1 Ignition switch
2 LCD display unit
3 Vent for heating and ventilation, driver
4 Vent for heating and ventilation, footwell
5 Control panel, travel lever
6 Display and control unit Variocontrol BOP
7 Rotary switch for speed range selection
8 Emergency stop push button
9 Push button for warning horn
10 Rotary switch for extension plates floating position
11 Rotary switch for extension plates vibration frequency
12 Rotary switch vibration extension plates on/off
13 Rotary switch drum vibration on/off
14 Travel lever
15 Rotary momentary contact switch for engine speed
16 Rotary momentary contact switch for drum vibration frequency*
17 Rotary switch for direction indicators left/right*
18 Rotary switch for hazard light system*
19 Rotary switch for lighting (StVZO)*
20 Rotary switch for working head lights*
21 Steering wheel

* Optional equipment

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4.1 General notes

Please read section 3 Indicators and Control Elements thoroughly before operating the machine if you are not yet fully familiar with the indicators and control elements of the machine.

All indicators and control elements are described in detail in this chapter.

4.2 Tests before taking into operation

The following inspections must be carried out before each working day or before a longer working period.

⚠ Danger

Danger of accident!

Please observe strictly the safety regulations in chapter 2 of this instruction manual!

- Park the machine on ground as level as possible.

Check:

- fuel tank and fuel lines for leaks
- screw joints for tight fit
- function of steering
- machine for cleanliness, damage
- presence of the appropriate operating and maintenance instructions,
- check whether the machine has been properly serviced.

i Note

For a description of the following tasks refer to the chapter "maintenance every 10 operating hours".

- Engine oil level

i Note

In hydraulic systems filled with Panolin HLP Synth. 46 always use the same oil to top up. With other ester based oils consult the lubrication oil service of the respective oil manufacturer.

- Check the hydraulic oil level, top up if necessary.
- Check the coolant level, top up if necessary.

⚠ Danger

Fire hazard!

Do not refuel in closed rooms.

- Check the fuel level, top up if necessary.

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5.5 Maintenance chart

No.	Maintenance work	Remark	Running-in instructions after 250 operating hours	every 10 operating hours, daily	every 250 operating hours	every 500 operating hours	every 1000 operating hours	every 2000 operating hours	every 3000 operating hours	every 6000 operating hours	as required
5.6	Check the engine oil level	Dipstick mark		X							
5.7	Check the water separator			X							
5.8	Check the fuel level			X							
5.9	Check the hydraulic oil level	Inspection glass		X							
5.10	Check the coolant level	Inspection glass		X							
5.11	Check the dust separator			X							
5.12	Check the tire pressure				X						
5.13	Clean the cooling fins on engine and hydraulic oil cooler				X						
5.14	Check the oil level in the drive axle				X						
5.15	Check the oil level in the wheel hubs				X						
5.16	Check the oil level in the axle reduction gear				X						
5.17	Check the oil level in the drum reduction gear				X						
5.18	Checking the Vario exciter oil level				X						
5.19	Change engine oil and oil filter cartridge*	min. 1x per year	X			X					
5.20	Change the fuel filter cartridge		X			X					
5.21	Drain the sludge from the fuel tank					X					
5.22	Battery maintenance	Pole grease				X					
5.23	Change the fuel pre-filter cartridge					X					

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6.3 Engine

Faults	Possible cause	Remedy
The engine does not start	Starter defective or pinion not engaging	Have examined by a specialist
	Fuel tank empty	Fill and bleed the tank
	Temperature below starting limit	Use winter fuel and engine oil acc. to the ambient temperature.
	Fuel filter clogged, in winter due to paraffin separation.	Change the filter. use winter fuel
	Fuel lines leaking	Check all line connections for leakages and tighten the fittings.
	Battery discharged or not connected	Tighten the pole clamps, check the cable connections
	Injection valves or injection pump defective	Have examined by a specialist
The engine starts poorly and works irregularly with poor power	Battery power too low, battery clamps loose or oxidized, causing the starter to turn too slowly	Have the battery checked, clean the terminal clamps, tighten them and cover them with acid free grease
	Especially during winter: the use of too viscous engine oil	Use engine oil suitable for the ambient temperature
	Fuel supply restricted, in winter fuel system clogged due to paraffin separation	Change the fuel filter. Check the line connections for leaks and tighten the fittings. Use winter fuel in the cold season.
	Incorrect valve clearance	Adjust the valve clearance
	Injection valve defective	Have examined by a specialist
	Injection lines leaking	Check the lines for leakages
	Turbo charger defective	Have examined by a specialist
	Dry air filter dirty	clean, replace if necessary
	Excessive play in the throttle cable	Adjust the throttle cable, change it if necessary

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General

This BOMAG machine is built in accordance with the latest technical standard and the valid technical rules and regulations. There is, however, a risk of danger for persons and property if:

- the machine is used for purposes other than those it is intended for
- the machine is operated by untrained personnel
- the machine is modified or converted in an unprofessional way
- the applicable safety regulations are not observed.

