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Indicators and Controls

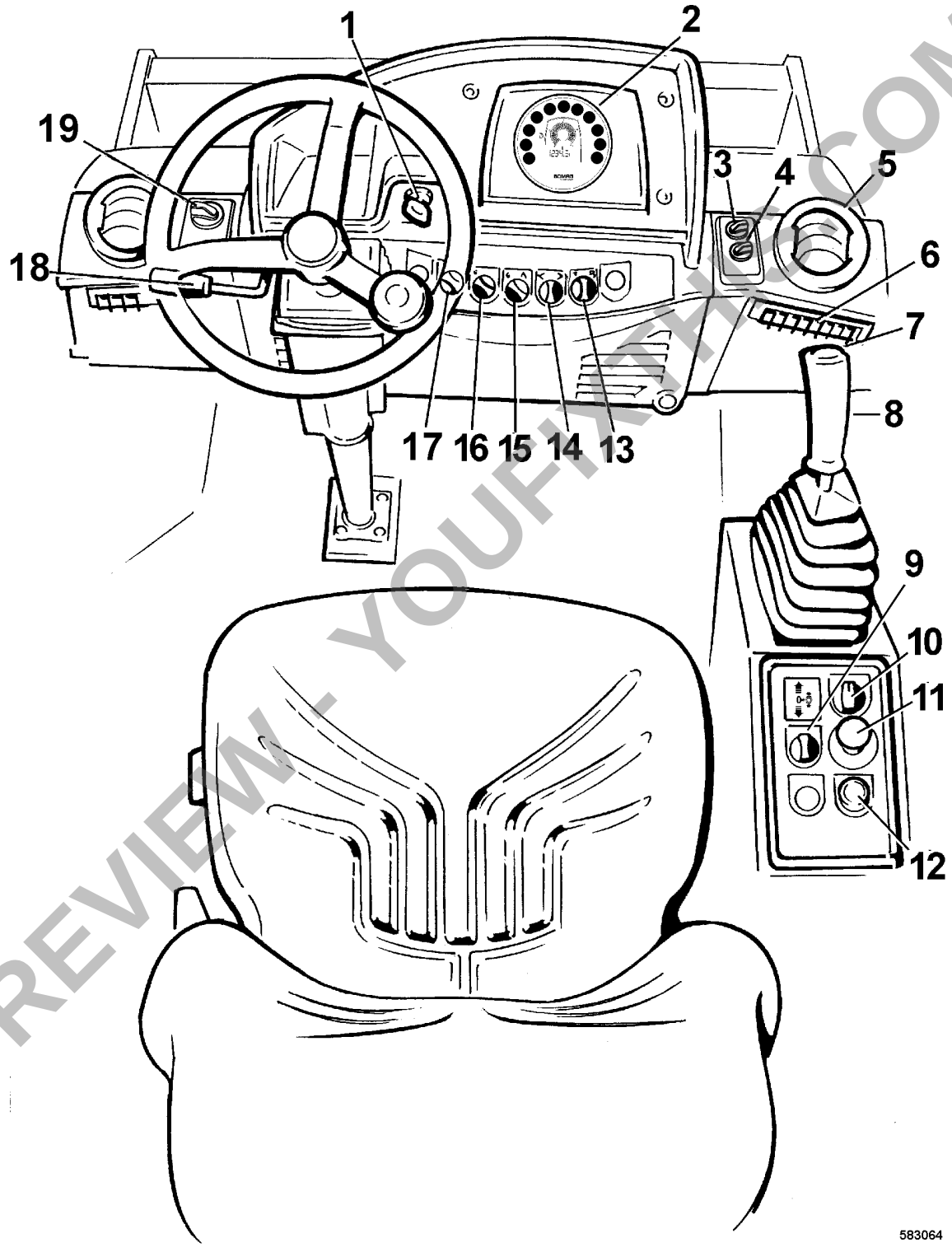


Fig. 12

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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.

