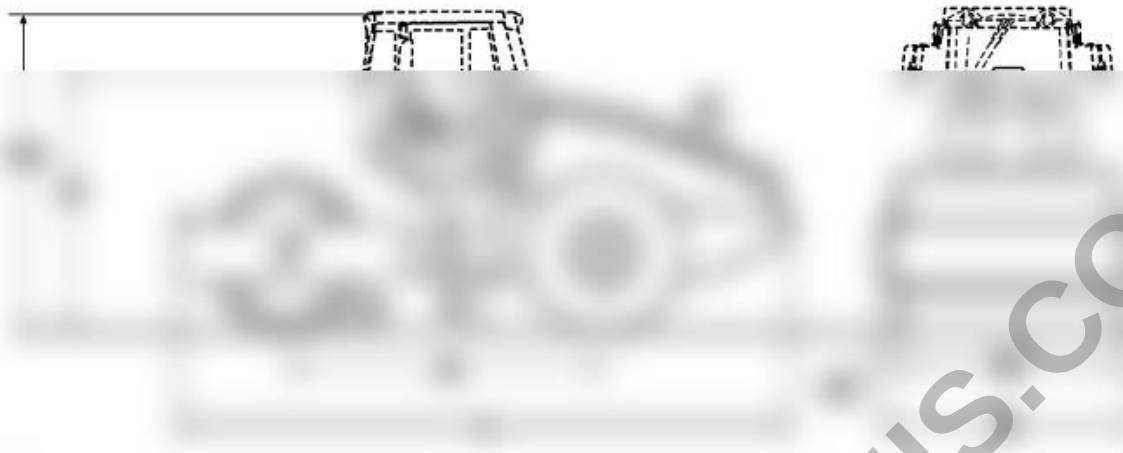


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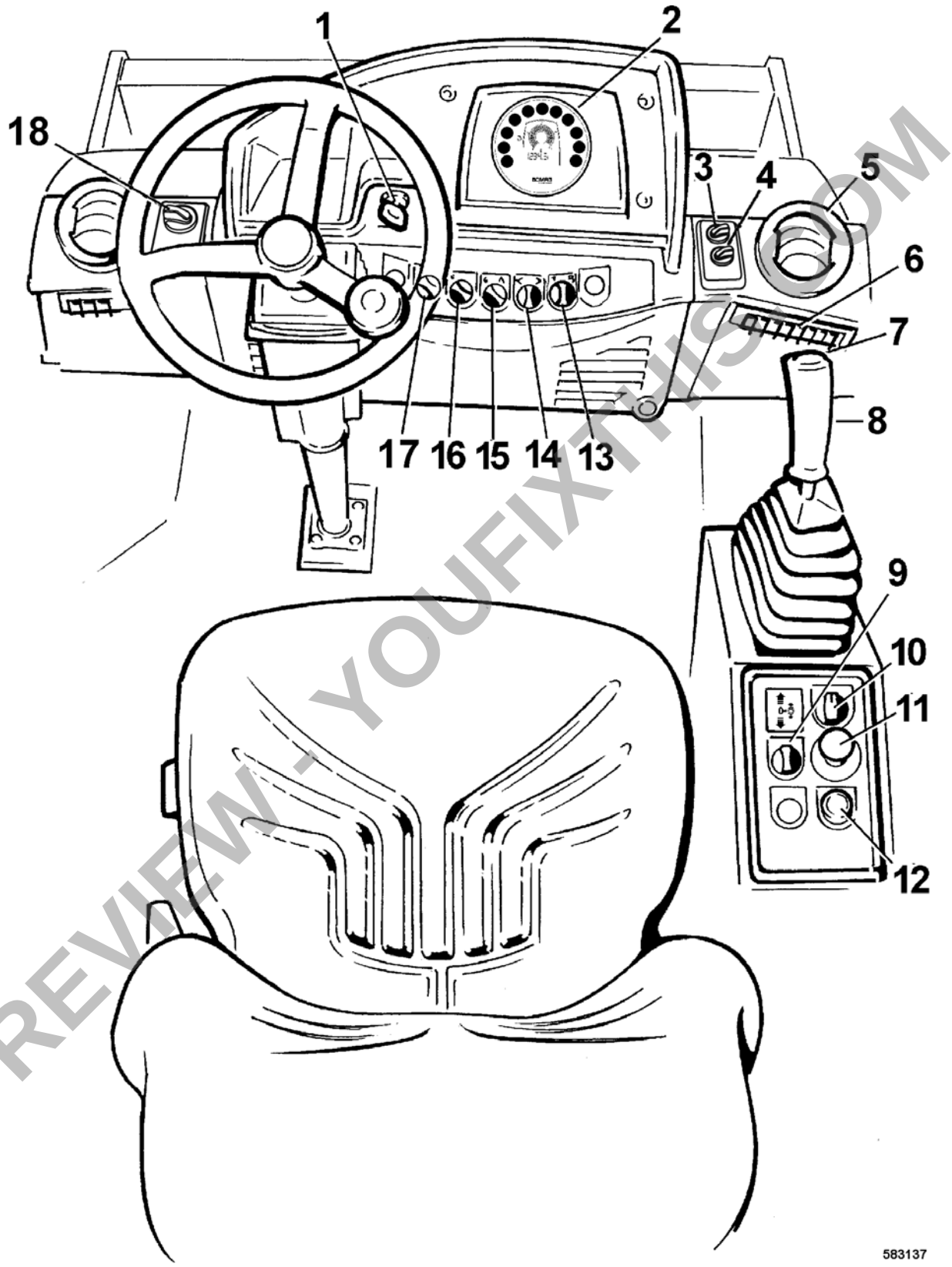


