OPERATING AND MAINTENANCE INSTRUCTIONS

CE

CR 8

Hatz 1 D 81 Z

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Preface

These operating and maintenance instructions describe the safe operation of the **CR8** soil compactor. Please read this operation manual and familiarize yourself with all details of your soil compactor before operating the machine for the first time. Carefully follow all instructions and always carry out the described operations in the indicated order.

Please refer to the following page for the General Safety Instructions.

We reserve the right to modifiy our equipment without prior notice.

In chapter 1, the soil compactor is briefly described to provide you with a good overview on the location of the individual assembly groups and their functions. Chapter 2 describes how to put the soil compactor into and out of operation and how to work with the machine.

In chapter 3, you will find a survey on and a description of the required service work. Chapter 4 contains instructions for trouble shooting by the operator. Chapter 5 describes how to preserve the soil compactor for an extended storage, e.g. during the winter season.

We placed a great emphasis on a user-friendly lay-out with clear pictorial and textual information. In the text, you will find figures in brackets which point out to illustrations, whereby the first figure indicates the figure number and the second one - separated by a dash - indicates the item number on the corresponding illustration.

Example 1: (2/1) means figure 2, item 1

Example 2: (2/3,6) means figure 2, item 3 and item 6

Important information for the operator and service personnel is highlighted by pictograms.

Indicates important information and hints which must be followed by the operator and service personnel.

Indicates working and operating methods requiring in addition the observance of all applicable environment protection and waste disposal regulations.

Indicates working and operating methods which must be precisely followed in order to prevent the soil compactor from being damaged or deteriorated.

Indicates working and operating methods which must be precisely followed in order to avert direct danger to persons.

For further information, please contact your authorized WEBER distributor or one of the addresses on the last page.

General Safety Instructions

General

All safety notes (see also explanations of the pictogram meanings in the preface) must be read and observed (any lack of clarity must be dispelled before the soil compactor is put into operation), because otherwise the use of the machine may

* constitute a risk to life and limb of the user
* impair the machine and other valuable property.

In addition to these operating instructions and the mandatory accident prevention regulations in the country of use and on the operating site, the generally accepted technical standards for safe and professional work must be also observed.

Designated Use

Soil compactors are only allowed to be operated in accordance with their designated use, whereby the operating and maintenance instructions, the generally accepted safety and traffic rules and the regulations of the individual countries of use must be followed.

The soil compactor has been exclusively designed for the compaction of

- sand
- gravel
- crushed aggregates
- semi-cohesive mixed material
- concrete block pavement.

Any other use of the soil compactor is considered contrary to its designated use. The company operating the soil compactor bears the sole responsibility for any misuse of the machine.

Driving Permission

Only trustworthy persons, who are aged at least 18 years, are allowed to handle soil compactors. They must be properly trained in the operation and maintenance of the soil compactor by the employer or his authorized representative.

Protective Equipment

When operating the soil compactor described in this operation and maintenance manual, the noise level at the operator's ear may exceed 90 dB(A). The German noise protection regulations (VBG 121) require the operator to wear personal ear protectors in case of noise levels of 90 dB(A) and more.

Additionally, a safety helmet and safety shoes belong to the protective equipment.

EC Machinery Directive, prEN500-1, EN292

Table of Contents

1 Technical Description

1.1 Illustration

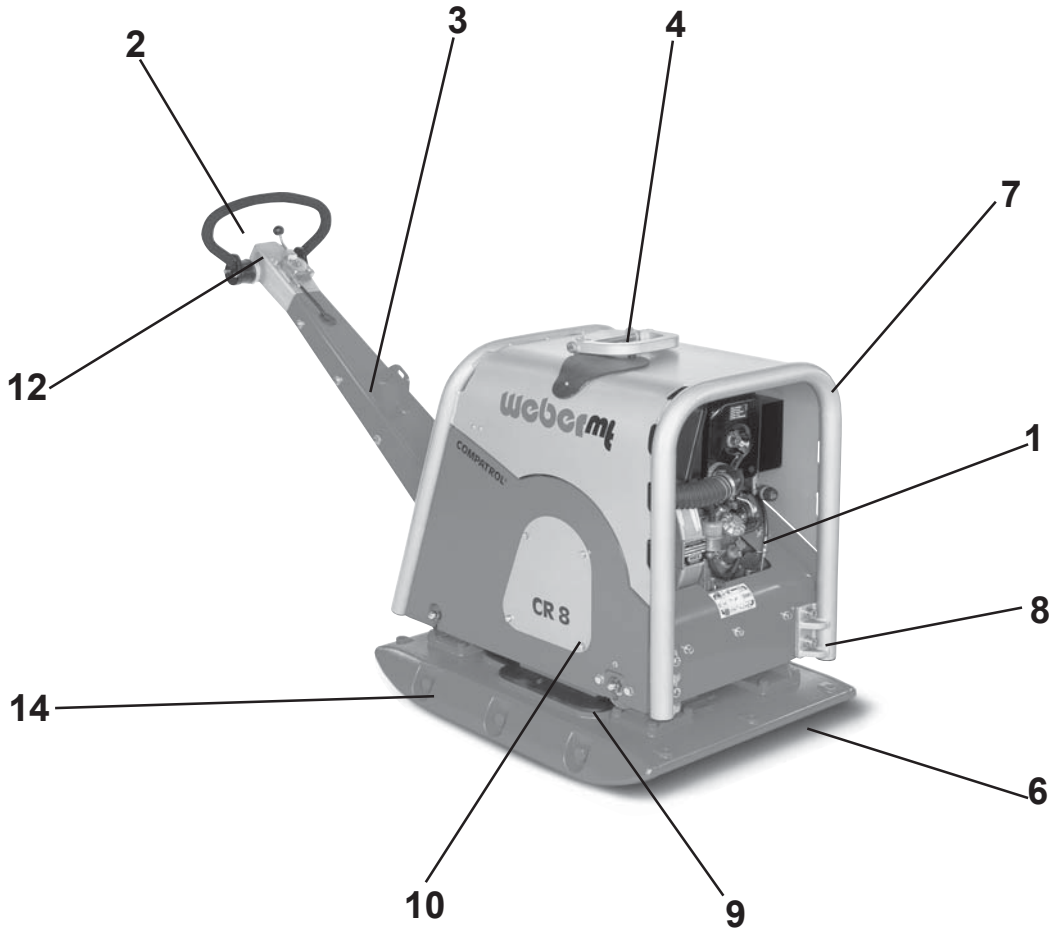


Figure 1 **Overall View CR 8**

1 Engine
2 Drive lever
3 Handle
4 Lifting lug
5 Ignition lock (not shown)
6 Base plate
7 Protective frame
8 Engine bracket
9 Vibrator
10 V-belt guard
11 Spring bar (not shown)
12 Engine speed adjusting lever
13 Vulkollan plate (not shown)
14 Extension plates

1.2 Machine Description

The **CR 8** soil compactors are machines of the walk-behind type used for compaction work in road construction and landscape applications.

Propulsion

The CR 8 soil compactor is driven by a Hatz Diesel engine.

Important!

Please refer to paragraph 1.3 (Specifications) for the performance details of the engine and the whole machine.

Function

The engine (1/1) drives the vibrator via a V-belt. The vibrator is screwed down to the base plate (1/6) and sets it vibrating. The vibrating base plate performs the vibration work and travelling motion.