Each person involved in operation, maintenance and repair of the machine must therefore read and apply these safety regulations. This should be confirmed by obtaining the signatures of the customer, if necessary.

Furthermore the following regulations and instructions are obviously also valid:

- applicable accident prevention instructions
- generally acknowledged safety and road traffic regulations
- country specific safety regulations. It is the duty of the operator to know and observe these regulations. This applies also for local regulations and the regulations for various types of manual work. If the recommendations in this manual differ from the regulations valid in your country, you must strictly observe the regulations in your country.

Intended use

This machine must only be used for:

- compaction of bituminous materials, e.g. road surface layers. (AC and AD machines only)
- medium and heavy compaction tasks in earth work (road sub-bases)
- This machine must only be operated with fully functional safety equipment.
- The machine should be checked by an expert once every year.

Unintended use

Dangers may, however, arise from the machine if it is used by untrained personnel in an unprofessional way or if it is used for purposes other than those mentioned in these instructions.

Do not work with vibration on hard concrete, on a cured concrete layer or heavily frozen ground.

Starting and operation of the machine in an explosive environment is prohibited.

Who is allowed to work with the machine?

The machine must only be operated by trained and authorized persons which are at least 18 years of age. The responsibilities for the operation of the machine must be clearly specified and complied with.

Persons under the influence of alcohol, medication or drugs must not operate, service or repair the machine.

Maintenance and repair tasks require specific knowledge and must therefore only be carried out by trained and qualified personnel.

Conversions and alterations to the machine

Unauthorized conversions to the machine are prohibited for safety reasons.

Original parts and accessories have been specially designed for this machine. We wish to make expressly clear that we have not tested or authorized any original parts or special equipment not supplied by us. The installation and/or use of such products can impair the active and/or passive driving safety. The manufacturer expressly excludes any liability for damage resulting from the use of non-original parts or accessories.

Safety notes in the operating and maintenance instructions:

⚠ Danger

Sections marked like this point out possible dangers for persons.

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Please fill in

. . . . . .

Machine type (Fig. 1)

. . . . . .

Serial-number (Fig. 1 and 2)

. . . . . .

Engine type (Fig. 3)

. . . . . .

Engine number (Fig. 3)

i Note

Supplement the above data together with the commissioning protocol.

During commissioning our organisation will instruct you in the operation and maintenance of the machine.

Please observe strictly the safety regulations and all notes on risks and dangers!