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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

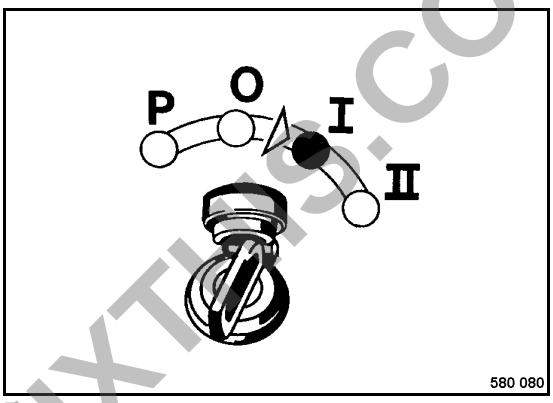


Fig. 196

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

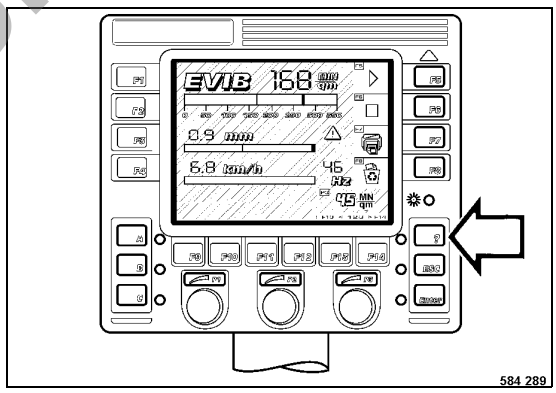


Fig. 197

- Press key ”?“ (menu) (Fig. 197).

i Note

The menu appears on the screen.

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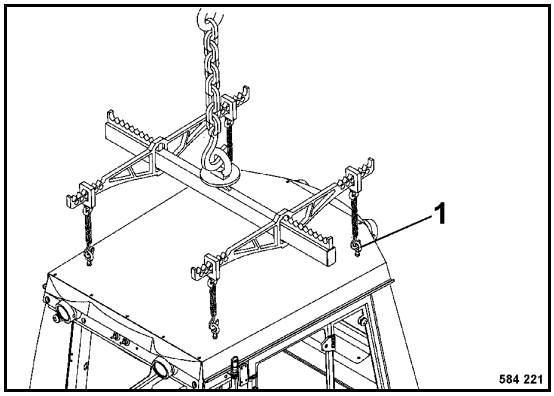


Fig. 201

- Fasten the lifting gear to the four lifting eyes 1 (Fig. 201).
- Loosen possible fastening on the transport pallet.
- Slowly list the crane with a crane.

⚠ Danger

Danger of accident!

Do not stand or step under loads being lifted.

7.2 Cabin assembly

⚠ Danger

Danger of accident!

Use lifting gear (chains or ropes) of sufficient load bearing capacity. The minimum load bearing capacity of the crane must be 1000 kg.

Do not stand or step under loads being lifted.

- Clean the operator's stand of dirt, oil and moisture.

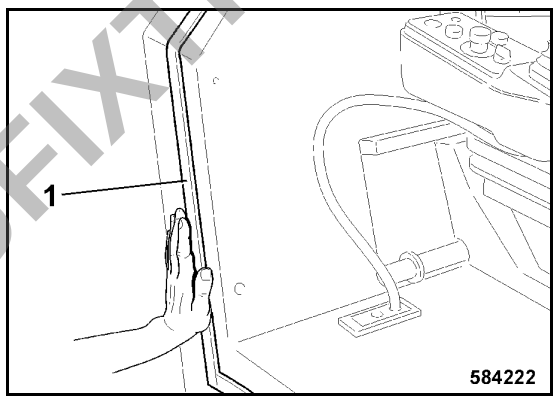


Fig. 202

- Stick the supplied sealing tape 1 (Fig. 202) along the edge of the operator's stand.

⚠ Caution

Only unroll and stick the sealing tape on just before mounting the cab to the operator's stand. The sealing tape will swell a few minutes after being unrolled. In this case the cabin can no longer be mounted!