Fig. 13

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4.1 General

If you are not yet acquainted with the controls and indicating elements on this machine you should thoroughly read chapter 3 “Indicators and control elements” before starting work.

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

4.2 Tests before taking into operation

Before the everyday use or before a longer working period the following tests and inspections must be performed.

⚠ 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
- function of emergency stop
- machine for cleanliness, damage
- presence of the appropriate operating and maintenance instructions
- proper maintenance of the machine

i Note

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

- Engine oil level, top up if necessary
- Fuel level, top up if necessary.
- Coolant level, top up if necessary
- Hydraulic oil level, top up if necessary.
- Water separator, clean if necessary

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5.1 General notes on maintenance

When performing maintenance work always comply with the appropriate safety regulations.

Thorough maintenance of the machine guarantees far longer safe functioning of the machine and prolongs the lifetime of important components. The effort needed for this work is only little compared with the problems that may arise when not observing this rule.

The terms right/left correspond with travel direction forward.

- Support the engine hood for all maintenance and repair work.
- Always clean machine and engine thoroughly before starting maintenance work.
- For maintenance work stand the machine on level ground.
- Perform maintenance work only with the motor switched off.
- Relieve hydraulic pressures before working on hydraulic lines.
- Before working on electric parts of the machine disconnect the battery and cover it with insulation material.
- When working in the area of the articulated joint attach the articulation lock (transport lock).

Environment

During maintenance work catch all oils and fuels and do not let them seep into the ground or into the sewage system. Dispose of oils and fuels environmentally.

Keep used filters in a separate waste container and dispose of environmentally.

Catch biodegradable oils separately.

Notes on the fuel system

The lifetime of the diesel engine depends to a great extent on the cleanliness of the fuel.

- Keep fuel free of contaminants and water, since this will damage the injection elements of the engine.
- Drums with inside zinc lining are not suitable to store fuel.
- When choosing the storage place for fuel make sure that spilled fuel will not harm the environment.
- Do not let the hose stir up the slurry at the bottom of the drum.
- The fuel drum must rest for a longer period of time before drawing off fuel.
- The rest in the drum is not suitable for the engine and should only be used for cleaning purposes.