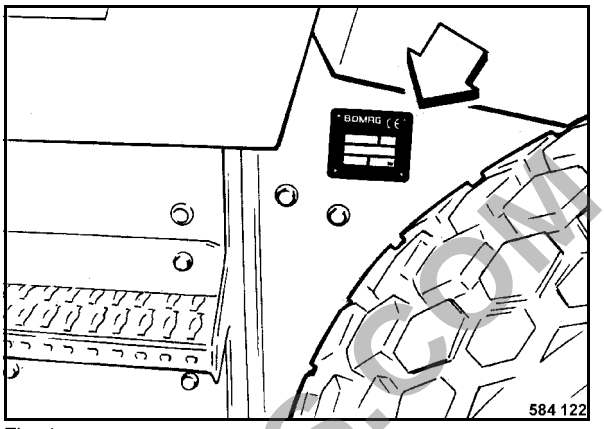


Fig. 1

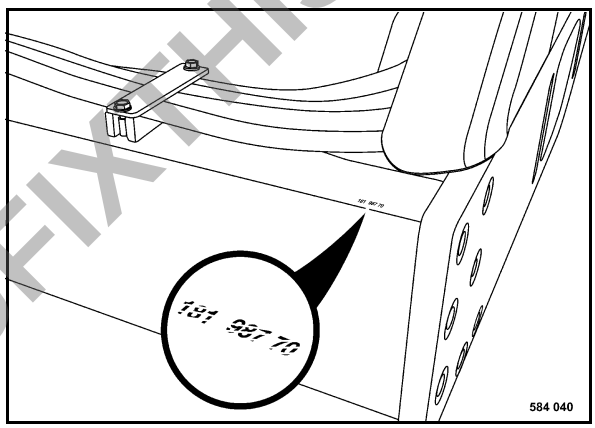


Fig. 2

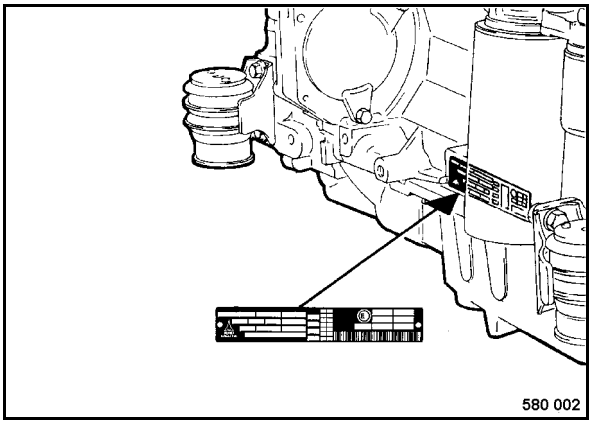


Fig. 3

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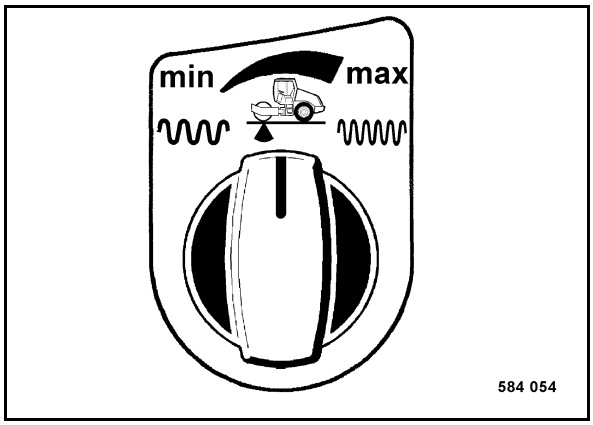


Fig. 21

No. 16 = Rotary momentary contact switch for vibration frequency*

Turn "Left" = Frequency reduction

Turn "Right" = Frequency increase

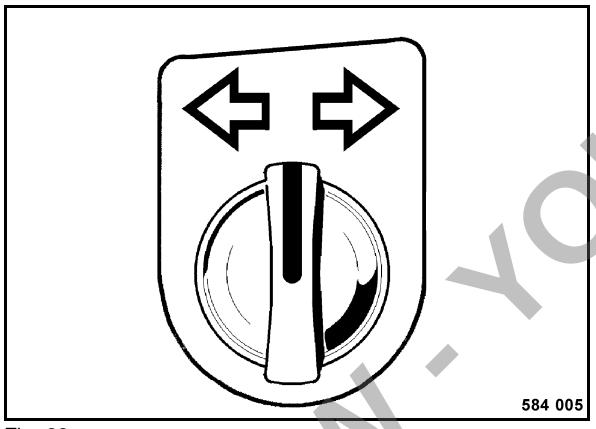


Fig. 22

No. 17 = Rotary switch for direction indicators left / right**

Position "middle" = Direction indicators disabled

Position "left or right" = The front and rear direction indicators for the corresponding side of the machine light up, control light 6 in the fault monitoring board flashes

* Optional equipment

** Optional equipment

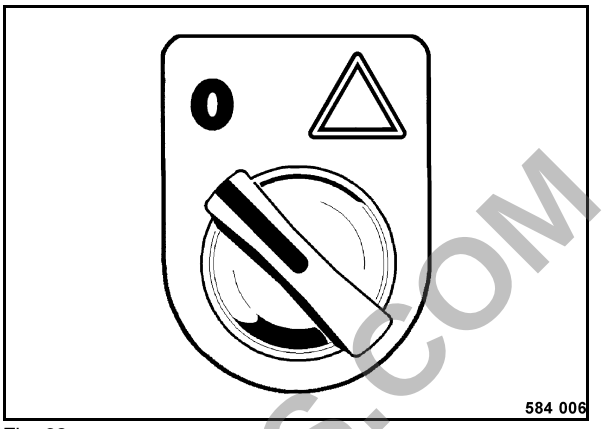


Fig. 23

No. 18 = Rotary switch for hazard light system***

Position "left" = Hazard light switched off, control lights off.