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Table of Contents

Technical Data 9

Safety regulations 13

Indicators and Controls 23

3.1 General notes 26
3.2 Description of indicators and control elements 26
3.3 Display and control elements BTM 36
3.4 Description of indicating and control elements BTM 37
3.5 Line diagram (EVIB) 39
3.6 Description of line diagram (EVIB) 41
3.7 Bar diagram (EVIB) 42

Operation 43

4.1 General 44
4.2 Tests before taking into operation 44
4.3 Electronic immobilizer 45
4.4 Starting the engine 45
4.5 Starting with jump wires 47
4.6 Driving the machine 48
4.7 Stopping the machine, operating the parking brake 49
4.8 Shutting down the engine 50
4.9 Switching the vibration on and off 51
4.10 What to do in events of emergency 52
4.11 Adjusting the steering wheel 53
4.12 Adjusting the seat 54
4.13 Operating the heating/air conditioning system 54
4.14 Operating the hood 55
4.15 BVC/BTM05 settings before start-up 56
4.16 Measuring pass with BTM 59
4.17 Finishing compaction of a track 62
4.18 Printing measuring data after completing compaction 63
4.19 Changing the paper roll in the measuring value printer 64
4.20 Changing the printer ribbon in the measuring value printer 65
4.21 Towing in case of an engine failure 66
4.22 Loading/transport 68

Maintenance 71

5.1 General notes on maintenance 72
5.2 Fuels and lubricants 73
5.3 Table of fuels and lubricants 77
5.4 Running-in instructions 78
5.5 Maintenance table 79

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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 (capable person) as required for the conditiosn the machine is working under, but at least 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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Foreword

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!

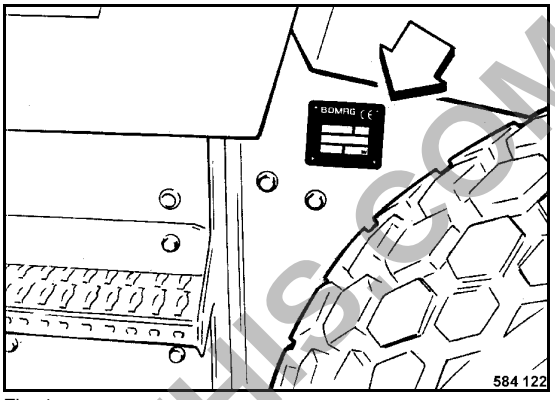


Fig. 1

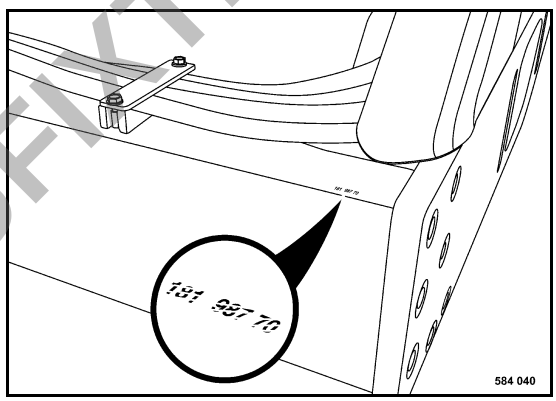


Fig. 2

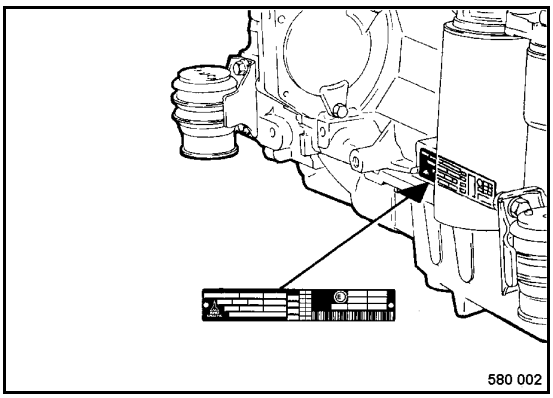


Fig. 3

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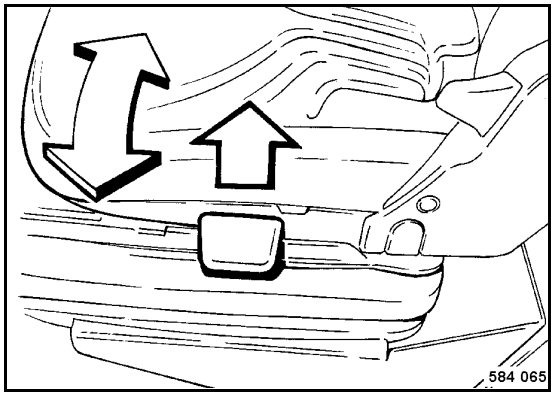


Fig. 30

No. 20 = Lever, swivelling of driver's seat*

⚠ Danger

Danger of accident!

