshop has the necessary specialist knowledge and tools to carry out the work required.

Mercedes-Benz recommends that you use a Mercedes-Benz Service Centre for this purpose.

Avoid corrosion damage. It is very important to check the paintwork and protective treatment both before and after the winter period and to make repairs where necessary.

Information on protective coatings, touch-up agents and vehicle care products is available at any Mercedes-Benz Service Centre or qualified workshop.

The technical documentation team at Daimler AG wishes you pleasant and safe motoring.



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Overview of care procedures

Daily	Periodic checks and care
	<ul style="list-style-type: none"> <li>▶ Check the lighting system for correct function.</li> <li>▶ Check the condition of the tyres.</li> </ul>
Depending on operating conditions:	<ul style="list-style-type: none"> <li>▶ Clean the radiator (▷ page 8).</li> <li>▶ Clean the fine particle filter (▷ page 9).</li> <li>▶ Clean the dust collector (optional equipment).</li> </ul>
Each time the vehicle is used under extreme conditions:	<ul style="list-style-type: none"> <li>▶ Rinse off all traces of corrosive materials using water.</li> </ul>

Weekly	Periodic checks and care
	<ul style="list-style-type: none"> <li>▶ Check the fluid level in the windscreen washer system.</li> <li>▶ Check the wiper blades.</li> <li>▶ Clean the radiator (▷ page 8).</li> </ul>
During winter:	<ul style="list-style-type: none"> <li>▶ Clean the vehicle.</li> <li>▶ Clean the fine particle filter housing; see Heating/ventilation blower (▷ page 9).</li> </ul>

Monthly	Periodic checks and care
	<ul style="list-style-type: none"> <li>▶ Clean the vehicle.</li> </ul>

Quarterly	Periodic checks and care
	<ul style="list-style-type: none"> <li>▶ Check the compressed-air dryer function (▷ page 12).</li> </ul>

Annually	Periodic checks and care
	<ul style="list-style-type: none"> <li>▶ Check the contents of the first-aid kit.</li> <li>▶ Check the flashing beacon for correct function.</li> </ul>
Before the winter season:	<ul style="list-style-type: none"> <li>▶ Check the antifreeze in the coolant.</li> </ul>
At the end of the winter season:	<ul style="list-style-type: none"> <li>▶ Protect earth points on the vehicle exterior and the connection points on the starter with acid-proof grease (F40 v1).</li> <li>▶ Clean the chassis and the platform area thoroughly. Only use pH-neutral cleaners, not alkaline or acidic products.</li> <li>▶ Check protective treatment for blemishes and apply a new treatment if necessary<sup>1</sup></li> <li>▶ Clean the wheel brakes (▷ page 9).</li> </ul>
Every 2 years	Periodic checks and care
	<ul style="list-style-type: none"> <li>▶ Check the function and condition of the fire extinguisher.</li> </ul>
Every 3 years	Periodic checks and care
	<ul style="list-style-type: none"> <li>▶ If necessary, renew the protective agents for the entire vehicle<sup>1</sup>.</li> </ul>

**i** In some countries, the legal requirements may mandate deviations from the regular checks described here. Observe the legal requirements in all countries concerned.

<sup>1</sup> To remove blemishes or to re-apply dual-layer protection, please consult a qualified specialist workshop. It has the necessary specialist knowledge, tools and qualifications to correctly carry out the work required on your vehicle. Mercedes-Benz recommends that you use a Mercedes-Benz Service Centre for this purpose.

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## Chassis and underbody protection

The Unimog's chassis and underbody have been treated with a special dual-layer protective coating.

This dual-layer protection consists of a penetrating wax (Carlofon 3650) and an underbody protection wax (Carlofon 4941). The penetrating wax improves the anti-corrosion protection on moving parts and at gaps, joints and overlaps. The underbody protection wax permanently seals the chassis.

## Maintaining the anti-corrosion protection

To maintain the anti-corrosion protection, please observe the following:

- Do not clean the vehicle for the first time until at least 4 weeks after it has been delivered.
- When using a high-pressure cleaner to clean the chassis and the underbody, the water temperature may not exceed 40 °C and the water pressure may not exceed 30 bar. Make sure that the distance between the vehicle and the nozzle is at least 30 cm.
- Only use a pH-neutral cleaner, not alkaline or acidic products.
- Do not use any petrol-based substances, rape seed oil, petrol, diesel or other solvents. They can cause the dual-layer protection to dissolve or peel off.
- Do not use any additional anti-corrosion agents.
- Whenever the vehicle is used in extreme conditions, remove all traces of corrosive substances with water afterwards.