Accessories

A damper plate (2.4.3) and extension plates (2.4.4) are available as optional extras.

Operation

The soil compactor is started by means of an electric starter (1/5).

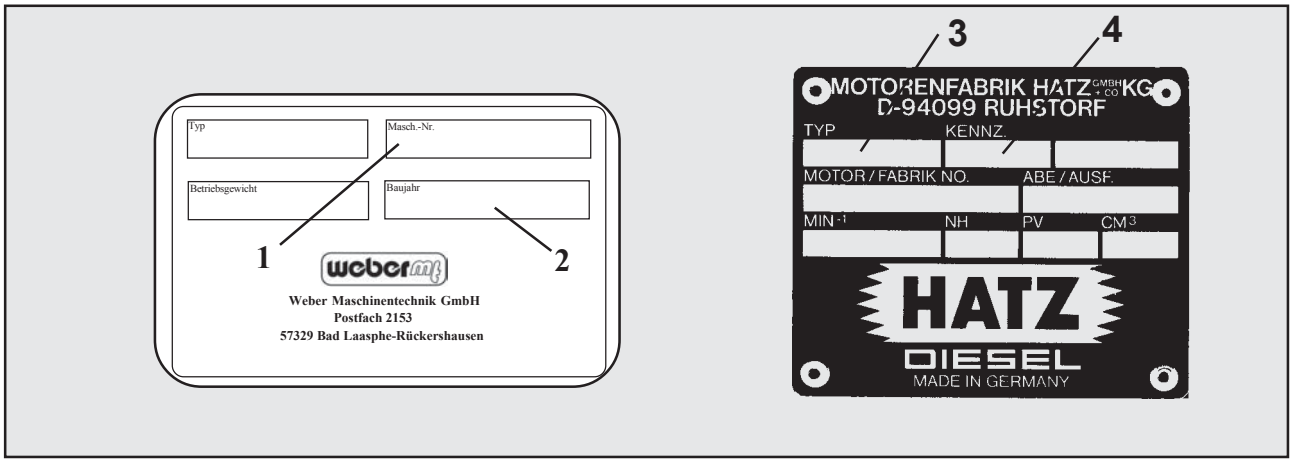
The soil compactor is steered by means of the handle (1/3) holding the engine speed adjusting lever (1/12) and the drive lever (1/2) to control the direction of travel and the infinitely variable driving speed. The spring bar (1/11) allows to fix the handle in vertical position during work breaks and transports.

1.3 Specifications CR 8

	CR 8
Weight	
Operating weight according to CECE in kg	587
Dimensions	
Overall length (in mm)	1818
Width without extension plates (in mm)	700
Width with extension plates (in mm)	850
Height with handle folded down (in mm)	1142
Base plate length (contact area in mm)	450
Propulsion	
Engine manufacturer	Hatz
Type	1 D 81 Z
Maximum output according to DIN 70020 (in kW (HP))	11,0/15 max. 3600
Type of combustion	4-stroke Diesel
Operating speed	2800
Driving speed (dependent on soil conditions (in m/min)	18
Gradeability (dependent on soil conditions, in %)	30
Depth compaction (in cm)	70
Performance (in m^2/h)	816
Vibration	
System	Two-shaft vibrator
Mode of driving	Mechanical
Frequency (in Hz)	64
Centrifugal force (in kN)	74

	CR 8
Noise and Vibration Data*	
Sound pressure level LPA (at the operator's place, according to 2000/14/EG, in dB(A))	97
Sound power level LWA (according to 2000/14/EG, in dB(A))	109
Hand/arm vibration (weighted root mean square acceleration, at the handle, determined according to 2002/44/EG, Part 1, in m/s²)	2,5/3,5

* *The indicated noise and vibration data were determined with the engine at nominal speed and the vibration system turned on, 2000/14/EG. During operation, these data may vary according to the specific conditions prevailing on the job site.*



1 MACHINE NO.

……

2 YEAR OF CONSTRUCTION

……

3 TYPE

……

4 ENGINE/SERIAL No.

……

2 Operation

2.1 Safety Precautions for the Operation

Safety and protection devices
Before every shift, the operator must check the operativeness of all controls and safety elements as well as the proper installation of all protection devices. The soil compactor is only allowed to be operated with all protection devices in place. The control's functionality is not allowed to be impaired or neutralized.

Before starting the soil compactor, the operator must take his personal noise protection measures. Before starting the engine, check to ensure that the soil compactor cannot slip out of control.

Conduct in Case of Failures
If defective safety devices or other failures which might affect the safe operation of the soil compactor are ascertained, the supervisor must be informed without delay. In case of malfunctions endangering the unit's operational safety, the machine must be turned off immediately.

Conduct of the Machine Operator
During the machine's operation, the operator has to constantly supervise the operational safety of the soil compactor. When running the machine, the operator is not allowed to leave the operating controls of the soil compactor. In addition, he must always have a sufficient visibility on the soil compactor's zone of operation.The operator must be assisted by a second person if, because of the operating conditions, the visibility on the zone of operation is restricted.

Stability
Soil compactors must be used and operated in a way ensuring their stability. The machine's stability is especially endangered on slopes and brinks. Thus, keep clear of slopes and brinks.

Driving and Compacting
When working on slopes, the operator must always walk on the uphill side. Compaction work on slopes exceeding the maximum gradeability of the soil compactor is prohibited. When working/travelling on slopes, always use extreme precaution and work directly in uphill or downhill direction.

Moist and loose bases considerably reduce the grip of the soil compactor on slopes. Increased danger of accident!

Passing unevennesses or kerbs is only allowed at reduced speed. In addition, the soil compactor must be operated in a way excluding any risk of injury caused by the handle swinging towards the operator.

Exhaust Precautions

Never inhale exhaust gasses. They contain carbon monoxide, a colorless, oderless and extremely dangerous gas which can cause unconsciousness or death. Never operate the engine inddors or in a poorly ventilated area, such as tunnerl, cave, etc. Exercise extreme care when operating the engine near people or animals. Keep the exhaust pipe free of foreign objects.

2.2 Transport

Short distances on the job site can be covered by the soil compactor in accordance with paragraph 2.6.

For long distances, however, the compactor can be lifted on an appropriate transport vehicle (truck, trailer) by means of a crane.

2.2.1 Loading by Crane

- Put the soil compactor out of operation as described in paragraph 2.7.
- Lock the handle (2/1) by means of the spring bar (2/2).

Danger!

Never use the handle (2/1) for lifting the machine by crane. The machine may overturn!!

- Put the crane hook into the protection frame (2a/1).

Danger!

Only use a lifting tackle and a crane of a sufficient bearing capacity.

Danger!

Do not enter the zone under the suspended load.

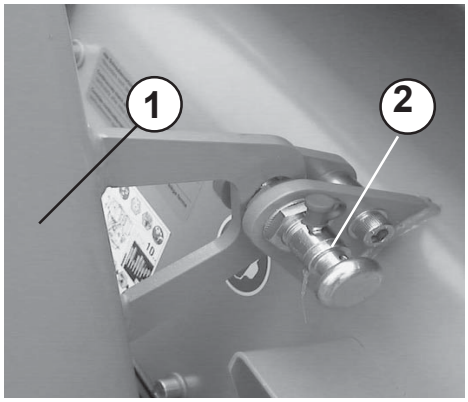


Figure 2

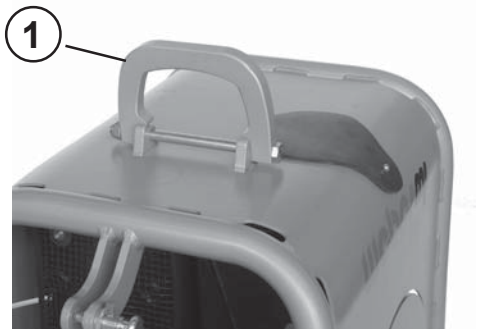


Figure 2 a

2.3 Commissioning

Caution!