Always lock the driver's seat in one of the locking positions while driving.

Do not swivel the driver's seat while driving.

turn = Stop the machine and apply the parking brake. Pull the lever up and swivel the driver's seat to the desired position.

i Note

Swivelling angle max. 20° to either side.

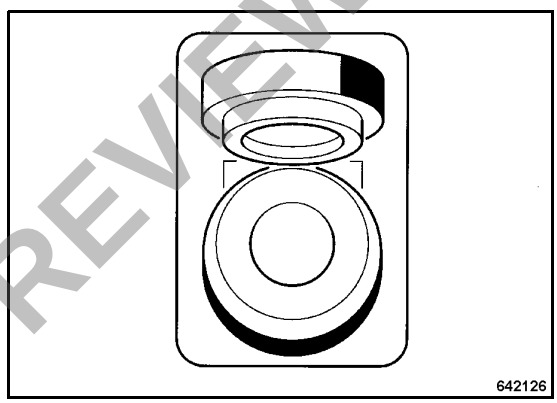


Fig. 31

No. 21 = 2-pole socket

Current only with the ignition switch in position "I" or when the engine is running.

* Optional equipment

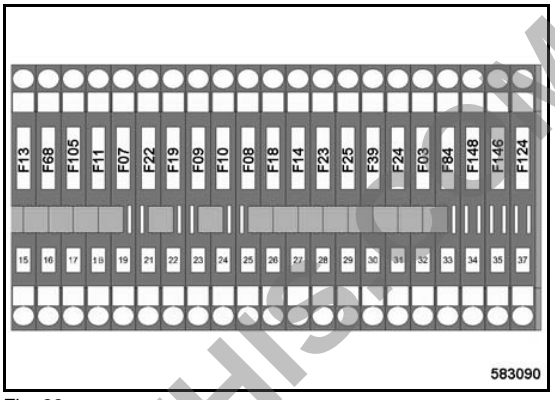


Fig. 32

No. 22 = Fuses in electric junction box

⚠ Danger

Fire hazard!

Do not use fuses with higher ampere ratings and do not bridge fuses.

(15) 30A = (F13) Start switch
(16) 5A = (F68) Electronic immobilizer
(17) 20A = (F105) Engine speed
(18) 15A = (F11) Front head lights**
(19) 15A = (F07) Hazard light
(21) 15A = (F22) Working headlights, rear
(22) 15A = (F19) Working headlights, rear
(23) 15A = (F09) Parking and tail light, left*
(24) 15A = (F10) Parking and tail light, right*
(25) 15A = (F08) Direction indicators*
(26) 10A = (F18) Pre-fuse for working head lights
(27) 15A = (F14) Engine solenoid
(28) 10A = (F23) Warning horn
(29) 10A = (F25) solenoid valve for driving and braking
(30) 15A = (F39) Main fuse for cabin
(31) 10A = (F24) Instruments
(32) 15A = (F03) Vibration
(33) 10A = (F148) Control MESX, potential 15*
(34) 10A = (F84) control, contact 54
(35) 15A = (F146) Control MESX, potential 30*
(37) 25A = (F124) Fuel pre-heating*

** Optional equipment

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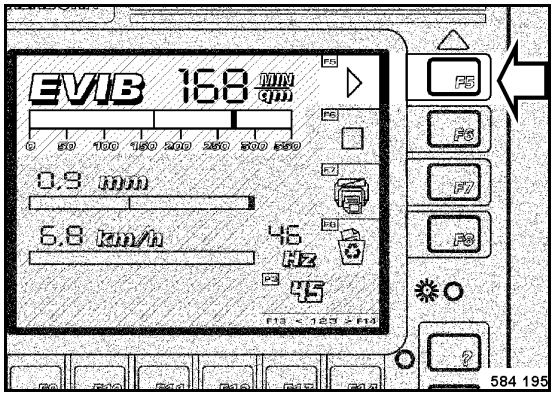


Fig. 90

- Control field F5 (Fig. 90) lights green.