Notes on the performance of the engine

On diesel engines both combustion air and fuel injection quantities are thoroughly adapted to each other and determine power, temperature level and exhaust gas quality of the engine.

If your engine has to work permanently in "thin air" (at higher altitudes) and under full load, you should consult the customer service of BOMAG or the customer service of the engine manufacturer.

Notes on the cooling system

Prepare and check coolant with highest care, since otherwise the engine may be damaged by corrosion, cavitation and freezing.

Coolant is prepared by adding an ethylene-glycol based anti-freeze agent with corrosion inhibiting properties to the cooling water.

Mixing with cooling system protection agent is necessary in all climatic zones. It prevents corrosion, lowers the freezing point and raises the boiling point of the coolant.

Notes on the hydraulic system

During maintenance work on the hydraulic system cleanliness is of major importance. Make sure that no dirt or other contaminating substances can enter into the system. Small particles can produce flutes in valves, cause pumps to seize, clog nozzles and pilot bores, thereby making expensive repairs inevitable.

- If, during the daily inspection of the oil level the hydraulic oil level is found to have dropped, check all lines, hoses and components for leaks.

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6.1 General notes

The following work must only be carried out by qualified and trained personnel or by the sales service.

Please observe strictly the safety regulations in chapter 2 of these operating and maintenance instructions.

Faults occur frequently due to the fact, that the machine has not been properly operated or serviced. Therefore, whenever a fault occurs, read through these instructions on correct operation and maintenance. If you cannot locate the cause of the fault or eliminate it yourself by following the trouble shooting charts, you should contact our customer service departments at our branch office or dealers.

⚠ Danger

Danger of injury!

Keep away from rotating parts of the engine.

6.2 Reading out faults BVC/ BTM05

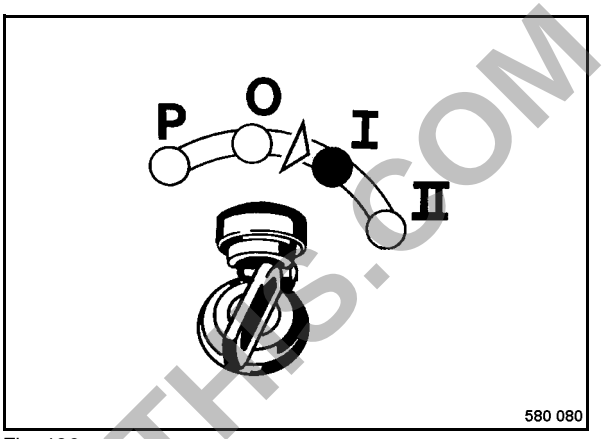


Fig. 196

- Turn the ignition key (Fig. 196) to position "I".

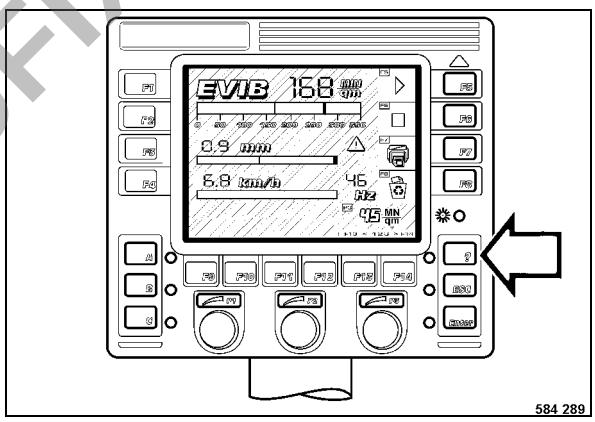


Fig. 197

- Press key ''?“ (menu) (Fig. 197).

i Note

The menu appears on the screen.