For commissioning, only carry out the pre-start work described in paragraph 2.4.

Keep to the initial maintenance intervals (refer to paragraph 3.2.1).

2.4 Pre-Start Work

- Check to ensure that all safety devices are in place.
- Check the whole soil compactor for evident damage (visual check).
- Check all screwed connections for tight seat, retighten them if necessary.
- Check the fuel level, if necessary, add fuel (refer to paragraph 2.4.1).
- Check the engine oil level, if necessary add engine oil (refer to paragraph 2.4.2).
- If required, fit the damper plate (refer to paragraph 2.4.3).
. If required, fit the extension plates (refer to paragraph 2.4.4.).

2.4.1 Checking the Fuel Level

- Put the soil compactor out of operation as described in paragraph 2.7.
- Loosen the tank cover (3/1).
- Push the tank cover(3a/1) aside.
- Clean the area around the filler neck.
- Open the cap (4/2) of the fuel tank (4/1).

Caution!

Fill the tank up with clean Diesel fuel only. Refer to paragraph 3.4 for quantities and specifications.

- Fill the tank up to the bottom edge of the filler neck (4/2).

Danger!

Take care that fuel does not come in contact with hot engine parts. Extinguish all open flames and do not smoke while filling the tank.

Environment Hazard!

Always wipe up any spilled fuel. Dispose of fuel-soaked cloth in an environmentally-friendly manner.

- Firmly close the fuel tank (3a/1) with the filler cap (3a/2).
- Fit the tank cap (4a/1) by fixing the tommy screws (4a/2).

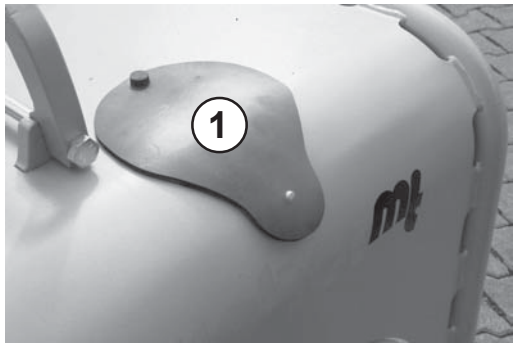


Figure 3

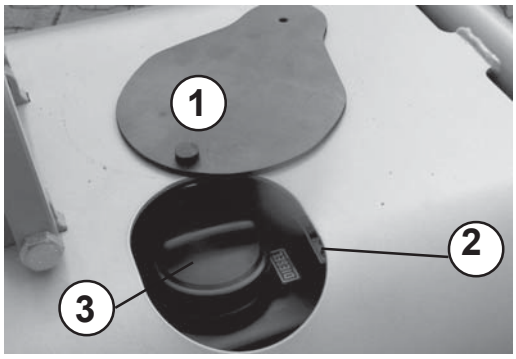


Figure 3 a

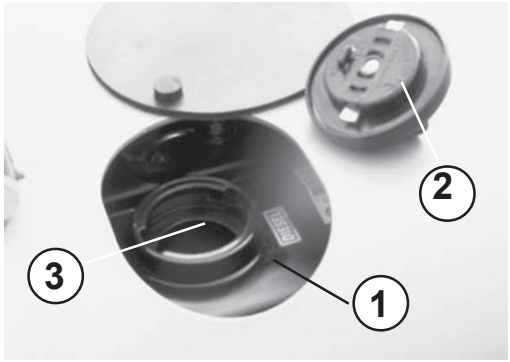


Figure 4

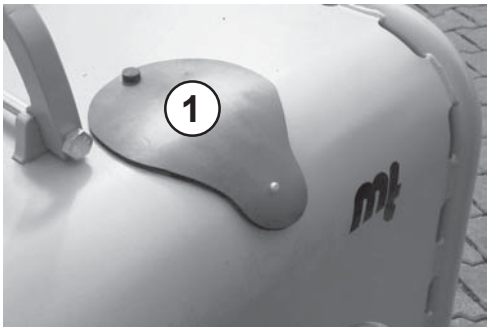


Figure 4 a

2.4.2 Checking the Engine Oil Level

Caution!

The engine oil level must be checked with the soil compactor standing horizontally on the ground.

- Pull out the oil dipstick (5/1), wipe it off with a clean, non-fluffing cloth and insert it again.

Caution!

-Screw the oil dipstick (5/1) down.
-Undo the oil dipstick once again.

Caution!

The oil level must reach up to the top mark (5/max).

- If required, add engine oil according to paragraph 3.3.1 (refer to paragraph 3.4 for quantities and specifications).
- Firmly screw the oil dipstick down.

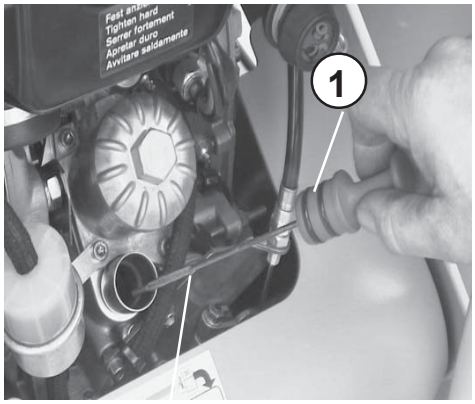


Figure 5

2.4.3 Fitting the Damper Plate

- Put the soil compactor out of operation as described in paragraph 2.7.
- Lift the soil compactor by means of a crane as described in paragraph 2.2.1.
- Put the damper plate beneath the machine.

Caution!

Do not enter the zone under the suspended load. - Risk of injury!

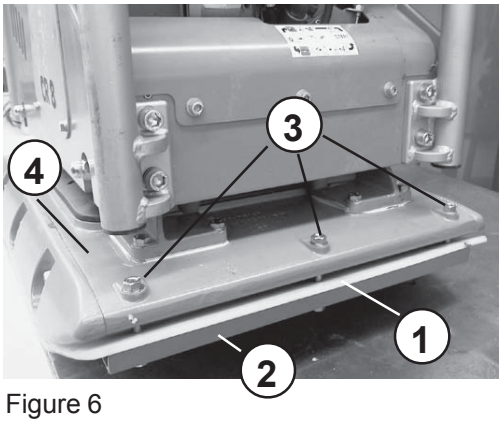


Figure 6

- Attach the Vulkollan plate (6/1), together with the holder (6/2), the screws, lock washers and the nut (6/3), to the front of the base plate (6/4) as shown.
- Attach the Vulkollan plate (6a/1), together with the holder (6a/3), the screws, nuts and the lock washers (6a/2) to the back of the base plate (6/4).