Position "right" = Hazard light switched on, control light 7 in the fault monitoring display lights up.

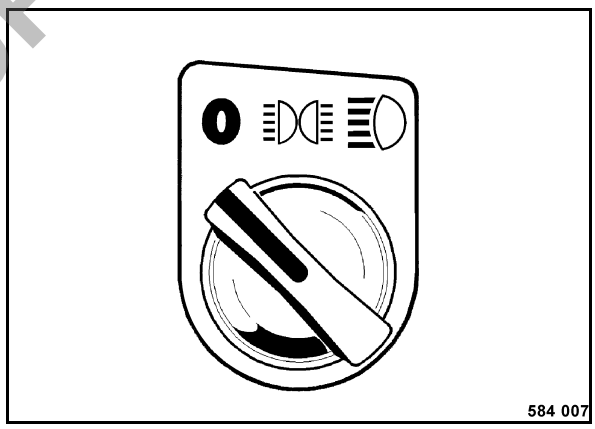


Fig. 24

No. 19 = Rotary switch for light system (StVZO)****

Position "left" = Light off

Position "middle" = Sidelights on, with ignition switch in position "I" or "P"

Position "right" = Travel light on, with ignition switch in position "I".

*** Optional equipment

**** Optional equipment

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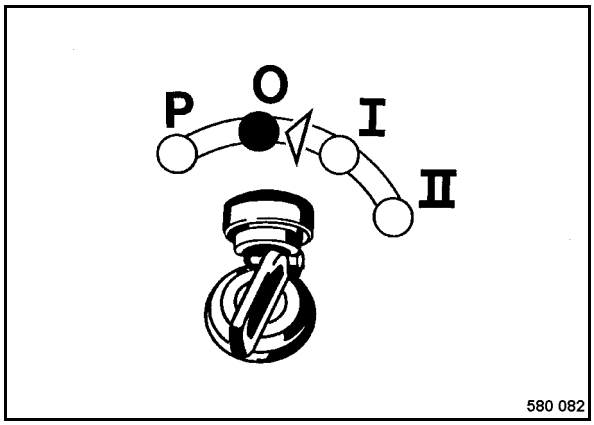


Fig. 58

- Turn the ignition switch (Fig. 58) to position "0" or "P" and pull the ignition key out.

i Note

The parking brake closes automatically when shutting the engine down.

⚠ Danger

Danger of accident!

Secure the machine against unauthorized use, pull the ignition key out, lock the cabin door.

4.9 Changing the LCD-display

Switching the middle display over

i Note

Switching over possible while machine is operated

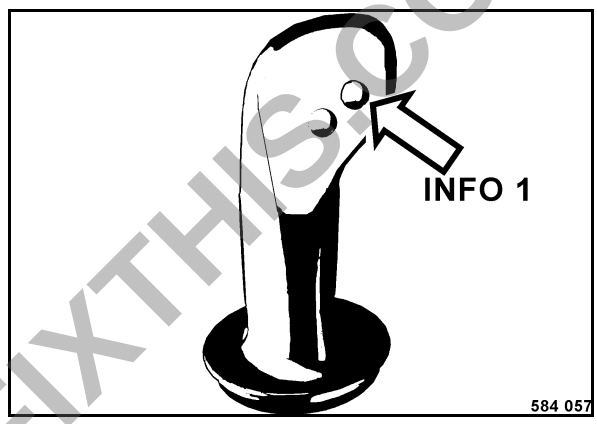


Fig. 59

- Press Info-button 1 (Fig. 59) (back of travel lever).

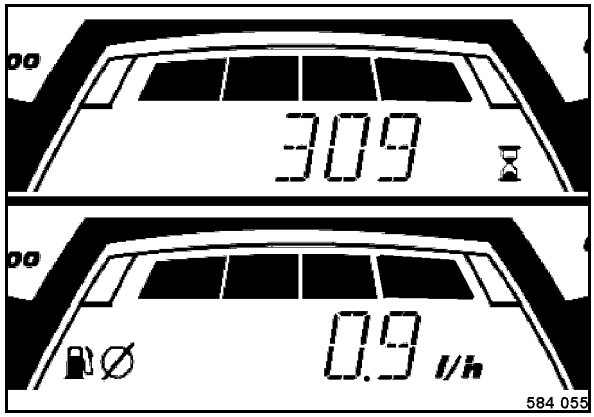


Fig. 60

With each actuation of the button the display changes from operating hours to mean fuel consumption or vice versa (Fig. 60).