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Technical Data **9**

Safety regulations **17**

Indicators and Controls **27**

3.1 General notes 30
3.2 Description of indicators and control elements 30
3.3 Display and control elements BTM 40
3.4 Description of indicating and control elements BTM 41
3.5 Line diagram (EVIB) 43
3.6 Description of line diagram (EVIB) 45
3.7 Bar diagram (EVIB) 46

Operation **47**

4.1 General 48
4.2 Tests before taking into operation 48
4.3 Electronic immobilizer 49
4.4 Starting the engine 49
4.5 Starting with jump wires 51
4.6 Driving the machine 52
4.7 Stopping the machine, operating the parking brake 53
4.8 Shutting down the engine 54
4.9 Switching the vibration on and off 55
4.10 What to do in events of emergency 56
4.11 Adjusting the seat 57
4.12 Operating the heating/air conditioning system 58
4.13 Operating the hood 59
4.14 Towing in case of an engine failure 60
4.15 Transport 62
4.16 BVC/BTM05 settings before start-up 64
4.17 Measuring pass with BTM 67
4.18 Finishing compaction of a track 70
4.19 Printing measuring data after completing compaction 71
4.20 Changing the paper roll in the measuring value printer 72
4.21 Changing the printer ribbon in the measuring value printer 73

Maintenance **75**

5.1 General notes on maintenance 76
5.2 Fuels and lubricants 77
5.3 Table of fuels and lubricants 81
5.4 Running-in instructions 82
5.5 Maintenance table 83
5.6 Check the engine oil level 87

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General

This BOMAG machine has been built in compliance with the latest technical standard and complies with the applicable regulations and technical rules. However, dangers for persons and property may arise from this machine, if:

- it is used for purposes other than the ones it is intended for,
- it is operated by untrained personnel,
- it is changed or converted in an unprofessional way,
- the safety instructions are not observed.

Each person involved in the operation, maintenance and repair of the machine must therefore read and comply with these safety regulations. If necessary, this must be confirmed by obtaining the signature of the customer.

Furthermore, the following obviously also applies:

- applicable accident prevention instructions,
- generally accepted safety and road traffic regulations,
- country specific safety regulations. It is the duty of the operator to be acquainted with these instructions and to apply these accordingly. This applies also for local regulations concerning different types of handling work. Should the recommendations in these instructions be different from the regulations valid in your country, you must comply with the safety regulations valid in your country.

Intended use

This machine must only be used for:

- medium to heavy compaction work in earth construction (road sub-bases)
- probably compaction of bituminous material, e.g. road surface layers.

Unintended use

Dangers may arise from the machine when it is used for purposes other than the one it is intended for.

Any danger caused by intended use is the sole responsibility of the customer or driver/operator, the manufacturer cannot be made liable.

Examples for unintended use are:

- work with vibration on hard concrete, cured bitumen layers or extremely frozen ground
- driving on unstable subbases or too small contact area (danger of tipping over)
- using the machine for towing
- use to pull down walls or demolish buildings

Transporting persons, except the machine driver, is prohibited.

Starting and operation of the machine in explosive environments and in underground mining is prohibited.

Remaining dangers, remaining risks

Despite careful work and compliance with standards and regulations it cannot be ruled out that further dangers may arise when working with and handling the machine.

Both the machine as well as all other system components comply with the currently valid safety regulations. Nevertheless, remaining risks cannot be ruled out completely, even when using the machine for the purpose it is intended for and following all information given in the operating instructions.

A remaining risk can also not be excluded beyond the actual danger zone of the machine. Persons remaining in this area must pay particular attention to the machine, so that they can react immediately in case of a possible malfunction, an incident or failure etc.

All persons remaining ion the area of the machine must be informed about the dangers that arise from the operation of the machine.

Regular safety inspections

Have the machine inspected by an expert (properly trained person) once every year.

Who is allowed to operate the machine?

Only trained, instructed and authorized persons of at least 18 years of age are permitted to drive and operate this machine. For operation of the machine the responsibilities must be clearly specified and complied with.

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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!