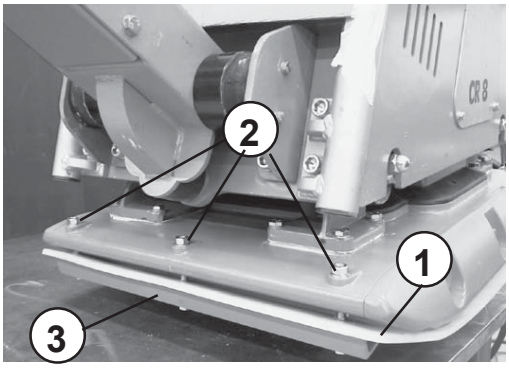


Figure 6a

Important!

Check to ensure that the Vulkollan plate is correctly fitted beneath the base plate.

Danger!

Do not enter the zone under the suspended load!

2.4.4 Fitting/Detaching the Extension Plates

- Undo three each fastening screws (6b/2) and remove the extension plates.
- Put the extension plates (6b/1) against both sides of the base plate and fix them by means of three each fastening screws (6b/2).

Firmly tighten the screws!

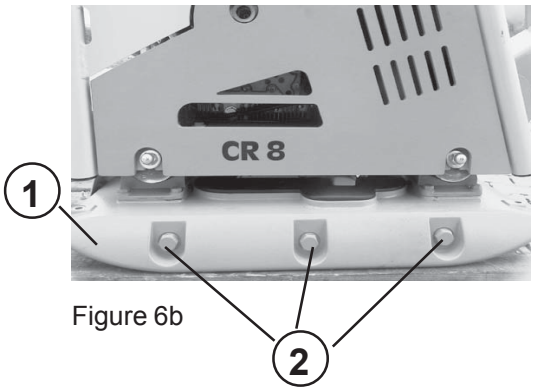


Figure 6b

2.5 Starting

Danger!

Before starting the machine, always ensure that nobody is in the danger area of the soil compactor and that all protective devices are properly in place.

When starting the soil compactor in closed premises, always ensure a proper ventilation - danger of poisoning.

Caution!

Never use starting aid sprays!

Figure 7

- Put the engine speed adjusting lever (7/1) into the full speed position.
- Put the ignition key (8/1) into the lock and turn it into position 1.
- Turn the ignition key (8/1) into position 2.
- Release the ignition key as soon as the engine starts.

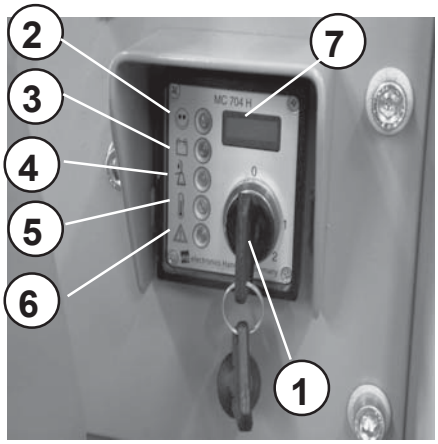


Figure 8

Important!

The ignition key must automatically return into position 1 and must remain in this position during operation. The alternator charge pilot lamp (8/3) and the oil pressure pilot lamp (8/4) must go out immediately after starting.

Caution!

The pilot lamp (8/2) lights up to indicate the engine's operation.
As long as the ingition is switched on, the hourmeter (8/7) records the working hours performed.

The symbols (8/5) and (8/6)are not assigned to a function.

Important!

In case of any irregularity, turn off the engine immediately, localize and repair the malfunction.Let the engine idle for some minutes.

In case of ambient temperatures of 5 degrees C below zero or less, the starting procedure must be carried out in accordance with the operation manual of the engine manufacturer.

Caution!

If the ignition key does not automatically return into position 1, put the machine out of operation - risk of starter damage because of starter working during machine operation.

2.6 Compaction Work

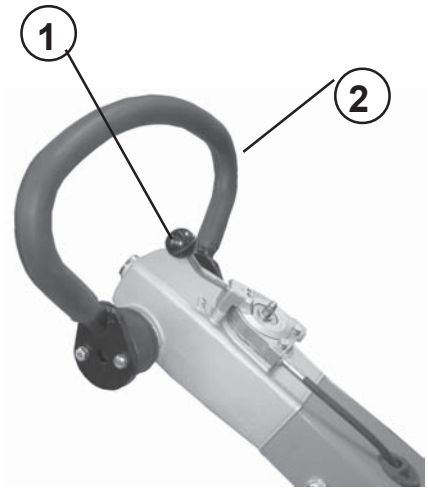


Figure 9

- Put the soil compactor into operation (refer to paragraph 2.5).
  As soon as the engine reaches its operating temperature:
- push the engine speed adjusting lever (9/1) into the full speed position.

Caution!

Compaction work is only allowed at full engine speed, otherwise the centrifugal clutch may slip and cause increased wear.

Important!

As soon as the centrifugal clutch achieves the cutting-in speed, the vibrator is automatically turned on.

Danger!

If obstructions (such as walls or trenches) are encountered, take care that persons do not get crushed and that the machine does not slip out of control.

Warning!

During work breaks, even if they are short, the soil compactor must be put out of operation (refer to 2.7).

- Steer the soil compactor with the handle (9/2) into the desired direction.

2.7 Putting the Soil Compactor Out of Operation

Before work breaks and at the end of every day's shift, the soil compactor must be parked on a stable base which should be as horizontal as possible.

Warning!

If the soil compactor causes an obstruction when being parked, precautionary measures must be taken in order to make the machine visible. If the machine is parked on traffic roads, the safety precautions required by the traffic regulations must be additionally observed.

Caution!

Never stop the engine while it is running at full speed, but let the engine idle for some minutes.

2.7.1 Stopping

- Push the speed adjusting lever (10/1) to the back and let the engine idle for some minutes.
- Turn the ignition key (11/1) from position "1" back in to position "0".
- Take out the ignition key.

Figure 10

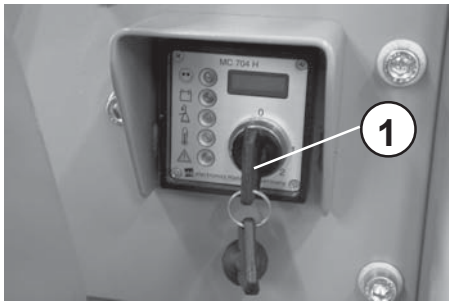


Figure11

3 Maintenance

3.1 Safety Precautions for Maintenance Work

Checks

Dependent upon the operating conditions, soil compactors must be made subject to an expert's check for operational safety as required, but at least once a year. The inspection results must be recorded in writing and kept at least until the next inspection.

Service Work

Service work is only allowed to be done when the drives are stopped. Exceptions are only allowed if work can be done with running drives only. In addition, the soil compactor must be secured against unintentional movements.

Drained consumables must be caught and stored in an appropriate receptacle and disposed off according to the relevant environmental protection regulations.

Prior to any work on parts which are not protected, the engine must be secured against unintentional starting.
After completion of service work, all protective devices must be properly installed again.

Modifications and Retrofittings

For safety reasons, any modifications and retrofittings made on the soil compactor without the manufacturer's authorization, are prohibited. Damage resulting from modifications or retrofittings is excluded from the manufacturer's liability. Only use genuine WEBER spare parts to ensure a safe and reliable operation.

Safety Precautions Required by the Engine Manufacturer

Please refer to the annexed operation manual of the engine manufacturer Hatz for a detailed description of the maintenance work to be done on the engine.