Switching the bottom display over

i Note

Switching over possible while machine is operated

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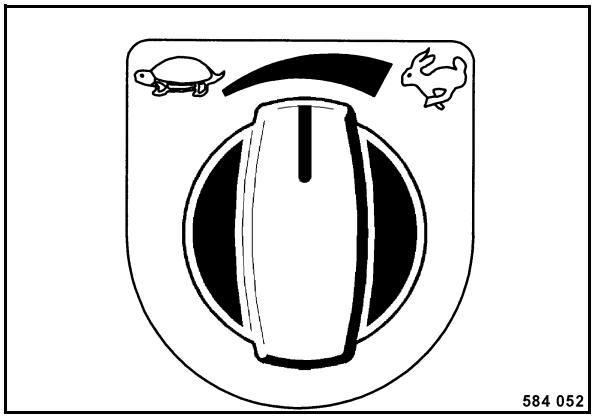


Fig. 156

- Choose the maximum forward speed (Fig. 156).

The adjusted travel speed is indicated by a green ring segment in the tachometer on the LCD display unit.

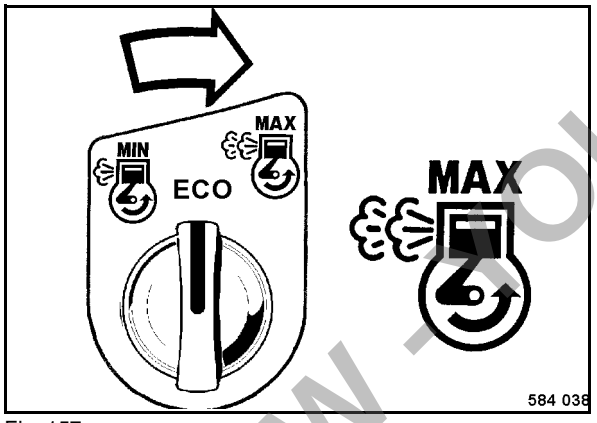


Fig. 157

- In the starting distance set the rotary switch for engine speed (Fig. 157) to "ECO" (Automatic) or "MAX" (full throttle).

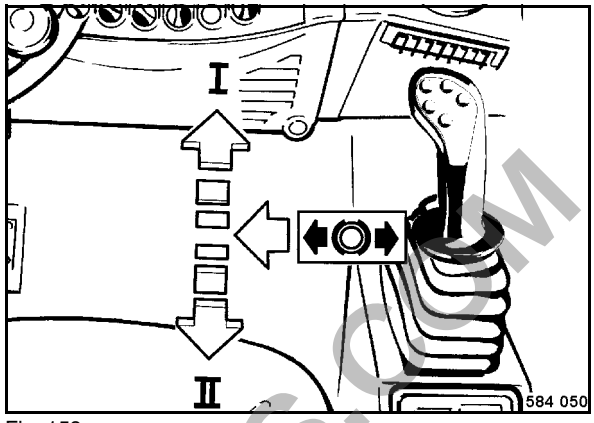


Fig. 158

- Shift the travel lever (Fig. 158) fully to position „I“.

The machine accelerates up to the preadjusted travel speed.

⚠ Caution

Differences in the travel speeds falsify the measuring result!

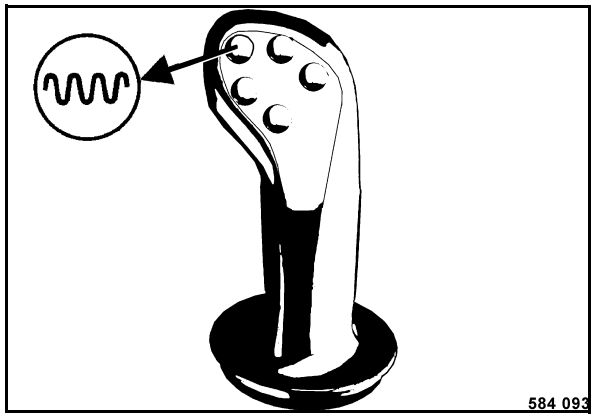


Fig. 159

- Switch the vibration on (Fig. 159).

⚠ Caution

Before reaching mark 1 the nominal exciter shaft speed and the adjusted amplitude must have been reached and a valid E_{vib}-value should be displayed.