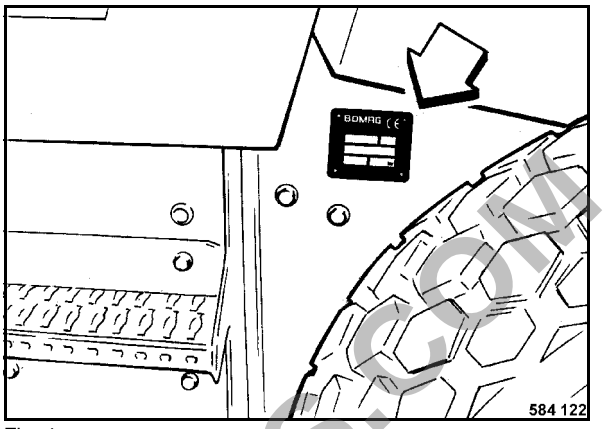


Fig. 1

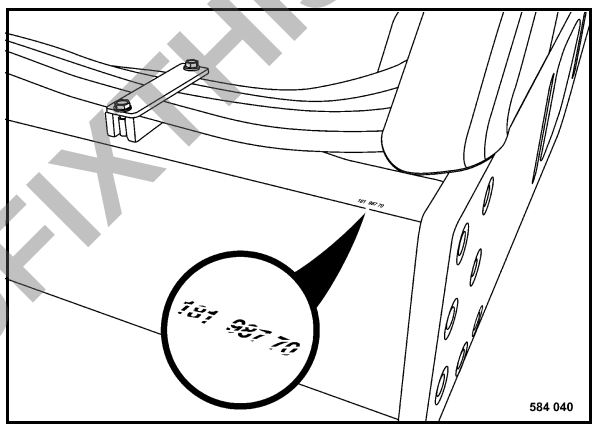


Fig. 2

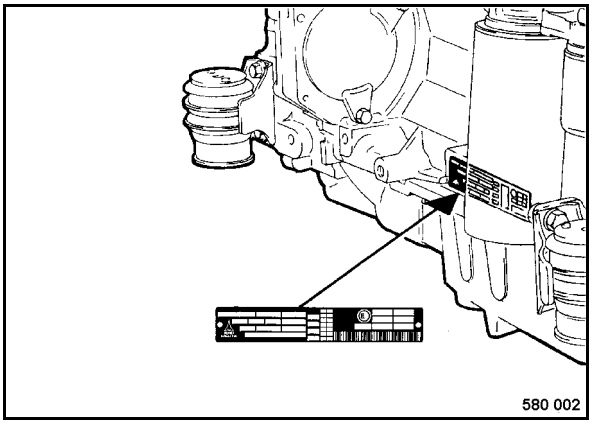


Fig. 3

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Do not shut down the engine all of a sudden from full load speed, but let it idle for about 2 minutes.

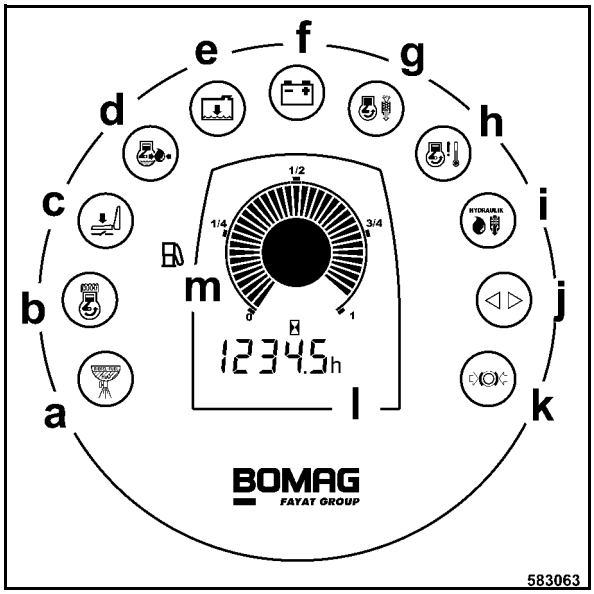


Fig. 15

No. 2 = Instrument cluster

i Note

With the ignition switch in position "I" all control and warning lights are switched on for a moment.