3.2 Maintenance Survey

Any maintenance work required on the soil compactor must be repeated at regular intervals.

The column „Maintenance Point´“ refers to the assembly group on which the work indicated in the column „Maintenance Work“ must be carried out.

The column „Remarks“ contains cross-references on paragraphs of this operating and maintenance manual or other documentation in which the maintenance work is described in detail.

3.2.1 Maintenance

Maintenance Interval	Maintenance Point	Maintenance Work	Remarks
Every 8 operating hours	Whole machine	- Check for visible damage, leaks etc.	
	Air filter	- Clean the air filter element, check it for damage and replace it if required	# 3.3.2
	Engine	- Check the engine oil level	# 2.4.2
Every 150 operating hours	Whole machine	- Check all screwed connections for tight seat, retighten them if necessary	
	All bare parts	- Slightly oil	
	Engine	- Change the engine oil	# 3.3.1
		- Replace the fuel filter	# 3.3.3
		- Replace the oil filter	# 3.3.1
	Vibrator	- Check the V-belt for damage/wear	# 3.3.4
	Battery	- Check the acid level, if required add distilled water	
Every 300 operating hours	Vibrator	- Change the oil	# 3.3.6

3.3 Description of the Maintenance Work

3.3.1 Changing the Engine Oil

- Put the soil compactor out of operation as described in paragraph 2.7.

Caution!

Drain off the engine oil at operating temperature and with the soil compactor in horizontal position only.

- Put a drain pan under the outlet.

Environment Hazard!

Choose a drain pan having a sufficient capacity to catch all the used oil. Do not let used oil run into the soil. Dispose of the collected used oil in an environmentally-friendly manner (acc. to statutory pollution control regulations).

Wipe up any oil residues and dispose of the oil-soaked cloth in an environmentally-friendly manner.

Danger!

Danger of scalding because of hot oil.

- Undo the screws (12/2) to remove the cover (12/1).
- Pull out the oil dipstick (13/1).
- Undo the protective cap (13/2).
- Screw the oil drain hose (14/1) onto the drain valve (14/2) and completely drain the engine oil.

Important!

Screwing the drain hose down opens the drain valve - oil escapes!

- Undo the oil drain hose (14/1).
- Put the protective cap (13/2) onto the drain valve (13/3).
- Top up with engine oil according to the quantity chart (3.4).
- Check the oil quantity by means of the dipstick (13/1) (refer to paragraph 2.4.1).
- Screw the dipstick (13/1) down.

Caution!

Make a short trial run and check tightness!

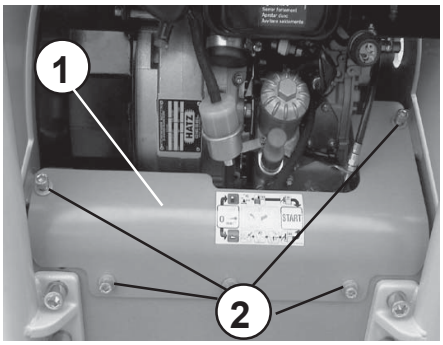


Figure 12

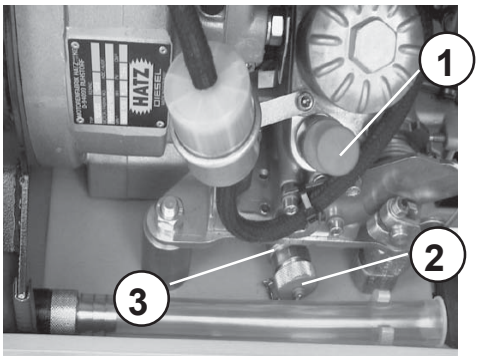


Figure 13

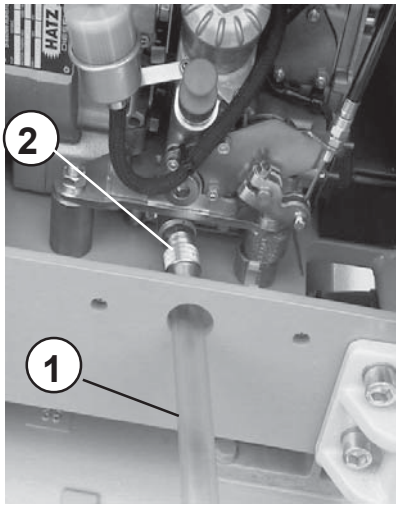


Figure 14

3.3.1.1 Replacing the Engine Oil Filter

- Put the soil compactor out of operation as described in paragraph 2.7.
- Drain the engine oil according to paragraph 3.3.1.
- Remove the cap (15/1).
- Pull the oil filter (16/2) out of the engine housing.
- Replace the oil filter (16/2) by a new filter element.
- Tighten the cap (16/1).
- Top up with engine oil according to paragraph 3.3.1.

Caution

Pay attention to the "TOP" mark on the oil filter!

Caution!

Perform a short trial run and check tightness. Retighten if necessary.

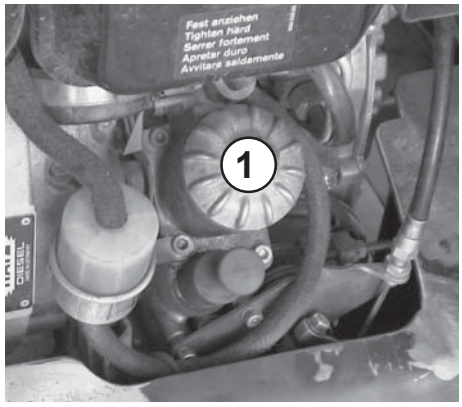


Figure 15

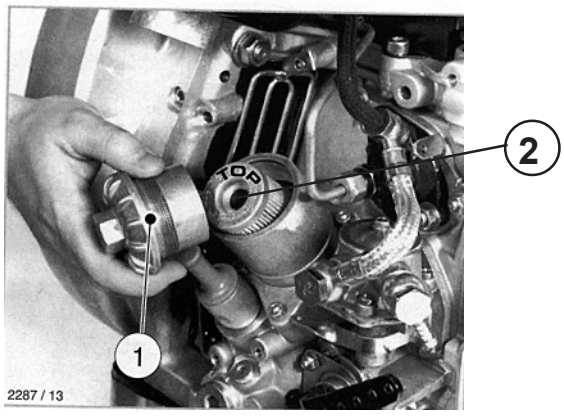


Figure 16

3.3.2 Cleaning/Replacing the Air Filter Cartridge

- Loosen the fastening screw (17/2) and remove the cover (17/1) from the air filter body.
- Pull the air filter element (18/1) out of the air filter body(18/2) and blow or knock it clean.

Caution!

If this procedure does not provide a sufficient cleaning (e. g. because of humid or oily dirt), a new filter element must be used.

- Insert the filter (18/1) again.
- Put the cover (17/1) on the air filter body again and firmly close the body with the screw (17/2).