Particularly critical locations in which these corrosive substances accumulate are:

- on the underbody
- in the wheel arches and the steps
- on the spring assemblies
- on the drive train
- between cab and platform or mounted equipment
- in the cab interior
- Clean the Unimog at least once a week.
- The engine compartment can be treated using a special sealant (AP1505).
- After cleaning, check the chassis and underbody protection and touch it up where necessary.

These measures will help to prevent mechanical or electrical components from malfunctioning.

## Chassis

The following components should be cleaned regularly:

- Engine compartment
- rear of the cab
- wheel arches
- vehicle underside

## Cleaning equipment settings

Water temperature:	max. 40 °C
Jet pressure:	max. 30 bar
Nozzle distance:	min. 30 cm

## Radiator

Clean the radiator every day in the case of heavy soiling during mowing operation.

## Cab interior

### Cab floor

When getting in, snow, dirt and salt will inevitably be carried into the cab interior. This corrosive mixture accumulates in the footwell area and promotes corrosion of the electrical and other components in the interior.

- ▶ **i** Mercedes-Benz recommends that you use original Mercedes-Benz floor mats. The floor mats can be removed and cleaned if dirty or wet. This prevents damage to the cab floor from residual dampness.
- ▶ Regularly remove and clean the floor covers.
- ▶ Clean the cab floor.
- ▶ Dry off moist residue immediately.
- ▶ In case of dry dust and salt residue: vacuum and clean the cab interior, particularly in the corners and pedals.

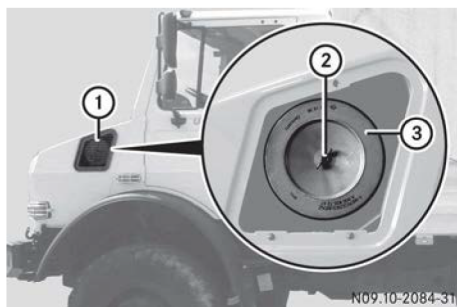
### Cable guide

- ▶ **i** Correctly seal the cable guide on the bulkhead of the cab after changing devices. If the cable guide has not been correctly sealed, the cab can become damp. This can cause corrosion to electric and other components in the interior. Make sure that you also observe the notes in the vehicle Owner's Manual.

### Heating/ventilation blower

The blower sucks in snow particles, salt and dust which accumulate in the fine particle filter housing.

Clean the fine particle filter housing once a week if using the vehicle for extreme winter road service operations in order to prevent the ventilation and heating from malfunctioning:

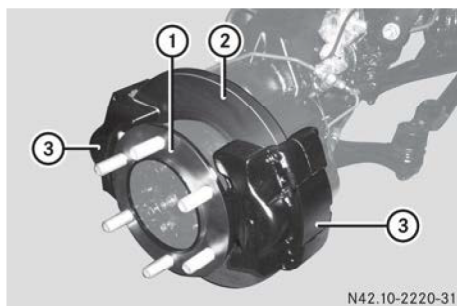


- ▶ Turn the quick-release fastening 90° and remove ventilation grille ①.
- ▶ Unscrew nut ② and remove fine particle filter ③.
- ▶ Clean the fine particle filter housing.
- ▶ Insert fine particle filter ③ and screw tight using screw ②.
- ▶ Insert ventilation grille ① and lock using the quick-release fastener.

## Wheel brakes

Clean the wheel brakes after the winter season in order to avoid them being damaged.

- ▶ Raise the vehicle, secure it using jack stands and remove the wheels; see the Operating Instructions.



- ▶ Thoroughly clean the hub-drive housings, the contact surfaces between the wheel rims and wheel hub ①, brake discs ② and

brake callipers ③, also see the notes on care (▷ page 12).

- Fit the wheels and lower the vehicle; see Operating Instructions.
- Carefully test the brakes.