a yellow = Water in fuel warning light
Lights when the water content in the fuel pre-cleaner reaches the sensor contacts. Warning buzzer sounds. The engine is shut down after 2 seconds.
Clean the water separator.

b yellow = Preheating control light
Lights when temperatures are low (pre-heating for starting)

c = not used

d red = Engine oil pressure warning light
Flashes when the engine oil pressure is too low, the warning buzzer sounds, the engine is shut down after 10 seconds.
Check engine oil level, repair the engine if necessary.

e red = Coolant level warning lamp
Flashes if the coolant level is too low, the warning buzzer sounds, the engine is shut down after 10 seconds.
Check coolant level. Check cooling system for leaks, repair if necessary.

f yellow = Charge control light
Lights if the battery is not being charged.
Check the V-belt, if necessary repair the generator.

g = not used

h red = Warning light engine overheating
Flashes if the engine overheats, the warning buzzer sounds, the engine is shut down after approx. 2 minutes.
Clean engine oil cooler, repair the engine is necessary.

i = not used

j green = Indicator control light

k red = Parking brake warning light
Lights when the parking brake is applied

l = Operating hour meter
Counts the operating hours while the engine is running.
All maintenance work must be performed according to the indicated operating hours.

m = Fuel level gauge*

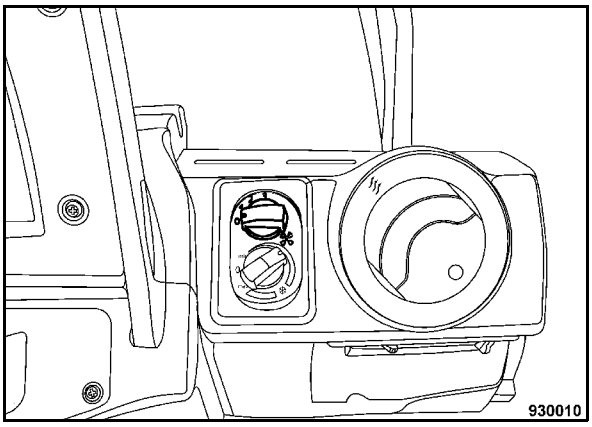


Fig. 16

No. 3 = Rotary switch for cabin fan

Position 0 = Cabin fan switched off.

Position 1, 2 and 3 = Fan stages of different strengths

* Optional equipment

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4.13 Operating the hood

⚠ Danger

Danger of accident!

If the hood needs to be opened further for maintenance or repair work, support it safely.

Bottom position

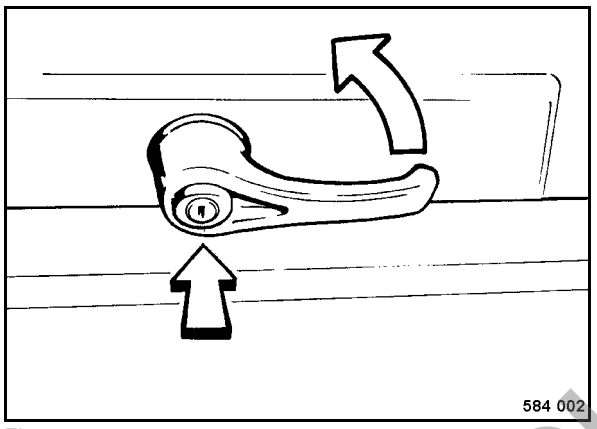


Fig. 75

- Unlock the lock (Fig. 75).
- To open the hood press in the button and turn the handle.