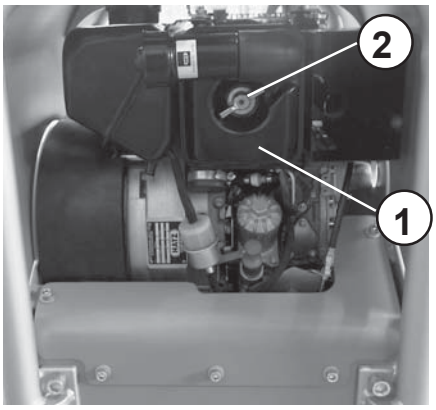


Figure 17

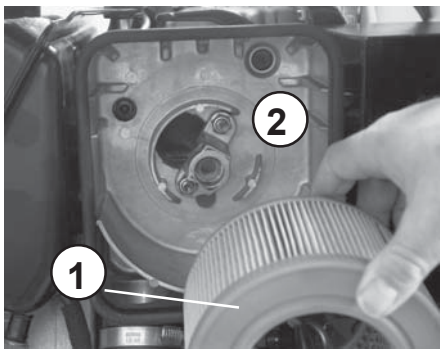


Figure 18

3.3.3 Replacing the Fuel Filter

- Put the soil compactor out of operation as described in paragraph 2.7.
- Put an appropriate pan beneath the filter in order to catch any escaping fuel.
- Shut off the fuel line (19/1).
- Remove the fuel line (19/1) from both sides of the fuel filter (19/2) and insert the new filter.

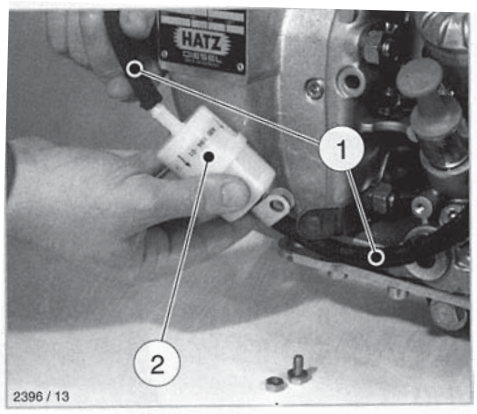


Figure 19

Caution!

Extinguish all open flames and do not smoke when working on the fuel system!

Environment Hazard!

Immediately wipe up any escaping fuel, dispose of the fuel-soaked cloth in an environmentally-friendly manner.

3.3.4 Checking the Condition and Tension of the Vibrator V-Belt

- Put the soil compactor out of operation as described in paragraph 2.7.
- Undo the screws (20/1) to remove the V-belt guard (20/2).
- Check the condition of the V-belt (21/1) (cracks, broken out flanks, wear).
- In case of excessive wear, replace the V-belt as described in paragaph 3.3.5.

Caution!

Take care to properly fit the V-belt on the pulleys (belt alignment).

The special centrifugal clutch will tension the V-belt.

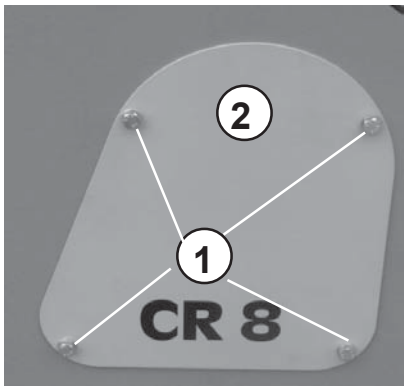


Figure 20

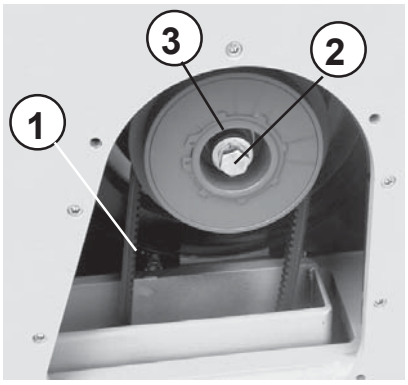


Figure 21

3.3.5 Replacing the V-Belt

- Loosen the screws (20/1) and remove the V-belt guard (20/2).
- Undo the fastening screw (22/1) and (21/2) of the centrifugal clutch (22/2) and remove it from the clutch.
- Screw a (M20x100) hexagon head cap screw with through-thread into the centrifugal clutch (22a/1). Remove the clutch from the cone of the driving engine by means of the (M20x100) screw.
- Remove the screw (22b/3) from the clutch.
- At first, mount the V-belt (22b/1) on the pulley of the vibrator and then on the clutch (22b/2).
- Put the centrifugal clutch onto the cone of the driving engine.
- Fasten the centrifugal clutch with the screw (21/2) and the disk (21/3).
- Fit the V-belt guard (20/2) by means of the screw (20/1).

Caution!

Check to ensure that the V-belt is properly aligned, especially after repair work.

Always use a new screw and disk to fasten the centrifugal clutch.

The torque to fasten the centrifugal clutch is 85 Nm.

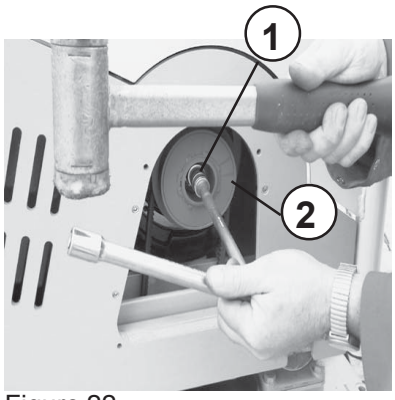


Figure 22

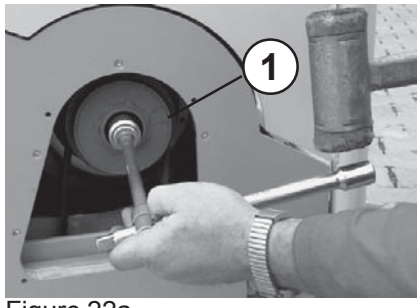


Figure 22a

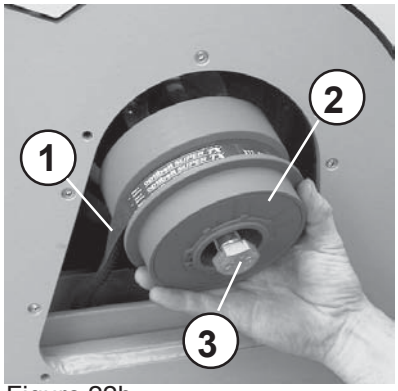


Figure 22b

3.3.6 Changing the Vibrator Oil

- Put the soil compactor out of operation as described in paragraph 2.7.

Caution!

Change the oil at operating temperature only.

When working on the machine, always protect the soil compactor against slipping out of control. - Risk of injury -

- Undo the screws (23/2) to remove the extension plate (23/1).
- Thoroughly clean the oil drain plug (23a/3) and the area around it.
- Put an appropriate drain pan (23a/2) beneath the drain outlet.
- Remove the oil drain plug (23a/3) from the base plate.
- Completely drain the oil.

Caution!

Take care that the contact surfaces of the oil drain/filler plug (23a/3) and of the base plate (23a/1) are clean.

- Tilt the soil compactor.
- Top up with gear oil through the oil filler/oil drain opening (23a/3) (refer to paragraph 3.4 for quantities and specifications).

Environment Hazard!

Dispose of the collected used oil in an environmentally-friendly manner. Take care that the environment is not polluted by oil.