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5.15 Checking the oil level in left/ right wheel hubs

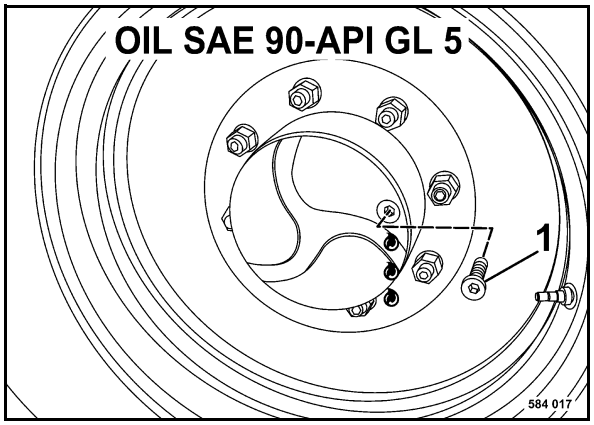


Fig. 195

- Move the machine until the oil level inspection plug 1 (Fig. 195) is in horizontal position.
- Clean and unscrew the plug.

The oil level must reach the bottom edge of the bore.

- Top up oil, if necessary.

For quality of oil refer to the table of fuels and lubricants.

- Screw the plug back in tightly.
- Repeat this inspection on the other side.

5.16 Check the oil level in the axle reduction gear

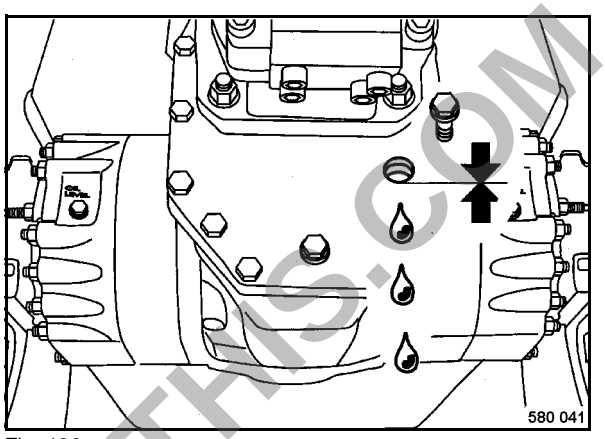


Fig. 196

- Unscrew the filler and oil level inspection plug (Fig. 196) and check the oil level.

The oil level must reach the bottom edge of the bore, top up oil if necessary.

For quality of oil refer to the table of fuels and lubricants.

- Retighten the filler and level inspection plug.

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possible malfunction of important parts. In such a case you should perform trouble shooting and replace or repair the defective components. Nonobservance may lead to total damage of the hydraulic system.

Do not clean or reuse the filter element.

- Take the old filter element (3) out and clean the filter bowl and the thread.
- Reinstall the filter bowl with the new filter element, check the condition of the O-rings (1) and (2), replace if necessary.
- After a test run check the filter for leaks.

5.42 Changing the steering oil filter

⚠ Danger

Danger of scalding!

Danger of scalding by hot oil when unscrewing the oil filter.

⚠ Caution

If the filter has to be changed together with the hydraulic oil, the filter must only be changed after the oil change and after the test run.

Do not use the oil in the filter bowl again.

Environment

Catch running out oil, dispose of oil and filter element environmentally.

i Note

Apart from the normal oil change intervals, the filter element must also be changed after major repairs in the hydraulic system.

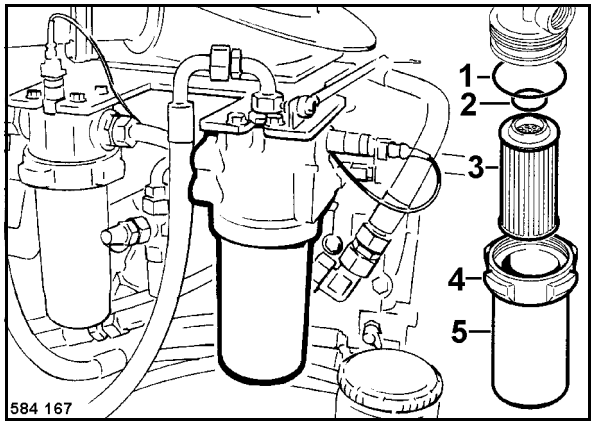


Fig. 253

- Unscrew spigot nut 4 (Fig. 253) and take off filter bowl (5) with filter element (3).
- Examine the surface of the filter element thoroughly for any visible dirt.

⚠ Caution

Visible dirt may be an early sign for the failure of system components and indicate the possi-

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