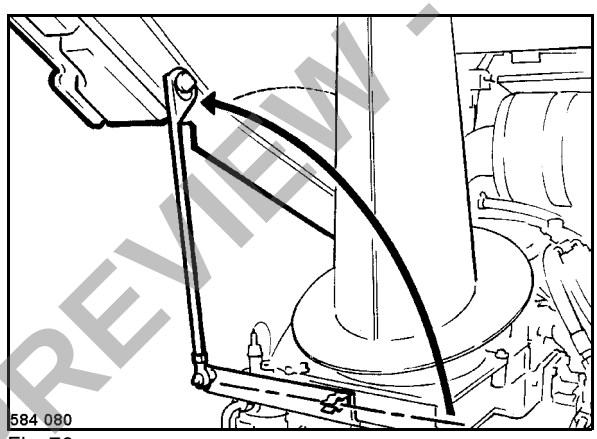


Fig. 76

- Pull the support out of the bracket and support the hood (Fig. 76).

Top position

- Push the hood to top position.

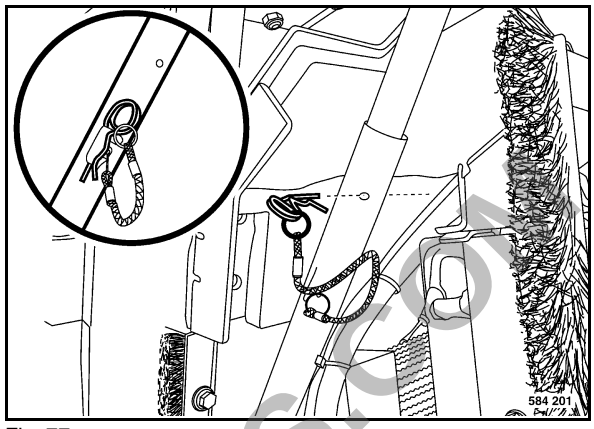


Fig. 77

- Pull the spring pin (Fig. 77) out of the bracket.
- Secure the hood i´n the protection tube with spring plug.

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5.6 Check the engine oil level

⚠ Danger

Danger of injury!

Support the engine hood for all maintenance and repair work.

i Note

The machine must be parked horizontally with the engine shut down.

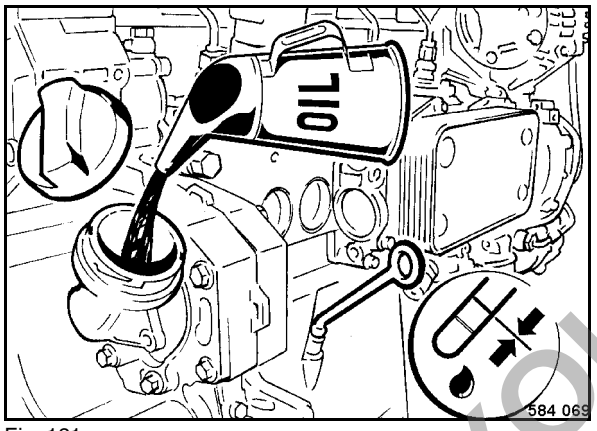


Fig. 121

- Pull the dipstick (Fig. 121) out, wipe it off with a lint-free, clean cloth and reinsert it until it bottoms.
- Pull the dipstick back out again.
- If the oil level is below the "MAX" mark fill in oil.
- If the oil level is above the “Max” mark determine the cause and drain the oil off.

⚠ Caution

Before longer work periods you should always top the oil up to the "MAX"-mark.

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

5.7 Checking the fuel level

⚠ Caution

Do not drive the fuel tank dry, as otherwise the fuel system needs to be bled.

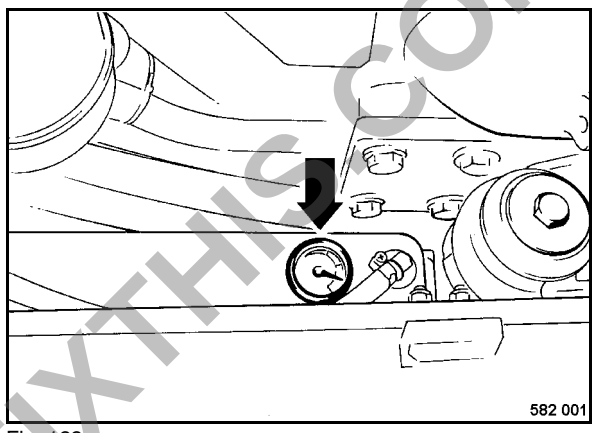


Fig. 122

- Check the fuel level on the fuel gauge (Fig. 122).