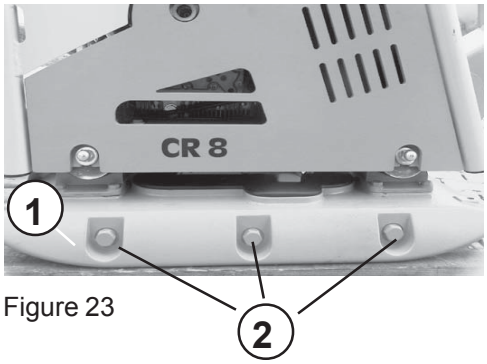


Figure 23

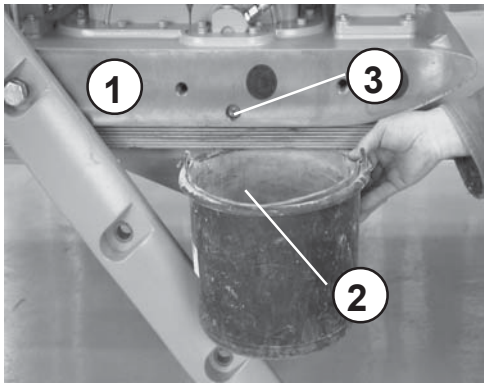


Figure 23a

3.3.7 Hydraulic Control

The switch head (24/2) is filled with hydraulic oil. Switching is effected upon actuation of the switch lever (24/1). A hydraulic line connects the reaction end socket (26/1) and the switch head.

Important!
In case of switching problems, proceed as follows:

- Remove the oil filler screw (25/2) of the switch head (25/1).
- Add hydraulic oil according to the specifications in paragraph 3.4 up to the middle of the sight glass (25/3). (Handle in vertical position).
- Fasten the oil filler screw (25/2).
- Bleed the hydraulic system by loosening the bleeding screw (26/2) at the reaction end housing (26/1).
- Firmly tighten the bleeding screw (26/2) again.

Check the oil level once again!

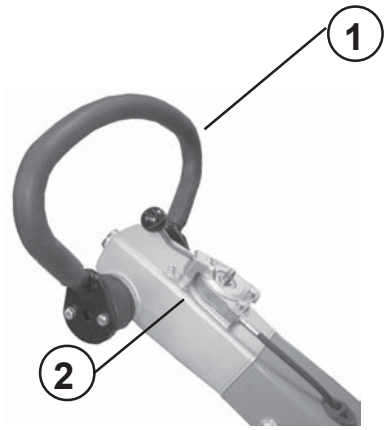


Figure 24

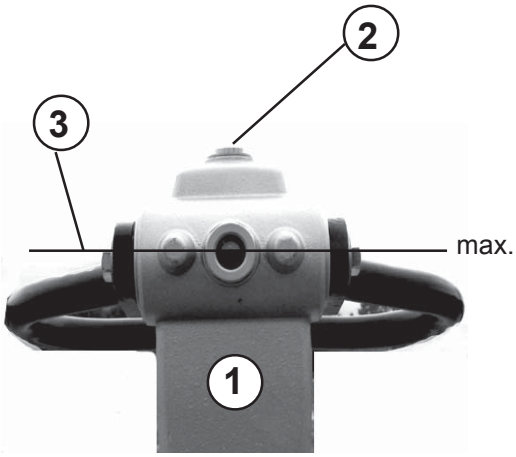


Figure 25

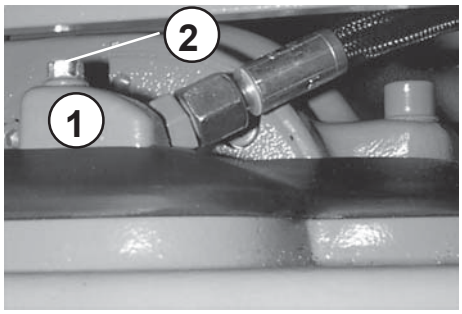


Figure 26

3.4 Consumables and Quantities

Assembly Group	Consumable Summer Winter Quality	Quantity CR 8
Engine Engine oil	SAE 10 W 40 (-10 ~ + 50 °C) API - CD CE-CF-CG or SHPD or CCMC - D4 - D5 - PD2	1.9 l
Fuel tank	**Diesel** Diesel according to DIN 51601-DK or BS2869-A1/A2 or STM D975-1D/2D	10,0 l
Vibrator	Fully synthetic gear oil API GL-5/GL-4 Initial filling Fuchs Titan 5 Speed SL 75 W 90	1.25 l
Hydraulic control	Fully synthetic gear oil DEXRON II-D-ATF Initial filling Fuchs TITAN ATF 3000 or equivalent	as required
Greasing points	High-pressure grease (lithium-saponified) according to DIN 51825 - KPF2	as required
Battery	Distilled water	as required

4 Malfunctions During Operation

4.1 General

If a malfunction occurs on the soil compactor, proceed as follows:

- Put the soil compactor out of operation as described in paragraph 2.7.
- Determine the source of the malfunction (refer to paragraph 4.2 - Trouble Shooting).
- Repair the failure (refer to paragraph 3 (maintenance work) and paragraph 2 (description of the various controls).

Please refer to the manual of the engine manufacturer with regard to the repair of engine malfunctions.

The detailed description of the various controls and the references given in the column "Remarks" of the maintenance survey chart (paragraph 3) and trouble shooting chart (paragraph 4.2) allow a quick failure elimination on condition that the given order is precisely kept to when service work is carried out.

Any service work has to be made with appropriate tools and in accordance with the safety regulations set out in this operating and maintenance manual.

If a problem persists although a component or assembly group has been replaced, repair work has to be continued with the work described next.

If a failure cannot be repaired although the described service work has been carried out or if a defect is not described in the operating and maintenance instructions, the failure must be repaired by authorized service personnel.

4.2 Trouble Shooting

Failure	Possible Cause	Remedy	Remarks
Soil compactor does not start	Mistake in operating the unit	Perform the starting procedure as described	# 2.5
	Lack of fuel	Check the fuel level	# 2.4.1
	Dirty fuel filter	Replace the fuel filter	# 3.3.3
	Dirty air filter	Clean/replace the air filter cartridge	# 3.3.2
	Lack of fuel/lack of oil	Activate oil pressure check	Refer to the manual of the engine manufacturer
No vibration/no or insufficient forward travel	Defective vibrator V-belt	Replace the vibrator V-belt	# 3.3.5
Delayed control	Air in the hydraulic control system	Bleed the control system	# 3.3.7

4.3 Repair and Replacement Work

4.3.1 Replacing the Battery

- Put the soil compactor out of operation as described in paragraph 2.7.
- Undo the fastening screws (27/1) and remove the battery cover (27/2).
- Disconnect the cable plug (28/3).
- Disconnect the terminals (28/1).

STOP At first, disconnect the negative terminal.

- Undo the screws (28/2) and take out the battery.

The installation is done in reverse order.