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### Notes on care

After the winter season:

- Raise the vehicle, secure it using jack stands and remove the wheels; see the Operating Instructions.
- Clean the contact surfaces between the wheel rim and the wheel hub and lightly coat them with penetrating wax (Carlofon 3650).
- Check the wheel rims for corrosion damage and cracks and replace the wheel rims where necessary.
- Fit the wheels and lower the vehicle; see Operating Instructions.

After every off-road use:

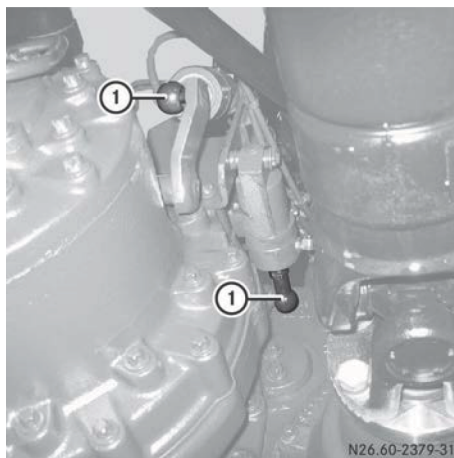
- Check the frame, chassis parts and cab for damage to the paintwork and to the protective agents and have any damage rectified immediately.

To remove blemishes or re-apply dual-layer protection, please consult a qualified specialist workshop. It has the necessary specialist knowledge, tools and qualifications to correctly carry out the work required on your vehicle. Mercedes-Benz recommends that you use a Mercedes-Benz Service Centre for this purpose.

### Compressed-air dryer

- Unscrew the drain plugs on the compressed-air reservoirs every 3 months. If condensed water is emitted, the granulate cartridge must be renewed; see the Operating Instructions.

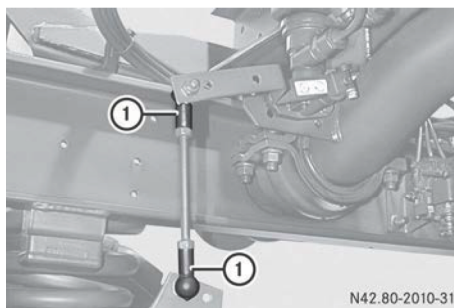
### Gearshift linkage on the transmission



Ball sockets (example)

- Clean and grease ball sockets ① on the gearshift linkage of the working and crawler gears as well as on the planetary gear set.

### ALB controller

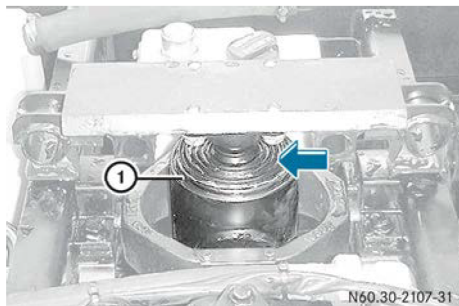


- Clean and grease ball sockets ① on the linkage of the ALB controller.

### Tipper cylinder

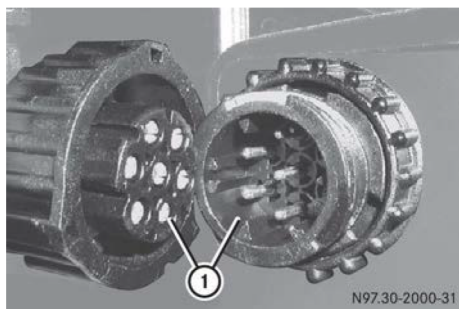
If the quick-change platform has been removed, make sure that the connection part for the quick-change platform has engaged in

the spring catches. You can prevent corrosion and damage to the tipping cylinder in this way.



- Retract the tipping cylinder ①; see Operating Instructions.
- Grease the cylinder units of the tipping cylinder with multipurpose grease.

### Electrical contacts



Connector pins (example)

At least once a year or after operation in arduous conditions such as fording or driving on roads treated with wet salt:

- Turn the vehicle key fully back in the ignition lock.
- Spray the electric contacts on connector pins ① with contact spray.