Refuelling

⚠ Danger

Fire hazard!

When working on the fuel system do not use open fire, do not smoke, do not spill any fuel.

Do not refuel in closed rooms.

Shut down the engine.

⚠ Danger

Health hazard!

Do not inhale any fuel fumes.

⚠ Caution

Monitor the entire refuelling process.

For quality and quantity of fuel refer to the "table of fuels and lubricants".

Environment

Catch running out fuel, do not let it seep into the ground.

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5.34 Changing hydraulic oil and breather filter

i Note

See also the notes on the hydraulic system in the chapter "General notes on maintenance".

⚠ Danger

Danger of scalding!

When draining off hot hydraulic oil!

⚠ Caution

The hydraulic oil must also be changed after major repairs in the hydraulic system.

Perform the oil change when the hydraulic oil is warm.

Replace the hydraulic oil filter elements with every hydraulic oil change.

Change the filter only after the hydraulic oil change and after the test run.

Clean the area round hydraulic oil tank, filler opening and breather filter.

Do not start the engine after draining the hydraulic oil.

Do not use any detergents to clean the system.

Use only lint-free cleaning cloths.

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

When changing from mineral oil based hydraulic oil to an ester based biologically degradable oil, you should consult the lubrication oil service of the oil manufacturer for details.

Environment

Catch running out hydraulic oil and dispose of environmentally.

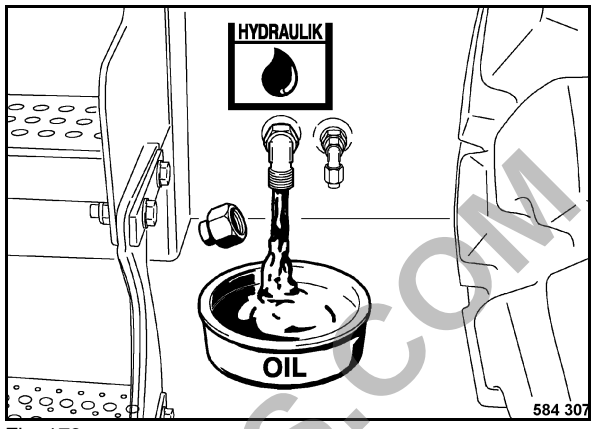


Fig. 172

- Unscrew the plug (Fig. 172) and drain off all hydraulic oil.
- Check the seal ring, replace if necessary and turn the plug tightly back in.

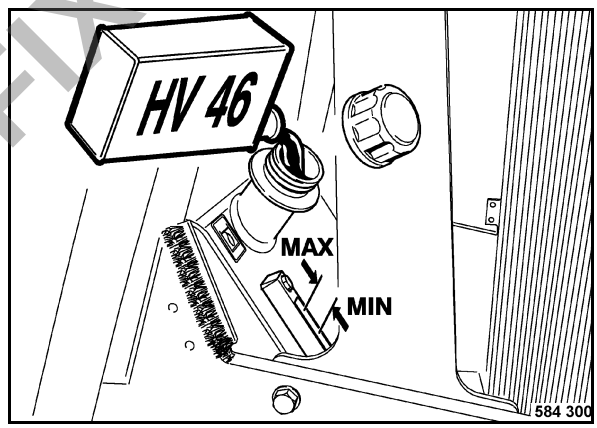


Fig. 173

- Remove the filler cap (Fig. 173).
- Fill in new hydraulic oil through the screen.

i Note

We recommend to use the BOMAG filling and filtering unit with fine filter to fill the system. This ensures finest filtration of the hydraulic oil, prolongs the lifetime of the hydraulic oil filter and protects the hydraulic system.

- Check the oil level in the inspection glass.

Nominal value:

approx. 3 cm below the upper edge of the inspection glass

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