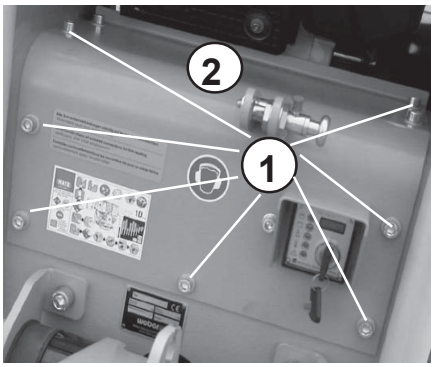


Figure 27

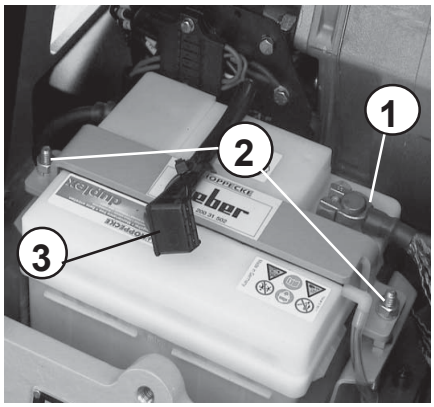


Figure 28

4.3.2 Replacing the Fuse

- Put the soil compactor out of operation as described in paragraph 2.7.
- Undo the fastening screws (27/1) of the battery cover (27/2) and remove the cover.
- Remove the protective cap (29/1) of the fuse holder (29/2).
- Remove the fuse (29/3) from the fuse holder (29/2).
- Insert a new fuse (29/3) with a rating of 20 A.

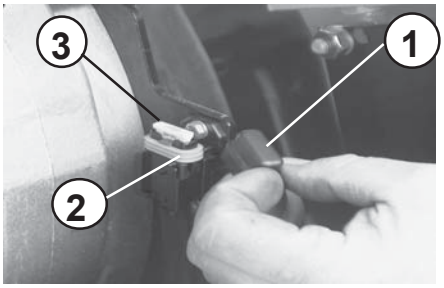
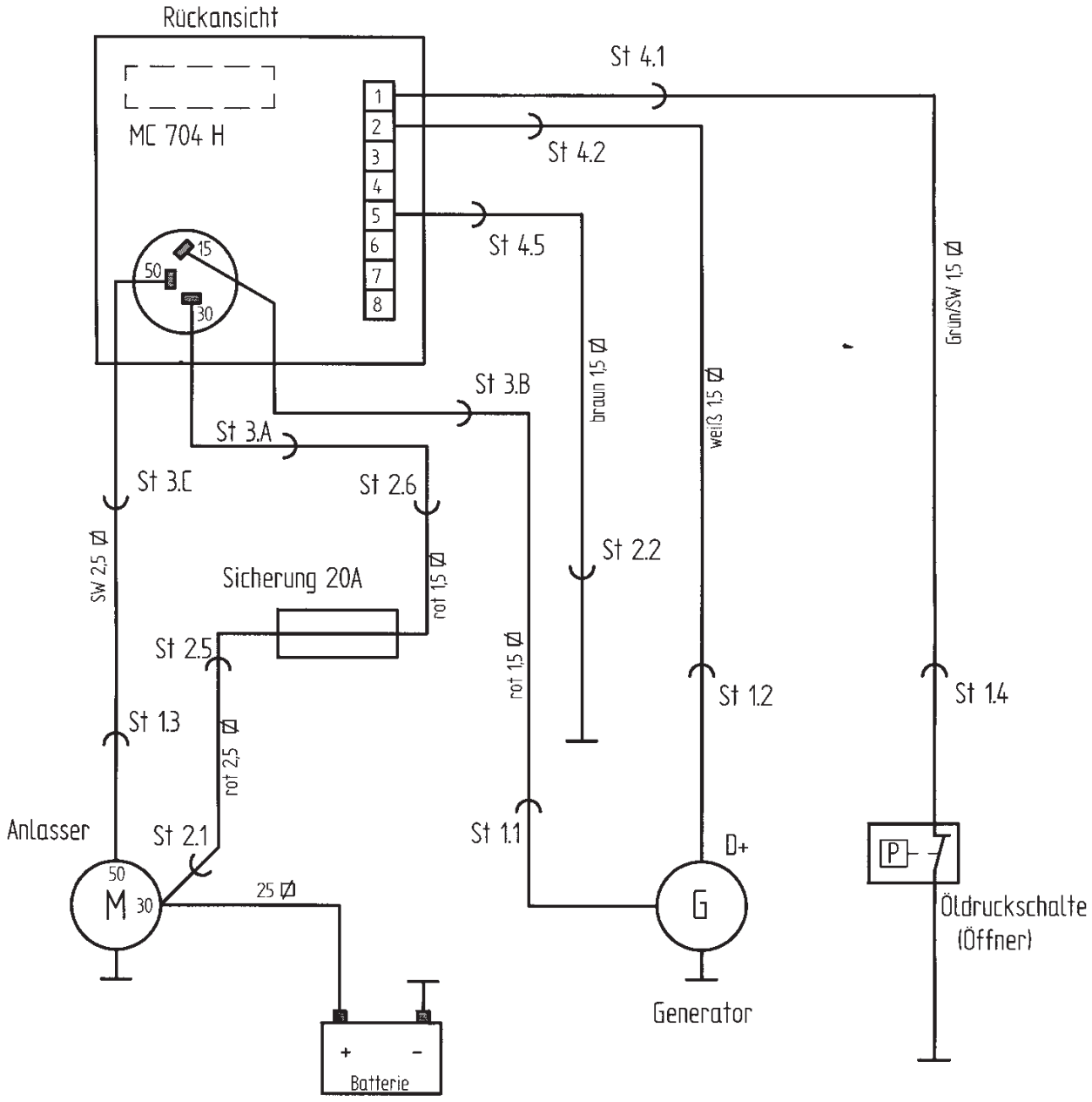


Figure 29

4.4 Electric Diagram



5 Preserving the Machine

If the soil compactor is planned to be put out of operation for an extended period of time (approx. 1 ... 6 months), e. g. during the winter season, it must be stored in a frost-proof and dry room. Before storing the machine, however, the preservation measures described in paragraph 5.1 must be taken. After the storage, the soil compactor must be put in operation according to paragraph 5.2.

If the soil compactor is to be stored for more than 6 months, additional measures must be taken in accordance with your WEBER service.

5.1 Preservation Measures

Assembly Group	Measure	Remarks
Whole soil compactor	- Thoroughly clean - Check condition, fastenings and tightness - Have any failures ascertained repaired	
All bare parts	- Apply a slight film of grease or oil	
Fuel tank	- Add fuel up to the bottom edge of the filler neck	# 2.4.1
Engine	- Check the oil level, if required, add oil	# 2.4.2
	- In the location of storage, put the engine into operation until its operating temperature is achieved.	
	- Put the engine out of operation	# 2.7
Battery	- Detach, charge, measure the fluid level, add distilled water if required	# 4.3.1

5.2 Removing Machine Preservatives

Assembly Group	Measure	Remarks
Whole soil compactor	- Thoroughly clean	
	- Charge the battery	
	- Perform pre-start work	# 2.4.

6 Addresses, Weber Maschinentechnik GmbH

For problems, questions and further information refer to one of the following addresses:			
in Germany	WEBER Maschinentechnik GmbH Postfach 2153 57329 Bad Laasphe - Rückershausen	Telefon Telefax E-Mail	+ 49 (0) 2754 - 398-0 + 49 (0) 2754 - 398101-switchboard + 49 (0) 2754 - 398102- spare parts-directlinie g.voelkel@webermt.de
in Netherlands	WEBER Machinetechniek B.V. Graafschap Hornelaan 159 6001 AC Weert	Telefon Telefax E-Mail	+ 31 (0) 495 - 530215 + 31 (0) 495 – 541839 info@webermt.nl
in France	WEBER Technologie SARL 26' rue d' Arsonval 69680 Chassieu	Telefon Telefax E-Mail	+ 33 (0) 472 -791020 + 33 (0) 472 – 791021 france@webermt.com
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