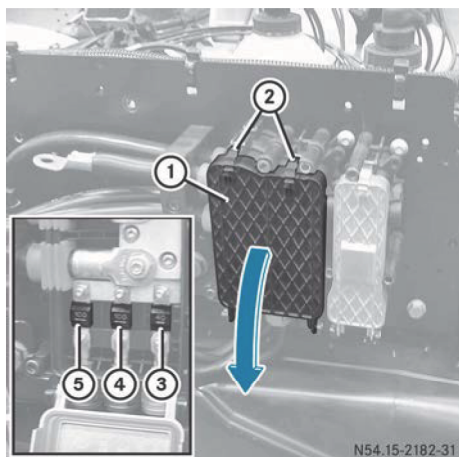
### Batteries

❗ Please observe the following points:

- dirty terminal clamps and battery surfaces cause leak currents, which lead to the batteries discharging. Always keep the terminal clamps and battery surfaces clean and dry. Lightly grease the terminal clamps, 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.
  - if batteries which are not in use have a no-load voltage of less than 12.4 V, they must be recharged.
- Check the battery fluid level; see Operating Instructions.
  - Disconnect the batteries; see Operating Instructions.
  - Clean battery terminals and grease lightly using acid-proof grease.
  - Thoroughly clean the battery compartment with water and allow it to dry.
  - Reconnect the batteries; see Operating Instructions.



### Fuses on the battery compartment



- ① Fuse box
  - ② Quick-release fasteners
  - ③ Equipment power socket fuse
  - ④ Telligent® automatic gearshift (AutomaticShift®) fuse
  - ⑤ Intake air preheater fuse
- Interrupt the power supply using the battery disconnection switch, see Operating Instructions.
  - Open fuse box ①.
  - Spray the fuse connections on the battery compartment with contact spray and grease them using acid-proof grease.
  - Close fuse box ①.
  - Reconnect the power supply using the battery disconnection switch, see Operating Instructions.

### Dual-layer protective coating

- Check the protective agents every week.
- Have paint and corrosion damage repaired immediately.

To remove blemishes or re-apply dual-layer protection, please consult a qualified specialist workshop. It has the necessary specialist

knowledge, tools and qualifications to correctly carry out the work required on your vehicle. Mercedes-Benz recommends that you use a Mercedes-Benz Service Centre for this purpose.

### Paintwork damage and corrosion damage

To repair paint and corrosion damage, please consult a qualified specialist workshop. It has the necessary specialist knowledge, tools and qualifications to correctly carry out the work required on your vehicle. Mercedes-Benz recommends that you use a Mercedes-Benz Service Centre for this purpose.

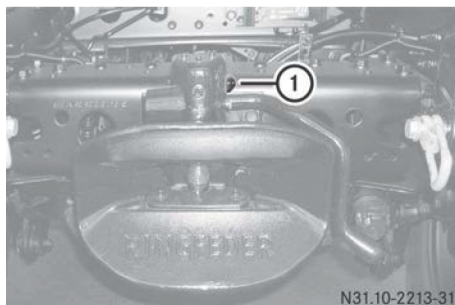
### Engine compartment

- After cleaning the engine compartment: spray the engine attachments and the engine compartment with engine sealant.

### Cab

- Check the body cavity sealing once a year and touch up where necessary.

### Trailer tow hitch



Always keep the coupling bolts and the towing eye bush clean and lubricated. This will



reduce wear and tear on these parts. If the coupling mechanism is sluggish, lubricate the coupling head above the conical lubricating nipple ①.

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## Preservative agents

Penetrating wax (Carlofon 3650)	A 000 986 59 70 10 (1 litre)
Underbody protection wax (Carlofon 4941)	A 000 986 60 70 10 (1 litre)
Underbody protection wax (Carlofon 4942)	0.5 litre spray can, by Carlofon ( <a href="http://www.carlofon.de">www.carlofon.de</a> )
Contact spray	by ITW or Carlofon ( <a href="http://www.carlofon.de">www.carlofon.de</a> )
Acid-proof grease (F40 v1)	by Bosch GmbH
Body cavity wax (VA18/65-4)	A 000 986 37 70 10 (3 litres)
Engine sealant (AP1505)	A 000 986 33 70 (1 litre)



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## **Imprint**

### **Internet**

Further information about Mercedes-Benz vehicles and about Daimler can be found on the following websites:

[www.mercedes-benz.com](http://www.mercedes-benz.com)

[www.daimler.com](http://www.daimler.com)

### **Documentation team**

Should you have any questions or suggestions regarding this manual, you can reach the technical documentation team at the following address:

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