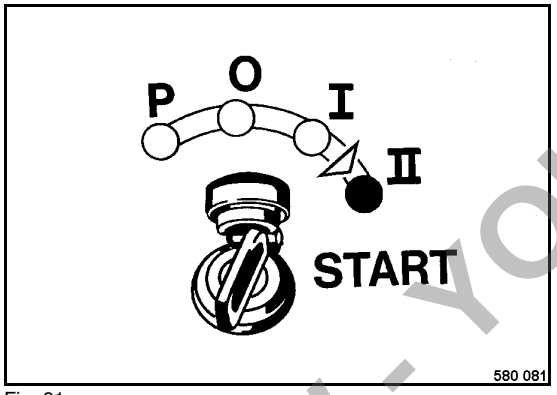


Fig. 91

- Turn the ignition key (Fig. 91) to position „II engine start.

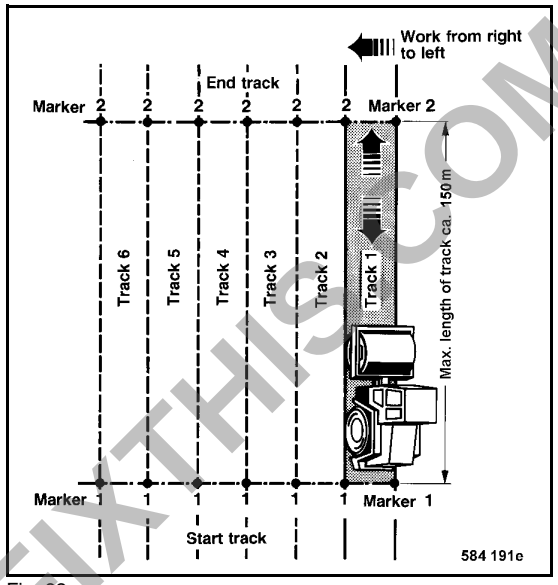


Fig. 92

- Mark the track to be compacted (Fig. 92).

⚠ Caution

Since the transducer unit is mounted on the left hand side of the drum, it is necessary to arrange the tracks so that track 1 is processed first, followed by further tracks offset to the left.

i Note

Maximum track length 150 m.

Forward:

Mark 1 = Start of track

Mark 2 = End of track

i Note

The operator may also remember the start and the end of the track by means of distinct points.

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Cleaning with cold cleansing agent

⚠ Caution

Protect electrical equipment such as generator, regulator and starter against the direct water jet.

- Spray the engine with a suitable cleansing agent, e.g. cold cleanser, let it soak in for a while and spray it off with a strong water jet.
- Run the engine warm for a while to avoid corrosion.

5.12 Check the oil level in the drive axle

- Park the machine on level ground.

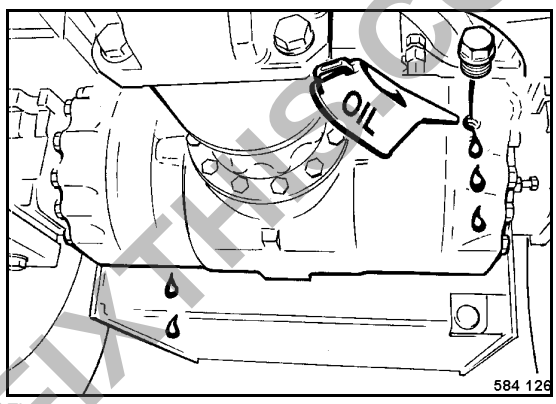


Fig. 128

- Unscrew the oil level inspection plug (Fig. 128) and check the oil level.

i Note

The second level inspection plug as at the back.

After filling in oil wait until the oil has evenly distributed inside the axle.

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

- Top up oil, if necessary.

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

- Turn the level inspection plug tightly back in.

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